

**Peoples of the Middle Gila:  
A Documentary History of the Pimas  
and Maricopas,  
1500's - 1945**

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# Chapter I

## IN THE BEGINNING

### *The Gila River*

The perennial flow of the Gila River has been the principal water resource of south central Arizona for many centuries. The river takes its course from east to west across the entire state, from its origins in the Mogollon Highlands of western New Mexico to where it joins the Colorado River at Yuma. Three major tributaries - the Salt, Santa Cruz, and San Pedro - and numerous minor ones join the Gila along its length. Both the Salt and the Gila were once perennial, but now flow only intermittently in their middle and lower courses.

The Gila River is usually divided into three primary alluvial reaches. The upper Gila flows through the mountainous Central Highland zone of eastern Arizona to where it emerges from the mountains about sixteen miles above Florence, Arizona. The middle Gila crosses a broad desert plain interrupted by rugged, low-lying mountains, to its juncture with the Salt River just below Phoenix. From there the lower Gila continues within the Basin and Range physiographic province, mostly as a wide, unconfined flood plain, to its confluence with the Colorado River. Our study of the Gila and its peoples is confined mainly to the middle reaches of the river (Olberg and Reed 1919: 14-22; Huckleberry 1996; Thomsen and Eychaner 1991).

In this century, the normal appearance of the middle Gila River has been a wide, braided channel that seldom contained a running stream, except during floods (Hoover 1929: 41; Huckleberry 1996: 8). Historical descriptions, extending back to 1697, show that this was not always so. The earliest visitor on record, the Jesuit missionary Father Eusebio Francisco Kino, described the prominent prehistoric ruin at Casa Grande in detail during his 1694 trip, but he scarcely mentioned the nearby river (Bolton 1919 I: 127-129). Three years later his keen-eyed companion, Captain Juan Mateo Manje, wrote that the “rio grande de Jila,” at its confluence with the San Pedro, had a great many groves of trees that graced and surrounded its stream courses. As they journeyed downstream the next day, the boggy lowlands forced them to take a narrow, beaten track across the mountainous terrain adjoining the river (Burrus 1971: 368-369). Then on November 20, 1697, they followed an open plain to a Pima *ranchería* they named San Andrés. They found the river again bordered with many groves, at a place where numerous canals for irrigation can be drawn off (Ibid: 374). These groves, Father Kino added, were cottonwoods (Bolton 1919 I: 171-172). Two years later Manje noted that from what he had seen, the river was well-populated and full of woods and thickets, with numerous and luxuriant cottonwood groves and other varieties of trees, including an abundance of *tornillo* (Burrus 1971: 428-429).

For the next 150 years, no one described the Gila in this much detail, but occasional travelers did add more observations. In his 1744 trip along the river, Father Jacobo Sedelmayr passed the Pima village of Tussonimo (Kino's La Encarnación del Tusonimo, near present-day Sacaton, Arizona), beyond which

the stream ran entirely underground in hot weather to emerge again at the great ranchería he called Sudac-sson. This was “the place where the water comes out,” some four leagues or ten miles west of Tussonimo, commencing about where the old Arizona Eastern Railroad crossed the Gila River east of Maricopa Wells (Dunne 1955: 23; Ezell 1956: 157; Burrus 1971: 210, 242).

Sedelmayr was the first to record the Gila’s propensity for sinking into the ground and reemerging downstream. In later years others would comment on this, and add some precision to the locations where the underground water reached the surface of the riverbed. These were: (a) the Blackwater district about ten miles east of Sacaton, (b) the Gila Crossing district, (c) the railroad crossing, and (d) to a lesser degree, at Sacaton (Lee 1904: 23-26, 66; Meskimons 1904; Hoover 1929: 44).

Father Sedelmayr also mentioned that the Gila River Pima settlements, and principally that of Sudac-sson, had many and very fertile irrigated lands on the plain and in the valley of the Gila, “as well as on its islands” (Dunne 1955: 23, 32; Ezell and Ezell 1987: 144). This reference to islands was repeated by others in years to come (Villaseñor 1748: 40 ; Foreman 1939: 282-283; Bloom 1945: 174; Nentvig 1980: 14) and is good evidence that the Gila originally had wide, braided channels and frequent bogs or sloughs that separated the bars and ‘islands.’ Several ‘49ers so described it at the Pima Villages (the vicinity of Casa Blanca) and downstream, where John W. Audubon (1906: 157) said “The river bottom here forms a great flat, which was, I think, once irrigated; at all events, it is cut up by a great many lagoons, nearly all muddy,....” William Chamberlain remarked on the heavy growth of weeds. His party camped on a small island in the river, where their mules could browse on the willows and weeds. Cottonwoods, willows, underbrush, mesquite and rank weeds marked the course of the Gila (Bloom 1945: 173-175). Alden Woodruff’s group had to swim their stock over to the bars and islands, where they found plenty of fine grass (Foreman 1939: 282-283). Three years later, in March of 1852, geologist C.C. Parry wrote that

“the stream of water, then at its average height, (in early March,) measured about 40 yards in width with an average depth of 2 feet, the volume, however, being considerably diminished by the extensive irrigating ditches drawn from above. The line of the river bank is at this season set off with lagoons and marshes, and everywhere bordered with a dense willow growth, rendering it difficult of approach”(Parry 1857: 20).

More recently, a study of predevelopment hydrologic conditions in Arizona’s alluvial basins found that the Santa Cruz River had a significantly greater underflow than did the Gila. Where the two came together, on the western third of the Gila River Indian Reservation, the flows were forced to the surface. There they maintained the marshlands, pastures, riparian vegetation, and islands remarked on by early visitors, and largely supplied the water for irrigation canals



downstream (Hackenberg 1983: 165; Rea 1983: 31, 38-40; Freethey and Anderson 1986: Sheet 2).

Several miles upstream from the modern Pima village at Casa Blanca lay the western end of the "Island of the Gila." In 1869-1870 this island was described as some twenty-eight miles long by a mile in width, and the most desirable location on the reservation for farming (Grossman to Andrews, Oct. 19, 1869; Hackenberg 1974a II: 133). On maps of this period, the island extended from Sweetwater upstream to a half-dozen miles east of Blackwater, with the normal channel of the Gila River bounding it on the north side and the Little Gila River along the south. This island was probably similar to another fertile "island" between two branches of the Rio Grande below El Paso, Texas.

As early as 1891, observers wrote that the Little Gila was probably of artificial construction; a prehistoric or early historic canal that flood waters enlarged by entering the head of the original ditch, deepening and widening the channel (Ann. Rpt. Comm. Ind. Affs. 1891: 214; U.S. House 1912: 35; 1914: 47; Olberg and Reed 1919: 130-131; Hackenberg 1974a II: 38-40; 1974b: 32-33). The Gila River Indian Community's Cultural Resource Management Program has laid this theory to rest. Trenches across the former course of the Little Gila have shown that it is of natural origin, a branch of the Gila River.

Of greater interest is that the course labeled Gila River on the earliest (1859) surveyed maps of the Gila and Maricopa Indian Reservation is actually what was later called the Little Gila River or Canal. This is seen by overlaying the 1859 plats upon more recent maps of the same area. The Little Gila River also had quite a different appearance from the riverbed further downstream. Forty-niners who trekked up from the south arrived at the Gila near present-day Sacaton, and described what they called the Gila River as a "deep, narrow, and Rapid stream of warm, muddy water" (Evans 1945: 153); "The Gila (pronounced Hela) is rapid and narrow" (Clarke 1988: 69); "deep muddy and swift" (Martin 1925: 144); "swift running, somewhat muddy stream, about 20 yards across at this place" (Robrock 1992: 163); and "a swift stream about 40 ft. wide, not as clear as I expected to see it" (Hammond and Howes 1950: 207). Boundary Commissioner John Russell Bartlett found it shut between banks fifteen feet high and not more than nine inches in depth on July 12, 1852 (Bartlett 1965 II: 260). One of the first passengers on the Butterfield Overland Mail noted (in 1858) that "This station [Sacaton] was located on the Gila River, .... A few miles beyond we came to the Pimos villages" (Ormsby 1962: 97-98). No one recognized that what they thought was the Gila River in reality was the branch called the Little Gila.

Prior to the American period, the principal ditches serving irrigated lands had their headings in the Little Gila. Olberg and Reed (1919: 130-131) added that in former times no trouble was encountered in keeping the river water diverted into this channel. Overgrazing and fuelwood cutting in the late 19th century led to a reduction of streamside vegetation. The Gila River began to experience tremendous channel widening due to bank cutting, with the most dramatic changes linked to catastrophic floods (Olberg and Reed 1919: 20-22, 57; Hoover 1929: 44-45; Dobyns 1981: 170ff.; Huckleberry 1996). This rendered maintenance of the diversions and protection works along the Gila very difficult,

prior to creation of the San Carlos Irrigation Project and the shift to conveying stored or pumped water through permanent canals. For the period before development by non-Indian settlers, Thomsen and Eychaner (1991) used measured streamflow data and long-term runoff estimates to calculate the mean annual flow of the Gila River upstream from the Reservation at 500,000 acre-feet, and the median annual flow as 380,000 acre-feet. In this century, the mean annual flow has been slightly less; 444,000 acre-feet a year from 1900 to 1950 (Hackenberg 1983: 163, 175; see also Chapter 15). After upstream development began, mean annual flows could not provide enough water to sustain agriculture on the Gila River Indian Reservation.

### *The Pima and Maricopa People*

The native peoples who for centuries past have lived along the Gila River are the Pimas and Maricopas. Today they are officially the Gila River Indian Community, and their reservation occupies both sides of the middle Gila upstream from its juncture with the Salt River for about 65 miles, encompassing some 371,933 acres in all. The present population of the Gila River Indian Reservation consists of 9,000 or more Pima Indians and about 300 Maricopas, the latter primarily in the northwestern corner of the Reservation.

The name 'Pima' has been in use since the late 1680's, prior to which speakers of the language known as Piman had been called Cipias or Zipias, Ymiris (Hymeris), Sobaipuris, Necuas(?), Sobas, and other names that were primarily regional. The people known by these local names formed a continuum, however. With the arrival of Father Kino in 1687, the missionary district of the northern Piman Indians or Upper Pimas soon became known as Pimería Alta, distinguishing it from the country of the Pimas Bajos, their close linguistic cousins farther south in Mexico. In time the Pimas Altos who found a livelihood in the riverless deserts of southwestern Arizona and northwestern Sonora were called first the Papabotas and then Papagos. Those who lived the year around in villages along the Gila River became known as the Pimas Gileños, Gila River Pimas, or simply Pimas. In later years the western Pimans were also called "Piatos," short for Pimas Altos, a very English-like contraction (Kessell 1976: 117).

The Sobaipuris disappeared as a separate entity after 1762, when the Spaniards relocated all of the people living on the San Pedro River to Piman communities further west along the Santa Cruz River and Sonoita Creek. Some of the refugees later left Tucson for the Gila Valley. The Gila River Pimas, today known as the Akimel O'odham or 'River People,' may represent a continuum of several groups which once had local names for themselves. In 1986 their desert-dwelling relatives voted to change their name to Tohono O'odham, 'Desert People,' in place of Papago (Bringas 1977: 23; Ezell 1983: 149; Fontana 1983: 134; Rea 1983: 8-9; Matson and Fontana 1996: xxix-xxx, 12). The name Xila (now Gila) has been in use since at least 1630, when it was applied to the Gila

Apaches living in southwestern New Mexico. The river that rises in that area also was called the Gila (Forrestal 1954: 43).

The Kohatks, a group intermediate between the Pimas and Papagos, lived at Aquituni and other villages or rancherías, as the Spanish called them, south of the Gila but also on occasion along the middle Gila (Hackenberg 1974a I: 86-92; II: 268-287). The name Coatoydag used by Kino in 1694 meant “fields of the Kohatk” (Bolton 1919 I: 128).

‘Maricopa’ came into use in 1846, and the people called Maricopa include descendants of at least six tribes who spoke closely related dialects of a single subgroup (‘River’) of the Yuman languages. Yuman is completely unrelated to Piman, which belongs to a widespread language family called Uto-Aztecan. At the date of first contacts (1540) two groups of River Yumans, the Quechan (Yuma) and Mohave, probably occupied locations on the lower Colorado River similar to where they lived more recently. The ancestral Maricopas dwelt along part of the intervening stretch of the valley and perhaps some sections of the lower Gila River Valley.

A number of students have worked at sorting out the antecedents of the present-day Maricopas (Spier 1978; Ezell 1963; Dobyns, Ezell and Ezell 1963; Harwell and Kelly 1983; Ezell and Ezell 1987). At the time of Father Kino’s first visit to the Gila River Pimas in 1694, he learned that they also occupied the lower Gila as far downstream as Gila Bend. Below that were villages of Pimas and Opas living together, and beyond the Painted Rock Mountains were another thirteen rancherías of Opas and Cocomaricopas. While the Spaniards often merged the Opas (Maricopas) and Cocomaricopas in their writings, the latter referred to a specific Yuman population on the lower Gila called the Kaveltcadom and more broadly to the Opas as well. They maintained settlements as far downstream as Agua Caliente until after 1775 and probably as late as 1823. Persistent hostilities with the Quechans and Mohaves forced both the Pimas living on the lower Gila and the Cocomaricopas to move upstream, where the Kaveltcadom joined the Maricopas (by then probably settled above the Gila-Salt confluence) by 1840.

In 1605 the Spaniards identified the first tribe on the Colorado below the mouth of the Gila as another group of River Yumans, the Halchidhoma. They were still there in 1699 but by 1744 had shifted northward to escape their enemies, the Quechan, and in 1776 occupied a stretch of the Colorado Valley below the Mohaves, around modern Ehrenberg. Warfare continued, now with the Mohaves, and in 1828 the remnants of the Halchidhoma abandoned the Colorado and took refuge with an unidentified, friendly tribe in northern Sonora. By 1838 the refugees had drifted north and joined the Maricopas on the middle Gila, settling at Sacate. The Kaveltcadom were a branch of the Halchidhoma who left the Colorado probably before the historic period.

The Kohuana (Kahwan; Kahuéin) and Halyikwamai, two tribes of River Yumans with identical speech, originally dwelt below the Quechan on the east bank of the Colorado. There they were largely subject to the will of the Quechan until, tired of being battered about, they went directly to the Pimas and Maricopas in 1838-1839. They settled among the sand hills north of the Gila, several miles

above Gila Crossing, the northernmost Maricopa village at the time. By 1846 the lower Gila River Valley lay abandoned and the only River Yumans remaining on the Colorado were the Quechan and Mohaves - the old adversaries of the ancestral Maricopas.

Once settled along the middle Gila, the Pimas and Maricopas lived as extended families in a series of villages ranged generally between the modern communities of Sacaton and Gila Crossing, with the Maricopas usually to the west. Their houses were domed huts covered with mats, accompanied by open-air ramadas and elevated granaries, spaced 100 yards or more from neighboring houses. Their economy was based on agriculture, using lands adjacent to the Gila to cultivate beans, corn, pumpkins, watermelons, muskmelons and cotton. Wheat and cotton were mentioned first in the 1740's and by the middle 1770's wheat had become their principal crop. Neither group used ditch irrigation at the time of Father Kino's first visits, but the Pimas began doing so by the 1740's. The Maricopas typically planted the inside bends of the river after the Gila's floodwaters receded, at least while they lived on the lower Gila. Ditch irrigation came into use among them only after 1850. Hostilities between the Pima-Maricopa and the Colorado River Yumans on the west, and the Apaches on the east, continued until around 1857 and 1872 respectively.

#### *Southern Arizona Before 1694*

Father Eusebio Kino's journey to the Gila River Pimas and the Casa Grande ruin in November 1694 was the first recorded visit by a European to either the middle Gila River or to this group of Upper Pimas, although he had trekked north from his home mission at Dolores in northern Sonora as far as Tumacácori in 1691 and to San Xavier del Bac in 1692 (Bolton 1919 I: 118-129). What Kino learned, and the reason for his 1694 trip, will be outlined in the next chapter. These were not the first visits by Spaniards to southern Arizona, however, and earlier records hold interesting clues regarding native peoples in the 16th and early 17th centuries.

One clue is a statement that when the Coronado expedition crossed Sonora and southern Arizona in 1540-1542, they passed through peoples of the same type and even the same language as far as the wilderness of Chichilticalli (Hammond and Rey 1940: 250). To reach this wilderness, which probably began at the upper Gila River, Coronado's army had traversed a broad band of country populated by Lower and then by Upper Pimas, all of whom spoke closely-related languages or dialects. This claim becomes even more plausible when we realize that their neighbors on the east, the Opatas, had yet to expand westward to the valleys where they were found a century later, including part of the Rio San Miguel in northwestern Sonora (Braniff 1978: 73; Pailes 1978: 140-141; Miller 1983: 120-121; Ortiz 1983: ix).

Captain Hernando de Alarçon sailed to the head of the Gulf of California with his three ships bearing supplies for Coronado. This mission continued up the Colorado River in two boats, where the captain met many natives and fortunately

left some recognizable names, including the Quicama (Jaliquimai; Halyikwamai) and Coano or Coama (Cajuenche; Kahwan). Although he claimed to have voyaged upstream for eighty-five leagues, Alarçon did not mention the mouth of the Gila River, which later diarists placed twenty to thirty leagues from the gulf (Hammond and Rey 1940: 124-155; Dunne 1955: 25; Ezell 1963: 6; Harwell and Kelly 1983: 84).

The natives along the lower Colorado knew about the kingdom of Cibola and had already heard of Coronado's *entrada* farther east. They discouraged Alarçon from trying to travel there across country, one *viejo* saying that it was ten days' distance over uninhabited country. Indeed, the historian of the Coronado expedition later wrote that "Most of the region is uninhabited" (Hammond and Rey 1940: 252). As for their own country, one chieftain along the Colorado said that twenty-three language groups lived close to the river. Captain Alarçon told another chief that they were Christians and that he had been sent by the sun. The Indian then asked "that I explain the reason why the sun had not sent me sooner to stop the wars that had raged among them for a long time, resulting in the killing of many" (Ibid: 133, 138, 147, 152).

Alarçon's response - that he had been too young - probably sounded inadequate. Later he backed into a theological discussion and, when that threatened to turn into a debate, he returned to the earlier theme by asking the cause of their wars? His informant said that they had big wars over trifles, and whenever they had no cause for war,

".... they would get together and some one of them would say: 'Let us go wage war at a certain place,' and immediately they would set out with their weapons. .... And when the leaders ordered them not to fight any more, they at once abandoned the war" (Ibid: 135).

Two hundred years later, conditions along the Colorado had changed very little (Dunne 1955: 25-26).

Although Captain Alarçon had nothing to say about the Gila River or the nations (if any) between the Colorado and the land of Cibola, Coronado's chroniclers found the context for local relationships much the same in the country they traversed. After commenting that chickens had preceded Spanish explorers to the valley of Suya (i.e., the Sobaipuris), Castañeda said he couldn't understand how they (the chickens) passed through so much hostile territory, "for the natives are ever at war with one another." Near the attempted settlement of Corazones III, also in the valley of Suya, some gold veins had been discovered but offered few possibilities and were not worked, "being located in warring country" (*en tierra de guerra*) (Hammond and Rey 1940: 251, 269). While his information was obviously somewhat secondhand, Alarçon learned that the ruler of Cibola (i.e., Zuni) was continuously at war with other chieftains in the neighborhood. How many of these were there? Fourteen or fifteen, he was told (Ibid: 143, 145). The Southwest in 1540 was not a peaceful place, and local wars that were launched simply for their own sakes probably had much to do with changes in the cultural geography and causing some areas to be without settled populations.

The next window on southern Arizona history opened in 1604-1605 when the governor of New Mexico, Don Juan de Oñate, set out for the discovery of the South Sea or Gulf of California. He traveled overland via Zuni Pueblo and the Hopi Indian towns, eventually descending what is now called the Bill Williams Fork to the Colorado River, which he named Buena Esperanza. The first group that he encountered there was the Amauaca, whom we now know as the Mohave. Adjoining them on the south was the Bahacecha nation, said to be of similar speech but whose name is not now recognized as a tribal designation. Below the juncture with the Gila River (their *rio nombre de Jesús*) the Oñate party met other Yuman-speaking groups; the Alebdoma (Halchidoma), Cogwana (Kahwan), Agalec-que-maya (Halyikwamai) and Cocopa (Cocopa). The latter nation was nearest the sea and perhaps the most populous one, with an estimated population of 5,000 or 6,000 (Hammond and Rey 1953: 1012-1022).

Perhaps more interesting were the people who lived in four or five rancherías by the Nombre de Jesús (Gila) where it joined the Colorado. Fray Francisco de Escobar, diarist of the trip to the South Sea, called them the Oseca (also spelled Ocara, Osera, Ozaras), and noted that they spoke a different language from the people upriver. From the few words he learned, he thought they might be Tepehuans, “although I do not definitely so state.” Leslie Spier (1978: 10) agreed with Kroeber that a Piman identification seemed plausible, while Paul Ezell (1955: 371-372) essayed a more specific identification with the group known historically as the Areñenos or Sand Papagos. It seems unlikely that the Areñenos ever had many people, and Father Escobar further reduced this prospect when he added that “The people or nation of this Nombre de Jesus river .... called Oseca ....” raised maize, beans, and pumpkins, and wove cotton blankets. They told him that the Nombre de Jesús was inhabited by this group and had about eighteen or twenty rancherías, “all named. They are the ones who live near the coral coast and who profit by the corals,” although later he found that most of the trade from the “coral coast” went to New Mexico (Hammond and Rey 1953: 1018, 1020, 1022; Hackenberg 1983: 161).

Fray Gerónimo de Zárate Salmerón served as a missionary in New Mexico from 1621 until 1626. His own *relaciones* or report included an account of Oñate’s South Sea expedition that largely paralleled Father Escobar’s, but added new details. According to the former, the Rio del Nombre de Jesús flowed between barren mountains, from southeast to northwest. All the river was settled by the Ozara Indians, and their multitude was very great. They drew signs on the ground of 20 rancherías or pueblos (Milich 1966: 71). Father Zárate Salmerón noted also that Fray Francisco had had a talent for learning languages; unusual for a Franciscan, but an ability that lends credence to Escobar’s suspicion that the Oseras were Tepehuans. Upper and Lower Piman are closely related to Northern and Southern Tepehuan, the native languages once spoken in Durango, Mexico, and in parts of adjoining states (Hammond and Rey 1953: 1020; Milich 1966: 75; Miller 1983: 120-121). To someone having a passing familiarity with Tepehuan, Piman must have sounded similar.

From all of this, it appears that Piman-speaking peoples lived in southern Arizona during the 16th and early 17th centuries, but they had not yet differ-

entiated into the named groups known from a century later. The inhabitants of the lower Gila River in 1605 were probably exclusively Pimans. For that matter, the same could be said for those who made their homes in the San Pedro and perhaps also the Santa Cruz River valleys. What isn't known is whether anyone at this time dwelt along the middle Gila River.

The Opas are the only group of ancestral Maricopas who cannot be traced back to the Colorado River, but if Ezell (1963) is correct, this may be because Opa is a word of Piman origin and we do not know its early referent in a Yuman language. At one time, the Opas probably lived among the other Yumans in the Colorado River valley, but then became the earliest Yuman population to settle on the Gila - some time after A.D. 1600. Since the Quechan or Yuma proper seem to have been absent from the earliest historical accounts, the drying up of the Blake Sea in the Imperial Valley in the 15th century may indeed have forced them to return to the Colorado. Being both numerous and aggressive, they displaced the Cocopa downriver to the southern delta, and the first group of ancestral Maricopas - the Opas - up the Gila River Valley (Ezell 1963: 15, 26; Williams 1983: 100).

For the balance of the 17th century until 1694, the history of southern Arizona is largely a blank page. In 1638 the governor of New Mexico led a group of soldiers and Franciscan missionaries to the Opata villages in northeastern Sonora, mostly in search of plunder, but the natives fled to the mountains. Both soldiers and priests soon went back to New Mexico. When the Franciscans returned from 1645 to 1653 they competed with the Jesuit fathers for conversions as far west as Himeris (Imuris), but withdrew after the Jesuits obtained an order for the Franciscans to abandon northern Sonora (Bannon 1955: 86-89, 101; Wilson 1995: 32). No doubt there was traffic across southern Arizona, perhaps even visits to the Gila River valley, but we have no known accounts. Only in the 1690's do we find records again, this time of Jesuit missionary endeavors advancing from the south.

### *The Hohokam and the Pima*

The question of whether the Pimas, the Akimel O'odham, are descendants in any sense of the prehistoric peoples who built Casa Grande and the other 'great houses' of the Gila and Salt River valleys has been asked for more than 300 years. As yet there is no definite answer. For the past century archeologists have been the ones displaying the greatest interest, but recently anthropologists have turned to evaluating Pima-Papago creation narratives (Teague 1993; Bahr et. al. 1994). The evidence to date is thin, and both the question itself and the answers adduced have changed through time. We can point out some neglected references that may shed more light and attempt to define where things now stand.

On his first trip to the Gila River in November of 1694, Father Kino marveled at the Casa Grande ruin, "as large as a castle." He asked the natives

living nearby, presumably Pimas, the question they would hear again from countless travelers: who built this? “It is said,” he wrote,

“that the ancestors of Montezuma deserted and depopulated it, and, beset by the neighboring Apaches, left for the east or Casas Grandes, and that from there they turned towards the south and southwest, finally founding the great city and court of Mexico” (Bolton 1919 I: 128-129).

This may be an interpretation made by Kino and Manje, and it unlikely that anyone living along the Gila knew about the Aztec city of Tenochtitlan. This explanation, the so-called Montezuma legend, was given more frequently than any other in the next century and a half, usually without the Apache association.

In 1697, Captain Juan Mateo Manje learned some important elements of Pima traditions, including the claim that the big adobe buildings had been built by a people who came from the north. The civilized inhabitants were governed by a chief named el Siba (Sivanyi), “the cruel and bitter man.” A bloody war had been waged against these people, who then divided themselves with some going to the east and south while others returned to the north (Manje 1954: 84, 86, 287-288; Burrus 1971: 222, 343, 368, 372). Manje’s reference to a connection between the prehistoric occupants of the Gila-Salt river valleys, whom we now call the Hohokam, and the puebloan peoples to the north may lend support to Teague’s recognition of such a relationship.

There is an even earlier antecedent in the story that Coronado’s chronicler, Pedro de Castañeda de Nájera, picked up in 1540 regarding Chichilticalli, a ruin located somewhere in southern Arizona: “Chichilticale received its name because the friars found in this region a house formerly inhabited by people who broke away from Cibola” (Hammond and Rey 1940: 251). While Casa Grande itself is no longer thought to be Coronado’s Chichilticalli, Castañeda’s native informants in 1540 might well have been retelling what they heard from their fathers or grandfathers.

Father Luis Velarde, writing in 1716, knew of the Montezuma legend. Thirty years later, Jacobo Sedelmayr reported the tradition involving el Siba, and added his own opinion that Casa Grande was the residence of Montezuma (Wyllys 1931: 130-131; Dunne 1955: 22-23). Nothing was said about Apaches and no one had yet sought to link the builders with the Pimas.

Then in 1774-1775 came the well-documented expeditions to California led by Juan Bautista de Anza, captain of the Tubac presidio on the upper Santa Cruz in Arizona. Anza himself referred to Casa Grande simply as an “edifice of the ancient Indians,” the Palace of Montezuma (Bolton 1930 II: 127, 241; III: 15). One of Anza’s fellow travelers, Father Francisco Garcés, also called it the reputed House of Montezuma, but then said that he had asked some old Sobaipuris - who built the houses now in ruins on the Gila and made the earthenware found in fragments there? They answered: the Hopis, for only they knew how to make these things; that formerly the Sobaipuris used to go there to fight. Father Garcés had visited the Hopis, who bore little love for the Pimas, and he agreed that it was



probably the Hopis, harassed by the Pimas, who abandoned the communities on the Gila River (Galvin 1967: vi, 6-7, 13, 74, 77).

Father Pedro Font, chaplain and cosmographer of Anza's caravan and colonizing expedition, put down everything he could learn about the Casa Grande de Montezuma in his diary entry for October 31, 1775. Their camp that day was at La Laguna, later known as Blackwater Slough, three leagues from the ruin. As they rode out to the site, the governor of the Pima ranchería they named San Juan Capistrano de Uturituc recounted the history or tradition of the Gila Pimas concerning this house, "handed down by their ancestors." This, in Font's opinion, reduced itself to fables, "mixed confusedly with some Catholic truths," but he wrote it all down nonetheless (Bolton 1930 III: 213-214; IV: 32-35).

Font heard two myths. One was an expanded version of the story that Manje learned in 1697, but without the war or the people at Casa Grande returning to the north. The chief was called simply The Bitter Man. The other myth involved some adventures of a culture hero called Drinker Man, more commonly known as Elder Brother or Se'ehe. This was recognizably an abbreviated form of the more complete conquest mythologies collected by Russell (1908: 209-230, 237-238, 247-248), Lloyd (1911: 147-165), and Smith, Allison and Hayden (Bahr et. al. 1994). In these, ancestral Pima-Papagos attacked the major Hohokam settlements and the chiefs and principal priests who lived in the 'great houses' and implicitly spoke a Uto-Aztecan language, perhaps Piman. The two most important villages seem to have been Casa Grande and Casa Blanca.

When the war by Elder Brother and his warriors against the Hohokam ended, the residents of the Salt River Valley west of Pueblo Grande were said to have left, going both north and south, while those living in the southern Hohokam homeland intermarried with the newcomers to become the modern Pima or Akimel O'odham (Fewkes 1907: 326-327; Teague 1993; Bahr et. al. 1994). In the Font versions, however, references to the war or to any relationship between The Drinker's people and the Pima-Papago were absent (Bolton 1930 III: 15, 214-217; IV: 36-41). This outline of late prehistoric events is remarkably similar to Haury's (1945: 211-212) reconstruction, which did not rely upon native traditions.

When the Americans with General Kearny's Army of the West marched down the Gila River valley in 1846, they too were curious about the builders of the 'great houses.' Captain A. J. Johnston picked up a fragment from a creation story, but the interpreters for the Pimas and Maricopas both told Lieut. W. H. Emory and Capt. Johnston that in truth their people knew nothing about the builders of these ruins (Johnston 1848: 498-501; Calvin 1951: 132). The expedition's physician, Dr. John Griffin, heard the same (Ames 1942: 211). Henry Smith Turner wrote, "The Pima Indians can give no satisfactory account of the period at which this house was built, or by whom it was occupied." Turner did acquire a slightly longer version of the tradition reported by Capt. Johnston, however (Clarke 1966: 107). Six years later, boundary commissioner John Bartlett's inquiries were answered with a *quien sabe?*, or that the ruins on the Gila were the Houses of Montezuma (Bartlett 1965 II: 248). Bartlett added his own perceptive note that this last was doubtless an idea derived from the Mexicans,

rather than from any tradition of their own. He could scarcely have known that natives told Father Kino the same thing as far back as 1694. Up to this point, no one had so much as suggested a link between the prehistoric build-ers of Casa Grande and the other ‘great houses’, and the Pima Indians.

The first person to do so seems to have been Adolph Bandelier, who visited the Gila-Salt valleys in the summer of 1883, and in the course of his investigations talked with Mr. John D. Walker of Florence, Arizona. We will meet Walker again in Chapters 10-12; for now it might be noted that he had lived in the area for twenty years, married into the Pima tribe at one time, and was evidently fluent in the language. From him, Bandelier learned essentially a shortened version of the creation epic as given in Bahr et. al. (1994). According to Bandelier, the Pimas claimed to be the lineal descendants of the Indians who built the ‘great houses’ and mounds in the Gila and lower Salt River valleys. They attributed the destruction of Casa Grande and the other centers to various causes, including internal wars; and they recognized that not all of the villages had been inhabited contemporaneously (Bandelier 1892: 434-435, 462-464; Lange and Riley 1970: 134-141).

Bandelier’s account vs. Bahr. et. al. (1994) suggests that John D. Walker perhaps understood the subtleties in the traditions told to him, but he modified or simplified their details in repeating the story. His own imagination may also have been a factor. The Pimas now became simply the lineal descendants of the people we call the Hohokam rather than, as his own sources may have had it, their having come from intermarriages. Given the geography of the Uto-Aztecan language family, it would be surprising if sedentary agriculturalists living in south-central Arizona in the A.D. 1400’s spoke anything but a Uto-Aztecan language.

In any event, Bandelier appears to have been the first to publish the idea that the Pimas were the descendants of the Hohokam. The archeologist J.W. Fewkes, who excavated Casa Grande, was fully aware of Pima traditions as well as those of the Hopis, and he formed conclusions close to those reached by Bahr and Teague (Fewkes 1907: 324-329). Fewkes performed a useful service in laying to rest one old tale; namely, that there was no basis for acceptance of the claim that Casa Grande was a station on the migration route of the Aztecs. It was not the House of Montezuma.

Other ideas also appear to have their origins with Bandelier, including the recognition of artificial mounds, which he even called platforms, at places along the middle Gila and Salt River valleys. While recognizing that some of these had had buildings on top, he was inclined to think that such mound building primarily served as “.... a protective device, called forth by the peculiar conditions of drainage, which threatened structures resting on the natural level” (Bandelier 1892: 444-445, 455-456). When he visited the Opatas country in northeastern Sonora and then Casas Grandes in Chihuahua, he was impressed with the similarities of the architecture there to the prehistoric ruins of the Gila and Salt River valleys, and to some intermediate sites as well. Almost two centuries earlier Captain Manje had noted this similarity in construction to ruins at Casas Grandes [Chihuahua] (Manje 1954: 86-87). Opatas informants told Bandelier repeatedly that Casas Grandes had been built by the Opatas in former times

(Bandelier 1892: 569-571; Lange and Riley 1970: 273-274, 276, 278-280). Unfortunately, he was unable to record any actual traditions and the Opatas have since been completely assimilated, leaving no one to ask (Hinton 1983: 320-322).

Bandelier came away with an overall impression that several tribes built the various Casas Grandes in the American Southwest and northern Mexico. The builders, probably of a single linguistic stock, occupied the country “in separate and autonomous groups” (Bandelier 1892: 570-571). Historically, some of the people living in the Valle de Sonora and even the neighboring Opatas (i.e., Sisibotaris) did have “... houses.... built of adobe, of very durable construction” (Bannon 1955: 25, 30-31, 47; Pérez de Ribas 1968: 147).

However, Bandelier’s claim that the Nébomes of south-central Sonora occupied similar ‘great houses’ until the middle 17th century is highly questionable (Bandelier 1892: 460-461, 571). He based this on a history of Jesuit missionary accomplishments by Padre Andrés Pérez de Ribas, first published in 1645. That author never saw these dwellings himself, but referred to his contemporary, Captain Diego Martínez de Hurdaide, as authority that the houses of the Upper Nébomes “... are made of blocks of earth, packed together in the manner of adobes,” or again that

“Their houses were well constructed, of large adobes, with roofs of heavy rafters covered over with brush and a layer of several inches of earth. Some houses were constructed much larger, with turrets at the corners, from which to fire with arrows upon an enemy” (Pérez de Ribas 1968: 91, 137).

The locale would have been east of the middle Rio Yaqui, in what is now southern Sonora. Campbell Pennington (1980: 335-337), an ethnographer among the Lower Pimas, regarded Pérez de Ribas’ account as “muddled,” there being no evidence that the Nébomes ever constructed such elaborate structures. Neither he nor David M. Brugge, another anthropologist familiar with the area, encountered any remains of large adobe houses there. One also can argue that Father Eusebio Kino would have seen little reason to make a long journey to Casa Grande in November 1694 if similar structures were known in the well-missionized Nébome country (Bolton 1919 I: 127-129; Manje 1954: 50). Where the buildings seen by Captain Martínez actually lie, or lay, no one knows.

Those familiar with the archeology of the Papago or Tohono O’odham country of southern Arizona, might wonder if Martínez had in mind something on the order of the massive adobe-walled enclosures or the large rectangular earthen enclosures reported for the late prehistoric Sells Phase on the present Papago Reservation? Historical sources made no mention of these, and the ethnic identity of their builders is unknown. Again, there seems to be nothing that would link building practices in the Pima-Papago country with southern Sonora.

Linguistic connections on the other hand may be very close. In his survey of southern Uto-Aztecan languages, Miller (1983: 120) noted that the Nébome dialect had sometimes mistakenly been placed with Lower Piman, but it was clear that linguistically Nébome belonged with Pima-Papago, the two still being

markedly different dialects. With this in mind, we might recall that in the Pima creation stories, part of the Hohokam did leave and go south after their defeat by Elder Brother's warriors (Fewkes 1907: 329; Manje 1954: 86; Burrus 1971: 343, 372; Teague 1993: 444; Bahr et. al. 1994: 37, 218-220).

The stability of the Pima traditions seems remarkable over the past 300 years, but it is in line with the expectations of Teague (1993) and Bahr et. al. (1994). The evident concern for accuracy in retelling and the plausibility of the events lead to the conclusion that while the stories may not be history, neither are they fiction, and native acceptance of the stories as something that really happened is quite legitimate. As Bahr says, history is a type of literature, but not all literature is history. To say that there is a Hohokam-Pima continuum is probably too simplified, but links do exist. These merit further study, especially in the areas of archeology and oral traditions.

## Chapter II

### EARLY SPANISH CONTACTS, 1694 - 1700

#### *Pimería Alta, 1687 - 1692*

Jesuit missionaries advanced the northern frontier of New Spain for most of the seventeenth century until by 1687 the northernmost mission on the Pacific slope stood at Cucurpe, a Eudeve Indian village in the headwaters of the Río San Miguel, some seventy-five miles south of present-day Nogales, Arizona (Bolton 1919 I; 164; Smith et. al. 1966: 32-33; Burrus 1971: 37-38, 49). In other Opatá villages to the east and south, Jesuit missions had existed for forty years or more. The next frontier would be what the Spaniards had begun to call Pimería Alta, the homeland of some 13,000 to 16,000 Upper Pima Indians. These lands included roughly the southern fourth of Arizona and the northern quarter of present-day Sonora, Mexico, although at the time this was all part of Sonora. The natives of Pimería Alta consisted of the Sobas, Sobaipuris, Papagos, and Pimas proper.

The man who was to gain fame as a missionary and explorer of Pimería Alta, Father Eusebio Francisco Kino, S.J., was a native of northern Italy who had arrived in Mexico in 1681, at the age of 35. No longer a young man, he retained the zeal of youth and in 1683 was assigned to the royal expedition sent to colonize Baja California. After three years, the crown withdrew its support and the venture failed. Kino returned to Sonora and in the spring of 1687 was chosen to establish the first mission among the natives of Pimería Alta. He found the natives well-disposed at the northern Piman village of Cosari, a dozen miles up the river from Cucurpe, and named his mission there Nuestra Señora de los Dolores. This was to be his home until he died in 1711.

Father Kino and a fellow Jesuit first rode north into southern Arizona in January of 1691. He visited the Indian village of Guevavi, some ten miles north of the current Arizona-Sonora border, and continued down the Santa Cruz River valley as far as the ranchería of San Cayetano de Tumacácori. This was by

invitation of the natives, but it would be another ten years before Guevavi became a Jesuit mission, with Tumacácori as a *visita* or secondary mission. In the course of this trip, Kino and his companion were greatly impressed with the beautiful, fertile and pleasant valleys of Pimería, inhabited by numerous and industrious Indians (Bolton 1919 I: 118-121; Kessell 1970a: 20-29; Burrus 1971: 42-44).

In August and September of 1692 Father Kino returned, this time with a number of servants and fifty pack animals bearing supplies and gifts. On this journey he pushed down the Santa Cruz beyond Tumacácori to the great ranchería of San Xavier del Bac, where he preached to more than 800 Sobaipuris who lived there. From San Xavier, he passed “to the other Sobaipuris, of the east,” whom he found along the San Pedro River, called the Río de Terrenate or Quiburi at that time. In the Santa Cruz valley he had found the natives “very affable and friendly,” while their kinsmen along the San Pedro were “still somewhat less docile” (Bolton 1919 I: 122-123; Burrus 1971: 44-45).

By his own count, between 1687 and 1708 the pioneering Jesuit made more than forty expeditions throughout Pimería Alta, traveling as far as two hundred leagues to the north, west and southwest. Most of the time only his servants and the governors or captains of different rancherías accompanied him (Smith et. al. 1966: 104; Burrus 1971: 64). He crossed some part of southern Arizona on at least fifteen of these journeys and reached the Gila River five times. On one trip he trekked along the Gila from the Colorado River upstream to Casa Grande, before turning away (Manje 1954; Fontana 1994: 94). The padre from Dolores was responsible for establishing more than two dozen missions and visitas among the northern Piman Indians. The northernmost of these was at San Xavier del Bac. None of the churches built by him remain in use today and the few that survive at all are archeological ruins (Fontana 1994: 93-94). At no time before the 1880's was there a mission among the Pimas of the Gila River valley.

We know of only a single diary kept by Kino himself, the *Relación Diaria*, from August and September of 1698 (Smith et. al. 1966). His lengthy historical memoir or *Favores Celestiales* included summaries and incidental mentions of many other treks (Bolton 1919). He depended upon Juan Mateo Manje, the leader of the military escort on nine expeditions with Kino, for a record of two journeys into Arizona. Manje's journals survive for seven exploratory trips and in more than one version for some of them. Manje fortunately was an excellent diarist.

He was also the nephew of General don Domingo Jironza Petris de Cruzate, *alcalde mayor* with the military command of the province of Sonora. When Jironza took office in 1693, he named his newly-arrived nephew an ensign in the Flying Company of Sonora. His young relative proved to be a skilled soldier and advanced rapidly, becoming *alcalde mayor* himself in 1701 and a general by 1708 (Burrus 1971: 47-51, 149). His book, *Luz de Tierra Incógnita*, written in 1720-1721, was built around his journals and gave the essentials of his trips with Kino, but included much additional information. *Luz* was first published in part in 1856, but only in 1971 did the surviving original journals appear in print (Burrus 1971). These documents and the writings of Father Kino

himself are virtually our only sources for a look at the Upper Pimas through the narrow window of time, 1694-1700, of the first recorded Spanish contacts.

Manje wrote in 1702 that the Pimas numbered more than 16,000 according to the census he made personally of each individual (Burrus 1971: 49). He would have included all of the Upper Pimas in this total. His 1697 and 1699 journals tell us something about how they were distributed. In the San Pedro River valley, Manje counted 1850 individuals, while the four settlements on the upper Santa Cruz between San Agustín (Tucson) and Guevavi. had 1860 people. The three rancherías within the limits of the present Gila River Indian Reservation contained only 730 natives. To these might be added the 530 Pimas found further down the Gila when Kino and Manje ascended that river in 1699 (Burrus 1971: 199-217, 242-246, 335-349, 359-379, 427). Some 11,000 of Manje's northern Pimas must have been living in rancherías in northwestern Mexico and in Tohono O'odham lands in present-day Arizona.

#### *1694: To Casa Grande and the Pima Villages*

In 1694, Father Kino undertook five expeditions. On three of these he stayed within what is now Sonora. Manje went along and kept the diaries. At the time of Kino's fourth journey Lieutenant Manje was off on a campaign, but earlier that year some Upper Pimas had told the young officer of a great river and large houses on the northern rim of Pimería (Dunne 1955: 18; Burrus 1971: 72, 192-193, 311). Kino was skeptical, until some Indians from the town of San Xavier del Bac came to see him at Dolores and confirmed the story.

With the San Xavier natives as guides and accompanied by a crowd of servants and native officials, the intrepid Jesuit went inland in November of 1694 to the "large River of Hila" and the Casa Grande, which lay forty-three leagues beyond San Xavier. Manje, a frequent skeptic, wrote that "As I did not go on this trip he was obliged to make rough notes" (Manje 1954: 50). Kino depended heavily upon the journals of his officer-companion, and in their absence, his own records were often sketchy.

There is no day-by-day account of this expedition and the journey from Dolores to the Gila River was passed over in silence. The padre and his entourage arrived at the first ranchería of the Gila River Pimas on November 28, 1694. He said mass at Tusonimo and renamed it La Encarnación. The following day Kino rode four leagues further to another ranchería, El Coatoydag, to which he gave the name San Andrés. His only descriptions were that "all were affable and docile people." This was no small compliment and probably intended to refute persistent rumors that the Pimas were hostile and had been making common cause with known enemies of the Spaniards (Bolton 1919 I: 127-129; Burrus 1971: 60-62, 72-74; Polzer 1971: 157, 161). The name Coatoydag, "fields of the Kohalks," identifies the natives who lived in this one village.

Kino counted 553 natives at San Xavier en route, but otherwise said nothing about the numbers of people he met, nor did he give any details on how they farmed or if they even practiced agriculture; what their houses were like, or the nature of their country. His concern was promoting Christianity, not with

native ways of life; in recording baptisms, not Pima customs. Although he did not pass beyond San Andrés, he invited the Opas and Cocomaricopas, neighbors of the Pimas, to come and meet him.

An accomplished cartographer, Father Kino also made a map of the lands downstream on the Gila and plotted the names of some nineteen villages, most of which lay to the south side. On this 1695-96 map, the first four settlements below San Andrés were evidently Pima towns. Next came three communities, probably beginning around the Great Bend, which he indicated to be “Pimas and Opas mixed.” This accords with Father Sedelmayer’s remark that “in three or four rancherías almost all speak both languages” (Dunne 1955: 19). Still farther downstream Kino represented another thirteen settlements primarily by Piman names (Burrus 1965: Map VIII).

Father Kino left only a brief description of the Casa Grande he had traveled more than one hundred leagues to see. He was told that the ancestors of Montezuma had deserted it and to his eye the ruined cities here had been abandoned for a long time (Bolton 1919 I: 128-129; Burrus 1971: 72-74).

Sonora was struck by a series of Indian uprisings and raids in 1695-1696. One revolt followed another, as Manje put it, and “only the town of the mission of Nuestra Señora de los Dolores escaped .... from the depredation and conspiracy” (Manje 1954: 67, 70). Troops of soldiers from the garrisons countered with their own campaigns, and although the Pimas were involved in some of these tumults, the perpetrators were mostly Janos, Jocomes and Apaches living in southeastern Arizona. The Pimas, presumably meaning the Sobaipuris, joined with General Juan Fernández de la Fuente from the Janos presidio in a general campaign in the Sierra Florida (Pinaleño Mountains). There is no record that any of these expeditions visited the middle Gila (Bolton 1919 I: 140-147, 162-164; Manje 1954: 43-71; Polzer 1971: 165-171).

#### *Fall 1697: Entrada to the Sobaipuris and Pimas*

By November 1696 all was quiet again. With calm restored in Pimería Alta, Father Kino paid a visit to the Sobaipuris on the San Pedro in December of 1696, took some livestock to San Xavier del Bac in mid-January, then made two more brief trips to the eastern Sobaipuris in the early months of 1697 (Bolton 1919 I: 164-169; Dunne 1955: 17-18; Burrus 1971: 95-96). By the fall of that year the decision had been made to penetrate further inland and confirm whether the Pimas there were quiet and ready to receive missionaries.

Accordingly, Kino and Manje set out from Dolores on November 2, 1697, on a month-long journey, with the usual body of servants and with pack-loads of provisions and presents. At the Sobaipuri community of Gaybanipitea on the San Pedro River, Lieutenant Cristóbal Martín and twenty-two soldiers of the Flying Company of Sonora joined them. The party then made its way from village to village down the river to its junction with the Gila. Both Manje and Martín kept journals, and Kino’s own report is fuller than usual (Bolton 1919 I: 167-170; Burrus 1971: 97-98, 197-200; Smith et. al. 1966: 35-36, 68).

Continuing down the Gila, they finally beheld the Casa Grande, situated a league from the river, on November 18th. Father Kino noted that “there are near by six or seven rancherías of Pimas Sobaipuris,” although from what both he and the two officers wrote, it is clear that these villages lay downstream. Manje made a detailed examination of the Casa Grande and neighboring ruins, and added that at a distance of twelve leagues (about thirty miles) the natives said there were many similar buildings (Bolton 1919 I: 171-173; Smith et. al. 1966: 41-42; Burrus 1971: 99, 206-209, 342-344, 370-372).

With the archeological investigations completed, the party resumed its march and camped that evening on the Gila one league from Casa Grande, at an unnamed settlement with 130 natives. The day following, they marched over a landscape that had no pasturage, so sterile that it appeared to have been sown with salt. A ride of four leagues brought them to the ranchería of Tusonimo, so-named for a great pile of mountain sheep horns that appeared to be a hill. Here Manje counted 200 docile and friendly souls. This was Nuestra Señora de la Encarnación del Tusonimo, seen by Father Kino in 1694.

In the two versions of his journal, Manje wrote that it was an interval of seven leagues (from the first settlement) to the great ranchería that all of the diarists called San Andrés. In the margin of the manuscript of Manje’s *Luz*, a later hand added “Sudaisón” at this location. Here they found 400 men, women and children, and also a young Indian streaked with red paint that appeared to be mercury (actually cinnabar, an ore of mercury). This excited considerable comment from both Manje and Martín since mercury was in heavy demand for the reduction of silver. The distance west of Casa Grande would have been seven to eight leagues. The explorers turned around here and on November 21st began making their way back to Dolores, by way of Picacho Peak and San Xavier del Bac (Bolton 1919 I: 172-174; Smith et. al 1966: 42-47; Burrus 1971: 209-219, 343-351, 372-381).

The most immediate result of this journey was a report that made clear the farthest Sobaipuris, or Pimas Sobaipuris in Kino’s terms, were good people, friends, and innocent of the robberies and hostilities that Sonora had been experiencing. Some had asked for missionaries and baptism. On his 1701 and 1702 maps, Father Kino showed three unnamed place symbols between Casa Grande and the junction of the Santa Cruz with the Gila River (Burrus 1965: Maps XI, XII).

One of the turning points in the history of the Sonoran frontier was the diplomatic wedge that Captain Francisco Ramírez de Salazar, the first captain of the Flying Company, drove between the Pimas and Sobaipuris on the one hand, and the Janos, Jocomes, Sumas, and Apaches on the other. This happened in 1692, shortly before Ramírez’s death, and by 1694 the Pimas and Spaniards had already made a number of joint campaigns against their common enemies (Manje 1954: 48-49, 247; Forbes 1960: 244-249; Polzer 1971: 59). This new alliance benefited the Sonorans but not their allies, as the enmity between the Apaches and the Sobaipuris led first to the latter losing part of their territory to the Apaches and then to their removal from the San Pedro Valley in 1762. Raids and



retributions between the Gila River Pimas and the Apaches continued for another century.

*Fall 1698: Return to the Pima Villages*

Father Kino's third journey to the Gila came a few months after the memorable battle of March 30, 1698, between the Apaches and their allies, and the Sobaipuris of the San Pedro. Between fifty-five and sixty of the former were killed on the field and more than one hundred died later from the effects of the Pimas' poisoned arrows. Kino and a lieutenant (probably Luis Granillo) counted the bodies on the battlefield on April 23d. Five Pimas died (Bolton 1919 I: 178-183; Manje 1954: 97-98; Smith et. al. 1966: 47-50; Burrus 1971: 578-580). With the frontier quiet for the moment, it was an opportune time for another expedition.

In August the father visitor charged the father at Mission Dolores to explore the Río Grande (the Gila) as far as the Sea of California and report on this. Kino made preparations accordingly and on September 22d he set off, accompanied by Captain Diego Carrasco, servants and pack animals. More animals had been sent ahead and others would follow. They traveled north by way of Guevavi and San Agustín (Tucson), and passed by Casa Grande at a distance of three leagues. Another four leagues brought them to the ranchería of La Encarnación a half-hour after dark. More than 300 natives were waiting to receive them; they had traveled twenty-two leagues that day (September 29th).

The next day they continued for another four leagues, at which point a courier sent from Caborca met them. In the afternoon they went "down to San Andrés over a smooth, hardpacked road to the very many delightful cottonwoods of the Rio Grande" (Gila). This, the good father tells us, was the San Andrés he had 'discovered' four (he says five) years earlier, and here more than 500 souls received them with kindness. Later, Kino would say that in the rancherías of La Encarnación, San Andrés, and in those nearby, they were greeted by more than one thousand souls, men and women (Bolton 1919 I: 184-186; Smith et. al. 1966: 8-16; Burrus 1971: 104-105, 553-563).

In his earlier travels, the pioneering Jesuit had gone no further west (along the Gila) than San Andrés, so it is understandable that the following morning (October 1st) he took several servants and "went down towards the west, .... eager to climb a hill which was in sight," to see if the tidewater might be in sight and the most convenient road to take to see where the Rio Grande emptied into the Sea of California! Since he had already drafted at least two maps (although not very accurate ones) that represented the country further west, his optimism at thinking he might be within viewing distance of the Gulf of California seems incredible (Smith et. al. 1966: 16).

This "hill" may be the only identifiable topographic feature from Kino's time, other than Casa Grande, that is potentially identifiable. Historian Herbert E. Bolton thought that it was the Estrella Mountains, but according to Kino's own journal those mountains would have lain further west. His movements after leaving the "hill" suggest that it may have been Gila Butte, located just north of Sweetwater and several miles northeast of Casa Blanca. If this is the case, then

San Andrés of Kino's time would have been at approximately the location of the later village of Sweetwater. This is in good agreement with the approximate distance of eight leagues from Casa Grande to San Andrés. The padre said very little more in the way of description, and because Diego Carrasco's diary was a near-copy of his own, it gives no new information.

Five leagues (c. 12½ miles) along his way on October 1st, the good father was seized with "a powerful fever" that obliged him to stop under some cottonwoods along the Gila. This would put him about as far downstream as Maricopa Wells. That afternoon he returned to San Andrés, where visiting Opa and Cocomaricopas from the lower Gila evidently corrected his geographical misunderstanding. The party reversed course, turned south and then headed west through the Papago country. A week later they achieved their goal by ascending a mountain [Pinacate Mountain] and seeing from its heights the Gulf of California (Bolton 1919 I: 186-187; Smith et. al. 1966: 16-24; Burrus 1971: 105, 564-577).

*Spring 1699: To the Cocomaricopas and Pimas*

Less than four months passed before Father Kino left Dolores once more, accompanied by Captain Manje, Father Adamo Gilg, and more than ninety pack animals. Their purpose this time was to refute scurrilous reports that the Cocomaricopas and other new nations to the west of La Encarnación and San Andrés "... were so barbarous and such cannibals that they roasted and ate people." They also sought to determine where the Gila (or the Río Colorado) emptied into the Gulf of California, and indirectly to show whether Lower California was a peninsula or an island (Bolton 1919 I:102; Burrus 1971: 110-111). This expedition, perhaps the best-recorded of any that Kino and Manje took part in, lasted from February 7 to March 14, 1699.

Their initial direction lay to the west and northwest via Sonoita and paralleled the Tule, Tinajas Altas, and Gila Mountains to the banks of the Gila River near a settlement they named San Pedro. This was clearly a Yuman village and the Yumans blocked any further advance, even discouraging a visit to the junction of the Gila and Colorado rivers only three leagues distant. After two days, diplomacy prevailed and the Spaniards decided to return up the Gila towards the east, reconnoitering all the settlements along its banks. The Yumas refused guides even for this, "... since these Indians do not talk to those living up the river, because of wars and strife among them" (Bolton 1919 I: 193-196; Manje 1954: 102-118; Burrus 1971: 110-112, 385-397, 405-421).

From San Pedro they rode up the Gila through a *despoblado*, an area without people twenty-seven leagues (about 67½ miles) in length. The first village, San Matias del Tulum (Tutumaoyda; Tumagoidad), lay on the south side of the river a few miles downstream from what would later be called Agua Caliente. On his 1695-96 map, Father Kino had shown "Tutumageidag" as the next-to-last Opa/Cocomaricopa settlement along the Gila, taking his information from informants at San Andrés in 1694. His scale on that map was seriously inaccurate for the lower Gila; nonetheless the persistence of San Matias indicates a stability to the western limit of Cocomaricopa rancherías for at least five years.

Continuing upstream, they passed through a series of Cocomaricopa and mixed Cocomaricopa/Pima communities until, at the Great Bend of the Gila, they reached San Felipe y Santiago del Oyadaibuc, with 132 persons, “all of the Pima nation” according to Manje (Bolton 1919 I: 196-197; Burrus 1971: 397-400, 421-425). Kino’s 1695-96 map had shown “Oiadaibu” immediately below the three villages labeled as “mixed Pimas and Opas,” indicating that by 1699 the Gila River Pimas had occupied a former Opa/Cocomaricopa site, or expanded westward to the Great Bend during the ensuing four years. Whichever the case, the Cocomaricopas and the mixed Cocomaricopa/Pima settlements were limited to a stretch of thirty-six or thirty-seven leagues (90+ miles) along the lower Gila by 1699. Their territory was unchanged in 1744 (Ezell and Ezell 1987: 144).

On March 1, 1699, the expedition departed Oyadaibuc and rode eastward eleven leagues, leaving the river to their left. On the 2d the travelers continued via “a wild and stony route” over an unnamed sierra and, descending from its heights, camped at the Pima ranchería they named San Bartolome del Comac. This lay three leagues (c. 7½ miles) upstream on the Gila from its junction with the Salt River and corresponds with “Comacson” on Kino’s 1695-96 map. The next day they marched another ten leagues (25 miles) to San Andrés del Coatcoida (Coata; Coatoydag), which Kino and Manje had last visited in 1697.

They passed La Encarnación at midday on March 4th, not giving a distance from San Andrés to La Encarnación, to arrive after nine leagues at an unpopulated campground that had fine pasturage. There they veered southward, leaving the river and Casa Grande to their backs, and continued along the established route via Tucson and San Xavier back to Dolores. According to Manje’s tabulation, they met either 1454 or 1460 persons of both sexes, “whom we had neither seen nor discovered” until this journey, along the Gila River. This included everyone living below San Andrés (Bolton 1919 I: 197-199; Manje 1954: 123-127; Burrus 1971: 111-112, 400-404, 425-432, 435).

“Sudaisón” in a later hand was written in the margin of Manje’s journal of the 1697 expedition (Burrus 1971: 210). Neither Kino nor Manje used that name for a Gila River Pima village, although Father Kino did represent “Soación” as the next settlement below San Andrés, between it and “Comacson,” on his 1695-96 map. The travelers evidently passed by Soación, a Pima village, and failed to mention it in their 1699 journals. Contrary to what later students have surmised, the great eighteenth century Pima ranchería of Sudac-sson, also rendered as Sutaquisón, at the “place where the water comes out,” was not the same location as the San Andrés of Kino’s time. Sudac-sson lay about four leagues or ten miles west of San Andrés.

#### *Fall 1700: To the Gila and Colorado River Junction*

Father Kino made one more trip to the Gila River. His journey in the fall of 1700 was modest in scale (ten servants, sixty pack animals). It had the purpose of finding a land route to lower California, where the missionary effort had been renewed in 1697. The caravan departed from Dolores and crossed the Papago country to the Cocomaricopa village of El Tutto, below the Great Bend of the

Gila. Even though this was Cocomaricopa country and on the lower Gila, many Pimas lived there, and the captain of La Encarnación sent word that his people had dealt a blow to the Apaches (Bolton 1919 I: 242-258; Burrus 1965: 47; 1971: 116-118. Kino's party then descended the Gila River to the Colorado, leaving the lands of the Cocomaricopas behind a little beyond Agua Caliente. They returned to Dolores through the deserts of far southwestern Arizona and the already-known settlements of northwestern Sonora.

*Diaries and Journals: Using Historical Sources*

We have only the journals and other writings of Father Kino and Captain Manje, plus the two diaries kept by Captain Carrasco and Lieutenant Martín, to draw upon for information about the earliest years of Spanish contacts with the Gila River Pimas and Cocomaricopas, 1694 to 1700. Manje's well-known book *Luz de Tierra Incógnita* was based in part upon his surviving records, but with many details and descriptions abridged or omitted. These sources have underlain the reconstructions of life in Piman communities by Ezell (1961), Winter (1973), Doelle (1981) and others. Except for Doelle (1981) these portrayals did not make use of Manje's original diaries, first published in 1971 (Burrus 1971).

Neither Father Kino nor his companions had much to say about the native peoples and their ways of life. The later Jesuits in Sonora were much better ethnographers. Kino's experience with the Pimas of the middle Gila River was very limited; he made only four visits and spent a maximum of ten days among them during his three later trips. With respect to his 1694 journey we know that he arrived on November 28th, and have no reason to expect that he was there for more than several days. Away from his home mission at Dolores, Kino was a man in motion, and brevity characterized his visitations elsewhere. Two of the military officers who accompanied him in 1697 and 1698 did keep diaries, but Diego Carrasco's was substantially the same as Kino's *Relación Diaria* of 1698. They paused for three days at the Pima Villages then.

Manje too was a man on the move, stationed initially at Corodéguaichi (Fronteras) with the Flying Company, then later at Dolores and also at the Real of San Juan Bautista, at that time the capital of Sonora. He was available for nine trips with Kino, but only two of those - in 1697 and 1699 - were to the middle Gila River. Both he and Kino recognized that Manje was the better diarist, and allowing that his time there totaled only seven days, Manje's descriptions are invaluable. By the late 1690's both he and Father Kino would have been conversant in Piman although dependent upon interpreters to communicate with the Cocomaricopas. The latter often visited the Pimas on the middle Gila River, but their own villages at that time lay on the lower Gila below the Great Bend. From the southern point of the Great Bend (the village of Oiadaibuc) upstream to Casa Grande was Piman country.

New information available in recent years has helped to clarify the numerous problems Ezell (1961: 110-115; Ezell and Ezell 1987: 138-140) outlined in his own efforts to extract cultural information from the Spanish records. "Cultural blindness," such as insensitivity to native social and political

nuances; the unnamed and perhaps unrecognized changes termed “village drift;” assignment of village names without geographic or other referents; unintended duplication of names by different visitors; and the inconsistent (sometimes erroneous) notations of distances are some of the recording problems that we can wish had been handled better.

To these we can add a lack of clarity in the original diary entries; possible transcription errors; questionable translations in documents that are not readily available in the original Spanish; and the temptation for modern students to read greater precision into observations than the persons who wrote them may ever have intended. The reasoning behind the judgments offered here is given as well.

Distances were expressed in leagues, and the only contemporary equivalent for the length of a Spanish league was 5,000 varas. A number of scholars have considered this problem with reference to Kino and Manje, and determined that their leagues each equaled about 2.4 to 2.5 miles (Hall 1984: 84-85; Manje 1954: xii; Dunne 1955: 12; Kessell 1970a: 25; Burrus 1971: 66, 166; Polzer 1971: 221, 244). Perhaps, as Karns suggested, it was really a paced distance, the distance normally walked in one hour (Carroll and Haggard 1967: 155). Discrepancies between actual distances and those given in journal accounts will be found (Burrus 1971: 166), the most obvious examples being in the travel narratives of Juan Bautista de Anza’s expeditions during the 1770’s. Mostly for ease of calculations, a league is assumed to be 2.5 miles. In more recent times, a Mexican league is four kilometers.

Pima villages in Kino’s day were constructed entirely of perishable materials and have left no prominent ruins. The only place name in this area with continuity is Casa Grande, which leaves one having to identify the sites of named historical settlements by scaling the distances indicated by travelers onto modern maps, from points of reference such as Casa Grande and the junction of the Gila and Salt rivers. To do this, we assume that some though not necessarily all of the journal entries stated the number of leagues between points accurately. When the figures given by several observers differed or there is difficulty in identifying the actual beginning or end points in a string of distances, some consensus is needed in order to identify settlement locations. Maps of the period indicate only the presence or positions of native communities, and are not useful for scaling the distances between places.

### *Native Populations and Settlements*

Manje found that Native American populations were well dispersed across Pimería Alta, from the Gila River south into northern Sonora, and from the San Pedro River and Río San Miguel west to Agua Caliente (in Arizona) and the Gulf of California (in Mexico)(Wylls 1931: 113-114). Between five and ten percent of the Upper Pimans lived along the Gila River while twice as many farmed lands in the San Pedro Valley, and an equal number inhabited villages on the upper Santa Cruz River. His figures showed the middle Gila valley as a minor population center; the largest village there, San Andrés, had 400 souls in 1697 and 500-plus in 1698 (Smith et. al 1966: 16; Burrus 1971: 344, 374). Neither

Kino nor Manje gave any indications of recent experiences with diseases that might have reduced the size of the native population. While the Yumas of the Colorado were not friendly with their neighbors up the Gila, nothing was said about ongoing or very recent raids (Bolton 1919 I: 197, 247, 288). The Pimas did actively raid the Apaches, however.

It would be interesting to know what became of Father Escobar's Osecas or Ozaras, whom he thought were Tepehuan-speakers and who lived around the junction of the Gila and Colorado rivers in 1605. Manje had a copy of Fray Gerónimo de Zárate Salmerón's *Relaciones*, which gave a good account of Governor Juan de Oñate's expedition from New Mexico to the lower Colorado that year. In 1699 Manje asked the oldest Cocopas and Yumas if a Spanish captain and soldiers had ever passed that way? They replied that this had happened in the time of their fathers (Manje 1954: 115; Burrus 1971: 395, 417-419). It probably never occurred to Manje to ask the same question of the Pimas, since only Father Escobar's own *relación* mentioned the Tepehuan connection. Their response might have been even more interesting.

How many Pima villages existed along the middle Gila River in the 1690's and where were these situated? In all of their accounts, the diarists consistently listed two communities: El Coatoydag, renamed San Andrés, and Tusonimo (Tcurshonyi Mo'o = mountain sheep horns), which they called La Encarnación. In 1694 and 1698, Father Kino placed these two sites four leagues or about ten miles apart and on the south side of the Gila River, San Andrés being the one to the west. In 1697, Lieut. Martín said it was three leagues (c. 7½ miles) from one to the other. Manje's diary at this point is not entirely clear, but close reading shows that it actually agrees with Martín's (Bolton 1919 I: 128; Manje 1954: 88, 90; Ezell 1961: 111; Smith et. al. 1966: 15, 42; Burrus 1971: 344-346, 374-375).

In his 1694 entry, Father Kino mentioned only these two settlements. In 1697 and in the context of Casa Grande he said "... there are near by six or seven rancherías of Pimas Sobaipuris," although he named only the two from his previous visit (Bolton 1919 I: 172). Manje, or some later annotater, left the name of one of the others as Tucsán or Tuesán, a ranchería of 130 persons on the banks of the river "about a league" from Casa Grande (Manje 1954: 87; Burrus 1971: 343, 372). By the etymology of the name (Tcuk Shon = "blackwater"), this village should have been near modern Blackwater, probably west of it and a little more than a league north-northwest from Casa Grande (Ezell 1961: 111). No mention of a community was made for that area in 1694 or in 1698-1699, implying that Tuesán may have existed only a short while.

The fourth named village was San Bartolome del Comac, the "Comacson" on Kino's 1695-96 and 1696-97 maps, three leagues up the Gila from its confluence with the Salt, and ten leagues below San Andrés (Burrus 1965: Plates VIII, IX; 1971: 241-242, 400-401, 426). These distances would put Comac in the southeastern corner area of Township 1 South, Range 1 East, G&SRM, and in the lower part of what was later called the Gila Crossing district, probably west of Santa Cruz Wash.

If San Andrés lay ten leagues upstream from Comac it would have been in the vicinity of the modern Bapchule community (see Smith et. al. 1966: 15). One can also scale westward, from Tuesan, and four leagues (ten miles) would place La Encarnación at present-day Sacaton or a little east of it (Smith et. al. 1966: 12). Manje and Martín recorded an overall distance of seven-plus leagues from Casa Grande to San Andrés, which by scaling puts San Andrés at modern Sweetwater (Stotonic). This is only about 1½ miles east of Bapchule, and at the location of a ditch (“Ancient Stotonic”) believed to have been in operation since earliest times (Hackenberg 1974a II: 26-27).

Even this slight discrepancy can be resolved by looking at the journals again. On October 1, 1698, when Father Kino climbed a hill west of San Andrés and then traveled five leagues westward, he saw on the road some rancherías “and two other large houses, but they were already more tumbled down than Montezuma’s” (i.e., Casa Grande)(Smith et. al. 1966: 16). Almost fifty years later, Father Jacobo Sedelmayr described Casa Grande and then wrote that “Twelve leagues down the river there are two other structures with some smaller houses nearby” (Dunne 1955: 22).

Almost certainly one of these ‘great houses’ referred to by both Kino and Sedelmayr was the ruin at Casa Blanca, which lies two miles or a little more southwest of Sweetwater (Hackenberg 1974b: 35). The second ruin would have been the one that Juan Bautista de Anza noted in 1774, only it lay at the Pima village of Sutaquisón, near Pima Butte, rather than at Casa Blanca. This second ruin was presumably destroyed sometime after Anza’s visit by the shifting of the Gila River (Bolton 1930 II: 126, 239). The geometry of these observations would place the former site of San Andrés at or near Sweetwater. By scaling, this distance would be twenty miles or about eight leagues from Casa Grande.

The good father’s “Soación,” shown on his map of 1695-96, lay between “S. Andrés” upstream and “Comacson” (Comac) below. This would be a fifth named village. Soación was presumably a small ranchería at the time since there is no other reference to it. The synonymy of the name indicates that it was perhaps the beginnings of the Sudac-sson/Sutaquisón, “where the water comes up,” of the eighteenth century. The present map location would place this village and the westernmost ‘great house’ about where the old Arizona Eastern Railroad grade crossed the Gila River (see Chapter I), thirty miles or so west of Casa Grande. This agrees with Sedelmayr’s estimate of twelve leagues. Modern-day Sacate is in approximately the same locality.

The travel journals tell us considerably more about the communities of the middle Gila River valley in the 1690’s than the names and placement of villages and the numbers of people. We learn that there were two principal settlements and at least four or five lesser ones, and while the larger localities had some stability, the smaller ones may have been more ephemeral. They were restricted to a nineteen-league (c. 47-48 miles) stretch of the valley, beginning at three leagues above the junction of the Salt and Gila and ending one league from Casa Grande. Another village of “todos Pimas” lay below, at the Great Bend, and since no one followed the Gila upstream from that site until much later, the probability

of more villages in the reach of valley between the Great Bend and the mouth of the Salt is unknown.

In 1697, Manje and Lieut. Martín had counted both the numbers of houses and of residents among the Sobaipuris in the San Pedro valley and again in the upper Santa Cruz valley between Tucson (San Agustín) and Guevavi. Father Kino may have had his own records of population statistics, but few of these survive. No one on this trip or any other gave the number of houses at the Gila River Pima settlements, or any explanation as to why these were omitted. The numbers given by the two officers were similar but not identical, with Manje enumerating ten sets of figures and Martín nine. Manje tended to round his population counts (Smith et. al. 1966: 37-45; Burrus 1971: 336-349, 360-379).

In any case, Manje counted 3550 individuals and 774 houses, while Lieut. Martín found 3164 people and 676 houses. There is no significant difference between Manje's calculated average of 4.59 persons per house and Martín's figure of 4.68. The range was between 3.5 and 5.43 persons/house with Manje's numbers, and from 4.28 to 6.15 in Martín's case. Using their averages, the settlement of San Andrés should have had between 85 and 110 houses. It should be noted, however, that for three of the Sobaipuri communities, Manje's figures vs. Martín's showed the average number of individuals per house differing by more than one whole person. This suggests possible errors of observation.

### *Dwellings*

The Pima settlements were referred to uniformly as rancherías. Nothing was said about the spacing of their houses or the distribution of these across the landscape, or the presence of other types of structures. Pima dwellings at that time were probably similar in form to the *kiik* still in use in the late nineteenth century (Ezell 1961: 49-53). The usual Spanish expression was houses (*casas*) or little houses (*casitas*) of poles and mats, although along the lower San Pedro, Manje wrote that the houses, made of poles and mats, were arched or vaulted, and oblong (Bolton 1919 I: 171; Burrus 1971: 204, 339, 344, 360, 373). Dwellings of this style had been familiar since the days when the Coronado expedition reported houses built with mats or *petates* found for 240 leagues or more, from Petatlán (in northern Sinaloa) to the beginning of the despoblado of Cibola (at the upper Gila River) (Hammond and Rey 1940: 250, 284, 308). By the middle of the eighteenth century, a thatched covering of Sacaton grass had replaced the earlier mats (Ezell 1961: 49-50).

There were occasional references to another type of structure that, when first mentioned, seems to have been built as an overnight accommodation for Father Kino. This was the *casa de adobe, vigas y terrado*, or simply *casa de adobe y terrado* (Burrus 1971: 335, 336, 348, 349, 402, 403, 431). Just what this was is not clear, and since no one described one of these, translators have given various opinions (Smith et. al. 1966: 66). Burrus (1971: 199, 247) called two such lodges at Sobaipuri villages "a medium-sized adobe house with beams and a dirt-covered roof," and "adobe-walled houses covered by an earth roof." Bolton (1919 I: 204-205, 234) said "earth-roofed adobe houses," and Smith et. al. (1966: 13, 27, 76,



78) chose “flat-roofed adobe house” and “adobe-walled house.” It is very unlikely that adobe bricks were in use then, nor is this implied. The setting, in the late 1600’s, was the Sobaipuri communities of the upper San Pedro and Santa Cruz drainages. By 1795, these houses were mentioned among the Gila River Pimas (Bringas 1977: 89).

Father John Francis Bannon, writing in the mid-twentieth century, recognized this problem of terminology and identified the so-called *casa de terrado* as a permanent house of adobe or mud construction, scarce in the 1500’s and very common when the Jesuits moved into Sonora in the next century. It would appear that solid architecture for housing was in the process of being adopted in that area. Bannon quoted a description from a 1628 Jesuit *Annua*, and this suggested an unfamiliar, aboriginal construction technique:

“Their houses are of clay and *terrada*, like those made of adobes, although much more solid, since they do not mix straw with the clay, but rather beat and press the mud until it becomes almost as hard as rock. Then they cover the house with timbers and thus their dwellings are both solid and agreeable to behold” (Bannon 1955: 15, 47).

This explanation would make sense of the terminology used for the *casas* in Pimería Alta; houses with vertical walls of beaten or packed adobe, similar to rammed earth, with flat roofs constructed of *vigas*, *latillas*, reeds or grass, covered with clay or sod. Archeological research in the Río Sonora valley found surface structures built of puddled adobe at late prehistoric and early historic sites there (Reff 1981: 101-102). The technology was probably a regional version of the construction methods used in the late prehistoric Animas and El Paso Phase dwellings farther east, where Cabeza de Vaca saw such structures in the 1530’s (Bandelier 1972: 128, 253).

The Spaniards did urge the natives to adopt ‘permanent’ houses. While the remains of *casas de terrado* might be expected, adobe-brick structures may have quickly replaced these. The adobe houses built during the past century have another origin, being the result of an Office of Indian Affairs offer of a wagon and harness to each person who would build an adobe house and occupy it as a family residence (Ann. Rpt. Comm. Ind. Affs. 1885: 2-3).

Pimas visited and sometimes lived among the Opas and Maricopas, which raises the possibility that some Opa/Cocomaricopa houses might also have been built at the Pima Villages. Cocomaricopa movement up the Gila to a location adjacent to the Pimas appears to post-date A.D. 1800, however. Unfortunately, Kino and Manje said not one word about the nature of Opa/Cocomaricopa dwellings in their 1699 and 1700 narratives. Neither did the later Jesuits or the diarists on the Anza expeditions eighty years later. Only the Franciscan father, Francisco Garcés, wrote in his 1770 account of the Opas that they had very large jacals and were accustomed to live many in each one (Kessell 1976: 59).

“*The Common Food of the Natives*”

The assumption that early historic Gila River Pimas were irrigation farmers with extensive canal and field systems is increasingly being questioned (Winter 1973: 69; Doelle 1981; Hackenberg 1983: 165). The sources that shed the most light on this question are the journals kept by Manje and Lieut. Martín. Manje did mention fertile fields under irrigation along the San Pedro, and both officers noted the same for the Sobaipuris of the upper Santa Cruz. At the Pima Villages and specifically Tusonimo/La Encarnación, Martín claimed in November 1697 that they were given mesquite “because they had no pinole, for the river had carried away their cornfields.” The following day, at San Andrés, they were made welcome with a house of mats, and “pinole made of mesquite beans and squashes all ready for us” (Smith et. al. 1966: 42).

Captain Manje on the other hand made no mention of domesticated crops, agriculture, or irrigation among the Pimas of the middle Gila, and in fact left quite the opposite impression. Upon arriving at the ranchería of Tusonimo on November 19, 1697, he found a great pile of mountain sheep horns. These appeared like a hill, and so numerous were these sheep that they constituted the common food of the natives. Because this heap exceeded the height of the highest house, he thought there were more than 100,000 horns (Burrus 1971: 209, 344). On their trip up the Gila a year and a half later, Kino and Manje found only 200 people at San Andrés. They learned that the others were away hunting mountain sheep, of which there were large flocks in the vicinity. Continuing on to Tusonimo, the natives there were absent hunting mountain sheep and mescal for their food supply.

The travelers kept moving and that same day (March 4, 1699), Manje discoursed on the abundance of tornillo (screwbeans), upon which javalinas gorged themselves. The natives gathered these pods or fruits in abundance and ground them to make flour. From this they prepared large loaves, in the manner of cassava bread. At Tuesan, he said that mesquite bread “is that which sustains this nation” (Burrus 1971: 243-244, 372, 428-429).

Manje left the definite impression that the Gila River Pimas were living on desert bighorn sheep, mesquite bread, and mescal, the latter prepared by baking the hearts of agave plants. The two latter foodstuffs were in wide use at this time, and an apparent reliance on desert bighorn sheep is not particularly surprising either. In 1701 Manje and Kino passed Baipia, fourteen leagues north of Caborca in western Sonora, and recorded that the people at this poor ranchería lived on tree roots, mountain sheep and other wild game, as well as *pitahayas* in season. Beyond, at Basoytutcan, the fifty needy persons there ate lizards, caterpillars, and hunted mountain sheep (Burrus 1971: 472, 497, 501).

A century and a half before, Coronado’s advance guard witnessed a flock of bighorns at one day’s travel from Chichilticalli, but the animals were so fleet the Spaniards could not overtake them. Between the Valley of Suya and Chichilticalli, his army saw many of these sheep, some saying they had seen flocks with more than one hundred head (Hammond and Rey 1940: 212, 251). In more recent times, ethnologist Frank Russell encountered a small flock in the Sierra Estrella in March, 1902. They showed no fear at the sight of man, and the Pimas had little interest in them (Russell 1908: 82). As recently as 1936 a

wildlife survey of the Reservation reported a small number of desert bighorn sheep in the Estrellas (Lister 1936: 4).

The pile of horns at Tusonimo was not unique. More than a century earlier, the Chamuscado-Rodriguez expedition toiled up the Rio Grande towards New Mexico, and at a point well below modern El Paso, Texas, they came to a beautiful valley they named Los Carneros. They gave it this name because in passing they discovered an abandoned ranchería, “where we found many horns of rams which appeared to weigh upward of sixteen pounds each. It was an impressive sight” .... the horns reportedly being larger than those of steers (Hammond and Rey 1966: 78).

It remained for Juan Bautista de Anza in 1774 to provide an explanation for the accumulation of sheep horns. In far southwestern Arizona he passed the Cabeza Prieta Tanks, where some Tohono O’odham lived in the dry season in order to hunt mountain sheep. Anza described the animals, noting that they multiplied very slowly. As for hunting them,

“These horns the Indians are careful not to waste. Indeed, whenever they kill the sheep, they carry the horns to the neighborhood of the water holes, where they go piling them up to prevent the Air from leaving the place. Those who, like ourselves, do not practice or do not know of this superstition, they warn not be take one from its place, because that element would come out to molest everybody and cause them to experience greater troubles” (Bolton 1930 II: 29-30).

Father Jacobo Sedelmayr had reported “many wild sheep” when crossing that area back in 1750 (Matson and Fontana 1996: 28), and that “their” (i.e. Native Americans) diet included mountain sheep and deer “of which there are an infinite number on the banks of the river.” It was not clear, however, whether Sedelmayr referred to the Colorado or the Gila, or to which group of natives (Ives 1939: 111). Nentvig (1980: 30) simply said that “many wild sheep .... are to be found in the Pimería Alta.”

### *The Question of Irrigation*

In 1697 and again on the 1699 expedition up the Gila, Manje made some interesting and quite definite remarks regarding agriculture among the Cocomaricopas and Gila River Pimas. On the first trip he wrote, with respect to San Andrés, that

“Here the river is heavily wooded, and there are fair lands, and many irrigation ditches can be taken from the river to irrigate these lands” (Burrus 1971: 374).

This statement leaves it uncertain as to whether canals existed. A year and a half later, when he reported that these people lived on mescal, mesquite, and desert bighorn sheep, he also used three tenses of the verb “to be able” to say that ditches can, were, or will be drawn from the river at three of the Cocomaricopa villages and the Pima community (Oyadaibuc) at the Great Bend (Burrus 1971: 398-399, 423, 425, 438, 443).

This leaves matters still unclear, but by reading all four versions of Manje’s 1699 diary it becomes evident that the qualifying phrase was “if missions are founded.” In four places (Ibid: 423, 425, 438, 443) he generalized about the status of agriculture on the lower Gila, and said in so many words that canal irrigation was not practiced among either the Cocomaricopas or Pimas:

“I do not doubt that by taking out irrigation ditches they will be able to cultivate much farmland, but these natives do not use canals to irrigate their lands; they simply wait upon the waters and, with the great flood, the river banks are inundated, and when the flood goes down they sow some of the bends and low-lying areas (Ibid: 438).

Manje’s phrasings in 1697 and 1699 were so similar as to indicate that his 1699 summaries were an elaboration of what he wrote earlier, and that any farming along the middle Gila River relied upon seasonal flooding to provide water for the crops. These were planted in loops and flats bordering the stream course after the flood waters went down. At Comac he noted only the presence of fertile lands, while downstream at Oyadaibuc the Pimas were currently sowing some plots and preparing others, because there it was the planting season. If the padres were to come, fine *acequias* could be drawn off for irrigating lands (Burrus 1971: 240-241, 400-401, 425). Both Manje and Lieut. Martín had had ample opportunities to see the irrigation systems along the San Pedro and Santa Cruz rivers and they did comment on these, as well as on the long-abandoned canal that once served the Casa Grande community. Yet their only remarks about the Pima villages below Casa Grande were those cited.

Hackenberg (1964: 9) indicated that the Maricopas, after relocating above the Gila-Salt junction in the early nineteenth century, used the islands of the Maas Akimel district for unirrigated farming. Pimas may have planted the islands as well as the river banks. Field notes of the botanists/agronomists Edward Castetter and Willis Bell reported a tradition that before the coming of the Spanish, the Gila was shallow and the Indians would divert flood waters over their lands by using logs and piles of brush as water spreaders. Their informant stated that the Pimas knew about ditches at the time, but they were ineffective because of the poor tools employed in their construction (Hackenberg 1964: 10).

To summarize, crops at the time of early Spanish contacts were of minor importance among the Gila River Pimas, and their plantings were done along the river bed, adjacent bottom lands, and inside the angles of river bends. There was no artificial irrigation. This was a risky strategy, but if the growing corn could escape a major flood, then good crops might result for little investment of effort.

Lieut. Martín tells us that in the fall of 1697 the Pimas lost this bet on the weather, and their corn crop as well.

### *Melons in the Southwest and on the Gila*

Since the only specific mention of cultigens on the middle Gila was Lieut. Martín's remark in 1697 about cornfields, we have no real basis for asserting whether the natives there had other crops. Father Kino and Manje did, however, list *melones* (muskmelons) and/or *sandias* (watermelons) among the foodstuffs being grown by the Sobaipuris on the lower San Pedro, at San Agustín (Tucson) and Santa Catarina on the Santa Cruz River, at a northern Papago ranchería, and by the Yumans at a settlement that Kino even named Las Sandias (Bolton 1919 I: 249-250, 253; Smith et. al. 1966: 14, 17; Burrus 1971: 253, 348, 366, 464). Both are introduced plants. Ezell (1961: 32-35) observed quite correctly that melons reached the Upper Pimas before actual contact with the Spaniards, but he left the mechanism unexplained.

Cultivation of melons and watermelons did travel well in advance of the frontier. In 1582 Antonio de Espejo found them among the Conchos, who lived north of the mines of Santa Barbara in what is now Chihuahua, and by 1598 the pueblos of northern New Mexico were growing both (Hammond and Rey 1953: 484; 1966: 213). Baltasar de Obregón, writing in 1584, provided the explanation for this rapid spread far beyond the mission frontier: the natives grew melons from the seeds they found when they killed the people whom Coronado left to establish the town of San Gerónimo or Corazones I, in the Valley of Señora in present-day Sonora (Hammond and Rey 1928: 164).

Father Jacobo Sedelmayr first noted melons among the Pimas of the middle Gila in one version of his 1746 relación (Ives 1939: 106). They were mentioned again by Father Bringas in 1795 and also among the Cocomaricopas, but the Yumans had them in such numbers that they gave Anza more than 2,000 watermelons! He threw melons away for want of any means to carry them (Priestley 1913: 15, 17, 19; Bolton 1930 III: 51; IV: 99; Bringas 1977: 90). Americans in 1849, staggering north from Tucson to the Gila River during the hot summer months, were greeted by the welcome sight of Pima Indians bearing watermelons and muskmelons. The Pimas too now seemed to have them in unlimited numbers, and in some places they may have been raising them for upwards of 300 years.

### *Cotton in Early Arizona*

Cotton is another crop with an interesting historical distribution. In this case it is an indigenous plant, and the cotton of the Upper Pimas was the same species as that grown by the Hopis of northern Arizona. It was mentioned by Kino and Manje, who found the Sobaipuris at San Agustín (Tucson) and in the upper and lower San Pedro valley growing cotton in abundance (Burrus 1971: 336, 339, 348, 365-366) although not necessarily in every settlement. The best

description of the appearance and use of locally-woven cotton fabrics for clothing was written by Manje at Aribavia, on the lower San Pedro:

“The clothing that everyone wears are very good *mantas* of cotton cloth, which cover them from shoulder to foot; painted in various colors, and others black. They are worn belted; withal, with woven sashes which appear like silk, and which they wrap around very cleverly” (Burrus 1971: 365).

Nothing was said about these mantas being limited to wearers of one sex, and the description makes them appear to resemble a Hopi blanket dress. At the opening of the historic horizon Zuni women wore these as well, “with the ends tied around the waist with a sash of the same cotton” (Hammond and Rey 1940: 299, 309). Such clothing was worn in other villages on the lower San Pedro (Burrus 1971: 340), but the diaries recorded nothing about the appearance of the Gila River Pimas seen a few days later.

Kino’s references to cotton were more equivocal. In 1698, Kino and Diego Carrasco journeyed into the northwestern corner of Sonora and evidently met some Areneños or Sand Papagos. These people said they would be going to visit their relatives, the Pimas, who lived on the Colorado River, and who had a great amount of corn, beans, cotton, many fish, etc. (Smith et. al. 1966: 24; Burrus 1971: 571). It is not at all clear to whom they were referring, and there is little evidence that much cotton was grown on the Colorado. Two years later at San Xavier del Bac, Father Kino mentioned that the natives gave him “many of their good fabrics and blankets (*mantas*?) of cotton,”.... without saying whether cotton was also grown there (Bolton 1919 I: 291-292). At San Mateo de Coat, a Cocomaricopa settlement well down the Gila, Manje gave his opinion that if Spaniards were there to instruct them, the natives could sow much corn, beans, pumpkins, and cotton to clothe themselves, and not go about so nearly naked (Burrus 1971: 423).

From these scattered comments it appears that cotton-growing and weaving at the time of Spanish entry was concentrated among the Sobaipuris of the San Pedro and Santa Cruz. Both of these areas had irrigated farmlands, which may have been desirable to provide an assured water supply. Length of growing season was not a consideration since Hopi cotton is adapted to a short season (Jones 1936: 56). Native agriculture made no use of irrigation ditches on the lower Gila and Colorado rivers, and the testimonial evidence for cotton growing there is uncertain. In Kino’s time, these areas probably grew no cotton, but 150 years before, Alarçon had found cotton among the Quicama (Halyikwamai), where no one knew how to weave (Hammond and Rey 1940: 142). Father Escobar’s Ozaras, whom he found living around the mouth of the Gila in 1605, wove cotton blankets “which are coarse like those from the province of New Mexico” (Hammond and Rey 1953: 1020). Apparently these were not used as clothing. What became of the Ozaras and their fabrics isn’t known, but they may have become one or more of the named groups of Pimans known a century later.

### *The 1690's: A Window Opens*

For our knowledge of early conditions among the Gila River Pimas and the neighboring Cocomaricopas, we owe much to the records left by Father Eusebio Kino and his soldier-companion, Captain Juan Mateo Manje. The window they opened in the 1690's showed a country that had only been glimpsed before. Manje's last trip with Father Kino was in the spring of 1701 and his book *Luz de Tierra Incógnita* was completed in 1720 or 1721. Manje himself lived until after 1735 and he continued writing, but not on matters that pertain directly to the Gila River Pimas or Maricopas.

Father Kino's own record of his travels and labors, the *Favores Celestiales* that Herbert E. Bolton discovered and translated as *Kino's Historical Memoir of Pimería Alta* (1919), was evidently finished in 1708 three years before Kino's death. He made a few more journeys after his last one with Manje, but his knowledge of the Gila River and its peoples was limited to the decade that ended in 1700. Soon thereafter, he seems to have almost forgotten the missions in southern Arizona and his earlier endeavors there.

## Chapter III

### THE PIMAS AND COCOMARICOPAS TO THE 1760'S

During the last few years of Father Kino's life, the missionary effort in Pimería Alta began to falter. Funds to continue and advance the work were not forthcoming and the native populations declined in numbers. After 1711 only Father Augustín Campos, at Mission San Ignacio (near Magdalena, Sonora), remained as a resident missionary in Pimería Alta. No Spanish colonists or miners had come to live there, although in another decade this would change. Even soldiers rarely saw the country. The Gila River lay far beyond the mission frontier.

While information about the native peoples who lived at the northern edge of New Spain slowed to a trickle, it did not stop entirely, and occasional visits probably continued. Father Campos had arrived in Pimería Alta in 1693, the same year as Juan Mateo Manje, and he continued to serve (primarily at San Ignacio) until his death in 1737. He might have told us much; reportedly he made many visits to the Yumas and had been at Casas Grandes many times, but he was not a writer. He did present a plan, not entirely a new one, for the establishment of a presidio, *villa*, and missions on the Gila River. This was not funded and therefore never realized. He fiercely defended the Pimas Altos against false charges and unreasonable demands, but late in life his anger turned against his fellow Jesuits, for which he was made to apologize. This reflected the toll his advancing years were taking, and soon after he died (Hammond 1929: 221-222; Donohue 1969: 10-11, 16-17, 29, 35, 64-65, 72-73, 105; 156; Burrus 1971: 645, 658-659).

#### *Father Velarde's Description of Pimería Alta*

Until relatively recently, historians thought that Father Luis Velarde had been Father Kino's companion at Mission Dolores since 1702 or 1703. Born in Valladolid in 1677, Velarde first came to Mexico as a missionary in 1709 and he arrived at the old mission of Dolores only in May of 1714, three years after Kino's death. He would serve there until his own death in December 1737 (González 1977: 17-18). In contrast with Campos, Velarde was a good writer and he showed an inquisitive mind. At Dolores he also had access to Kino's own manuscripts. In 1716, at the request of General Manje, Father Velarde penned his best-known work, the *Description of Pimería Alta*, which Manje incorporated into Part II of his *Luz de Tierra Incógnita*

as Chapters IX-XI. This can be read in both Spanish and in English translations, although the extant manuscript is "a wretched copy made by some ignorant scribe" according to a recent historian (Wylls 1931; Manje 1954: 221-267; Burrus 1971: 619-675; González 1977: 19-124).

The first part of Velarde's *Descripción* was a physical description of Pimería Alta. With respect to its northern rim, he said that the Pimas of the Río Gila were separated by a little mountain range from the Pima Sobaipuris, who were very numerous and had most of their villages on the west side of the river [San Pedro]. The Yuma, Cocomaricopa, and part of the Pima nation populated the lower Gila. He did not cite any settlement names or give distances or population figures. Part Two continued with the natural history of Pimería and the ethnology of the natives. Here he introduced a distinction between the Pimas of the West (probably meaning the Sobas) and the Pimas of the North.

The latter included the riverine villagers as far north as the Gila River, but not the Sobaipuris of the San Pedro River. The dress of those in the north was cotton mantas, very well woven and gracefully painted with red and yellow. Their habitations were huts, made by laying reed mats over poles bent in the form of arches, furnished inside with mats for sleeping, calabashes (gourds?) for holding and transporting water, and some ollas or pots in which to roast maize. Most had a metate for grinding. The "fruits of this Pimería" amounted to a mixture of native and introduced foodstuffs, including melons, watermelons, and considerable wheat, "especially those of the West." The Sobaipuris and the other Pimas of the North sowed much cotton, which they wove and with which they clothed themselves. His descriptions tended to be general and some elements in them may well have related to the Pimas of the Gila.

Velarde's account was well-informed and quite comprehensive, although it is not possible to say how much of it was based upon what he had read and heard, as opposed to what he knew first-hand (Donohue 1969: 11-12, 61). He probably relied upon Father Campos, whom he credited with continuing Kino's pattern of *entradas*. The third section of Velarde's *Descripción* recounted a history of the efforts to convert the Pimas to Christianity and made a plea for additional support and more missionaries. The whole report was dated at Dolores, May 30, 1716.

#### *Decline in the Early 1700's*

The following year, Father Velarde formulated a plan for the development of Pimería Alta. This was ambitious in that it proposed the Jesuit Order should supply eight additional missionaries for Pimería Alta and the government should establish a *presidio* of thirty soldiers in the valley of the Sobaipuris. One objective was to encourage the Pimas to join more enthusiastically in warding off Apache attacks, implying that such had now become a serious matter (Burrus 1971: 676-703; González 1977: 89-124). Another problem was depopulation of the missions, which Velarde laid to numerous epidemics. He estimated the population in Pimería Alta at still about 10,000 souls. Compensating for these losses had required drawing Papagos in from their remote and sterile lands to repopulate some of the missions, especially San Ignacio and Dolores, both of which were wanting in people and almost at an end (Burrus 1971: 671, 686). Nothing came of his proposals. While Father Velarde continued in active service, he evidently wrote no more about the Gila River Pimas or the Cocomaricopas (Donohue 1969: 29-30, 35, 61).

The northern Pimas at this period received few visitations. The number of missionaries increased, but their efforts remained focused south of Pimería Alta, while the nearest garrison, the one at Fronteras in far northeastern Sonora, was rendered ineffective for many years by the scandalous conduct of its captain. He was removed only in 1727. On at least one occasion (in 1726) the chaplain for the Fronteras garrison, Ignacio Arceo, was called away by the northern Pimas and traveled thirty leagues inland to baptize 140 of their children (Bancroft 1889: 361; Hammond 1929: 222-223; Donohue 1969: 12, 50; Smith 1993: 154).

Father visitor Daniel Januske, a missionary since 1693, wrote a general report on the missions of Sonora in 1723. Jesuit Sonora had twenty-four missions, only four of which - Dolores, San Ignacio, Tubutama and Caborca - with four priests lay in Pimería Alta, where they



served fifteen pueblos with a declining population of Pima Indians. Nothing was said about those Pimas Altos who lived beyond the missions (Donohue 1969: 30-42; González 1977). Seven years later the same missions ministered to even fewer Pimas, a decrease explainable in part by a measles epidemic that hit Arispe and other missions in 1728 (Donohue 1969: 65-67).

*The Rivera Inspection and New Missionaries for Pimería Alta*

In the fall of 1726, Visitor General Pedro de Rivera arrived in northern Sonora to examine the condition of the frontier presidios. He spent thirty-five days, the longest time at any, in his inspection of Fronteras, one of only two garrisons with the primary responsibility of defending the northern frontier against the Apaches. At Fronteras he removed the captain and replaced him with a much better commander, Captain Juan Bautista de Anza (the elder). Although Rivera did not visit Pimería Alta itself, his report praised the results achieved by the missions there and underlined their important contributions to frontier defense. Pimería Alta contained mostly pagan Indians dependent upon the occasional visits of missionaries, but who nonetheless were well instructed and docile. They needed priests. Regular visits to the Pimas Altos, to maintain their friendship for the Spaniards, became one of the special duties of the captain at Fronteras (Donohue 1969: 24-25, 45-58, 62).

Rivera's recommendations, and a pledge of support by the Bishop of Durango, led to eighteen new German priests being brought to New Spain in the Mission or Class of 1730. Four of these received assignments to missions in Pimería Alta. Two served briefly at Guevavi and at San Xavier del Bac in Arizona, while a third padre replaced Father Campos at San Ignacio when he retired in 1736. The fourth priest, Father Ignacio Keller, would serve twenty-seven years at the place he usually called Santa María Suamca, now Santa Cruz, Sonora, on the upper reaches of the river with the same name.

In May of 1732, Captain Anza escorted the new Jesuits to their stations and introduced the natives to their fathers. San Xavier and Guevavi had had priests thirty years earlier, for a few months, while the Pimas at Santa María had never had a resident father. From San Xavier, Anza rode east with Keller to Tres Alamos on the San Pedro River, then south up that river through the Sobaipuri villages to their destination at Santa María. The Sobaipuri settlements were visitas, ministered to from Suamca, the *cabezera* or head mission. To the Spaniards, it appeared that there must be over 1,800 souls in Father Keller's mission. If true, this would indicate that the population of the Sobaipuris in the San Pedro Valley was approximately the same as in Kino's time, even if they did not necessarily live at the same locations. The Gileños or Gila River Pimas became a visita of San Xavier del Bac (Bancroft 1883: 523-525; Hammond 1929; Donohue 1969: 68-69; Kessell 1970a: 42-48).

*The Journeys of Father Ignacio Keller, 1736-1743*

By 1736 the missionaries at Guevavi and San Xavier had left and the entire northern Pimería fell to Father Keller. Strong-willed and a loner, he was, as one historian put it, "as tough and zealous as they came" (Kessell 1970a: 59). In 1736 Keller went as far as Casa Grande and various rancherías nearby on the Gila and Verde rivers, traveling by way of Guevavi and San Xavier and returning by the same route. He apparently made this trip with the idea of finding a route to the Hopi Indian villages. His chronicler, Father Baltasar, wrote that Keller found things "in the same state and in the same circumstances then as when Father Kino had left them" (Ortega and Baltasar 1944: 343-344).

In July and August of 1737 the ardent Jesuit made a new entrada,

"through the lands of the Sobaipuris, following the course of the river (the San Pedro) which, beginning near Terrenate, extends for almost 200 leagues, to its junction with the Gila. He saw the fertile fields of that valley, most of which

could be irrigated with the waters of the *arroyo* (i.e., the river). He encountered the remains of many *rancherías* that existed at another time, and which now for the most part the Pimas Sobaipuris had abandoned because there they were exposed to the continuous, barbarous assaults of the enemy Apaches, whom they used to face up to, defeating them not a few times. Moreover, they discovered that without the protection of Spanish arms and soldiers, they tired of such frequent and contentious fighting, and have as the least evil ceded land to the enemy. It is seen as necessary to live with arms in hand, and among continuous threats of their cruel barbarities, and very often to have to oppose their forces against such rabid, ferocious opponents” (Ortega and Baltasar 1944: 344).

It was, however, a fine place for *reducciones* or settlements of Indian converts. Another source reduced the estimated length of the Sobaipuris' lands to about 100 leagues (Thomas 1941: 203).

After striking the Río Gila, Father Keller turned west along it towards Casa Grande. He examined a large, elevated rock that extended into a level plain, and then fell into a delirium for a day. Farther along he discovered the Verde and Salt rivers, which joined and formed the Asunción, which in turn disembogued into the Gila. Keller visited the Cocomaricopas by meeting them while they were on a campaign “against certain enemies.” He then returned by another route to Santa María (Bancroft 1883: 525; Ortega and Baltasar 1944: 344-345; Donohue 1969: 80). Nothing was said about the Gila River Pimas, which suggests that Keller bypassed them entirely by following the Salt River Valley and then the Gila as far as Cocomaricopa country before he turned for home. Nor did he offer any population estimates.

The synopses of Father Keller’s trips north in 1736-1737 given by Bancroft (1883: 525; 1889: 362), Dunne (1955: 20) and Donohue (1969: 80) are neither complete nor very accurate. The Sobaipuris had been having a difficult time with the Apaches and had probably lost the lower San Pedro Valley to them. The causes of this loss were entirely indigenous, and had nothing to do with the Spanish presence. The Pimas of the middle Gila River Valley appear to have been unaffected.

It was also at this time (1739) that Apaches ambushed and killed Sonora’s leading soldier, Juan Bautista de Anza (the elder). His son, and namesake, would have an even more distinguished career in these same borderlands.

Fray Ignacio made at least one more journey north, leaving Suamca at the end of July, 1743, in response to a royal *cédula* instructing the Jesuits to contact and convert the Hopi Indians. Since the Pueblo Revolt of 1680 and the reconquest of New Mexico in 1692-1693, the Hopis had retained their independence. The Spaniards had never attempted to penetrate to their country from the south. This time, Keller set off with an escort of nine soldiers and some Pimas and continued beyond the Gila on a route towards the Hopis, not knowing if the people in this unknown country would be friends or enemies. The latter turned out to be the case. His party was attacked and one soldier died from an arrow wound that became infected, while most of the horses and supplies were lost (Mills 1936: 6-7; Ortega and Baltasar 1944: 345; Dunne 1955: 6-7, 23, 33). The available accounts made no mention of the Gila River Pimas. Eighteen years later another Jesuit father wrote that the report on Pimería “and on the journeys of Father Ignatio Keler (*sic*) is being finished. It was written by the padre himself,....” (Matson and Fontana 1996: 52). If this report survives, it is yet to be discovered.

#### *Fray Jacobo Sedelmayr and Pimería Alta, 1736-1751*

The next known traveler to the northern reaches of Pimería Alta was another German Jesuit, Jacobo Sedelmayr. He arrived in New Spain early in 1736, one of the forty-nine who sailed in the Mission of 1735. Sedelmayr went north at once and by September 1736 he was at his mission station of Tubutama on the Río Altar. This would be his home for the next sixteen years

(Dunne 1955; Donohue 1969: 78-79; Matson and Fontana 1996: xvi). As his own reports show, he was thoroughly familiar with the work of his predecessors. Tubutama lay well to the west, close to the Sonoran Desert homeland of the Tohono O'odham, whom he called Papabotas (Papagos). By September of 1737 the new father had ridden a circuit of 100 leagues among the Papago rancherías, persuading them to come and live at a pueblo near the mission. He baptised numerous children, a great many of whom soon died in a smallpox epidemic. Many of the people in the rancherías, he noted, were in communication with the neighboring Pimas of the Río Gila (Ortega and Baltasar 1944: 347; Dunne 1955: 5; Donohue 1969: 79).

Father Sedelmayr did not enjoy good health and it was six years before he undertook another journey, this time to San Marcelo del Sonóita. More Papagos were persuaded to move to the missions. At the end of November, 1743, guided by Indians from the pueblos he had visited, he arrived at the communities bordering the Río Gila. Here he saw that one ranchería would be well-populated by Pimas, another by Cocomarcopas. They received him with great demonstrations of joy. Although he found them in a state of paganism and totally unclothed, he persuaded them to sow cotton, from which they could weave cloth, with which they could then cover themselves. The women wore short skirts of willow bark. From here, Father Jacobo passed to the Río Gila, which joined with the Asunción at that place. He traveled through the rancherías, giving the natives knives, ribbons, and most valuable of all, an ax. The Cocomarcopa nation extended for thirty-six leagues, with almost forty villages along both banks of the river (Ortega and Baltasar 1944: 348-349).

Taking leave of the Cocomarcopas and ascending the Gila, at a distance of some leagues he encountered three large communities of Pimas, some distance from one another, "and these were the ones that padre Kino first recognized" (Ibid.). He gave no other details about the Pimas. Sedelmayr discovered many other settlements that later received names. In all, he traveled 172 leagues, and Mills (1936: 6-7) suggested that he returned by way of the Santa Cruz Valley.

Father Keller, and then Father Sedelmayr, said or implied that nothing had changed at the Pima villages along the middle Gila River since Kino's time. This may strain creditability a bit. Perhaps most interesting was Sedelmayr's statement that the Cocomarcopa nation extended for thirty-six leagues along the banks of the lower Gila, a distance that matched exactly the figure reported by Manje in 1699. Apparently the location of the Cocomarcopas, as with the Pimas, had been extremely stable over a period of fifty years. Sedelmayr gave no population estimates, but the number of communities had increased greatly since Father Kino's time, perhaps because many Halchidomas-Kaveltcadoms from the Colorado River had joined the Opa-Cocomarcopa group on the Gila River during the previous half-century.

The Apaches had treated Father Keller roughly and when he was unable to obtain another military escort, Sedelmayr volunteered to continue the exploration for a route to the Hopi towns. His 1744 visit added substantially to Spanish knowledge about the Pimas of the middle Gila. The father left Tubutama October 7, 1744, apparently with only four native companions, and he arrived back from his journey at the beginning of November. There are at least four published narratives of this expedition; three by Sedelmayr and all written shortly after its conclusion. The fourth is in a volume compiled in 1752 that used his actual diary (Ives 1939; Ortega and Baltasar 1944: 349-353; Dunne 1955; Ezell and Ezell 1987). Since their details are different, although largely complementing one another, it is necessary to use all four to reconstruct Sedelmayr's route as well as who and what he saw on this journey. This has been attempted before (Mills 1936: 7-9; Donohue 1969: 112-114; Ezell and Ezell 1987: 138-142), with the results largely in agreement with one another.

Jacobo Sedelmayr had a rather cavalier attitude towards geography and with identification of the people he wrote about, so that it is often difficult to say where he was, how he got there, or to what group he referred. He used place names sparingly (although he compiled an incredible list of Cocomarcopa rancherías) and was often remiss about distances and directions. Because he was the first to give an account of the Pima Villages after Kino and Manje, and he appears to have documented some changes there, his 1744 journey was an important one.

From Tubutama he traveled eighty leagues to the Pimas of the Gila River, crossing the Papabotería (Papaguería) en route. Father Kino had once given the distance from Tubutama to San Xavier del Bac as about fifty leagues, and from San Xavier to the Pima Villages as another

forty-three leagues, so Sedelmayr must have bypassed the easier route along the Santa Cruz River and traversed the eastern part of the Tohono O'odham country, heading directly for the Gila (Bolton 1919: 118-119, 128; Ezell and Ezell 1987: 139). The country was still well populated. He estimated about 6,000 souls in the rancherías he found en route and another 6,000 "in those of the Papagos, in those of the same Pima Nation, and in other (rancherías) adjacent to that (Gila) river, according to prudent computation" (Ortega and Baltasar 1944: 350).

He was well-received by the Pimas, even more so because of the trinkets he distributed among them. These barbarous people had houses that were long and narrow, with a whole family living in each, giving the appearance of an anthill when they all came out. He admired one vestige of the travels of Father Kino; they showed him a short bit of an ax, which the famous Jesuit had given to them. It was the only iron tool left to them and they used it by turns for wood-cutting. It was so worn out as to scarcely be of service (Ibid).

Sedelmayr preached to them, then got to the issue of finding a way to reach the Hopis. After initially agreeing to show him the route, the Pimas absolutely refused any aid, and a few days later he had the same experience with the Cocomaricopas (Mills 1936: 8; Ortega and Baltasar 1944: 350-351; Donohue 1969: 112-113). The German puzzled over such behavior, but as Donohue says, perhaps the real problem was his own mission Indians who feared the loss of their priest and his benefits, and so prevailed on the local natives to refuse guides.

Father Sedelmayr described the Casa Grande ruin and the similar remains nearby, and gave a very abbreviated version of the traditions surrounding them. He was inclined to agree that Moctezuma had resided there. Today in the basin of the Gila, he wrote, not very far from Casa Grande, lived a branch of the Pima nation divided into three rancherías. The most easterly was called Tuquisan (Fuquissan); four leagues downstream lay Tussonimo [Cheshoñi Mo'o], and still further on, the (Gila) river ran entirely underground in hot weather. Where it emerged was situated the great ranchería of Sudacsón (Sudac-sson). All of these, on either bank of the river and on the islands, had many and very fertile irrigated lands. When he was there, the Indians grew corn, beans, squash, melons and cotton; those at Sudac-sson raised wheat by irrigation (Ives 1939: 106; Dunne 1955: 23; Ezell and Ezell 1987: 144).

Slightly later in his report and evidently in reference to the gift and instructions he made to the Cocomaricopas one year earlier, the good father claimed that "... in many places after the fathers came and because of their teachings, the natives have woven good blankets from the large amount of cotton which was given them to plant" (Ives 1939: 108; Dunne 1955: 29). The implication seems to be that while cotton was grown and woven by the Sobaipuris and Pimas in the riverine valleys of Sonora before the Spaniards came, it was the Jesuits who introduced cotton to the Cocomaricopas and Gila Pimas, as recently as 1743. The Gileños would have been familiar with cotton growing and woven mantas among the nearby Sobaipuris. The wonder is that cultivation and weaving seem to have caught on so rapidly along the Gila River.

By articulating the distances included in Sedelmayr's three narratives, it is possible to estimate the locations of the three Pima rancherías he saw. From Tuquisan, the one farthest east, to Tussonimo, it was four leagues. The names are similar to two rancherías from Kino's time (Tuesan, Tusonimo) and the number of leagues between these was also given as four. Tentatively, the two villages might have been at the same locations in 1697 and 1744. With respect to Sudac-sson, Sedelmayr wrote that leaving the Pima rancherías and going five leagues downriver (i.e., five leagues below Sudac-sson) one came to a beautiful spring with pasturelands, savannahs of reed grass and willow groves. This he named Santa Teresa, and another five or six leagues brought him to the junction of the Gila and the Asunción (Salt) rivers (Ives 1939: 107; Dunne 1955: 24). Measuring back from this confluence, ten or eleven leagues would place Sudac-sson at the place where the former Arizona Eastern Railroad grade crosses the Gila River, the location proposed for this site in Chapter I.

Sedelmayr gave another useful measurement - that the Pima rancherías occupied fourteen leagues along the river (Ezell and Ezell 1987: 144). Again scaling from the junction of the Gila and the Salt ten leagues upstream to Sudac-sson, the westernmost Pima village, plus another fourteen leagues to the easternmost one at Tuquisan, would put the latter at the site of Tuesan. Manje recorded this site in 1697 as lying on the Gila River, one league from Casa Grande. The principal differences between 1697 and 1744 seem to be that in 1744 there was no longer a

settlement near modern Sweetwater (Kino's San Andrés), the community at Comac was gone, and Sudac-sson (Kino's Soación) had grown from a minor into a major ranchería.

Only at Sudac-sson did Sedelmayr mention wheat being raised by irrigation, but seven years later he wrote that a Papago chief asked him for grain (undoubtedly meaning wheat) and took it to sow at Tussonimo, a ranchería on the Gila River (Matson and Fontana 1996: 42). In contrast with the Jesuit encouragement of cotton growing, wheat probably spread among the Pimas from other northern O'odham.

In a paragraph of mixed statistics, Father Sedelmayr also told us that the Gila River Pimas were separated from the enemy Apaches, upstream, by an unpopulated stretch of about two days travel. Downstream lay another two-day despoblado to the beginning of the Cocomaricopa nation, which was a large village of both Pimas and Cocomaricopas at Estucabic/Stuc Cabitic ("black mountain standing by itself"), about twelve leagues below the Gila-Salt junction (Ortega and Baltasar 1944: 352; Dunne 1955: 24; Ezell and Ezell 1987: 147). He was the first European on record to actually follow the course of the Gila downstream as far as Agua Caliente. From his reports, it appears that mixed Pima-Cocomaricopa settlements still existed on the lower Gila, but that all Pima villages now lay above the confluence of the two rivers.

Twelve leagues below this juncture would put the first village of the Cocomaricopas, in 1744, at the beginning of the upper end of the Great Bend, rather than at the Painted Rock Mountains or thereabouts where it had been in Kino's time. The Cocomaricopas therefore had shifted upstream to partially fill a gap created by withdrawal of the Pimas. The Cocomaricopa lands still extended downstream along the Gila for about thirty-six leagues, measured now from Stuc Cabitic at the upper end, and within them lay between thirty-six and forty-one rancherías "... on both sides of the river, with little separation," the number depending upon how spellings are rendered (Ives 1939: 107; Dunne 1955: 24-25, 79). Sedelmayr himself had said "almost forty rancherías" in 1743. The lower Gila was becoming very crowded as tribes rearranged their territories. Nothing was said about population estimates among either the Gila River Pimas or the Cocomaricopas. After proceeding down to the Colorado River, he turned and rode east up the Gila to about the Great Bend, then headed home to Tubutama across the desert (Mills 1936: 9; Dunne 1955: 5).

In three weeks Sedelmayr had accomplished much, in spite of his failure to find a road to the Hopis. In November 1745, one version of his report became the basis for a memorial by the Jesuit provincial, Cristóbal Escobar y Llamas. In this, Escobar proceeded to set goals for expansion of the missions. He proposed twelve new missions (which would have required twenty-four new priests) along the Gila and Colorado, as well as a hundred-man presidio on the banks of the Gila (Dunne 1955: 78-80; Donohue 1969: 114-119). The presidio proposal never got beyond the request stage, but the Jesuits' Mission of 1750 to New Spain did bring six priests to Sonora (Donohue 1969: 124). Father Sedelmayr, now the local visitor in Pimería Alta, was on hand to greet them.

Before these new missionaries came, the father from Tubutama made two additional journeys to the Gila. In October 1748, he left Tubutama with an escort of fifteen soldiers and rode through Papaguería, to arrive after eleven days among the Cocomaricopa villages on the Gila River. He then traveled downstream along the Gila and followed the Colorado to the southernmost Yuma village before turning around and retracing his route back to his mission by early November. He found some Pimas intermarried with Cocomaricopas and noted that the latter nation was still spread out along both banks of the Gila in broad, fertile lands, as far down as the Agua Caliente. Also, as an evident sign of progress, .... "Since the previous entradas they have planted cotton from which they weave blankets to wear, and they trade with the Christians" (Dunne 1955: 8, 55-64; Matson and Fontana 1996: xx-xxi, 20-25).

Two years later the priest made an entrada to the Colorado River country and the Yumas, traversing the western parts of Papaguería and striking the Gila two leagues above its mouth. Sedelmayr and his escort visited the tribes between there and the Colorado's mouth before returning in part over the entry route, the whole trip requiring just a month (Dunne 1955: 8, 67-73; Matson and Fontana 1996: 26-33).

*The Pimas and Cocomaricopas to 1750*

The visits to the Gila River by Fathers Keller and Sedelmayr revealed that conditions there were not entirely as they had been a half-century earlier. Pima villages now occupied only a fourteen-league stretch of the middle Gila River Valley (about thirty-five miles). Before, the Pimas had dominated the river from Casa Grande to the village of Oidaibuc, at Gila Bend, approximately three times this distance. Yet there is nothing to show that this withdrawal by the Pimas was anything other than voluntary. Their villages were still sparse along the middle Gila. It is also possible that Pimas who lived lower on the river had simply remained where they were, while Cocomaricopa settlements grew up around and eventually beyond them. Western Apaches continued to be hostile to both groups, as they had been since the 1690's, and relations with the Yumas were in the same state. No one at the time so much as hinted that settlement changes among the Gileños and Cocomaricopas reflected pressures brought about by wars and raiding. With the Sobaipuris of the San Pedro, it was a different story.

Both Jesuit fathers showed little interest in domestic architecture, settlement patterns, social structures, agriculture, or native religion, and with Sedelmayr it was not always possible to tell which group he was writing about. Clothing was of greater interest but mainly because in the priests' minds it was a matter of decency. Canal irrigation had been adopted at Sudac-sson, perhaps only for wheat, although the Yumas had shown for years that wheat could be grown with only the floodwaters of a river. Irrigation ditches apparently were never reintroduced along the lower Gila and the people there continued to farm the river bends after seasonal floods went down, even raising cotton this way after Sedelmayr had persuaded them to plant it in 1743. His seed stock must have come from the Sobaipuris or other Pimans in northern Mexico since there was no contact with the Hopis at this time. Even so, the cotton itself would have been the short-fiber species grown by the Hopis. No one mentioned mountain sheep or any other hunting and gathering activity now, though from later references the use of mesquite bread, saguaro fruit, and other native foodstuffs continued. The diaries of Father Sedelmayr or the report that Ignacio Keller was preparing might tell us much more, but with the lapse of 250 years, prospects are slim that these may yet survive.

One secondary source has preserved a few more details from this period. This is the Second Part of Joseph Antonio de Villaseñor y Sánchez's *Theatro Americano*, written apparently in 1745 and published in Mexico in 1748. Much of his Chapter 17 drew upon a bad transcript of Sedelmayr's 1744 report. We are told that the three rancherías of the Gila River Pimas were so vast "that the number of people occupying it cannot be ascertained." Apaches were trouble-some in northern Pimería due to their raids and threats of raiding, which held back settlement, but the Cocomaricopas were said to make continual war on the Nijora (Nixote) nation. This apparently took the form of raiding the Nijoras for young boys, most of whom were sold to the Spaniards as slaves. In more recent times, the Ezells were inclined to think that these Nixote antagonists were the Mojaves, but by their placement relative to the Cocomaricopas, they might have been Yavapais. Sedelmayr in fact considered this slave raiding to be the reason for the "little wars" between the various groups of Yumans (Ives 1939: 110-111). Villaseñor did not mention the Yumas (Villaseñor 1748: 374-377, 394-397, 402-409; Dunne 1955: 47-48; Ezell and Ezell 1987).

In describing the natives of Pimería Alta, the padres usually said that they were not quarrelsome but peaceful, calm, and easy to deal with. But there had been a revolt in 1695, and in 1734 the converts at the new missions of San Xavier del Bac, Guevavi and Santa María de Suamca took to the hills, from which the fathers convinced them to return. Coastal Sonora saw a serious Seri revolt in 1750. There were hints that all might not be well in Pimería Alta (Villaseñor

1748: 394), and although his Tubutama mission had grown to nine pueblos by 1747, Father Sedelmayer admitted that “a number of whites, Indians, and apostates retired from our mission to the Gila River,....” (Matson and Fontana 1996: 10, 12). This may be the earliest sign that the Gila River settlements were becoming a refuge area for natives who had grown tired of the restrictions imposed by mission life.

Jacobo Sedelmayer, now the father visitor of the newly created Jesuit province of Pimería Alta, visited a number of the missions early in 1751. Anyone reading his report should have recognized that the conduct of several priests either was or would soon be beyond what the natives could tolerate. Sedelmayer himself was oblivious to this and perhaps had become part of the problem (Kessell 1970a: 122; Matson and Fontana 1996: xxii, 43-50). That summer, newly-arrived priests were assigned to a tier of missions at Sáric, San Xavier del Bac, and Sonóita, pushing the mission frontier farther to the north and west.

### *The Pima Revolt, 1751-1757*

Whatever its immediate causes, a native revolt broke out on the night of November 20, 1751, and the rebellious Pimas murdered two priests and at least one hundred peaceful Indians and settlers. Papagos or Pimas from the Gila River region led by Jabanimó (“Raven’s head”), an old chief of the Gila Pimas, burned the temporary chapel and padre’s house at San Xavier. Other missions in western and northern Pimería Alta were abandoned or destroyed. The governor of Sonora gathered his troops and in the course of several months restored order, mostly by negotiation rather than fighting. The middle Gila River grew more remote than ever (Mills 1936: 14-16; Donohue 1969: 131-133; Wilson 1995: 46-48).

As one historian put it, the Pima Uprising was a decade-long affair (Kessell 1970a: 108), and Pimería Alta was never really the same again. Peace remained elusive as apostate Pimas drove off livestock and harassed both settlers and peaceful Indians. Matters came to a head once more in 1756, indirectly because the padres were actively recruiting natives from the Papageria to replace the Pimas who lived along the rivers, where many died from the white man’s diseases. Jabanimó wanted no part of salvation, and rumor had it that he intended to incite the Papagos against the minister at San Xavier again.

That fall, as a result of the priest’s attempt to suppress a native festival or from some other provocation, Jabanimó and his warriors, including Papagos, fell upon San Xavier and pillaged both the father’s house and the dwellings of loyal Indians. The priest managed to flee. An ensign from the newly-founded presidio at Tubac rode to the rescue, killing fifteen of the rebels and putting the others to flight (Kessell 1970a: 140-141; Wilson 1995: 49).

Another newly-arrived Jesuit missionary, Bernard Middendorff, found himself temporarily appointed chaplain of the punitive expedition that the new governor of Sonora led in pursuit of Jabanimó’s followers. In November and December, 1756, they pursued the enemy to the banks of the Gila River, where they found their campsites at the confluence of the Gila and Salt. Then, “... behind the top of a rather high hill which hung right over the Gila River....” (probably Meridian Hill, at the junction of the Gila and Salt), the governor’s scouts spotted the enemy, still led by Jabanimó, in position on a hill.

Negotiations for a surrender failed and the governor led an assault, apparently up the mountainside. Middendorff described all of this in detail, including the rebels’ rush from the mountaintop to seek safety among the bogs and reeds of the river below. The royal forces spent sixteen days on the Gila River. In a letter, Middendorff also described briefly two ‘great house’ ruins; Casa Grande, and what may be the Acuña site (Gardiner 1957; Kessell 1970a: 141-142). A map believed to be associated with this expedition shows only “many rancherías” in the vicinity of the Pima Villages (Navarro Garcia 1964: 533-534 and Map 61; *New Mexico Historical Review* 6(2): frontispiece).

The Sobaipuris of the San Pedro had never had a resident priest, and if any further documentation of the northern Pimans’ attitude towards missionaries was needed, they provided it. Two of Middendorff’s classmates in the Mission of 1756 rode north from Suamca in the first days of 1757, with a military escort and the veteran Father Ignacio Keller, to whom these Sobaipuris had been a visita for the last twenty-four years. Instead of a welcome, the natives

wanted nothing to do with the two new padres. They were willing to continue as allies of the Spaniards and to go with them on campaigns, but they would accept only Father Keller as their priest and kill any other missionary sent to live with them. "In a word, they want to be baptized, but to live as they wish, to be Christians only in name." The disappointed, would-be missionaries withdrew and found places elsewhere in Pimería Alta. The Sobaipuris would enjoy their old life for only five more years (Kessell 1970a: 144-147, 161-162).

*The Pimas in Father Juan Nentvig's Rudo Ensayo*

The latest account of southern Arizona and Sonora before the expulsion of the Jesuits in 1767 was Father Juan Nentvig's *Rudo Ensayo* or, as he called it, his *Descripción de Sonora*. Nentvig had arrived in Mexico in 1750 and served at Saric for a few months, barely escaping with his life when the Pima Revolt started. Afterwards he ministered for a short time at Suamca, then among the Lower Pimas, and finally at the Opata mission of Huásabas. He visited Guevavi but never served at a mission in present-day Arizona and probably made no entrada towards the Gila or elsewhere. Much of his information about northern Pimería Alta probably came from fathers Sedelmayr and Keller (Nentvig 1980: xx).

There are at least four manuscripts of the *Descripción*, all written in 1763 or 1764. He wrote about the natural history and geography of Sonora, the lives and customs of its natives, and an account of the missions and Spanish settlement. Although he described his work as badly arranged, it was quite inclusive and offered the most comprehensive look at Sonora since Velarde's essay in 1716. Two versions of the map Nentvig made to accompany the text have been published, and the *Descripción* is available in both Spanish and English (Donohue 1969: 149; Nentvig 1971, 1980; Matson and Fontana 1996: Map).

Much of Nentvig's ethnographic information was given without geographical reference points, so that we learn for example about the Pima nation or about the Opatas. With respect to the Pimas Altos, he did subdivide them into four groups. These were: the villages along the Santa Cruz River; the Papagos; the Sobaipuris; and the Gileños, who resided on both banks of the Gila River. With the latter, however, he included the Opas, Cocomaricopas, Yumas, Quiqui-mas and several others, whom he asserted all spoke the same dialect (Nentvig 1980: 72). This classification has its faults, but he added that according to priests who had visited them for the last sixty years, neither the "great numbers" of people in the villages along the Gila and Colorado Rivers nor their robust natures had decreased. Indeed, "The only decline noted was in their desire to become Christians" (Nentvig 1980: 27). While Nentvig was writing from secondhand knowledge here, his information about a stable population may have been correct.

His notes about the principal settlements along the Gila placed Tucsonimó on the south side; Sudaesón or Encarnación, the residence of Jabanimó, head chief of the Gileños, on the north side; and farther west, the ranchería of Santa Teresa "with its abundant spring" (Ibid: 15). Ten or twelve leagues beyond was the junction with the Asunción (Salt) River, and ten leagues below that one entered the land of the Opas and Cocomaricopas. These nations dwelt on both sides of the river for a distance of thirty-six leagues, as far as Tumac, "the last hamlet (*ranchería*) of the tribe," which was near the Agua Caliente (Ibid: 15-16). Most or all of this he necessarily learned from Sedelmayr's 1744 and 1748 journeys, although he introduced a few inaccuracies.

Quite different was his claim that the land on both banks of the Gila for a distance of ten leagues was inhabited by Pimas Altos called Gileños, who raised wheat, corn, etc., "and so much cotton that after the harvest, because of the apathy of the natives, more remains in the field, a fact recorded by a missionary in 1757." Their irrigating canals, which brought water from the river and some springs, were well-constructed (Ibid: 14-15). If accurate, this would mean that between 1744 and 1757 the Gila River Pimas had taken up both irrigation and the raising of wheat and cotton in a serious way.

At least two other observations by Nentvig may reflect changes in Gileño customs between his time and the 20th century. With the exception of the Apaches, all of these nations



showed devotion to their dead by burying all of the deceased's belongings, plus some pinole and a jug of water with him (her?). In attempting to prevent the Pimas "especially the Pimas Altos" from practicing this custom, a missionary had to remain at the burial site until it was completely closed (Ibid: 62). The Gila River Pimas of course were not subject to such restrictions. Russell (1908: 194-195) indicated that water and pinole were placed on the grave but personal property was destroyed. Ezell (1961: 89-98) dwelt at length on burial customs, but eventually concluded that personal property was not interred. If Nentvig was accurate, this may be a difference between practices in the 18th and in the late-19th and 20th centuries.

There is also a question of the division of labor in agricultural activities. Nentvig (1980: 68) made a passing comment that Opatá women were happy in the knowledge that while their sisters with the Pimas Altos and Apaches "were compelled to slave in the fields," they (Opatá women) performed more feminine duties. On the other hand, both Russell (1908: 89) and Castetter and Bell (1942: 133) said that the work of clearing the fields, planting and irrigating devolved upon men among the Pimas, while women harvested the crops. Spier (1978: 60) indicated the same practices among the Maricopas. Since Nentvig was quite specific, perhaps the division of labor became more marked among the Gila River Pimas as time advanced, especially after men ceased having to watch for raids.

Sedelmayr had complained in 1747 that Indians, apostates, and others "retired" from his mission to the Gila River. There is the question too as to whether and how the Sobaipuris who withdrew from the San Pedro Valley in the spring of 1762 may have altered the life of the Gila River Pimas, either by adding to their population or introducing new skills or customs. Nentvig's (1980: 73) account of the Sobaipuri removal said that some migrated north to Suamca, others went farther southwest to Guevavi and Sonoitac (Los Reyes de Sonoitac), while still others traveled west to San Xavier del Bac and Tucson. Other contemporary sources gave the number of Sobaipuris resettled at Tucson as 250, 30 at Suamca, and unknown numbers roaming the surrounding towns (Kessell 1970a: 161-162; Dobyns 1976: 19-21).

A decrease from the estimated 1,800 souls in Father Keller's mission (Suamca plus the San Pedro Valley) in 1732, to only 300+ in 1762, seems incredible even with the casualties that a long, grinding war with the Apaches may have produced. It is possible that earlier refugees settled among the Pimas living along the middle Gila River, while others arrived there later from missions whose populations continued to decline. As for new skills, Nentvig (1980: 69) implied that the Pimas were cooperative when it came to learning. This may have paved the way for the Sobaipuris to share their weaving skills with the Gileños.

By 1764, Father Nentvig painted a gloomy picture of native and Spanish settlements depopulated, mostly because of Apache attacks. In the remaining years of the Jesuit period, to 1767, the missions of Pimería Alta barely held their own and missionary work was virtually at a standstill, while the natives lived largely as they pleased (Bancroft 1889: 368; Kessell 1970a: 149-181; Nentvig 1980: 102-107, 128-129). By 1770 the people of Tucson were mostly Sobaipuri refugees from the San Pedro (Kessell 1976: 56). Wherever and in whatever numbers the Sobaipuris blended with their kinsmen elsewhere, the strategic results of their removal from the San Pedro Valley were to leave the Gila River Pimas more exposed. The front line of the conflict with the Apaches now shifted to the Santa Cruz Valley. If the Pima Uprising was a decade-long affair, then the next ten years belonged to the Apaches (Kessell 1970a: 156, 165-169).

## Chapter IV

### THE PIMAS AND COCOMARICOPAS IN THE LATE 18<sup>TH</sup> CENTURY

Late in July of 1767 the decree of Spanish King Charles III, banishing the Jesuit Order from New Spain, arrived at the presidios in northern Sonora.

Detachments of soldiers marched to all eight of the missions of Pimería Alta, took the fathers into custody, and locked the church valuables in the sacristies. They left each of the mission properties in charge of a *comasario*, a sort of trustee or temporary royal manager. Arrangements had already been made in Mexico City for the Franciscan vice commissary general for New Spain to accept the burden of the northwestern missions. Fifteen of the replacement missionaries would be grayrobed Franciscan friars; six to missions in Pimería Baja and nine, including the Father President, to ministries in Pimería Alta. All were peninsular Spaniards or born in New Spain.

By late June of 1768, the new fathers had taken up their stations and received custody of their respective churches, sacristies, padres' quarters and furnishings. Under current policies the friars would be responsible for a spiritual ministry only, while government agents would manage the temporal businesses of the missions. Father Francisco Garcés arrived at the northernmost mission, San Xavier del Bac. Fifteen leagues to the south lay the presidio of Tubac, under the command of thirty-one year old Captain Juan Bautista de Anza (the younger) (Kessell 1976: 14-41).

#### *Francisco Garcés' 1768 Visitation of the Gila*

More than one historian has portrayed Father Garcés as the Kino of the Franciscans (Bancroft 1889: 386; Kessell 1976: 3, 47). Scarcely a month after he arrived at San Xavier, two rancherías of Papagos came to help cut the wheat harvest, and he convinced a considerable number of them to stay and live like Christians. He was soon invited to visit some gentile rancherías to preach to them, and he set off on August 29<sup>th</sup> with four Indians who had been sent to guide him, plus one from San Xavier. They went about eighty leagues to the west, north, and southeast, through various large rancherías of Papagos. He also saw one of the numerous rancherías on the Río Gila where a large crowd had gathered.

When Garcés arrived at a settlement, he preached to the people through his Indian interpreter. The old Indians and principal men of the ranchería gathered into what they called a circle, which amounted to a discussion held around a fire. This lasted from nightfall until two in the morning, and the new father spoke to them of the divine mysteries, of the King, and so on, and they asked him why he had come, how he had crossed the sea, what he was looking for, etc. The Pimas added that they had kept good faith with the Spaniards, and for their part they had no objections to the erection of new missions. At all of the rancherías where he spent the night, Garcés would celebrate the Holy Sacrifice of the Mass. He confessed that he liked all of the Indians he had seen and visited, but most especially the Gileños held first place in his affections.

The natives escorted him from one ranchería to the next, and everywhere they gave whatever they had to Father Garcés and the interpreter. Such gifts from such people, and with him so poor, were greatly appreciated. Everyone was pleased with this visitation, but soon after his return he fell terribly ill and was carried south to the mission at Guevavi to recover (Arricivita 1792: 403-404;

Coues 1900: 25-26; Kessell 1976: 46-47; Francisco Garcés, *Compendio...*, May 21, 1775, in ASM Archives).

Father Garcés knew little enough about where he was on his first *entrada*, but he did visit at least one of the villages along the middle Gila River. He probably had no map, and at this point he evidently had not read the numerous Jesuit accounts of this part of Pimería Alta. In any event, he was concerned with spiritual rather than temporal matters. Noticeably absent was any claim about distributing trinkets or gifts among the natives. This would have been unlikely because, in addition to the Franciscan vows of poverty, the annual subsidy from the government had become inadequate even for mission expenses.

The Indians no longer had to perform work nor did the friars have control over the temporal businesses of the missions, which meant that the Indians now labored for the royal *comisarios*, while both the fathers and their spiritual charges grew poorer. This would change when management of temporalities was restored to the padres in 1769 (Kessell 1976: 17-20, 42-45, 51-53). In the account of his 1768 journey, Father Garcés did give the best description from any period as to what happened when a missionary arrived at a native village. No longer did the natives put up the bowers and arbors of Kino's day. Instead they gave him a hearty and apparently sincere welcome.

#### *Population Growth on the Middle Gila*

In 1772 the governor of Sonora reported to the viceroy about the several trips that Father Garcés had made. With respect to this 1768 journey, he claimed that the minister saw various villages of Gileños that were "so populous that the people who inhabit them, counting children and adults, must be 4,000 or even more;" (Bolton 1930 V: 35). This estimate is not inconsistent with the figures that Father Sedelmayr offered in 1744, and if accurate it would mean that the population of the middle Gila had increased several fold from the numbers in Kino's time.

Several possibilities come to mind as to how this happened. One is that the Pimas who once lived intermingled with the Cocomaricopas at and above the Great Bend had removed themselves to the middle Gila, abandoning the Gila valley below the Gila-Salt junction to the Opas. In 1770 the Sobaipuri refugees at Tucson threatened to move north to the Gila, which may imply some precedent for such a move (Kessell 1976: 56). The precedent might have been the many rancherías that Father Keller found abandoned in the lower San Pedro valley in 1737. Five years before, it appeared that there must be more than 1,800 souls in his mission (see Chapter 3). This partial loss of the San Pedro Valley evidently took place between 1732 and 1737.

Father Sedelmayr said in 1743 that he persuaded the Pimas and Maricopas in communities bordering the Gila to sow cotton. The next year he found that the natives had woven good blankets from the cotton given them to plant. This is one factor that suggests some of the people from the San Pedro moved to the middle Gila, because such a rapid advance in skills implies existing knowledge of both cotton cultivation and weaving, which of course the Sobaipuris of the lower San

Pedro already possessed. Some of these Sobaipuris almost surely found their way to the middle Gila (Spicer 1962: 146).

Finally, Father Sedelmayr's complaint in 1747 about a number of whites, Indians, and apostates retiring from his mission at Tubutama to the Gila River may have been a prelude to the Sonoran governor's unhappy observation, in his 1772 report, that missions should be founded in the Papago country because

“...this country is a refuge and asylum for all the vagabonds and Indians of evil life from the missions of Pimería Alta, who, seeking the liberty which they love so well, take refuge in the country mentioned, where they live without God, or king, or law, except that of their whims, ....” (Bolton 1930 V: 34-35).

The context of Governor Sastro's comments was still Father Garcés' 1768 journey. Garcés himself agreed completely, and in his 1774 journal he added that

“Although this tribe or portion of Pimas [i.e., the Papagos] has been very numerous, now, on account of the number who have attached themselves to the pueblos or have gone to the Gila and Colorado rivers, it may be that the population does not reach four thousand souls, though it does not lack much of it” (Bolton 1930 II: 319).

From all of this, it appears that the population of the middle Gila was increasing by the 1740's if not before and that this increase continued until at least the 1770's. The new people were initially refugee Sobaipuris who came directly or indirectly (or both) from the San Pedro valley. They were followed by Papagos who, for economic reasons or to escape life at the missions, sought out the Gileños and became part of the growing population.

#### *Father Garcés' Journey to the Pimas and Opas, 1770*

By 1770 an epidemic of measles, malignant fevers and diarrhea was raging through Sonora, leaving many dead. The Pimas of the Río Gila sent messengers to advise Father Garcés of their difficulties and begged him to come to their aid. Since one very sick woman was a Christian and a married woman had fled San Xavier (apparently to the Gila Pimas), and just to console everybody, Garcés left San Xavier on October 19, 1770, equipped with charity, apostolic zeal, “and no other escort than his guardian angel.” Bac had escaped sickness and he intended to return in five days.

This was probably the most interesting trip he made to the Gila. A number of parallel accounts, including his unpublished diary, have been used here in reconstructing it (Arricivita 1792: 416-418; Bancroft 1889: 386-387; Coues 1900: 26-30; Kessell 1976: 57-60; Francisco Garcés, *Diario* [1770]; *Compendio...*, May 21, 1775, in ASM Archives). The diary has everything moved back by one day as compared with the other sources and shows him leaving San

Xavier with four native companions on the 19<sup>th</sup>. This is accepted as the correct chronology because he mentioned in the entry for October 23 that, in honor of the saint, he named two rancherías *San Juan Capistrano* because it was his day. October 23 is the correct day.

On the first day, Padre Garcés traveled towards the northwest and viewed three Papago rancherías (Cuitoat [Quitoa], Oapars, Tubasa), some of whose people were at his mission, though he wasn't able to gather them all in because of their fear of a speedy death. He stayed at the pueblo of Quitoa that night. The second day he went westward in search of a sick old woman, looking over different *rancherías volantonas*. This newly-fashionable term, as Garcés used it, may have meant seasonal settlements rather than vagabonds or wandering peoples displaced from elsewhere (Radding 1997: 253, 268-270). He arrived at Aquituni [Ak(i) Chiñ, possibly the Papago ranchería by that name on Santa Rosa Wash] that night, where he found and catechized a sick old gentile who presently died.

On the 21<sup>st</sup> he followed a route between north and northeast, quartering towards the east, and arrived at the Río Gila very close to the Casa Grande. The first ranchería he came to was called Pitac [*bitoi*; Arizona Ash], and he decided that it was the one Padre Kino had named San Andrés (Rea 1997: 166-167). There he baptized the sick children who were in the greatest danger. He talked half the night with the principal men, and the next morning said Mass and preached to them through the interpreter. He set out for Pitaique, heading west for about three hours and seeing many people on the road. At the house of the governor, the Indians of Pitaique knew him because he had been in that ranchería in 1768, although it was on the other bank of the river then. In consideration, he gave them two axes as presents. These Pimas were great farmers and had their acequia and weir in the river. In the course of events, the raging currents of the river put the weir out of service.

The governor at Pitaique assured him that everyone wanted a padre to teach them, and here he baptized twenty-two. It was very difficult to push his way through the obstacles they raised to his departing, almost requiring force, but he continued downriver. In each place, Father Garcés said Mass and baptized those who were the sickest.

On the 23d he set off to the west, leaving behind villagers on either side of the river. In a short time he came to an average-sized ranchería called Saboy, and afterwards another one known as Uturituc [Hejel Jeg], with large, beautiful fields of wheat, well sprouted. The name Uturituc meant "an open place, without trees" (Bolton 1930 III: 17; Rea 1997: 38). These two rancherías he named San Juan Capistrano. He stopped here awhile, but early in the afternoon, having crossed the river, he came to a very large ranchería that he named Napcut, where there were some very old men who well remembered Padre Kino. And so he thought this was the ranchería of La Encarnación. They brought in a talkative Opa individual, who gave him a flood of lies why he should not go on to the Opas.

This discouraged the Indians who had accompanied him from his own mission, but Garcés set off again on the 24<sup>th</sup> with the son of the governor, two young men and a guide, and in a short time they arrived at the great pueblo of Sutaquisón. This consisted of three separate rancherías, which he named San

Serafino. It had much water and planted fields independent of the river. At the second ranchería he took a siesta, and because of all the urgent requests they made of him, decided that he didn't want to spend the night.

In these pueblos they had no sickness, such as in the first ones, and the natives were all very similar in appearance. Their fields of wheat were very large, well tended and enclosed. It even appeared that everyone joined together to make the enclosures, then divided the lands within them. All of these Indians were very hard workers, courageous at defending themselves and in taking the offensive against the Apaches. From them, they had taken many captives in years past, although last year many perished in an Apache attack.

Garcés and his small party went on, now between west and south, seeing a moderately large mountain range which, apparently, he was going to leave to the right. He told the Indians that he didn't want to take that route if it was from the northwest, leaving the *sierra* to the left. They went on, across land with some pasturage, camping at nightfall by a saline pool.

Early on the morning of the 25<sup>th</sup> Garcés' troop started off along the same route, near the sierra, apparently following the eastern side of the Estrellas. They went down to the river and saw that the water, very good elsewhere, had become very salty and muddy because of the junction with the Rio Salado or for some other reason. The mountain range ended at the river and from the heights he saw a broad valley and the great Sierra Azul. Two rows or galleries of cottonwoods bordered the stream sides and almost divided the valley. One stream was apparently the Río Salado and the other an unnamed, ephemeral watercourse. During the afternoon he traveled westward and arrived at night at the Opa ranchería he called La Pasión [de Tugabi].

The Opas received him with pleasure and regaled him with what they had, although they didn't understand him or the Pimas with him when they asked about the route to the Hopis. He was asked all sorts of impertinent questions, such as whether he was a man or a woman and if he was married, and others "in conformity to their rudeness." The villagers gave them food, however, as the party had carried very few foodstuffs with only a single horse. These natives had not seen padres before.

For the next two days Father Garcés traveled among the Opas. Their principal sites, the ones that he saw, were La Pasión, San Ybon de Ojiatujui, and San Simon y Judas de Uparsoitac, the latter near the Great Bend. Everywhere the Opas sowed all of the usual seeds, such as wheat, corn, beans, etc., and although he saw some Indians completely naked, many others went about clothed. Some had woven cotton fabrics that they made in imitation of the Gileños while others covered themselves with mantas from the Hopis, which they got through the Yavaipais or Nijoras.

The good father departed Ojiatujui on the 28<sup>th</sup>, accompanied by many old men and boys. They passed through various rancherías and fields that were sown *de temporal*, meaning without irrigation. In a few hours they came to the ranchería of San Simon y Judas de Uparsoitac, where he stayed in the house of a baptized Pima from Sutaquisón. Many people crowded in to see him, among others four Cocomaricopas from the Rio Colorado who gave him to understand

that there were many people on the river below, some of them called Cocomaricopas and others Chuchuma Opas, but all the same people and enemies of the Yumas. By Chuchuma Opas, Garcés meant the Opas who lived near the hill called Tumas, on the north side of the Gila downstream from the Painted Rock Mountains (Ezell 1963: 14). He saw some Yuma captives and also different Pimas who had married Opas, as in the rancherías around Ojiatujui. He was assured that the Jesuit padres on their journeys had passed lower down and hadn't seen the ranchos called San Ybon. Garcés had to tell the Cocomaricopas that he would go to their country another time.

By now he had been away from his mission ten days, twice as long as he had expected. So, sick at heart to leave these people, some of whom were dying of measles, and baptizing only one child who was almost dead and whom he found by the sounds of his crying, he turned eastward and proceeded for three days through a despoblado, half-lost as he said. He came to some Papago rancherías where he learned that most of the children and the old woman he had baptized among the Pimas had died. On the fourth day, the natives from his mission rejoined him, and the following day they arrived back in Tucson. The estimated length of this journey was ninety leagues.

Three weeks later, Father Garcés expanded his already-ample description of the Indians of the middle and lower Gila in a letter to a fellow missionary:

“These Opa and Gila Pima Indians have good lands; they grow cotton, squash, watermelons, maize, and in the first rancherías, wheat. They are very robust and stocky, comparatively light-skinned, and seem to be hard workers. Although the Opas are not very skillful when it comes to warfare, with the instruction of the Pimas they are showing an inclination and trying hard. Even though they grow cotton, the women still wear a wand wrapped around the body from which hang well-fastened many ribbon-like strips which they get from the bark of the willow; this serves as a skirt, for as much as they cover themselves.”

“The lands seem to afford little feed (i.e., for livestock), though boys would bring some at night for the two animals we took. In all, if the land is not as good as Pimería Alta for stock, it is incomparably better for people. They raise good-sized sheep; they have some horses, fish, and very large jacales, especially the Opas who are accustomed to live many in each one. The Pima country alone will accommodate four very fine missions, and Sutaquisón could raise considerable livestock. Not counting the farming area of individuals and small rancherías along the river, there are five large pueblos, each of which will support a mission nicely.”

“As for the Opas, they are not as concentrated, yet there are many people in little territory, and in various places pueblos can be

formed. They were amazed and very happy that I came alone. .... Until they feel that they are not being deceived and are confident of the Father, they tell all manner of lies. They deny the roads and say that there are no waterholes and that every place is full of enemies. .... One must not ask for other peoples, as the Jesuits did for the Hopi. Had they not asked, they would have got farther into the interior. .... They shared their food and fish with us. They are not tight-fisted like the Papagos” (Kessell 1976: 59-60).

In this remarkable set of narratives, Father Francisco Garcés wrote the only known description of the Opas and one of the best accounts of a visit to the Gila River Pimas from any period. His sympathetic understanding was creditable and also unusual in the facility he displayed for expressing it in words.

The Pimas grew cotton and wheat with at least some aid from irrigation, and had learned the skills needed to weave cotton fabrics. The Opas lacked irrigation and wheat, though they were obviously aware of both, and raised cotton which they had also learned to weave. They retained the Yuman tradition of a large house of relatively permanent construction, probably more like the larger houses described by Spier (1978: 83-87) than the Pimas’ *kiik*. Although Garcés arrived in the middle of a measles epidemic, this affected people in some villages but apparently not in others.

Father Sedelmayr had actually preceded Garcés in following the Gila River downstream beyond its junction with the Salt River to the Great Bend, but Sedelmayr by comparison had said very little. Upstream on the middle Gila, Garcés 1770 travelogue was perhaps the most complete inventory of Pima settlements from any period until the middle of the 19<sup>th</sup> century. At times it was not clear what he meant (as with the “independent” fields at Sutaquisón); he offered no population estimates, and gave neither the distances between villages nor the length of his daily marches. Consequently it is not possible to sort out the interval distances between these Pima settlements, other than to say that they all probably lay within the stretch of valley between Casa Grande and the vicinity of Gila Butte, and were encountered in the order he gave. His identifications of two communities as being those the Jesuits had named San Andrés and La Encarnación were almost certainly wrong, and have resulted in no little confusion since (Ezell 1961: 114-115). When Garcés returned with other Spaniards in 1774-1775, they did record distances by leagues. These allow some estimates of village locations to be made.

This sort of excursion must have intrigued the native peoples he visited, but probably made little difference in their real lives, apart from the two axes he left at Pitaique. The padre himself came through the 1770 trip in fine shape, and the next year he made a two-month entrada to the Yumas of the Rio Colorado, emerging at Tubutama

“.... sound, fat, merry, and well content, dressed in the very same clothes he took from his mission, missing not a thread, except for the cord, and that not because the Indians stole it from him, but



because one night when he was alone he tied his horse with or to it. The horse with a jerk broke it in three places” (Kessell 1976: 60, 62).

*The Anza Expeditions, 1774-1775*

The diaries from Fray Francisco Garcés’ solitary forays found interested readers in the captain of the Tubac presidio, Juan Bautista de Anza (the younger), and the viceroy of New Spain. Spain at this time was beginning to extend its authority into Upper California, or New California as they called it, to thwart English and Russian designs on this coast. The first mission had been established at San Diego in 1769, a presidio was founded at Monterey in 1770, and other missions followed in 1771-1772. These required supplies and reinforcements, but a sea route had proven to be difficult. What was needed was a dependable overland route from Sonora to California. According to Garcés’ accounts, he had traveled within sight of the coastal ranges, and Monterey lay only days from the Colorado River (Kessell 1976: 93-94; Weber 1992: 242-249).

The Franciscan father and Captain Anza proposed a pilot expedition that would attempt to open a road to California. The two did not get along well; Anza considered missions (and perhaps missionaries?) useless and resented the friar’s meddling in military affairs, while Garcés thought the military should provision the two soldiers who had been stationed at San Xavier for his protection. There was mutual respect nonetheless and they may have simply agreed to disagree. In any event, in September 1773 a new viceroy granted Anza’s request for permission to open a trail to California. His small expedition would include twenty volunteers from Anza’s own garrison and two priests, one of whom was Father Garcés.

This party left from Tubac on January 8, 1774, and proceeded via Altar and Sonoita in northwestern Sonora to the Yumas, who gave them a friendly reception and helped the soldiers cross the Colorado River. After finding their way around some impassible sand dunes beyond the river, they made it to the Los Angeles basin and then on to Monterey. By mid-May, Captain Anza and his escort had returned as far as the Colorado River. From there, everyone except Father Garcés continued up the Gila River, took the cutoff across the “forty-mile desert” between Gila Band and Sutaquisón, then turned south near Casa Grande and returned to Tubac on May 27<sup>th</sup> – 294 leagues from Monterey.

When Father Garcés split away from the rest of the party at the Colorado crossing, he detoured upriver to the Jalchedunes (Halchidhomas), most of whom “... go dressed with blankets and blue cloth from Moqui and from the Pimería. They plant cotton....” Returning to the Gila, he followed it upstream, retracing his path from 1770 between Uparsoitac and the Pima villages. By now it was June 23<sup>rd</sup> and he spent another two weeks with the Pimas, finally arriving back at his pueblo of San Xavier del Bac at 5 P.M. on July 10, 1774. Two fellow priests at Tumacácori transcribed his diary notes, which were less full than they might have been, into a legible copy for presentation to the viceroy. The diaries by

Anza and Fray Juan Días, who had continued with Anza's party, also survive (Bolton 1930 II; Kessell 1976: 95-96; Weber 1992: 249-252).

Francisco Garcés was a born missionary. In 1775 his companion on the trail was Fray Pedro Font, a peninsular Spaniard himself. Font wrote that Father Garcés was so well suited to get along with the Indians that he appeared to be but an Indian himself:

“.... He sits with them in the circle, or at night around the fire, with his legs crossed. There he will sit musing two or three hours or more, oblivious to all else, talking with much serenity and deliberation. And though the foods of the Indians are as nasty and dirty as those outlandish people themselves, the father eats them with great gusto, and says that they are good for the stomach, and delicious. In short, God has created him, as I see it, solely for the purpose of seeking out these unhappy, ignorant, and rustic people” (Kessell 1970b: 190).

Anza's feat of a 2,000-mile round trip in just twenty weeks led the viceroy to recommend him for promotion to lieutenant colonel and to lead a much larger group of soldiers, colonists and their families over the new route. He would then select the site for a new presidio on San Francisco Bay. Anza spent the early part of 1775 recruiting colonists in Sinaloa and seeing to their outfitting and provisioning with broken-down pack animals, in part because an Apache raid had carried off the royal horse herd at Tubac. Nonetheless, the caravan got underway on October 23, 1775, and the 240 people trekked north through Tucson and the Pima rancherías to arrive a month later at the Colorado. Fathers Garcés and Font kept journals, as did Anza himself. From the Colorado River, Anza, Font and the colonists continued on, eventually to Monterey, while Father Eixarch remained with the Yumas and was waiting when Padre Font returned with Captain Anza and the soldiers on May 11, 1776.

Meanwhile, the indomitable Garcés had traveled west to mission San Gabriel, then north into the San Joaquin Valley, crossed the Mohave Desert and the Colorado River again, explored Havasu Canyon and ended up an unwelcome guest of the Hopi Indians. Garcés was gone for almost nine months on this odyssey, keeping a journal all the time, and by August 27, 1776 he had arrived back on the Colorado. He returned home again to San Xavier del Bac, via the Gileño Pimas, on September 17<sup>th</sup>. Anza and the others had taken a more direct route from the Yuma Crossing south to the Camino del Diablo and eastward along the present international boundary to San Miguel de Horcasitas, reaching there on June 1<sup>st</sup> (Bolton 1930: III, IV; Kessell 1976: 110-121; Fontana 1994: 160-164). Anza's reward for his successful project was promotion to the governorship of New Mexico, where he served for nine years, 1778 to 1787, longer than anyone before or since.

With five diarists on the two expeditions and a journal from each trip by both Anza and Garcés, all conveniently gathered into several published sources (Coues 1900; Bolton 1930: II-V; Galvin 1967), the documentation is not only

ample but available. Distance logs were included in each diary, although not between every village, the only major problem being that Anza's record of the leagues traveled was sometimes half the number given by the priests. The reason for this is not evident. The measurements offered by the friars were more consistent and so are used here.

With reference to the cultural geography of the middle Gila, the 1775 expedition spent the night of October 30<sup>th</sup> at a campground near the Gila River, where there was abundant pasturage and water. Anza said this site was called Comari [*komal̄*; "flat"]; Garcés referred to it as a laguna, and Father Font used the name La Laguna. Casa Grande lay some three leagues to the east-southeast. From Font's description in particular, it is evident that they were camped at Blackwater Slough, which was about eight miles west-northwest of Casa Grande. At this time no one was living at Comari (Coues 1900: 65; Bolton 1930 III: 13-15; IV: 32-34, 42; Galvin 1967: 6-7; Rea 1997: 32). The next day everyone visited Casa Grande and Font left an extended description, as well as the traditional history he learned from the governor of the Pima village of Uturituc.

On November 1<sup>st</sup> the entourage set out from La Laguna at 9:30 A.M. and 3½ hours later arrived at the pueblo of San Juan Capistrano de Uturituc, having traveled four leagues to the west-northwest. Garcés had given the village this name in 1770 although it consisted of two rancherías, whereas now only one was mentioned. Garcés and Font estimated that about 1,000 Indians welcomed them and Anza said more than 1,000 assembled. In 1774 Garcés had also given a figure of nearly 1,000 souls (Coues 1900: 102-103; Bolton 1930 II: 240, 303; III: 17-18; IV: 42-43; Galvin 1967: 7).

In 1775 this was the first pueblo of the Pimas. The year before, however, when he passed this way going from west to east, Father Garcés traveled three leagues up the river from Uturituc "through uninhabited lands of the Pimas" and arrived at the village of Pitac (Bolton 1930 II: 389-390). This location would have been about at the 19<sup>th</sup> century settlement of Blackwater, which Garcés confirmed by saying that "although farther down the river did not run, here there was much water," as well as pasturage in the vicinity. This was as much as Garcés said about Pitac in 1774, while Anza and Father Días did not even mention it in their diaries that year. In his 1770 journal, Garcés had noted two rancherías – Pitac and Pitaique – that lay east of Uturituc, but the absence of distances made it impossible to say whether any of the villages named in 1770 were at the same location in 1775. Both Pitac and Pitaique were gone by then.

Uturituc was south of the Gila River and seven leagues or about eighteen miles downstream from Casa Grande. According to Hodge (1960 II: 877) Uturituc meant "the corner" in Pima and it lay at the angle of the new and old stream beds of the Gila, i.e. where the Little Gila River rejoined the main Gila. This would place it at or near Sweetwater and approximately at the site of Father Kino's San Andrés, or Coatoydag. A few of the descriptions written by Anza diarists were specific to Uturituc. Garcés said that they "took care of our wants and feasted us extravagantly, for they have sheep very like those of the Hopi Indians or perhaps the same." They had chickens and horses as well, and here

Captain Anza reciprocated the Pimas' offer of water, wood and provisions with an abundance of glass beads and tobacco (Bolton 1930 III: 17-18; Galvin 1967: 7).

The natives entertained the Spaniards in a great arbor made for the purpose, the river being "somewhat distant" from this spot. They fenced their fields with poles and laid them off in divisions, with very good irrigating ditches and very clean. "They [the fields] are close to the pueblo and on the banks of the river." The fields obviously lay between the pueblo and the river. This was on November 1<sup>st</sup>, and the Gila carried so little water that it reached only half way up the legs of an Indian who waded across it. They had not yet planted because the river was so low that the water could not enter their ditches. However,

"... to remedy this they planned to assemble all together and fasten many logs [or poles; *palos*] in the middle of the river, and then many branches, to raise the water so that it would enter the ditches" (Bolton 1930 IV: 43-44).

They also ate much péchita, which was the mesquite pod ground and made into atole; tornillo, grass seeds, "and other coarse things." Font, the culinary critic, noted as well that he "... saw also how they wove fabrics of cotton, which they plant and spin, and which most of them know how to weave" (Ibid).

On November 2<sup>nd</sup> it was time to continue west. The colonists departed late in the morning and by mid-afternoon (Font said 3 P.M.; Anza 2:30), after traveling west by north, they halted on the banks of the Gila River near the village called La Encarnación del Sutaquisón. Both Garcés and Font recorded the distance that day as four leagues (ca. ten miles). Scaling the distance from Casa Grande would put Sutaquisón near Pima Butte or Sacate, about where the Arizona Eastern Railroad grade crossed the Gila, at "the place where the water comes out." Whereas in 1770 there had been much water here, in 1775 the river was dry. Garcés and Font estimated about 500 persons lived at this pueblo, while Anza said he distributed gifts of tobacco and glass beads to around 800 (Coues 1900: 106-109); Bolton 1930 III: 18-20; IV: 44-46; Galvin 1967: 4). Both Font and Anza mentioned that they passed through two villages (Font said two smaller pueblos) that belonged to Sutaquisón on their way to that site, but neither gave their names.

In 1770 and again in 1774, Father Garcés had said that Sutaquisón was a great pueblo that consisted of three separate rancherías, so this association had evidently not changed. Sutaquisón in 1774 was quite a place, according to Anza. He described it as a permanent village of the Pimas with more than 2,000 souls, devoted to agriculture. One of their fields, "and they say that it is the smallest one which they have," he judged had from sixty to eighty *fanegas* (one fanega = 2.57 bushels) of wheat planted, "of marvelous quality," which was ready to be harvested as of May 22, 1774. To Father Díaz too, these fields of wheat "filled us with admiration." Anza also noticed the foundations and even part of the walls of a prehistoric 'great house' there (Bolton 1930 II: 239, 304).

In 1775 though the people were taking water from the bed of the Gila River by making wells in the sand. Font, who had not been this way before, was an interested observer:

“Only in the time of floods is it [the river] useful for the grain fields and corn fields of the Indians. On its banks it has a continuous cottonwood grove, but the trees are not very large” (Bolton 1930 IV: 45).

According to him, within the space of a year Sutaquisón had undergone a population loss of 60 to 75 percent, and a relocation as well:

“The Indians were asked why they lived so far from the river, since formerly they had their pueblo on the banks, whereas now they had moved it to a place apart. They replied that they changed the site because near the river, with its trees and brush, they fared badly from the Apaches, but now being far away they had open country through which to follow and kill the Apaches when they came to their pueblo” (Bolton 1930 IV: 46).

Anza also offered some comparisons:

“In my former diary [1774] I noted the vast fields which were cultivated in these pueblos of the Pimas. At present they are not planted as they ought to be because the river is so short of water that in some places it is dried up, but according to what the Indians tell me the drought will last only till the middle of this month, when they will commence their planting” (Bolton 1930 III: 19).

The month was November 1775.

As of 1775, Uturituc was the first village of the Pimas, coming from the east, and Sutaquisón was the last one. “To that small district,” said Father Font, “is reduced nearly all the country occupied by the tribe of the Gila Pimas” (Bolton 1930 IV: 45). Francisco Garcés summed up their situation at this time in a single paragraph:

“In the region of these four leagues one comes upon the villages of Atisón, Tubus Cabors, and San Serafín de Napcub, which is on the other [north] bank of the river. At this village of La Encarnación de Sutaquisón ends the Pima nation of the Gila River, which in the region of four leagues has five villages: San Juan Capistrano de Uturituc, San Andrés de Tubus Cabors, Atisón, San Serafín de Napcub, and La Encarnación de Sutaquisón, which have altogether, I judge, about two thousand five hundred souls.”

“All these villages have large sowings of wheat, and some of maize, cotton, squash, and other seed crops. For irrigation they have dug good channels [acequias]. The fields are surrounded by a common fence, and those of the separate owners are set off each by its own fence. These Indians go clothed in blankets that they themselves make from cotton or from the wool of their sheep or wool brought from Moqui. This part of the day’s journey hasn’t much forage, but in the village called Sutaquisón there is enough to keep a presidio supplied, ....” (Galvin 1967: 8).

Father Font, never loath with an opinion, left the Pima country on a more personal note:

“.... the Gileños, whose tribe ends here, enjoy good health and are quite fat and robust, although in so large a concourse as assembled on our arrival I did not see many old men or old women. These people try to clothe themselves with the blankets of cotton which they raise and weave, and with some *sayal* which they acquire through the communication which they maintain with the Papagos, and with the Upper Pimas and the presidios of Tubac (Tuquison now) and Altar. Of the sayal they make their cotton breeches, and those who do not have breeches supply their place with a blanket gathered up and tied, while the women cover themselves with deerskin.”

He went on to characterize the men’s and women’s coiffures, and then gave his recommendation that the Gila Pimas were in a propitious condition for the founding of a mission among them. They lived in established pueblos, and with their fields they succeeded in supporting themselves with their own labor (Bolton 1930 IV: 49-50). Font’s sayal was probably a coarse fabric woven from lechuguilla or sotol fiber (Castetter and Underhill 1935: 55-56, 61-62; Castetter, Bell and Grove 1938: 67).

The length of the country the Pimas occupied along the Gila had shrunk dramatically, from fourteen leagues in 1744 to seven leagues in 1774 and four leagues in 1775. The reason was obvious to all. Anza, writing in 1774, said that the Pima villages had about 3000 persons, “all of whom live in close union, being frightened by the last attacks which the Apaches have made on them.” Father Díaz said the same, that the Gileños thus united were better able to withstand the continuous assaults of the Apaches (Bolton 1930 II: 240, 303). The loss or reduction of 500 persons from 1774 to 1775 probably resulted from the drought causing them to move or relocate, rather than from an excess of deaths.

Finally, Father Garcés told us that the large pueblo called San Seraphin de Nacub [Napcub], which he visited in late June of 1774, was one league distant from Sutaquisón, upstream from the latter and on the other [north] side of the river. A little more than a league farther along, traveling east, he came to San Andrés de Tuburs Cabors [Jewed Cavolk], on the south side and near the river,

also very populous. What he meant in saying that the latter's villages were abandoned and attached to Uturituc is not clear, but in November of 1775 he again wrote that the ranchería of San Andrés was abandoned. Uturituc lay a little more than a league's travel eastward from Tuburs Cabors and again on the south side (Ibid: 389; Galvin 1967: 13). Somewhere along there, probably about in the middle, was Atisón.

On November 3, 1775, the caravan left Sutaquisón but marched only two leagues to the west-northwest, as far as what Anza called Las Lagunas and both Font and Garcés referred to as the Lagunas del Hospital. These would have been near what were later termed the Maricopa Wells, characterized by Font as a place with bad water, bad soil and bad grass. Here the expedition tarried for four days because of sickness (Bolton 1930 III: 20-22; IV: 46-50; Galvin 1967: 8-9). It then continued west and passed around the south end of the Estrella Mountains, heading towards the Great Bend and eventually California.

Fifteen leagues from the Lagunas del Hospital brought them to the Great Bend and the Opa village of San Simon y Judas de Upasoitac, where they remained two days. Pedro Font and Captain Anza both described these people in considerable detail; Garcés made only a few remarks (Coues 1900: 113-116; Bolton 1930 III: 23-24; IV: 51-53; Galvin 1967: 9). Father Garcés had last been here in June of 1774 while returning on his own from California. From Upasoitac he had continued upstream along the Gila River, retracing his 1770 route in reverse. After six leagues he arrived at Tugsapi, another Opa settlement, from which the best road led out to the Jalchedunes on the Colorado. Three more leagues brought him to La Pasión de Tugabi, whose people had asked him all sorts of impertinent questions in 1770. What had become of the community he named San Ybon de Ojiatujui on the 1770 trip, we are not told.

The good father implied that Tugabi extended along the Gila for 2½ leagues, as after traveling this distance he left the people of that village behind. He didn't say how far below the Gila –Salt confluence the settlement lay, nor in his tabulation of distances did he specifically note the junction of the Salt and the Gila. On June 23d he met the people of Sutaquisón, who were out gathering saguaro fruit, and after spending a couple of days with them he moved another five leagues up the Gila to the three pueblos of La Encarnación del Sutaquisón, "with many people" (Bolton 1930 II: 387-388). By Garcés' record of distances and also Father Díaz', Sutaquisón lay from ten to 10.5 leagues up the Gila from its juncture with the Salt River, and there were no other settlements in that interval.

Garcés estimated the number of Opas and Cocomaricopas in 1775 at about 3,000. Their last village on the Gila was near Agua Caliente and they called it San Bernardino del Agua Caliente. The year before, this place had been deserted on account of a war with the Yumas, but now 200 persons or more had assembled and Anza installed the officers of the new village. A few days earlier he remarked on a change in the Opa-Cocomaricopa settlement pattern that this peace had brought about. The people now lived "more closely united in their villages" than before and in a level and open country with larger fields (Coues 1900: 118-125; Bolton 1930 III: 23-31; IV: 57-58; Galvin 1967: 10-11).

Apparently the Pimas took no part in the war between the Yumas and the Opas and Cocomarcopas. The latter evidently began their withdrawal up the Gila around 1774 since Anza found a ranchería at the site he called San Bernardino, “the first village of the Cocomarcopas,” five leagues below Agua Caliente, on his return from California that year. Now in 1775 this site was no longer occupied and San Bernardino instead lay very near Agua Caliente. Garcés noted that nevertheless some people were found farther down the river, a result of the recent peace (Coues 1900: 123; Bolton 1930 II: 236-237, 300; III: 30-31; IV: 58-59).

One year later this peace was still holding, although it was now a fragile one. Father Garcés, returning from his nine months of wandering in California and Arizona, arrived back among the Gileño Pimas in early September, 1776, to find the men drunk on saguaro wine, *navait*. He paused for a couple of days and then hurried on to San Xavier (Ezell 1961: 86; Galvin 1967: 87-88). Sometime that year the Spanish frontier made its last northward advance when the presidio at Tubac was moved to Tucson, establishing a permanent Spanish presence there (Fontana 1994: 164).

Padre Garcés wanted a presidio and missions established among the Pimas and Cocomarcopas as well, but the opening of a road to California shifted attention to the Rio Colorado. Farther to the east, disaster followed the movements of the Terrenate presidio down the San Pedro Valley and the Fronteras garrison to a site in the San Bernardino Valley. Apaches battered these exposed garrisons without letup, while to the south, rebel Seris and Piatos attacked the missions and settlements there. Spain was now involved in a war with Great Britain, and her always-limited resources were severely restricted. There would be neither a mission nor a presidio at the Pima villages, or anywhere else on the Gila.

### *The Yumas Close the Sonora Route to California*

In early January of 1781, soldiers, settlers and missionaries arrived to establish two small villages on the California side of the Colorado River, one on a hill opposite modern Yuma, Arizona, and the other about ten miles upstream. They were 100 leagues from the nearest garrison, and they lasted six months. Early that summer another group of California-bound colonists and their livestock continued the pattern of Spanish impositions upon Yuma hospitality and forage; the most recent in a series of indignities, failed promises and requisitions of food and arable land. On the morning of June 17, 1781, the Yumas rose up and attacked both settlements. Within three days the towns had been destroyed and more than 100 Spaniards, including four missionaries, lay dead. Father Francisco Garcés was one of those who perished. The Yumas spared women and children (Kessell 1976: 126-146; Weber 1992: 256-258; Santiago 1998). With the Sonora route and Yuma crossing closed, Alta California would be dependent upon the sea for its contacts with New Spain.

Lieutenant Colonel Pedro Fages of the Catalonian Volunteers was sent off in mid-September with ninety soldiers and Pima and Papago volunteers to ransom



Spanish survivors and to make war if the Yumas remained belligerent. Fages marched north through the eastern Papago country and reached the Río Gila just below the Great Bend, at a large village that contained some twenty small houses. This may have been the unnamed Opa settlement two leagues below Upasoitac, visited by Anza on November 11, 1775, since in both instances it was thirteen leagues from this site down river to Agua Caliente. Although Fages claimed at the large village that “Here begins the nation of the Cocomaricopas,” it is apparent that this was not so. Fages himself said that there were more villages up the river, and as he headed down the Gila he continued to pass their houses for several leagues beyond Agua Caliente. In the vicinity of these small houses, he said, were planted quantities of cotton, squashes, and watermelons.

Fages picked up more volunteers – Pimas, Papagos, and now some Cocomaricopas – as his troops hurried along. By 1779 the Yumas had resumed their wars with neighboring tribes in spite of Spanish pleas, and no doubt the volunteers were looking for a payback. Instead of a war, Fages held a parley, and ransomed seventy-four captives from the Yumas (Coues 1900: 113-118; Priestley 1913; Bolton 1930 IV: 54-56; Kessell 1976: 143-145; Sánchez 1990: 109-112). During all of this, nothing was said about the natives of the middle Gila River, and the Pima auxiliaries had probably come from missions in northern Sonora.

After the expeditions of Anza and Garcés in the 1770’s, there are no records of Spanish visits to the middle Gila until the 1790’s. A regularly enlisted Pima Company served out of Tubac beginning in 1787, but whether its ranks ever included Pimas from the Gila River is not known. Arrival of this garrison coincided with the start of Apache peace establishments, a policy that brought relative peace to northern New Spain for more than a generation, and no doubt some relief to the Pima villagers as well (Ezell 1957: 177-178; Dobyns 1972).

#### *Visitors to the Middle Gila in the 1790’s*

In 1791 the few Franciscans still ministering in Pimería Alta were cut adrift, to sustain themselves and their conversions with only the royal stipend or *sínodo* (Kessell 1976: 158-159, 182-183). The mission program had been declining, with scarcely 2,000 mission Indians in 1774 and less than 1,200 in 1798, at the eight Pimería Alta missions and their visitas. Yet the Gila River Pimas were still asking for missionaries and baptism, as they had for a century now. In the end it was scandalous misconduct by fathers elsewhere in Pimería Alta that prompted an inspection by a Father Visitor. As a result, the Pimas received their last visitation by a friar concerned with their condition and way of life (Kessell 1976: 183-187, 245-246).

The Father Visitor, Fray Diego Miguel Bringas de Manzaneda, rode north towards Pimería Alta in the spring of 1795 and arrived in Tucson by October. One of his goals was the decades-old vision of expanding missionary activity on this northern frontier to include the Papagos, the Gila River Pimas and the Cocomaricopas. At Tucson the presidio commander provided an escort for Bringas’ party to continue to the Gila. Although the padre left a lengthy report and a good map, there is no diary. Ezell (1956, 1958) has reconstructed his route.

From the ruins of Casa Grande this party turned west along the south side of the Gila River to the first pueblo of the Gila Pimas, known by the name of Vehurichuc (Uchurichuc). While Bringas recorded no distance, the synonymy suggests that this was the community that Father Garcés had called Uturituc, and which in 1775 had also been the first pueblo of the Pimas. He had placed it seven leagues down stream from Casa Grande. Bringas wrote no more about it, but he did say that at a distance of three leagues, almost due west, were two other pueblos, the first known as Chuburracabon and the second as Sutacsonc, vulgarly Sutaquisón. The first probably corresponded with Garcés' very populous pueblo of Tuburs (Tubus) Cabors and the latter with La Encarnación de Sutaquisón. Between these were also two smaller rancherías, which Bringas did not name. The population, which he counted personally in the three pueblos and estimated for the two smaller sites, amounted to 1,500 persons of both sexes (Ezell 1956: 157; 1958: 24-25; Bringas 1977: 88-89).

Uchurichuc presumably lay at or near Garcés' site of Uturituc, close to modern Sweetwater, and Sutacsonc in the vicinity of Pima Butte or the later community of Sacate. The locations and even the number of Pima villages evidently had remained stable from 1775 to 1795. The population too was the same as the number estimated by Father Font in 1775, although both Garcés and Captain Anza had given larger figures (Bolton 1930 III: 217-218).

Diego Bringas was an administrator and trouble-shooter, not a missionary, and his descriptions largely repeated what had been said before. He characterized the Gila Pimas as diligent people who liked to work and who lived from their own industry, cultivating the soil. They sowed maize, wheat, beans, watermelons, melons, squash, cotton, and other legumes grown by the Spaniards. Their fields were "cleverly fenced" and worked with sticks. They knew how to spin and weave cotton, which allowed many of them to be partially clothed.

As for irrigation, Bringas said at one point that the Gila River covered the fields at flood season, while he noted elsewhere that its waters could easily be conducted anywhere for farming. They had a dam or weir, "poorly built," that allowed the river to feed a main ditch along their fields and thence to distribute water to small fields cultivated by each family (Bringas 1977: 89-91). We saw earlier that the Gileños had ditch irrigation at some villages by the middle 18<sup>th</sup> century, and it could be inferred from Bringas' phrasing that each village was served by one main ditch, as in later years. The weirs of course were temporary structures of logs and brush, probably modeled on Spanish practice. The river itself abounded in fish of various species, something implied but not always made clear in earlier sources.

The Bringas party found the Gila River Pimas at peace and living in the same places as where Fray Francisco Garcés had visited them from 1768 to 1776. Their pueblos, Bringas said, were "solidly built," and in some of them he had seen *casas formadas de pared*. While he offered no descriptions, his phrasing suggested that these were the Gila River equivalent of the *casas de terrado* discussed in Chapter II. Tanned hides, cotton fabrics and their grain crop were the bulk of their trade with pueblos to the south and other Indians in the area (Ibid). Nowhere was there any mention of Spanish traders visiting the Pimas.

The Bringas map (Ezell 1956: 156) showed a *ciénega* just to the west of Sutaquisón, probably to the west of the Gila although within or near the Maas Akimel or “clear river” district (Hackenberg 1974a II: 47-48; Rea 1983: 31). Ten leagues west of Sutaquisón, the Gila joined its waters with the Salt River, and almost fifteen leagues west of that pueblo (apparently following the course of the Gila) one encountered the first gentiles of the Cocomaricopa nation. Their numbers approached 4,000 and their lands were rich, with almost the same qualities as those of the Gileños. The Cocomaricopas were allies of the Gila River Pimas and enemies of the Apaches and Yumas. This was the extent of Bringas’ description, and while he had met some of the Cocomaricopas, he did not visit their lands. Their nearest village now lay only five leagues below the Gila-Salt junction, closer to the Pimas than in Garcés’ time, but with the two groups still living well apart from one another.

The Gileños had another activity that Bringas considered to be “all the more necessary” because it contributed to the diminution of their mutual enemies, the Apaches. The Pimas were faithful allies of the Spaniards and they also conducted their own campaigns against the Apaches. At the time of Bringas’ visit, his hosts had just returned from an expedition that left eighteen Apaches dead or taken prisoner. He noted that they took Apache prisoners to nearby missions, but he did not explain or perhaps didn’t realize that the Pimas then sold or bartered young prisoners as slaves (Ezell 1961: 22, 118-119, 144; Dobyns 1976: 138-139; Bringas 1977: 89-91; Officer 1987: 76).

In his report to the king, Father Bringas argued the benefits from establishing six missions and two presidios among the Papagos, the Gileño Pimas, and the Cocomaricopas. In New Spain his proposals were turned down, while in Europe the French invasion of Spanish soil in 1795 virtually ensured that schemes for extending missions to remote frontiers would be ignored. New missionaries continued to arrive, but they replaced fathers who were old or sick, and as late as 1813 Indian delegations from the Gila were trooping south to demonstrate their desire for missions. Their requests would not be fulfilled, nor would there be any more visitations. The existing missions did continue into the first decades of Mexican independence “by the grace of inertia,” as one historian put it, with the last signature of a Franciscan on any mission register appearing in 1843 (Kessell 1976: 185-226, 297, 302; Bringas 1977).

### *The Native Defense of Pimería Alta*

Warfare had ancient roots in southern Arizona, and the arrival of Spaniards and Apaches (at nearly the same time) simply added a new dimension. Throughout the mission period, the natives of Pimería Alta were continuously threatened by their enemies – Apaches to the north and east, Seris on the south and west, and the Yumas and occasionally Yavapais from the west and north. A cordon of presidios extended from Fronteras on the east to Terrenate on the upper San Pedro (later moved to Santa Cruz), to Tubac and Tucson, then to Altar in northwestern Sonora. These offered some measure of protection to people in the upper Santa Cruz Valley and in the missions and settlements south into Mexico.

The Spanish and Mexican frontier remained stalled at Tucson, leaving the Sobaipuris of the San Pedro and the Gila River Pimas with only themselves to rely upon.

The Apaches were the most serious threat, but the Pimas proved capable of taking care of themselves and helping the Spaniards as well. The mode of organization most widely used was for the Pimas to serve as auxiliaries, accompanying soldiers from the presidios during their campaigns against the Apaches. This started as early as 1694. In one place and another it continued for more than a century and a half, and the assistance of the Pimas was definitely valued (Bolton 1919 I: 207; Thomas 1932: 155; Sauer 1935: 9; Manje 1954: 48-49; Kessell 1970a: 173; 1976: 61, 160; Officer 1987: 129-130, 190-191; Fontana 1994: 166). Pimans living at the missions served regularly as auxiliaries, while the more distant Sobaipuris of the San Pedro and the Gileños may have offered themselves on occasion.

A second model of Pima military organization was an actual company of Pimas, eighty men strong, with Spanish officers. The Pima Company, organized in 1782, had originally been stationed at mission San Ignacio (near Magdalena, Sonora). In 1787 it reoccupied the old presidio at Tubac and served there for more than half a century (Dobyns 1972; Kessell 1976: 137-138, 160-163, 297-300). While recruited originally from the Pimas at San Rafael de Buenavista on the upper Santa Cruz, its rolls included other Indians. In time, some from the Gila River communities may have enlisted.

As Ezell (1961: 117-120) and others have pointed out, the Gila River Pimas developed a unique organization that served them well, offensively and defensively. The core of their system was military service and eventually universal military service; a militia that displayed fighting skills, organization and efficiency equal to the best presidial garrison. One corollary of this system was the stationing of sentinels, as at the Pimo Lookout Rock near Sweetwater, and rapid communication between villages. Another aspect was the existence of a single leader more prominent than others, with both civil and military authority.

What the Gileños did was to raise their military organization above the level of economic raiding or retaliation. They depersonalized warfare and made it more of a professional affair than an individual search for plunder or recognition. Some American-period observers recognized this (Ibid; see also Chap. 6). Their system was not achieved all at once and, as Ezell said, the persistence of Apache aggression over generations was perhaps the factor that led this military organization to reach its peak efficiency in the Mexican period.

The relative remoteness of the Gileños meant that they could not rely upon soldiers based at Tucson or Tubac for protection, so they responded by creating an organized militia that seems to have been modeled on the ideal of a presidial garrison. Juan Bautista de Anza's enigmatic statement that "This village [Sutaquisón] acknowledges as its *juez* or captain the person who is captain of my presidio" leaves one uncertain as to what links may have existed (Bolton 1930 II: 126). This, the most nearly indigenous of the three models of defense, was also the most successful. The proof of this success is that the people were able to maintain their position on the middle Gila River.

The Sobaipuris on the San Pedro might have prevailed there if they had had time to develop such an organization. Instead they had failed, first yielding part of the San Pedro Valley to the Apaches, and then withdrawing entirely under Spanish direction and dispersing among other settlements. Father Keller's claim that without the protection of Spanish arms and soldiers the Sobaipuris became tired of the continuous fighting may not tell the entire story, since at that time their population should have equaled or even exceeded that of the Gileños. Organization was apparently the key, and this the people of the San Pedro did not have, although they did achieve the initial step of making their settlements more compact.

At the end of the 18<sup>th</sup> century the Pimas of the middle Gila River were still living as they pleased, outside the missions, along the same stretch of river they had occupied a century earlier, and with about the same size population. Their agriculture had improved significantly with the introduction of ditch irrigation and new crops around 1743. They participated in the Pima Revolt of 1751 but otherwise remained friendly with the Spanish. During the second half of this century they developed irrigated agriculture extensively, and an efficient, largely indigenous system of military defense.

The Gila River communities probably served as a refuge for other Pimans seeking safety from attacks or fleeing the missions. The allied Opas and Cocomaricopas still lived along the lower Gila River, separated from most of the Pimas. In the next half-century the numbers of Pimas increased while the Cocomaricopas decreased, and the latter eventually moved upstream to join the Pimas along the middle Gila.

## Chapter V

### THE MEXICAN PERIOD, TO 1846

In 1812 the Franciscans succeeded in establishing their first mission to the Papagos at Santa Ana de Cuiquiburitac, less than fifty miles northwest of Tucson (Fontana 1987). It lasted only a few years, but the old dream of the padres for missions on the Gila River continued to linger. The Gila dried up in 1813, and the resultant crop failures led a Cocomaricopa chief and some of his followers to pay a visit to Arizpe, Sonora, and demonstrate their desire for missions before the authorities. A large Gila Pima delegation followed.

The *comandante general* listened to their requests and then sought an informed opinion. His seasoned commander at Fronteras replied that the Pimas deserved missions, but a new presidio would be needed to ward off Apache attacks. Perhaps the Pima Company at Tubac could be moved to the Gila? This, the comandante decided, "was not possible at present," and the proposal died once more (Kessell 1976: 225-226).

*Father Caballero Visits Sonora*

Mexico gained its independence from Spain in September of 1821. Within a year, officials in Mexico and California were agitating to reopen an inland route from Alta California to Sonora. Father Félix Caballero, a Dominican missionary in Lower California, set out from his mission of Santa Catalina Mártir on April 14, 1823, to reconnoiter a road to Sonora. Caballero and two companions passed over the lower Colorado River into Cocopa territory to avoid the Yumas, then crossed a mountain range, possibly the Tinajas Altas, and turned towards the north and northeast. On the morning of the 23d they crossed another sierra (the Mohawk Mountains?) and at 10 A.M. that day they arrived at the Gila River. They forded the river, traveled until 6 P.M. and resumed early on the morning of April 24<sup>th</sup>. Continuing northeasterly, they reached the country of the Jalchedumes (Halchidhomas) at 9 A.M. There, the native captain and all of his people turned out to greet the travelers (Beattie 1933; Bean and Mason 1962: 10-13; Kessell 1976: 262).

Padre Caballero's diary is incomplete after that page, but his party apparently continued along the Gila to Cocomaricopa territory, left the river at Gila Bend to cross the "forty mile desert" and touched the Gila again in Pima country. In twelve walking days from Santa Catalina they reached Tucson. Father Caballero continued on to Arizpe and then returned to Tucson.

The Dominican's arrival created a sensation in Sonora and opened the prospect of reestablishing a land route with California. Arrangements for a return trip were immediately approved and the establishment of a mail service through the new region was authorized. At Tucson, Brevet Captain José Romero was waiting to escort Caballero back to Lower California (Beattie 1933: 56-57).

One major surprise of Caballero's journey was his reference to reaching the country of the Halchidhomas, on the lower Gila. According to Spier's (1978: 13-18) and Ezell's (1963) understandings, the Halchidhoma should have been living on the Colorado River below the Mohaves as of 1823, leaving there in 1828 for some point in northern Sonora and then joining the Maricopas on the middle Gila about 1838. That reconstruction may need some changes, because if Father Caballero was correct, part of the Halchidhomas had already left the Colorado by April 1823 and were living along the lower Gila, rather than somewhere south and east of Nogales, Sonora.

### *The Romero Expedition to California*

Captain Romero and ten soldiers left the presidio of Tucson on June 8, 1823, as escorts for Father Caballero. Two days later they reached the Gila River and halted at a place with tall grass, possibly the same location as Anza's campsite of Comari, "a site with abundant pasturage." The distance from Aquituni, the Kohatk community situated on the Santa Cruz southwest of Picacho Peak, was the same (ten leagues) in both diaries (Bolton 1930 III: 13-15; Bean and Mason 1962: 14).

The company rested their horses on the 11<sup>th</sup> and started down the Gila the next day. They reached the first pueblo of the Pimas after two hours, the second pueblo an hour beyond, and one hour later were met by the captain governor of

the Pimas, who escorted them to the third pueblo and his residence. The distance that day was four leagues. On the 13<sup>th</sup> they marched for an hour and passed through the fourth pueblo, then crossed the dry bed of the Gila to the north side, where a very large ramada had been built and many Cocomaricopas with their three principal captains were waiting. The journey that day was only one league. The diary gave no village names or estimates of population.

From the journal entries, it appears unlikely that we can match Romero's four Pima pueblos with the locations of Gileño communities known from earlier or later times. The number of rancherías – four – and the overall distance between them – a short five leagues – were approximately the same as what Garcés and Anza saw some forty-eight years earlier. The problem is that we cannot be certain where Romero struck the Gila. By his measurements of time and distance, the first Pima settlement should have been only a two-hour march from the campsite with the tall grass, which could place it well to the east of Sacaton. The fourth one would then have been in the Sweetwater-Bapuche area. On the north bank of the river at the fourth pueblo was where the Cocomaricopas had prepared their very spacious bower or arbor (*enrramada*) (Romero 1823; Bean and Mason 1962: 14-15).

On June 14-16, Romero made three short marches, seven leagues in all, and on the evening of June 16<sup>th</sup> he halted at Hueso Parado. This is the earliest known reference to the most important village of the Cocomaricopas/Maricopas in the Mexican Period. According to Spier (1978: 20-21), "Standing Bone" settlement was just below Maricopa Wells, close to Santa Cruz slough. Romero placed Hueso Parado some seven leagues above the junction of the Gila and Salt, which would be about right. This settlement was the setting for the epic battle between the Yumas and the Maricopa and Pima warriors on September 1, 1857 (Kroeber and Fontana 1986). Hueso Parado was also listed by name in the censuses taken in 1858, 1859 and 1860.

Romero did not mention anyone living on the stretch of river between the big Cocomaricopa arbor and Hueso Parado, which may mean that some Pima villages from earlier years had been abandoned, with the people shifting upstream. His party resumed traveling and followed the river downstream to the confluence of the Gila and the Salt, then continued another eighteen leagues along the Gila until they arrived "at the house of the old Cocomaricopa governor," which should have put them at Gila Bend. The three captains at the arbor location had told Romero and Father Caballero that they would accompany them down the Gila "entering all their rancherías," which suggests that there may have been villages in this intermediate stretch or below the governor's house.

The party continued another fourteen leagues to Agua Caliente. Four leagues beyond, the Cocomaricopa captains recognized that they were at the end of their country. Nothing was said now about the Halchidomas (Romero 1823; Bean and Mason 1962: 17-19). The Romero party continued and eventually arrived back at the Lower California mission of Santa Catalina on the night of July 6, 1823.

### *The Cocomaricopa Mail*

The episode that sparked this renewed interest in a land route between Alta California and Sonora happened two years earlier. At that time José Gavilán, a Cocomaricopa from the Gila, appeared at San Diego, California. His route, dubbed the Cocomaricopa trail, apparently led from the neighborhood of mission San Gabriel [Los Angeles] across the northern part of the Colorado desert and San Gorgonio Pass (now traversed by Interstate 10) to the Colorado River near modern Blythe, California. It crossed the river in Halchidhoma country, between the hostile Mohaves to the north and the Yumas farther south. Father Garcés, whose Puerto de San Carlos may have been the same as San Gorgonio Pass, apparently knew of this route although he did not use it (Galvin 1967: 95). Cocomaricopas carrying government dispatches in both directions created a courier service along this trail. Later in that decade their unfriendly neighbors drove the Halchidhomas from the Colorado River and closed down this “Cocomaricopa mail” (Beattie 1933; Ezell 1968).

### *The Pimas in 1825*

The Gila River Pimas had watched these developments and considered their own interests. A visit by the Father Prefect in 1823 stirred their old hopes for the benefits that baptism might bring, battered as they were by the enemy Apaches. Now they wanted to know why, after so many promises, no missionaries came to live with them, baptize their children and instruct them in the arts and agriculture (Kessell 1976: 263)?

Colonel Mariano de Urrea, civil and military governor of Sonora, agreed with them and passed their pleas on to authorities in Mexico City. There the Pimas, being friends of the Halchidhomas and Cocomaricopas, were seen as the key to “an enduring peace and alliance” between the Gila Pimas, Cocomaricopas and Yumas that would allow reliable communications between Sonora and Upper California. Urrea praised the Gileños, who lived in fixed rancherías, traded with Tucson, Tubac, and the rest of the frontier, and notwithstanding their lack of tools and stock, harvested wheat, maize, beans and cotton in the very fertile lands that they irrigated “by a canal, filled by means of a dam made of posts, with the flood waters the river carries to them each year.” They wove mantas of cotton and dressed themselves with these. Their surplus woven goods, prepared deerskins and baskets “*que hacen de un arbusto llamado uña de gato,*” were used in trade (Lucas Alamán to the Minister of War, June 17, 1825; Kessell 1976: 264).

The comandante summoned native leaders to Arizpe early in 1825; twenty-three Gileños showed up but no Yumas. Urrea received them graciously, confirmed them in office and furnished some provisions, but he had no money for gifts. In his report of March 21<sup>st</sup> he “made clear the limits of the rancherías of the gentile Pima Gileños.” Actually his list was not entirely clear because it included some Papagos and Cocomaricopas:

Rancherías

Distances in leagues

Population



Buen Llano	36 leagues from Tucson	400
El Hormiguero	1 from no. 1	1,200
La Tierra Amontonada	$\frac{3}{4}$ from no. 2	1,200
El Apache Parado	1 from no. 3	600
La Agua	$1\frac{1}{2}$ from no. 4	600
El Ojo del Agua	14 from no. 5	2,000
Altar	1 from no. 6	2,000
La Aquituni	Separate from those along the river; 7 south	300
El Hueso Parado de Pimas y Cocomaricopas	15 from no. 8	<u>900</u> 9,200

He added that the last *ranchería* [i.e. Hueso Parado] was situated among the Cocomaricopas. At a distance of twelve leagues along the river there was a Cocomaricopa *ranchería* named Chinal, friendly with the Gileños, in which they said there were more than 1,000 souls (from Kessell 1976: 264 and Mariano de Urrea to el Gobernador, March 21, 1825 [encl.]).

This was the first list of Pima villages in thirty years and the names were rendered in Spanish without the Piman equivalents. Aquituni was the only name carried over from the 18<sup>th</sup> century. Tentative locations can be offered for several of these settlements.

The first one listed, Buen Llano, was presumably the easternmost and closest to Tucson. Unfortunately a distance of thirty-six leagues would put this site almost anywhere. In 1823 Captain Romero recorded the distance from Tucson to the first pueblo of the Pimas (unnamed) as twenty-five to twenty-six leagues (Bean and Mason 1962: 14-15). In 1774 and 1775 Juan Bautista de Anza had placed the distance between Tucson and Uturituc, the easternmost Pima *ranchería* at that time, at twenty-four and twenty-six leagues, by two different routes (Bolton 1930 II: 127-129; III: 10-18). If Urrea's figure of thirty-six "short" leagues was not a mistake, then this conformed with nothing, and the system of estimating village locations by comparing entries in diaries and measuring distances from known points does not work for Buen Llano.

Analysis of the name yields better results. Although we lack the Pima name for Buen Llano, the easternmost village in the 1770's was Uturituc, which meant "an open place, without trees" (Bolton 1930 III: 17), or "the corner" (Hodge 1960: 877). Uturituc [Hejel Jeg] was probably at or near Sweetwater (see Chapter 4) or as Hodge said, at the angle ("corner") of the Gila and Little Gila Rivers (Rea 1997: 32, 38). Bolton (1930 III: 17, 217; IV: 42) placed it between Sacaton and Sweetwater. Buen Llano might be rendered in English as "a broad flat or plain, without trees," which is close to the translation for Uturituc. Ezell (1958: 22-23, 25) said that Uchurichuc (Uturituc) designated a Pima village that was in existence until the 19<sup>th</sup> century, and the Bringas map showed it as the easternmost of three villages. The conclusion is that Uturituc and Buen Llano may have been the same settlement, and the site of Romero's first pueblo as well. The 1858 census by Lieutenant Chapman listed a pueblo of Buen Llano with a

population at that time of 391 (Ann. Rpt. Comm. Ind. Affs. 1858: 208). In 1859 it had 406 people (Hackenberg 1974a I: 307).

The next four villages were evidently listed in order, east to west, within an overall distance of  $4\frac{1}{4}$  leagues. El Hormiguero was presumably a predecessor of Stotonic, "Many Ants," the name being a translation from Piman to Spanish. This site would have lain to the east of Casa Blanca, which agrees with Russell's (1908: 23) placement of Many Ants on the south bank of the Gila between Casa Blanca and Santan. The 1858 census listed Ormejera No. 1 and No. 2, with a combined population of 855 persons. The Southworth maps from 1914 located Stotonic at Sweetwater. In 1825 Urrea listed El Hormiguero as one league (west) from Buen Llano.

The third settlement, La Tierra Amontonada, could be translated as Earth Piled Up. This might have been an earlier designation for Casa Blanca, a name first used in 1858, or the site of Earth Hill, one of the villages that Russell (1908: 22) listed as known to the oldest Pimas. The location was given only as three-quarters of a league (ca. 1.875 miles) from El Hormiguero.

Romero said that there were four Pima villages in 1823, which would mean that El Apache Parado, number four in Urrea's list, was almost certainly a Pima ranchería. Since it lay one league from La Tierra Amontonada, and village no.5 (La Agua) was 1.5 leagues from El Apache Parado, the short intervals suggest that by 1825 there were five Pima communities instead of four. The total distance of  $4\frac{1}{4}$  leagues from first to last is close to the five leagues indicated in Captain Romero's diary from 1823. La Agua, the westernmost village and  $3\frac{1}{4}$  leagues from El Hormiguero (Sweetwater/Stotonic), would have been about at the 20<sup>th</sup>-century site of Sacate.

Four villages are yet to be accounted for. Unfortunately nothing is known about the two largest – El Ojo del Agua and Altar – with populations of 2,000 each, although the distances imply that neither lay along the middle Gila. La Aquituni [Ak(i) Chiñ] was Kino's site of Santa Catalina, more recently recorded as site AA:7:3 ASM and situated on the Santa Cruz River southwest from Picacho Peak, a good ten leagues south of the Gila River rather than seven. Font referred to this as a Papago village; Ezell considered the people of Aquituni to have been Kohatks, a small group that historically might have been classified as either Pima or Papago (Bolton 1930 III: 13-14, 213; Hackenberg 1974a II: 268-287). Russell (1908: 20, 22) said the name meant Creek Mouth and that the site had been abandoned about a century earlier, although we see now that it had an estimated population of 300 as recently as 1825. This village is obviously not the Aquituni that Father Llorens recorded in 1811 near the headwaters of Santa Rosa Wash, on what is now the Tohono O'odham Reservation (Fontana 1987: 141).

Hueso Parado, "Standing Bone," located just below Maricopa Wells, was mentioned earlier as the most important village of the Maricopas during the Mexican period. With reference to Urrea's listing, Hueso Parado was more than fifteen leagues from Aquituni and it included both Pimas and Cocomaricopas, with an estimated population of 900 in all. Hueso Parado was probably synonymous with the "El Juez Tarado" pueblo listed in Lieutenant Chapman's 1858 census, where he also showed it as having both Maricopas (314) and Pimas

(263). Silas St. John's census placed only 310 Maricopas there in 1859, with 162 at the new settlement of Sacaton. The decline at Hueso Parado continued, with 240 inhabitants listed in the 1860 census, while in December 1860 it totaled still fewer – 232 people (US Census, 1860, Arizona County N.M., Schedule 1; Hackenberg 1974a I: 296, 306-307, 331).

Urrea never saw the Pima Villages and his information, probably from the Pima interpreter Pedro Ríos in Tucson, included Kohatks and some Cocomaricopas as well. El Ojo del Agua and Altar, both shown with populations of 2,000, were geographically separate from any of the other communities and do not match names from any prior or later lists of Gila River rancherías, which suggests that they were actually large Papago villages. If their populations are subtracted from Urrea's figure of 9,200, the lesser total of 5,200 is more consistent with the 5,500 to 6,000 Pimas, Opas, Cocomaricopas and Kohatks estimated by Anza and Garcés in the 1770's.

At this time and at least through 1827 the ranchería at Gila Bend should have been occupied as well (Johnston 1848: 603). Perhaps this was Urrea's community of Chinal, if his twelve leagues along the river actually meant the distance across the cutoff between Maricopa Wells and the Great Bend. With a population of more than 1,000, it may also have been Romero's "house of the old Cocomaricopa governor."

#### *A Mexican Army on the Gila*

By the summer of 1825 Urrea was gone, charged with defiance of the federal government. General José de Figueroa was on his way to try and maintain good relations with the Gila Pimas, Cocomaricopas and Yumas, and ensure their cooperation with the establishment of regular traffic between Sonora and Alta California. The intention was evidently to make a treaty of peace "between those nations, which was already current among the Gila Pimas, Cocomaricopas and Yumas." This lacked only the meeting of the principal chiefs, apparently to ratify the agreement (Lucas Alamán to the Minister of War, June 17, 1825; Kessell 1976: 264-266).

Early in September, Figueroa wrote optimistically that "those nations having already celebrated among themselves the peace which they have proposed, with the ceremonies to which they are accustomed in similar cases," there was much progress towards guarantees by the Yumas of peace and obedience. This was according to José Gavilán, the subchief of the Cocomaricopas. With this in mind and also to escort José Romero (now a Lieutenant-Colonel) back from California, Figueroa proposed to lead his troops on an expedition to the gentiles and the Colorado River in October (Comandante General José de Figueroa, Arizpe, to Secretary of State, September 5, 1825; Bean and Smith 1962: 75-77).

Although this peace was destined to be short-lived, General Figueroa led his 322 well-armed infantry and cavalymen north from the presidio of Tucson on October 26, 1825. On the 30<sup>th</sup> they approached the first pueblos of the Gila River. The 31<sup>st</sup> saw the troops and horseherd, which were badly used up, halted for a rest. On the 1<sup>st</sup> they continued on without a word about the Pima Villages, until

on the 4<sup>th</sup> when they arrived at “this point,” probably meaning Agua Caliente, some twenty-five to thirty leagues short of the Colorado River. With a force of this size, which included a field piece, the general was leading the largest body of soldiers to pass through the Pima towns until the Mormon Battalion came that way in 1846.

After various delays, Figueroa’s small army arrived at the Rio Colorado on November 16<sup>th</sup> at 11 A.M. Here he found about 1,000 Indians (Yumas) prepared to attack if he should approach them. He called upon their leader, Cargo Muchachos (“He Molests Little Boys”), to cross the river and talk peace, which he did, agreeing as well to help Romero reach the Colorado. The general shortly received news of a Yaqui Indian revolt and decided to turn back instead of waiting for Romero’s party. He departed as rapidly as possible and returned south via the Camino del Diablo along the Arizona-Sonora border, leaving twenty-five men at Agua Caliente to await Romero and provide an escort (Comandante General José de Figueroa, Tucson, to Secretary of State, November 29, 1825; Ezell 1957: 180; Bean and Mason 1962: 77-80).

### *Pima Commerce and the Route to California*

As for Romero, he left San Gabriel on November 28, 1825, and evidently followed the Cocomaricopa trail back to the Colorado, arriving in Tucson early in January. He knew that the Yumas were now seeking to reestablish friendly relations, which made the old Anza road to Alta California available again. This route was preferable to any other, and the trail from San Diego to Sonora via Warner’s Pass and Yuma Crossing became the official one for mail as well as for travel between Sonora and Alta California. It was used extensively during the Mexican War period and later it became one of the main immigrant routes to the California gold mines (Beattie 1933; Officer 1987: 102-104).

Until the middle 1820’s, there is very little indication that the middle Gila River saw visitations by Spaniards or Mexicans other than occasional missionaries and official parties passing through. Trade was rarely mentioned nor were there any non-native settlements; only the periodic proposals for missions. Long periods passed with no mention of the Gileños at all. This began to change with Urrea’s comments that a ready market existed for the cotton mantas they wove, for their tanned deerskins and baskets of devils claw. The well-established traffic in slaves, specifically for children captured in war, continued in spite of official disapproval.

Figueroa indicated the incipient nature of any regular commerce when he offered to inform the Secretary of State if there were “some products, on the basis of which there can be established some trade or commerce, which will make more enduring the relations which shall be established” (José de Figueroa, Arizpe, to Secretary of State, Sept. 5, 1825). José Escudero reported that after 1831 a kind of fair, held annually on the Gila River, attracted multitudes of people from Tucson, Tubac, Santa Cruz and the San Ignacio River, who came to buy the Pimas’ mantas, baskets, and captives (Ezell 1957: 179; 1961: 29-30). The

increased traffic to the Pima towns had little noticeable effect upon either the native social fabric or the local economy.

### *Beaver Trappers in Southern Arizona*

In the Spanish and Mexican periods, animal hides had importance for both domestic use and as articles of export in the Southwest. Skins, particularly those of deer, pronghorn and bison, were probably New Mexico's chief export item at the end of the Spanish period, whereas in Arizona only buckskins would have been important (Weber 1971: 12-31). Fine furs, and particularly the beaver pelts used as the source of felt for making men's hats, were largely neglected. Mexico showed only slight enthusiasm for furs, while commerce with the one significant market, the United States, was prohibited under Spanish law.

In 1821 New Mexico was opened to foreigners and trade over the Santa Fe Trail began. Fur trapping, already long established in the Missouri River country, spread immediately to Santa Fe. Americans there were told that it was a violation of law for foreigners to take beavers from the waters of Mexico. This was not the case, but officials may have been enforcing Spanish laws, and in 1824 the central government did order the governor of New Mexico to prevent foreigners from trapping in that territory (Weber 1971: 61-62, 66). Initially this was winked at or enforced unevenly, but early in 1826 the Mexican minister in Washington warned his government that 300 men who had recently left the United States for New Mexico planned to trap for beaver on the Gila River. Antonio Narbona, governor in Santa Fe, wrote to José de Figueroa at Arizpe and to the governor of Sonora on August 31<sup>st</sup>, telling them that foreigners were on their way to trap the Gila, San Francisco, and Colorado rivers (Ibid: 104, 113-114).

James Baird, who may have been the earliest trapper on the Gila, was actually a naturalized citizen of Mexico. Imprisoned in Chihuahua from 1812 until 1820 for illegal entry, he applied for and received Mexican citizenship in 1824. His short career as a mountain man and trapper amounted to two seasons, the winters of 1824-25 and 1825-26, when he hunted beaver on the sources of the Gila River and in the Mogollon Mountains. He may never have entered Arizona, but by the fall of 1826 he became alarmed at the large number of foreigners encroaching upon what had been his private trapping domain. In his last letter, written on October 26, 1826, he protested that more than 100 Anglo-Americans planned to trap, in a body, along the Gila River in New Mexico and Sonora. Eight days later he died in El Paso (Strickland 1966; Weber 1971: 115-120).

Actually the Americans were already in the Gila Country. In late October, sixteen armed foreigners appeared at the Gileño and Cocomaricopa rancherías, where they spent four days giving gifts to the Indians and probably doing some trading. According to the Indians, they also carried trapping equipment, and left when they learned that the Cocomaricopas had sent a messenger to Tucson. The comandante there sent some men to find them, but the Americans had already departed towards the east. At the Cocomaricopa village the troops learned more details and received a valise stolen from the trappers, in which was a passport

issued by Narbona in Santa Fe on August 29, 1826, to S.W. "Old Bill" Williams, Ceran St. Vrain, and thirty-five others (Weber 1971: 120-122; Kessell 1976: 268).

That December a delegation of Pimas from the Gila appeared in Tucson to report that two companies of Americans were trapping beavers. The Cocomaricopas had wanted to kill them but the Papagos refused to allow this, and the intruders returned the way they had come. Brevet Captain Manuel de León gave the Pima emissaries a paper that ordered all foreigners to present themselves in Tucson, and results quickly followed. On the last day of 1826, three unidentified Americans showed up at Tucson, the first recorded visit there by U.S. citizens. They came to present their passports, and the captain allowed them to return to New Mexico (Kessell 1976: 268).

The best-known account of beaver trapping in the Southwest and virtually the only one by a participant is James Ohio Pattie's *Personal Narrative*, first published in 1831 and reprinted many times since. His inaccurate chronology and failure to mention the leaders and other members of the trapping parties he traveled with caused problems, until historians gradually began to compare and correct it by reference to contemporary documents from New Mexico and the statements of other trappers (Hill 1923a, 1923b; Yount 1923; Cleland 1950; Camp 1966; Thwaites 1966). It should be read alongside a corrected outline of Pattie's experiences (Weber 1971: 93n, 95-97, 112-113, 123-127, 135-140).

Pattie and his father, Sylvestre, came to New Mexico in the summer of 1825. Late in the fall the two Patties and five companions headed south along the Rio Grande, then west to the Santa Rita copper mines and beyond to the Gila River, where beaver were plentiful. Seven hunters who joined them on the Rio Grande abandoned Pattie's party and trapped ahead on the Gila. The Patties set their traps along the San Francisco, which was bordered in many places with high and rugged mountains, upon which were multitudes of mountain sheep. After caching their furs they continued down the Gila, only to be met by six of the hunters, who were heading for the copper mines after having been attacked by Indians and losing one member.

The Patties resumed their descent of the Gila to the junction with the San Pedro, which they called the Beaver River for the number of its beavers. After trapping that river for a week, they continued down the Gila for another ten days, according to James Pattie, until they had as many furs as their animals could pack. He made no mention of meeting any Pimas or Cocomaricopas, although on their return they skirmished with a large party of *Eiotaros* (Coyoters) and lost most of their horses. By April 29, 1826, they reached the copper mines again (Thwaites 1966: 90-108; Weber 1971: 95-96).

That summer Pattie and a party of fifteen attempted to retrieve the beaver pelts they had cached on the Beaver River, but found the furs gone. They did recover a small quantity of the skins they had buried on the San Francisco River (Weber 1971: 96-97). As the winter of 1826-27 approached, trapping parties returned to the Gila, only now to be met with a violent reception.

Some time in the fall a party led by Peg-leg Smith and William Wolfskill, working for Ewing Young, all prominent names in the history of the western fur trade, made their way to the Gila via the Santa Rita mines. The sixteen men

traveled for two or three weeks and found good trapping. They followed down the Gila almost to the mouth of the Salt, where some thirty Indians – Apaches according to Smith – rode up and invited the whites to their village. The Americans declined an invitation to trade and as they were leaving, one Indian shot an arrow into a horse. The brigade did not want to fight Indians and voted to leave, even abandoning their traps, but Smith and Milt Sublett tried to raise their traps and were met with a shower of arrows. The departure became a flight and six mules were lost, but the rifles of the mountain men accounted for at least that many of their foes by the time the party made it back to the Rio Grande (Hill 1923a: 10-12; 1923b: 245-247; Templeton 1965: 51-52; Wilson 1965: 50-53).

Biographers of the fur trade in the Far West have indicated, without actually saying it, that James Ohio Pattie's chronology is too early by about one year. If this correction is made, then the events in other accounts that lack associated dates tie together much better. Pattie's story resumes in late December 1826 with the arrival at the Santa Rita mines of a company of French-Canadian trappers, bound for the Colorado River. James Pattie joined the party, which now numbered thirteen, led by Michel (Miguel) Robidoux. They left the mines on January 2, 1827, and traveled down the Gila for two weeks, then came upon the same band of Indians that had robbed them of their horses and beaver skins the year before. According to Pattie, the two sides patched up their differences and smoked the pipe of peace (Thwaites 1966: 119-120; Weber 1971: 123).

Robidoux's company resumed its march and passed beyond where Pattie had turned back earlier. On January 25<sup>th</sup> they arrived at an Indian village situated on the south bank of the river. The Indians seemed friendly and almost all of them spoke Spanish, their community being only three day's journey from "a Spanish fort in the province of Sonora," an obvious reference to Tucson. The natives were "to a considerable degree" cultivators, raising wheat, corn and cotton, from which they made cloths. Although Pattie did not give the settlement or the Indian group a name, they clearly had found the Pima Villages.

Three days later the trappers came to what Pattie labeled "the Papawar village," by which he might have meant Papago, but he located it about one mile upstream along the Salt from the Gila-Salt River junction. Initially the inhabitants rushed out with their faces painted and weapons in hand, just the kind of welcome that boundary commissioner John R. Bartlett got twenty-five years later when the Pimas made the same assumption; that the strangers were Apache raiders.

This time though, the reception went from hostile to friendly to hostile again. The French trappers proposed to spend the night in the village, while Pattie and one other person settled down some distance away. Around midnight the Indians attacked the party in their village; Pattie and his partner fired in self-defense and then fled on their horses, riding towards a high mountain on the south side of the river, which they reached at daybreak. All of the other French except Robidoux were massacred. He managed to escape and joined Pattie later that day (Thwaites 1966: 121-126; Holmes 1967: 32-33).

Pattie's is the only account of what happened, but the language is that of his editor (e.g. "estimating my forbearance aright"). The text has also been

crafted to eliminate the names of most persons other than Pattie, which makes his actions or decisions appear to have been the most decisive ones. According to him, the massacre occurred on the night of January 28-29, 1827, and the next evening he and the two other survivors met a party of thirty trappers. With little question, these were men that Ewing Young had led back to recoup the earlier losses of the Smith and Wolfskill group. Although Pattie indicated that they met up with Young's group the next day, a reminiscence by George C. Yount, who was with the Young party, claimed that they found the spot where Robidoux's men were killed only two to three weeks later. Yount also said that the attackers had been Pimo and Maricopa Indians, rather than Papagos (Hill 1923b; Yount 1923: 8-11; Camp 1966: 31; Thwaites 1966: 121-128; Holmes 1967: 32-34).

Pattie offered no reason for the attack, which is all the more curious in light of the hospitality that the Pimas and Cocomarcopas of southern Arizona normally exhibited towards visitors. According to Yount, the perpetrators later admitted that the slaughter was unprovoked (Camp 1966: 33). Elsewhere, Yount's biographer suggested the explanation, drawn from an unknown source, that "Unaccountably and foolishly, Robidoux had permitted liberties with these normally peaceful people" (Camp 1972: 413). Another author wrote that the brigade had been persuaded to stay the night with Indian girls as blanket companions (Templeton 1965: 55). If this is what happened, then Pattie's silence may have been his way of saying that the attack actually resulted from a lack of restraint or experience with local customs on the part of the trappers, whereby hospitality was coerced rather than offered freely.

Finally, the location of the Robidoux affair, about a mile above the Gila-Salt confluence according to Pattie, presents some incongruities. No Papago (or Kohatk) village was ever reported on the lower Salt River, at this time or any other. Yount's attribution of the attack to Pimas and Maricopas is much more likely. There was an early 20<sup>th</sup> century settlement of Maricopa Village in that area, although in the early 19<sup>th</sup> century no Pima or Cocomarcopa ranchería was mentioned on the lower Salt. In the description of his escape and subsequent movements on January 29-30, Pattie's geographic references make no sense with respect to a settlement on the lower Salt River. We conclude that there was none.

His account ties together much better with the local geography and with Yount's remarks if the Robidoux affair took place at Hueso Parado, which Urrea had just listed (in 1825) as a Pima and Cocomarcopa village. Hueso Parado of course lay on the lower Gila rather than on the lower Salt. The beavers that Russell (1908: 81) said were once common along the Gila would have been more at home in the clear groundwater lake and among the sloughs and return flows of the Mass Akimel and Gila Crossing districts, which lay just below Hueso Parado, than on the lower Salt. This could explain the presence of trappers at that village. Perhaps Pattie's locational discrepancies can be laid to his editor.

In any event, after Pattie and the other two survivors joined Ewing Young's group, there are two versions of what happened next. Pattie's version is that on the morning of January 31<sup>st</sup>, the thirty-two Americans examined their arms and started off to attack the ranchería. In less than ten minutes they drove the natives from their village, except for the 110 who were slain, then burned their



houses and recovered the horses, traps and furs of the Robidoux company (Thwaites 1966: 128-129).

Peg-leg Smith, according to his biographer, was convinced that these were the same Indians who had invited Wolfskill's men to their village for trade and entertainment a few months earlier. He wanted retribution and the recovery of their property. Young on the other hand was out for beaver pelts, not a fight. George Yount, who was also present, said in his memoirs that the Robidoux party "had been attacked by the united warriors of the Pimos and the Maracopas" within the last three weeks, and now the natives were anxious lest the outrage be discovered. Ewing Young's party found and buried eight of the dead, then waited two days for the balance of the company to come up. The Indians, seeing that the trappers had discovered what they had done, launched their own attack.... "the warhoop (*sic*) rang from front to rear, and the hills re-echoed it a hundred times" (Templeton 1965: 56; Camp 1966: 31-32).

In language that makes Pattie's colorful narrative seem bland, Yount recounted how the band of thirty-two waited, each behind a tree, until Peg-leg Smith's rifle cracked and the Indian in advance tumbled, the signal for the other trappers to open fire. Their shots found targets and the battlefield was soon covered with the dead and dying, the Indians retreating slowly. None of the fur trappers were wounded. The next day the Indians sent a delegation to sue for peace, which was granted on the condition that they never again molest an American (Hill 1923b: 245-254; Templeton 1965: 56-57; Camp 1966: 31-33). That autumn (1827) George Yount, now in charge of twenty-four men that included James Ohio Pattie and his father, passed down the Gila to the Pima Villages again. The natives well remembered the encounter, and renewed their determination to not molest Americans (Hill 1927: 78-79; Camp 1966: 43-44).

The number of trappers who passed through the Gila River country probably numbered in the hundreds, and like the Patties, many were there more than once. Antoine Leroux, another well-known figure of that period, had been with one of the companies that had a severe fight with the Maricopas, probably in 1827 (Hackenberg 1974a I: 166). Kit Carson first trapped down the Salt River as far as the mouth of the Verde River in the fall of 1829, in another company led by Ewing Young (Quaife 1935: 9-10). Two years later, Young and thirty-six others traveled to Los Angeles via the Gila River route. They had a fight with Apache Indians near the mouth of the San Carlos River, from which point they reached the Pima Villages in two days. There they were received with friendship and hospitality and laid in more provisions, after which "we continued down the Gila, in our vocation of trapping for beaver," (Hackenberg 1974a I: 167).

The market price of beaver dropped substantially in 1832 and stayed down, a consequence of the new fashion for hats of silk instead of beaver felt. The heyday of the trapper in the Southwest had lasted little more than six years. The interest of the fur trade shifted to buffalo robes, but a few of the fur hunters persisted. At the time of John Johnson's defeat of the Mimbres Apaches in 1837, two parties of trappers were out on the upper Gila and the surviving Apaches wiped out one of these (Weber 1971: 207-208; 1982: 132-133; Hackenberg 1974a I: 167-168; Strickland 1976).

As for trapping having any long-term effects, one historian concluded that “The trappers who worked the rivers of Arizona had no permanent impact on the land. They doubtless suppressed beaver populations in parts of Arizona for a time, but their activities were sporadic and short-lived” (Sheridan 1995: 375). Indeed, one of the first settlers at Phoenix (signing himself “Salinas”) wrote that “The river here is quite large, .... and has lots of good fish, with plenty of ducks, geese, beaver, and other game, along the stream; also plenty of timber for building and other purposes” (*Arizona Miner*, Feb. 8, 1868, p. 2 col. 4).

It is tempting to think that the Sobaipuris along the San Pedro had simply led their irrigation ditches from the ponds behind beaver dams, thus watering their crops with a minimum of effort. There is little documentation for beavers along the middle Gila, in contrast with the San Pedro, and the Gileños may have constructed weirs – man-made versions of beaver dams – because no beaver dams (or beavers?) were found along that stretch of the Gila. Until the Sobaipuris were forced from the San Pedro River, there was no need for such heavy labor – the construction of weirs and irrigation ditches – along the middle Gila.

In spite of the numerous books and biographies written about the fur trade in the Far West and Southwest, and the numbers of trappers who followed the Gila, the information about the Pimas and Maricopas in this literature is almost nil. The writing is primarily about the Patties, Ewing Young, Peg-leg Smith, George Yount, and innumerable others, but includes very little in their own words. There is the first-hand narrative by Pattie (Thwaites 1966) and several brief, reminiscent accounts by George Yount, Peg-leg Smith and Job Dye, all written from memory and embellished by editors if not by the writers themselves. With the possible exception of Hueso Parado, these are of no help for identifying the sizes, number, and location of Pima or Maricopa villages, nor do their other observations add to anything but the history of the fur trade and the narrators themselves. Unlike the missionaries, military officers, and some of the ‘49ers who would soon follow, the beaver trappers were interested in only their own activities. The natives amounted to part of the background, much like the beavers themselves.

If the experience of the Pimas and Maricopas with American fur hunters had any measurable impact, it was probably to create a healthy respect for the firepower of the trappers. This may have translated in part into the hospitality that General Kearny and Captain Cooke met with in 1846, and which the ‘49ers found in 1849. More than likely it had been misbehavior by the trappers themselves that triggered the violence in 1827.

### *The Later Years of the Mexican Period*

The fur trappers generally had little trouble with the Apaches in the Gila country, in part because many of the southern and western Apaches were still being rationed at the peace establishments that Mexico continued for a decade after gaining its independence from Spain. While this policy had led to a general condition of peace with the Spaniards and then with the Mexicans, war and raiding continued as usual between the Pimas and the Apaches. When rationing

stopped in 1831, plundering resumed and the defense of Sonora fell largely upon the frontier militia, both Indian and Mexican.

The Pimas' nearest neighbors and perennial enemies, the Pinal Apaches, lived two days to the east. In the fall of 1834 a group of armed Tucsonians, joined by more than 200 Papagos and Gila River Pimas, made a successful campaign against the Pinals. The latter also became a target of Sonora's governor because of a war kicked off by Apaches at the Janos peace establishment. The Pinals sued for peace, and the result was a great peace parley and treaty-signing at Tucson on March 5, 1836. One provision in the treaty was that the Indians would settle temporarily at the junction of Aravaipa Creek and the San Pedro River. The chiefs would also keep the commander at Tucson, Lieutenant Colonel José María Martínez, informed about matters of interest (Officer 1987: 122-130, 136-137).

Four months later, the Apaches informed Martínez of a new party of Americans on the Gila. The commander's scouts returned with the news that forty Americans had built and fortified a small house near the Gila River and planted a field of corn. They departed, but returned again in the fall and harvested their crop in November, then abandoned the site. This was food for thought for the commandant, and the treaty with the Pinals continued to pay other dividends.

Very soon there was also a new problem. Shortly after the treaty-signing, Martínez had promised Culo Azul, leader of the Gila River Pimas, a new suit of clothes for every campaign he made against hostile Apaches. This is the earliest notice we have of this leader. Unfortunately, the colonel had not distinguished one Apache band from another. All Apaches were enemies to the Pimas and Maricopas, and in their eyes raids against the Pinals were worthy of reward. In the late summer of 1837, Chief Azul presented Martínez with fifteen pairs of Apache ears, only to be told that the comandante considered it probable that the ears had been attached to Pinal heads shortly before. The Pinals were now friends of the Spaniards.

The Pima leader retired and complained to a friend, a Tucson merchant, about Martínez's failure to live up to the agreement. The merchant sympathized and gave his friend some ammunition from his own stock, since the Pimas now had guns. He also wrote to the governor and called the Gila River Pimas loyal allies, urging that they be furnished with firearms and ammunition, bolts of cloth and clothing. With such encouragement they might take the offensive against the Apaches at Janos, many of whom were said to be living in the Chiricahua Mountains and preparing to attack Tucson and Tubac. These were the real enemies. The governor was impressed with the letter and forwarded a copy, with his recommendation, to the central government (Kessell 1976: 304; Officer 1987: 128, 139, 141-142). What results followed are not known.

About 1830 a so-called caravan trade developed between northern New Mexico and southern California. This continued until 1848, along both the old Spanish trail that led through southern Utah and the southern route via the Gila River. In some years it involved hundreds of people and thousands of head of horses and mules, and the exchange of New Mexico serapes, blankets, conchas and other woven goods for the horses and mules that Californians now raised to

excess. Rightly or wrongly, New Mexicans were often accused of liberating many equines from their California owners without the formality of a trade. At the time of the Mexican War in 1846-48 this route was known as far distant as Washington D.C. and it was recommended for General Kearny's expedition to California (Lawrence 1931; Hussey 1943; Weber 1971: 149-153). Between fur trappers, trading caravans and Apache campaigns, traffic through the Pima Villages had become substantial.

Early in 1843 Captain José Antonio Comadurán of the Tucson presidio reported that restless Papagos of the Altar Valley were finding willing allies among the Gila River Pimas for a proposed rebellion. His garrison lacked the arms and ammunition to meet threats or raids; even food was a problem. Then in March, a Papago informant told him that an uprising was underway and that Gila River Pimas, except for Culo Azul of the Pimas, the Maricopa chief Antonio and their closest followers, were involved. Comadurán sought to restore peace to Papaguera through diplomacy, sending emissaries to the Papagos and to the Gila River (Officer 1987: 163-164).

In the meantime, the governor of Sonora planned to do away with the Papago threat by means of a military campaign under the direction of Lieutenant Colonel Felipe Flores. Flores led a large force of regulars and auxiliaries north from Altar in early April, skirmished with the Indians and then defeated them in a major engagement on April 20<sup>th</sup>. By early May, Flores and his forces had destroyed the will of the Papagos to continue the fight and many fled northward to take refuge with the Gila River Pimas and Maricopas. Those tribes were losing interest as well.

Captain Comadurán sent an emissary from his garrison to the Gila River late in April, to offer amnesty to the rebels who would meet certain conditions. Culo Azul agreed to send messengers to all of the Gila River towns. When they assembled, the leaders of the various Pima communities expressed shame and regret for all that had occurred. Antonio, speaking for the Maricopas, also begged forgiveness and promised never to rise against the Mexicans again.

Upon receipt of this news, Lieutenant Colonel Flores was ordered to take himself to Tucson with 250 men and coordinate peace negotiations with Captain Comadurán. Comadurán had earlier recommended that the best way to ensure permanent peace with the Papagos was to intimidate them with a show of strength. Sometime in June 1843, Flores rode into Tucson at the head of his force of regular soldiers and auxiliaries. Whether or not his appearance was a factor in the final peace negotiations, warfare between the Mexicans and the Pimas and Papagos ended permanently (Ibid: 165-166).

The Pima-Maricopa war with the Apaches continued for another thirty years, and according to agent Frederick Grossmann (1873: 411) "at one time" the Comanche Indians came from the east. The Pimas repulsed them in a bloody battle fought near the later mail station at Sacaton. While unsupported by documents or other accounts, this may well have happened, given the better-known pattern of Comanche raids on the Navajo Indians during the 18<sup>th</sup> and 19<sup>th</sup> centuries (Correll 1976).

*The Pima Calendar Sticks*

Calendar sticks, maintained by individuals, were an indigenous means of recording Pima and Maricopa history. In the surviving examples, these began as early as 1833 and continued into the late 19<sup>th</sup> century. Each record consisted of a deep notch for the year, plus supplemental notches that served as aids to recalling memorized events. The year began about June, at the time of the annual saguaro harvest. The stick owners kept their chronologies accurately and, as those who worked with them soon learned, they did not make mistakes if asked to repeat a story. The circumstances and details might vary considerably, however, when one account is compared to another or against an outside source.

Russell (1908: 35ff) found five notched calendar sticks among the Pimas, two of which were 'told' to him by their possessors. Both began in 1833-34. Owl's Ear [Chukud. Naak] lived at the Salt River village and was the first person from whom Russell obtained a calendar record. Benjamin Thompson kept the only calendar in the group of villages around Casa Blanca, and he related the events that Russell identified with Gila Crossing (Ibid: 18n). A later writer (Smith 1942) indicated that the Gila Crossing stick owner at that time was Juan Samuel. Hall (1907) also published the record from the Salt River village.

In addition to these, Leslie Spier found a Maricopa calendar stick whose record began with 1833. Its owner gave Spier a narrative of events for specially marked years. Spier concluded that all of the sticks, from both the Pimas and Maricopas, derived from a single prototype made after 1833 (Spier 1978: 138-142). This seems possible, but the final answer is probably unknowable. There are also the calendars of John Hayes and Mejoe Jackson that C.H. Southworth recorded in 1914; both of these began in 1842-43 (Southworth 1931; Southworth "Excerpts;" Jones 1961). And finally there is the paper-and-pencil chronology that Juan Thomas of Blackwater village started in 1850-51, after losing his stick (Russell 1908: 18n, 35, 45ff).

The Pima narrators noted the events that they thought were important at the time. Russell (1908: 37-38) analyzed the nature and frequency of these events for the three calendar records available to him. Most numerous were the attacks by Apaches and Yumas, as well as raids by the Pimas and Maricopas themselves. These continued into the early 1870's. Other notations included natural events such as heavy rains, floods, and lightning strikes; festivals that involved the brewing of liquor and people killed during drinking bouts; epidemics; the deaths of sorcerers; events relating to whites; and matters of personal interest.

For the Mexican period, virtually all of the entries had to do with attacks and raids. John Hayes recorded the war between the Papagos and Mexicans in 1843, but visitors such as the beaver trappers, the Army of the West, and the Mormon Battalion passed unnoticed. The first record of events involving non-Indians at the Pima Villages dated from 1857 with the arrival of a one-armed trader [Silas St. John; see Chapter 8] who later sold out to Ammi White. References such as the death of Antonio Azul's father (Culo Azul) in 1854-55, commencement of the Island Ditch in 1856-57 and its completion in 1861-62, the

years of famine and abundance, and occasional mentions of specific villages help to document happenings that may otherwise not be on record.

*The Cocomaricopas Join the Gila River Pimas*

The name Maricopas, synonymous with the older Spanish term Cocomaricopas, came into use around 1846. As used at that time, it referred to the survivors of various Yuman groups – the Opas, Kaveltcadoms (Cocomaricopas), Halchidhomas, Halyikwamais, Kohuanas – whose histories were discussed at length by Spier (1978) and Ezell (1963), and summarized in Chapter 1. We might ask at this point whether anything new has been learned about when these Yumans relocated from the lower Gila, the Colorado River, or elsewhere to the middle Gila River?

With the qualification that we lack information from some periods, there is no reason for more than minor adjustments. Spier (1978: 26) believed that ancestral Maricopas first moved above the Gila-Salt confluence to the Gila Crossing–Pima Butte area about the beginning of the 19<sup>th</sup> century. There is presently no documentation to support or deny this and the matter is left unresolved. My own feeling is that the initial shift may have taken place somewhat after the year 1800, and that this was a partial relocation of Pimas and Cocomaricopas from one or more villages on the lower Gila to the site that became known as Hueso Parado. Yuman raiding may have prompted this movement, but it did not leave the lower Gila unpopulated. The earliest known date for Hueso Parado is 1823, and in 1825 it was reported as a Pima and Cocomaricopa village. This would have been the unnamed “Maricopa village” mentioned in the Pima calendar narratives from 1833-34 and later (Russell 1908: 38-50).

We know that there were people living on the lower Gila in 1823 and probably in 1825 – Father Caballero called them Halchidhomas – but the accounts of Romero and Figueroa are less clear on this point. In 1846 both Lieutenant Emory and Captain Johnston said that in passing from Sonora to California in 1827 (Johnston) or 1828 (Emory), a Dr. Anderson found the Cocomaricopas in a village near Gila Bend, where they furnished him with guides. Johnston added, “The Pimos and Coco Maricopas have only recently got together.” A third diarist, Captain Henry Smith Turner, said that the Maricopas moved up some five or six years ago and had become neighbors and allies of the Pimas (Johnston 1848: 601, 603; Calvin 1951: 143; Clarke 1966: 109). Relying on traditional sources, Spier (1978: 39-40) and Ezell (1963: 23) placed the final abandonment of Kaveltcadom territory, the Gila Bend area, as after 1835.

The increase in the number of Cocomaricopa communities from the time of Father Kino to Jacobo Sedelmayr’s visits in the 1740’s are the best indication that relocations by the Halchidhomas-Kaveltcadoms from the Colorado River to the Gila began long before the 1820’s and 1830’s. Father Caballero’s reference to meeting the Halchidhomas on the lower Gila in 1823, whereas the Patties found them on the Colorado a few years later, suggests further that these movements were incremental ones, and that part of the Halchidhomas not only

lived for awhile on the lower Gila but had left the Colorado River by 1823 (Ezell 1963: 21).

The traditional dates for Halchidomas joining the Maricopas at Gila Crossing–Pima Butte between 1833 and 1838, and for the Kohuanas and Halyikwamais arriving there in 1838 and 1839, are probably as accurate as will ever be known. On matters of this nature, documentary sources may not exist. By 1840 at the latest, all of the divisions that composed the modern Maricopas had come together alongside the Pimas on the middle Gila River.

## Chapter VI

### AMERICAN VISITORS AT THE PIMA VILLAGES, 1846-1849

#### *James K. Polk and Manifest Destiny*

In the United States presidential election of 1844, the Texas question and manifest destiny were the major issues. The Democratic candidate, James K. Polk, advocated annexation of the Republic of Texas and won the election. Even before he assumed office on March 3, 1845, Congress had adopted a joint resolution inviting Texas to join the American union. Mexico protested, broke off diplomatic relations and withdrew its minister in Washington, while in Mexico City demands for war were voiced. Polk, fearful of an invasion, ordered General Zachary Taylor's "Army of Occupation" into Texas in August, and on March 8, 1846, Taylor advanced towards the Rio Grande. Later that month he began construction of Fort Brown at what is now Brownsville, Texas. In the meantime, the United States had annexed Texas as a state of the Union (Smith and Judah 1968: 3, 56-59, 471; Stegmaier 1996: 15-17).

When Polk took office he had one of the clearest agendas of any American president, and he had a mandate to carry it out. One goal was to acquire California and expand the United States to the Pacific Ocean (Nevins 1952: xvii). By the time he left office in 1849, he had achieved this and more, through a war that probably neither the United States nor Mexico wanted (Wilson 1989: 98-99). The acquisition of California made construction of a Pacific railroad inevitable, and for this the United States needed the part of northern Mexico that is now the American Southwest.

Polk attempted to purchase this part of Mexico at the same time he began to exert military pressure. His cabinet agreed to a plan to settle the Texas claim and also to "adjust a permanent boundary between Mexico and the United States" by negotiating with Mexico to purchase the country north of a line drawn west from El Paso to the Pacific Ocean. In November 1845, Polk sent an envoy to Mexico with secret instructions to offer a graduated scale of payments for increasing amounts of the country north of the thirty-second parallel. The Mexican government refused to receive this emissary, but rumors of the proposal led to protests in parts of northern Mexico. On the Sonoran frontier, concerns lay

with the Apaches, and with domestic political turmoil (Officer 1987: 189-192; Wilson 1989: 98).

As these early diplomatic and military moves were working themselves out, a U.S. Army officer who had recently returned to St. Louis from Santa Fe, Major Richard Bland Lee, was asked to prepare the details of a plan for the conquest of New Mexico. This he did, submitting his proposals to the Adjutant General on September 4, 1845. He was amazingly thorough, and when Colonel Stephen Watts Kearny received word next May that he was to be the officer in charge of the contemplated movement upon Santa Fe, the Adjutant General provided Kearny with a copy of Major Lee's letter. The AG added that "The Major's communication was regarded, at the time, rather in the light of a confidential one" (Jones to Kearny, May 13, 1846; Smith and Judah 1968: 107-112; Wilson 1989: 100).

### *The Occupation of Northern Mexico*

On May 11, 1846, President Polk sent a war message to Congress; two days later Congress responded with both a declaration that war existed and a call for volunteers. That same day and the next Kearny received the outlines of a plan to protect the property of citizens on the Santa Fe Trail and to take possession of Santa Fe, together with the authority to organize a force for accomplishing these objects (Jones to Kearny, May 13, May 14, 1846). Polk proposed to his cabinet that as soon as Kearny took Santa Fe, he leave a force to hold it and move towards California with the balance of his command. The cabinet agreed (Nevins 1952: 105-107).

Scarcely two weeks later, General Winfield Scott sent Kearny a 'heads up' message to strengthen his forces. After occupying Santa Fe and other points, he would be marching via the "most practicable route - the caravan route" to take and occupy the principal points in Upper California (Scott to Kearny, May 31, 1846). A confidential order from the Secretary of War soon dispelled any remaining mysteries:

"It has been decided by the President to be of the greatest importance in the pending war with Mexico to take the earliest possession of Upper California. An expedition with that view is hereby ordered, and you are designated to command it. .... The choice of routes by which you will enter California will be left to your better knowledge. .... We are assured that a southern route (called the Caravan route, by which the wild horses are brought from that country into New Mexico) is practicable; and it is suggested as not improbable that it can be passed over in the winter months. ...." (Marcy to Kearny, June 3, 1846, in U.S. House 1850: 236-239).

Kearny marched his Army of the West, 1,600 men strong, out of Fort Leavenworth on June 27th, and less than two months later they were in



possession of New Mexico. By now a brigadier general and acting on “the most reliable information yet received as to the best route,” Kearny determined to march down the Rio Grande about 200 miles and then to the Gila and down that river (Kearny to Jones, September 16, 1846). He started off and on October 6th met Kit Carson, en route to Washington with dispatches that announced the Californias were already in the possession of the United States. The general thereupon reduced his escort to 100 men with two mounted howitzers and ordered Carson to return to California with him as a guide (Quaife 1935: 109-110; Smith and Judah 1968: 113, 156). Approximately one month behind them, Captain Philip St. George Cooke led a battalion of Mormon soldiers that would follow a more southerly route through Tucson.

Four of Kearny’s officers kept journals of their march to California and these have all been published. The best known is that of Lieutenant William H. Emory, who was actually a member of the Corps of Topographic Engineers (Emory 1848; Calvin 1951). Captain A.R. Johnston (1848), Captain Henry Smith Turner (Clarke 1966), and Assistant Surgeon John S. Griffin (Ames 1942) authored the other journals. Kearny’s own report, a brief one covering the march from Santa Fe to San Diego, added nothing new and referred to the journals and maps of Lieutenant Emory and Captain Johnston (Cutts 1965: 195-196).

### *The Army of the West on the Gila River*

After leaving the Rio Grande, the Army of the West advanced to the copper mines near present-day Santa Rita, New Mexico, then continued west to the upper Gila River and followed the river downstream. On November 9, 1846, the command emerged from the mountains along the Gila, into a wide plain east of modern Florence, Arizona. At noon, they halted at a good patch of grass, where they found themselves among the remains of “an immense Indian settlement” with pottery and foundations everywhere, and the outlines of *acequias* or irrigation canals sometimes quite distinct. The trails of horses and other animals, some of them fresh, were impressed into the plain (Calvin 1951: 129). According to Captain Johnston (1848: 595-596), the site where they halted was about four miles out [west] from the mouth of the canyon. The ground around the house remains was “always strewn with broken pieces of flint rocks, of a few inches in diameter,” as well as a profusion of pottery.

They passed the deserted lodges of Indians, without describing these or assigning them to a tribe or group. At another place they found twelve poles set up on the circumference of a circle twenty feet in diameter, with a thirteenth pole in the center. Radii had been drawn on the ground from the center pole to each pole on the periphery. Emory estimated that the feature was “the figuring of some medicine man of the Apaches or Pimos, we could not tell which,” because it was on neutral ground between the lands claimed by the two groups (Calvin 1951: 129-130). Isaac Duval, a Texas argonaut of 1849, found a similar feature with twenty radii instead of twelve and lacking the poles near the Maricopa village (Hueso Parado?) (Dillon 1987: 107). Perhaps these represented a now-forgotten Maricopa ceremony. In any event, the army marched seventeen miles that day

according to Captain Turner; Dr. Griffin claimed twenty miles. Their camp that night lay in a large patch of “soda grass” [sacaton?], which the mules enjoyed very much (Ames 1942: 210-211; Clarke 1966: 106-107).

On November 10th the troops passed the remains of acequias, pottery, and other archeological features the entire day. Where the river bent towards the north (actually the northwest), a long meadow extended south for many miles, and it was there that the Pimas grazed their cattle. About six miles along, the soldiers could see the walls of Casa Grande, the “Casa de Montezuma,” off to their left. They visited it and Johnston served as the principal archeologist, while the others mentioned the remains only briefly. In almost the same breath, the diarists said that the Pimas knew nothing about the builders of the ‘great houses,’ and that these were built by legendary persons we would now identify as the Sivanyi, the chiefs and principal priests of the major Hohokam settlements (Johnston 1848: 598-599, 601; Ames 1942: 211; Calvin 1951: 132; Clarke 1966: 107).

According to Turner, the command marched twenty miles on the 10th and camped about eight miles short of the Pima village. Emory placed their camp nine miles from the town, and Dr. Griffin estimated some six miles (Ames 1942: 211; Calvin 1951: 131; Clarke 1966: 107-108). If Casa Grande lay six miles along the route that day, their campsite must have been fourteen miles beyond, which would place it virtually at Sacaton. Hackenberg (1974a I: 212, 214) located the camp at approximately 1.5 miles west of the present Pima agency at Sacaton. The army first made contact with the local Indians at this encampment, meeting a Maricopa Indian out looking for his cattle. Within three hours, their camp was filled with Pimas loaded with corn, beans, honey, watermelons, and jars of saguaro preserves. “A brisk trade was at once opened” and the Pimas demanded white beads, red cloth, white domestic (cloth) and blankets in return (Johnston 1848: 599; Ames 1942: 211; Calvin 1951: 133; Clarke 1966: 107). Their settle-ments and farmlands lay farther west and downstream.

The next morning (11th), the interpreter for the Maricopas took Emory and Johnston to a second large ruin, on the north side of the Gila, while the army continued on to camp at the Pima village in some old corn fields. Emory and Johnston put the march that day at eight miles; Dr. Griffin said six miles. With reference to Casa Grande, they would have been twenty to twenty-two miles west of it, or about eight Spanish leagues. This would put the beginning of the Pima village and croplands in the area of Sweetwater and Bapuche. Hackenberg (1974a I: 214) identified the site as Old Mount Top Village, which lay a mile or so south of Sweetwater (Stotonick), 1.5 to two miles east of Casa Blanca, and next to the Pimo Lookout Rock [Rattlesnake Home] promontory. No one mentioned Casa Blanca by name before 1858.

The officers’ journals now began to lose their consistency, with reference to reports from earlier years and with respect to one another. They referred to a Pima village and a Maricopa village, as if there was one of each. All lay south of the Gila and no names were given. Turner said that they marched at 9 A.M. on November 12th and were out of the Pima village at noon; soon after they arrived at the first houses of the Maricopa village (Clarke 1966: 109). Emory, on the other hand, wrote that they traveled 15½ miles that day and passed through

cultivated grounds for the entire distance, camping on the dividing ground between the Pimas and Maricopas (Calvin 1951: 135-136). Johnston simply claimed that they marched through the settlements of the Pimas and Coco Maricopas and encamped beyond them (distance fifteen miles). Dr. Griffin put the march at sixteen miles, at least ten of these through well-cultivated fields, with their village scattered at intervals on the river for some twenty-five miles (Ames 1942: 212). From this information, there is no way to tell how many Pima villages Kearny's army passed through or their names, sizes, or other details. It is probable that all of them lay in the stretch between Sweetwater and Pima Butte, which is a distance of about ten miles.

Perhaps most difficult to understand is Dr. Griffin's claim of the village being scattered at intervals on the river for some twenty-five miles. The march of fifteen to sixteen miles on November 12th encompassed all of the settled and cultivated area that the army saw. A month later the Mormon Battalion took the same route and a number of diarists with that unit also cited the figure of twenty-five miles, but no one explained how they arrived at this. By calculation, Kearny's Camp 97 lay near Maricopa Wells, and while many of the Maricopas came to see and trade with the troops, none of the journalists implied that the army actually saw a Maricopa village. Dr. Griffin was clear that the Pimas and Maricopas each had a separate village and a separate chief. Emory perhaps gave a clue when he added that "The Maricopas occupy that part of the [Gila River] basin lying between camp 97 and the mouth of the Salt River" (Ames 1942: 212; Calvin 1951: 137).

The probable settlement pattern was that the Pimas occupied the south side of the middle Gila valley between the vicinity of Sweetwater and Pima Butte, much as they had done since the 1770's. The extent of their farmlands and the number, names, and sizes of their villages are not known, though the overall length of their settlements and fields was about ten miles. This was nearly the same (4¼ leagues or 10.6 miles) as the distance that the Pima rancherías occupied in Colonel Urrea's 1825 list (see Chapter 5). The Pima villages and cultivated areas in 1846 may have been in virtually the same locations as in 1825.

The Maricopa settlement that Kearny did not visit, and with reference to which Emory's camp at Maricopa Wells "was selected on the side towards the village," was probably Hueso Parado, situated just north and west from Maricopa Wells. It lay at that location as recently as 1860 (Spier 1978: 20-21; Calvin 1951: 138). Emory's map (Ames 1942: opp. p. 202; Calvin 1951: 142) shows a Maricopa settlement farther down the Gila, closer to the mouth of the Salt River. If by 1846 a Maricopa community existed some ten miles below Maricopa Wells, this could explain Dr. Griffin's remark about the village being scattered at intervals for some twenty-five miles on the river. The traditional accounts of the Halchidomas and others moving to the middle Gila imply that Maricopas should have been living at several locations by 1846.

As for the size of the population, Dr. Griffin and Captain Johnston both estimated 2,000, while Emory said that the number of Pimas and Maricopas together was given variously as from 3,000 to 10,000, the former evidently too low (Johnston 1848: 599; Ames 1942: 212; Calvin 1951: 137). Captain Turner

offered no figure. Dr. Griffin volunteered that “These people seem to enjoy fine health” and then proceeded to document his claim (Ames 1942: 212-213). Both Pimas and Maricopas made an overwhelmingly positive impression on the Army of the West, leading to Kearny’s remarks that

“The Pimos Indians, who make good crops of wheat, corn, vegetables, &c., irrigate the land by water from the Gila. .... These Indians we found honest, and living comfortably, having made a good crop this year; and we remained with them 2 days, to rest our men, recruit our animals, and obtain provisions” (Cutts 1965: 195-196).

One reason for this impression was the cordial reception, but perhaps more importantly the Americans perceived that these natives were honest, industrious, and successful agriculturists, qualities that persons with their backgrounds would have valued highly. Juan Antonio Llunas was the Pima governor at this time, while don José Messio led the Maricopas (Calvin 1951: 133, 137). According to Lloyd (1911:94-95), a Maricopa named Francisco Lucas, called “Thirsty Hawk” by the Pimas, had learned enough Spanish to be an interpreter.

#### *Pima and Maricopa Farming in 1846*

After having passed through miles of country that would barely subsist their own stock, Kearny’s men were as surprised as the ‘49ers three years later in finding the nineteenth-century equivalent of a supermarket at the Pima Villages. The Pimas had an abundance - more than enough - of corn, corn meal, wheat, flour, beans, pumpkins, melons (watermelons at least), red pepper, and jars of ‘molasses’ made from saguaro fruit. On their part, the Maricopas traded watermelons, corn meal, pinole, and salt. Beef cattle were in short supply and only two or three bullocks could be procured. The other produce came from their storehouses, which were evidently full to overflowing (Ames 1942: 211-213; Calvin 1951: 131-137; Clarke 1966: 108-110). Whether chick peas, lentils, and onions were raised at this time is not known, but almost certainly there were other cultigens, such as grain amaranths, that the Americans would not have recognized.

Neither the natives’ domestic arrangements nor their agricultural system excited much comment. Emory rode among the thatched huts of the Pimas:

“Each adobe consists of a dome-shaped wicker-work, about six feet high, and from twenty to fifty feet in diameter, thatched with straw or corn stalks. In front is usually a large arbor, on top of which is piled the cotton in the pod, for drying” (Calvin 1951: 135).

Captain Johnston said that the houses of these Indians were all alike,

“... a rib work of poles 12 or 15 feet in diameter is put up, thatched with straw, and then covered on top with dirt, in the centre of this they build their fires; this is the winter lodge; they make sheds with forks, and cover them with flat roofs of willow rods for summer shelters” (Johnston 1848: 601).

During the crop season the fields had all been irrigated and cotton was still standing in some of the patches, although frost had already killed everything (Ibid: 600). Emory, the engineer, was impressed with the “beauty, order, and disposition of the arrangements for irrigating and *draining* the land” (emphasis added). This was a sophisticated observation on his part since the crops had been harvested and the ditches presumably were not running. Emory alone recognized that irrigated farming in a river bottom required provision for the draining of excess water to avoid fields becoming waterlogged or salinity to build up (Calvin 1951: 133, 136). More recent studies confirmed that the Gila River Pimas selected land that could be irrigated easily from canals, yet was not too low to drain readily. They coped with soils impregnated by soluble salts, a common problem in irrigated areas, by repeated flooding to wash out the mineral matter (Castetter and Bell 1942: 122-123).

None of the diarists with Kearny said anything about the number or arrangement of acequias, other than Emory’s remark that they were larger than necessary (Calvin 1951: 136). It is tempting to suggest that the Pimas’ continuing success as irrigation farmers may have been due to their recognition of the need for drains as well as ditches, and for periodic flooding to remove salts from the fields. Their predecessors in the area may have lacked these refinements.

The army’s campsite on November 11th, in several cornfields from which the grain had been picked, allowed direct observations on the Pimas’ fields. Captain Turner noted that these were enclosed

“... by imperfect fences made of cotton wood poles, set up right in the ground, with smaller branches of cotton wood entwined between” (Clarke 1966: 108).

Dr. Griffin said only that their fields were well fenced and the land well irrigated (Ames 1942: 211). Lieutenant Emory added that

“... The fields are sub-divided, by ridges of earth, into rectangles of about 200 x 100 feet for the convenience of irrigating. The fences are of sticks, wattled with willow and mesquite,....” (Calvin 1951: 133).

These fences or fencerows were actually intended to slow the rush of floodwaters and spread the silt deposited by the river across the fields (Radding 1997: 51). No one recognized that these were silt traps, rather than fences. Their seemingly random placement at angles to one another, as shown on two of the 1859 plats of

the Gila River Indian Reservation and the Southworth maps from 1914, supports this interpretation. Other than Emory's indication that the small enclosures were each about one-half acre in size, nothing was said about their size, number, or location. In appearance, these fields in 1846 must have been very similar to those that Font described along the middle Gila seventy years earlier (Bolton 1930 IV: 43).

Whether the willow and cottonwood in these fencerows eventually took root to become living fences is not known, and would probably not have affected their functioning. American observers would have assumed that the alignments marked the boundaries or ownership of fields, or were intended to keep animals out (Castetter and Bell 1942: 131; Ezell 1961: 37). This technology appears to be aboriginal Piman, rather than Mexican. Occasional heavy floods of course would have destroyed the fencerows as well as the acequias and weirs.

As for Maricopa practices, these were said to be the same as for the Pimas. This may not have been entirely true; Spier (1978: 59) had information that the Maricopas may not have used irrigation ditches before 1850, and nothing learned during the present research contradicts this. None of the diarists mentioned the remains of dams or weirs in the riverbed, noted as far back as the 1770's, nor did they comment on the mesquite bread that would still have been a food staple.

The productivity of Pima and Maricopa agriculture and the generosity of these people in providing travelers with foodstuffs gained wide notice with the publication of Emory's (1848) journal. His report served as a guide for many California-bound emigrants when the '49ers began to pour through. Travelers counted on a peaceful reception and plentiful food there, and apparently they were never disappointed. This ability to supply any number of parties has never really been explained, although it seems unlikely that the Pimas had somehow been able to forecast this and create a minor entrepreneurial miracle on relatively short notice (Dobyns 1982). Large-scale agricultural development had been in existence there for some years, perhaps decades.

Actually, from the beginnings of Jesuit missionization in Pimería Alta, one of the objects had been the production of corn, wheat, and other products for sale elsewhere in Sonora. According to Father Kino this had been very successful in the early years (Polzer 1971: 161), though we do not know that the Gila River Pimas were involved in this commerce at an early date. In 1774-1775, Anza commented on the vast fields cultivated by the Pimas (Bolton 1930 II: 127, 240; 1930 III: 19). At a later date, the presidio at Tucson is said to have depended upon wheat grown by the Pimas and Maricopas (Dobyns 1989: 23, 32). There was also the annual trade fair held on the Gila River after 1831. This reportedly brought many Mexicans to buy captives, baskets of willow and devils claw, cotton mantas, and large quantities of wheat (Ezell 1957: 179; 1961: 29-30; Dobyns 1989: 33).

When we consider also the references to the Gila River as the caravan route to California, it appears that by 1846 the Gila River Valley was more like a main street; no longer an isolated place visited by a few trapper-traders. The Pimas and Maricopas were the shopkeepers. Additional study in Mexican archives may document the expansion of this productivity, and involvement of the

Pima farmers in a barter economy for at least ten or fifteen years before the appearance of the Army of the West.

*The Mormon Battalion at the Pima Villages*

General Kearny and his troops left the Pima Villages on November 13th and marched west over the cut-off to Gila Bend, a route that soon became known as the "forty-mile desert." Just five weeks later Lieut. Colonel Philip St. George Cooke and his much larger force, the Mormon Battalion, appeared on the middle Gila. Cooke had left Santa Fe on October 19, 1846, with 397 men, but on November 10 he felt obligated to send back a party of fifty-five invalids. Three hundred and thirty-five eventually arrived in California.

They pioneered a route that lay well south of Kearny's and proved to be practicable for wagons; it soon became known as Cooke's Wagon Road. Three guides with excellent reputations - Pauline (Powell) Weaver, Baptiste Charbonneau, and Antoine Leroux - showed the way. They passed through Tucson on December 16-17 and continued via Picacho Pass for the Gila, which Cooke estimated lay about seventy-four miles from Tucson (Peterson et. al. 1972: 21, 23, 45-48; Bieber and Bender 1974: 67, 95; Ricketts 1996).

The primary record of this march is Cooke's journal, published originally as a government document and subsequently in a much improved, edited version, which lacked the map (Bieber and Bender 1974). In addition there are at least ten individual diaries and reminiscent accounts for the march from Santa Fe, New Mexico, to San Diego, California, by enlisted members of the battalion. None of these were obviously copied from another account, but some common elements in them may stem from a single source. Recently, a scholar has combined selections from a number of these journals into a composite picture, a single day-by-day account (Ricketts 1996). Finally, there is a very useful trail guide that retraces the route using modern topographic maps (Peterson et. al. 1972).

Only the diary of Henry Boyle (1943) consistently recorded the number of miles traveled each day, although Cooke's journal and most of the others occasionally included these figures. This inconsistent recording of mileages, the general absence of ethnographic details, and the limitation of fixed reference points to the battalion's December 23-24 campsite at Maricopa Wells (as yet unnamed), means that delimiting where something happened between the Sacaton area and Maricopa Wells is usually not possible. Sacaton as a place name did not exist until later.

On December 21st the Battalion arrived at the Gila River, having marched up from the south and crossed the general's trail, to camp in "tolerably good grass." Cooke (Bieber and Bender 1974: 167) and James Pace (1946: 42) placed the day's march at ten miles; other diarists said that it was fifteen (Bliss 1931: 81; Boyle 1943: 28; Rogers 1954: 77). In any event this should have placed them very close to Sacaton, at the same site where General Kearny camped on November 10th (Peterson et al 1972: 48-49). Hackenberg (1974a I: 212, 214) placed both camps approximately 1.5 miles west of Sacaton. At that point, Cooke said they were eight miles above the Pima village.

The next day the troops marched nine miles down the Gila and encamped at the only place where there was anything like pasture. This was at the first irrigating ditch (Bieber and Bender 1974: 168, 170). Robert Bliss put the distance at eight or nine miles (Bliss 1931: 81); both Pace (1946: 42) and Rogers (1954: 77) said ten miles, and Boyle (1943: 28) claimed twelve miles. The various companies probably made their camps at several locations in what they called a Pima village.

When Cooke first arrived at the Gila, he was met by many Indians and two letters, from Kearny and Major Swords. The natives had sacks of corn, flour, and beans ready, but the guides reported that such prices were being asked that they could do nothing (Bieber and Bender 1974: 168). Colonel Cooke forbade trading on private accounts, an order that was widely ignored because the soldiers had evidently been on reduced rations. One recalled thankfully that the Pimas had cut up and boiled pumpkins, and handed these to the hungry soldiers as they passed by (Brown 1900: 66). They quickly returned to full rations although, as one said, at their own expense (Golder 1928: 198).

Most diarists referred to a Pima village, but Robert Bliss and James Pace noted that they passed quite a number of villages on the 23rd as they marched downriver to an encampment at Maricopa Wells. They put the march that day at twelve miles while others recorded it as fifteen (Golder 1928: 199; Bliss 1931: 81; Boyle 1943: 28; Pace 1946: 43; Bieber and Bender 1974: 173). Nothing was said at the time about the size, names or locations of the Indian communities, but Christopher Layton and Colonel Cooke in his personal account both said that their camp on December 23-24 was made at the village of the Maricopas (Cannon 1911: 84; Cooke 1964: 164). This would have been Hueso Parado.

The diaries gave other incidental observations that help to provide a more complete picture of life on the middle Gila at this time. Samuel Rogers (1954: 78) noted that

“Their cooking utensils consisted of earthenware made I think by themselves, as they have a great deal of earthenware which is used for various purposes.”

Their weaving skills also attracted favorable attention, particularly in relation to the rudeness of their looms. Rogers pronounced their blankets “of excellent quality” while Cooke referred to “their large white cotton blankets.” Robert Bliss mentioned that “they raise some cotton & weave a very pretty blanket which is their principal clothing.” James Brown recalled that “Each Indian was wrapped in a large home-made blanket” (Brown 1900: 66; Bliss 1931: 81; Rogers 1954: 77-78; Bieber and Bender 1974: 170). David Pettegrew (Ricketts 1996: 104) and Henry Bigler were the only ones who attempted to describe the weaving process:

“I saw their squaws spinning and weaving, their spinning was simply done by twisting a stick, winding the thread around it. Their looms were 4 sticks about four feet long laid on the ground



like this □ four square. The spinning and weaving was a slow and tedious process” (Bigler 1932: 52).

None of the diarists indicated that Pima fabrics were dyed, painted, or otherwise decorated in any way. Dr. Griffin had been impressed that the cotton had a very fine and silky appearance, while their cloth

“.... though coarse is of beautiful texture the threads being perfectly even, and in fact it looks as well as the article commonly used for summer clothing called I believe everlasting” (Ames 1942: 212).

In spite of the testimonies to their weaving, at least five diarists, including Cooke, were surprised to see many of the Indians going about nearly naked.

While Lieut. Colonel Cooke was largely concerned with matters of food and forage, he did make two unique observations. One was that while the Pimas had horses, ponies, mules, donkeys and even poultry in good numbers, they lacked sheep and possessed only a few cattle. The battalion had its own traveling commissary of sheep and beef cattle, which had not been faring well, and Cooke determined “to add to their comfort and welfare” by giving the Pima chief three ewes with young. The large sheep with good wool that Fathers Garcés and Font saw there in the 1770’s were evidently not even a memory (Bigler 1932: 52; Ezell 1961: 47; Gudde 1962: 37; Kessell 1976: 59; Ricketts 1996: 104).

Cooke also left a description of one of their ‘wigwams,’ as he called them. Although his journal entry for December 24 was written while they were camped near the Maricopas, it is not clear whether he referred primarily to a Pima or a Maricopa dwelling:

“.... I entered one of their wigwams, rather above the average in size and goodness. It was eighteen or twenty feet across, dug slightly below the ground, only about five feet pitch inside, made of rank grass or reeds, resting on props and cross poles, and partially covered with earth; the door, a simple hole about three feet high; the fire in the middle; the hole above very small. They are thus smoky and uncomfortable, and seemingly very ill suited to so warm a climate” (Bieber and Bender 1974: 176).

Everyone had comments on the trade between the Mormon Battalion and the Pimas and Maricopas. Clearly it was much greater in volume than with the Army of the West a month earlier, if only because more than three times as many soldiers were involved. Cooke himself acknowledged buying seventy or eighty bushels of corn, about 600 pounds of flour and three days’ rations of corn meal, while Henry Bigler said that the colonel bought 100 bushels of corn to feed the teams (Bigler 1932: 51; Bieber and Bender 1974: 170-171, 174, 177). Cooke neglected to say what he gave in exchange.

Most of the private soldiers participated in the trading, especially when the colonel relented and allowed them to carry the provisions they could pack on their persons. They were interested only in foodstuffs: corn, cornmeal, wheat and flour, beans, squashes, pumpkins, molasses, peas (chick peas and green peas), and the biggest treat - watermelons. For these they traded literally the shirts off their backs, old shoes, pants, vests, beads, needles and thread, and uniform buttons. Money was of no interest to the Gileños nor was there any particular scale of value. James Brown said that one brass button had more purchasing power than a five dollar gold piece (Brown 1900: 66; Cannon 1911: 84; Golder 1928: 198-199; Jones 1931: 9-10; Bigler 1932: 51-52; Boyle 1943: 28-29; Rogers 1954: 77-78; Gudde 1962: 37; Bieber and Bender 1974: 168, 171, 173).

Henry Bigler's impression that "... the Pimas are the finest looking Indians I have ever seen and the largest" was shared by other members of the battalion, and Nathaniel Jones added that "They appear to be the most healthy people I ever saw and the most children I ever saw in any country" (Jones 1931: 9-10; Bigler 1932: 51). As to the numbers of Pimas and Maricopas, there was little consensus. Cooke himself offered no estimate; Christopher Layton said they went through one Pima village that contained nearly 4,000 inhabitants (Cannon 1911: 83-84). Henry Bigler understood that the Pimas were about 5,000 strong "and that their settlements extended down the river for twenty-five miles" (Gudde 1962: 36).

Robert Bliss (1931: 81) and Henry Boyle (1943: 28) repeated this figure of twenty-five miles, which no one could have known from their own knowledge. Nathaniel Jones said twenty-six miles (Jones 1931: 9). As discussed earlier, the evident implication was that Maricopa settlement extended to near the junction of the Gila and Salt rivers. Whatever the distance, at 10:40 on the morning of Christmas Day, the Mormon Battalion resumed its march, across what some called the forty-mile desert towards Gila Bend, then on to the Colorado River and California (Bieber and Bender 1974: 177).

With the passage of the two groups of American soldiers, traffic along the middle Gila perhaps slowed but did not stop. Within the next few months Kit Carson and Edward Beale returned this way, bearing Commodore Robert Stockton's dispatches from California. One year after that trip, Beale carried dispatches back to California by this route (Bonsal 1912: 25-34). In the late fall of 1848 Joseph Meek, ex-mountain man and newly-appointed U.S. Marshal for Oregon Territory, passed this way with his escort (Tobie 1949: 178-183). In March 1849 a future Arizona governor, John C. Fremont, reached the Gila River and Pima villages en route to California after his disastrous fourth expedition (Hafen and Hafen 1960: 141, 298-299). None of these parties left more than cryptic comments.

Lieutenant Cave Johnson Cout's company of the First Dragoons formed part of the column that Major Lawrence Graham led across northern Mexico from Monterey in Nuevo Leon, to Los Angeles, California, at the end of the Mexican War. They passed through the Pima Villages at the end of October and beginning of November in 1848. At that time (October 29) an unsuccessful war party had just returned from the Colorado after losing a fight with the Yumas, which cost

the Pimas their “King” and thirty warriors. The Pima chief (probably Culo Azul) asked Major Graham for a few men to go on a revenge foray (Dobyns 1961: 65).

Couts in his journal claimed that all the Pimas wanted in trade was red shirts and whiskey, and if promised these, they would bring in a small basket of corn at a time. He was the only traveler who mentioned tobacco, which the Indians grew and then cut while green and left it to dry, resulting in a very bitter taste. Watermelons, muskmelons and pumpkins were raised “in abundance beyond credibility;” the former were very tough while the two latter he found very good. The natives apparently raised these without metal tools (Ibid: 66-68).

As for their fields and villages, the former were all prepared for irrigation, for which they had large and numerous irrigating ditches. From the Pima village, presumably meaning the Sweetwater area, Graham’s party marched thirteen miles downstream to the next camp. Coutts claimed that from the Pima village, down the river for about eighteen miles, was what might be called an “Indian city.” Huts were scattered thickly along the route at one to two miles from the river, the space between them and the river consisting of the finest fields he had ever seen (Ibid). While these observations may have been accurate, Coutts’ narrative was full of exaggerations and highly colored statements, such as his claim that millions of melons had been brought to them.

### *The Argonauts of 1849*

The first word of gold discoveries in California reached the East Coast in August of 1848. By this time and through the winter of 1848-1849 the first wave of gold-seekers, thousands of people from northern Mexico, flooded through the valley of the Gila and along other routes across northwestern Sonora. Both Colonel Graham’s command and Fremont’s party met these companies, and Lieutenant Coutts thought that “The whole state of Sonora is on the move .... The mania that pervades the whole country, our camp included, is beyond all description....” (Chamberlain 1956: 272-273; Hafen and Hafen 1960: 299; Dobyns 1961: 87-89; Officer 1987: 209-210, 221-222, 245, 385). Later in 1849 some of the west-bound American argonauts, as they termed themselves, met Mexicans already returning from California with both gold in hand and stories that fired their dreams (Martin 1925: 144; Van Nostrand 1942: 297; Evans 1945: 154; Watson 1981: 154-155; Robrock 1992: 167).

Gold hunters from the eastern U.S. had to wait until the spring of 1849 to leave for California. Most of these, an estimated 25,000 to 40,000, took one of the northern routes up the Platte River Valley and through the South Pass in Wyoming, on to Salt Lake City and then across Nevada; more than 2,000 miles across mostly unsettled country. Another 9,000 to 20,000 travelers took one of the southern routes, which included the Gila Trail (Kearny’s route) and Cooke’s Wagon Road, as well as other trails across northern Mexico. These were somewhat longer but lacked major mountain ranges and had settled areas in the Rio Grande Valley, at Tucson, and the Pima Villages, where supplies could be obtained. Southern Arizona and California both had long stretches of barren

desert with no dependable water sources and sparse forage (Harris 1960: x; Dobyns 1989: 34; Robrock 1992: xv-xx).

Most of the southern trails came together at the middle Gila. By the treaty of Guadalupe Hidalgo, proclaimed on July 4, 1848, all of the country south of the Gila River was still part of Mexico, while the north side belonged to the United States. The actual boundary would soon be surveyed. No particular objection was made to Americans crossing northern Mexico to reach California, and indeed the Pimas welcomed one and all. Farther south, the thousands of *Sonorenses* who departed for the gold fields in 1848 left the villages of western Pimeria reduced to families of women (Wagoner 1975: 276-277; Kessell 1976: 309).

Several secondary sources, including an annotated bibliography of '49ers journals, letters and reminiscences, cover this period of southern Arizona's history (Dobyns 1982; 1989: 13-17, 33-36; Etter 1986: 209-220; Officer 1987: 219-244). While most of the accounts that Etter (1986: 209-220) listed have been reviewed, the essential observations about the Pimas and Maricopas can be found in about eleven narratives. Even in these there is much repetition or overlapping, while another forty or so largely reiterate observations similar to what is said elsewhere (Etter 1986; Dillon 1987; Clarke 1988; Robrock 1992). Publication interest is low in this field and only a few volumes have been issued since 1950.

One problem with the '49ers' narratives is determining which were contemporary with the events described and which were written later, or edited at a later time? With letters (Bieber 1937; Foreman 1939) and accounts such as Chamberlin's (Bloom 1945; Oliphant 1955: 16-17), Eccleston's (Hammond and Howes 1950), and Aldrich's (1950), published at the time or which exist in their original form, there is no question about their contemporaneity. But for reminiscences or autobiographies (Harris 1960; Etter 1986; Dillon 1987) there is a question about how their reliability has been affected by the vagaries of memory or from having been rewritten at a later time.

For a fine-grained study that may wish to determine the number and locations of villages or the nature of the Pimas' irrigation works, reliability must be considered. And while there are no known examples of journals copied or extracted from other accounts, practically all of the parties on the southern route had a copy of Emory's, Johnston's, and sometimes Cooke's journals with them. They made direct references to these, and some of the '49ers probably drew upon these earlier sources without making acknowledgements.

These emigrant narratives began in March 1849, if one includes Fremont's cryptic notes, and continued into December. The majority of the companies passed during the mid-to-late summer and fall months. In contrast with the previous century and a half, the diarists were non-military, non-clerical individuals; civilians who often neglected to include dates, distances, names and numbers, and who may never have kept a journal until 1849. Hackenberg (1974a I: 220-237) made extracts from a number of these accounts and both he and Dobyns (1982) analyzed the documents to some extent.

Before we draw from the various narratives and comment topically, we will transcribe the diary of Judge Benjamin Hayes from December 19 through December 24, 1849, when he was at the Pima Villages. More than a century ago

the historian H.H. Bancroft (1889: 483) judged that "The journal kept by Benjamin Hayes in 1849 is the most complete I have seen." This is still true today and particularly so with respect to his graphic accounts of life among the Pimas and Maricopas. Only some inadequate extracts from this diary have ever been published (Wolcott 1976). Dr. Paul Ezell made a photocopy of the pages for December 19-26 from the handwritten original at The Bancroft Library. The transcript below is from this copy, done with permission of The Bancroft Library, lightly edited and without omissions:

"Diary of Judge Benj<sup>n</sup> Hayes' Journey Overland  
from Socorro to Warner's Ranch"

.....

"Wednesday, [Dec.] 19<sup>th</sup> [1849] - About four o'clock commenced raining and continued at intervals until 10 o'clock. After breakfast, Capt. Cooper resigned, with the view of giving the company an opportunity to organize in smaller parties, according to the different views prevailing. One organization took place, consisting of H.M. Cooper, Sarshel Cooper, Jos. Vaughn, Benj<sup>n</sup> Hayes, R. Lincoln, Eli Sheppard, Jesse Baxter, James T. Farley, P. Austin, J. Austin, A. Ball, Anderson Moore, Wilson, Jos. Venable, N. Cain, W. Cain, Mo Williams, Leigon, James Daley, W<sup>m</sup> Johnson, T. Chandler, Osborne & Jef (Black boys)."

"All left for the Pimo villages. Soon struck the river, the soil improving as we neared it. We found the river deep, and on the rise, which was unpromising for our trip across, as we had been advised to go by Mr. Hatcher. Approach to Pimo village - met a solitary Indian, a Maricopa, who told us in Spanish that his people had plenty of corn, wheat, flour, beans &c. The town is near the bank of the river, on a level, rich plain - low straw huts. Beyond the village found the people gathered round the wagons & our old friends of Bayliss' company, engaged in traffic."

"Took our camp, without a blade of grass - got a little fodder, one bundle, for my mules that night - some got a little corn. Night heavy dew - we are in a new climate. Pimos ploughing their lands to-day. Our other emigrants getting along very well. Pimos here have no good animals to trade. They seem to possess a good many cattle. Sun shining in afternoon - road pretty good, in spite of the rain. All of Bayliss' company well and in tolerable spirits, though the description we have had of the road is far from encouraging. They start in the morning, carrying some shelled corn. Their plan is to go down on this side, stopping early in the day and seeking the hills for grass. The village is scattered widely over the plain."

"Thursday, 20<sup>th</sup> - The Grand chief called to see Capt. H. [Hatcher] & showed him a variety of papers, from which it seems

that the New York Free Mil. company was here on Oct. 27th, 1849; they say, 'the Pimos being very friendly & accommodating.' Allen Johnson, from Tennessee, says 'they have treated us with much kindness & courtesy.' He writes of date Sept. 10th 1849. Sam<sup>l</sup> H. Berry gives a favorable certificate of date Oct. 12, 1849. Havilate Mining Association passed this place Oct. 23, numbering 50 men all told, some only accompanying on the journey. They hail from New York. They are thankful for the favors received. Dated Oct. 23d 1849. Signed John Brown, New York City."

"L.P. Graham, B<sup>t</sup>. Major, 2d U.S. Dragoons recommends Culo-Azul, chief of the Pimo villages, Nov. 2, 1848. The Fremont association from New York City, numbering 19 members, passed here Nov. 20th 1849. They received much kindness from the Pimos during their stay, signed Isaac Brown, President. Everton says he put 22 head of oxen in his field, paying 20 yds. of manta. He remained here the night of Sept. 21, 1849."

"To day quite pleasant - wood scarce. Some brought from the river, cottonwood. We have a quiet, pleasant company, and are well satisfied with the division that has been. The wagons and Bayliss' company started to-day. We remain to give our animals the benefit of corn, which we buy sometimes for 50 cts. for a basket containing about 6 or 8 pints, and for traffic. I have trafficked off every superfluity (*sic*) I could find. Pumpkins have been cooked and several good dishes made. Beans in abundance. They have pinole plentiful - some little wheat flour, & some corn meal is bought in small quantities. Bayliss' company think the Santa Cruz river empties into the Gila below our present camp somewhere. An axe was stolen from our camp to-night - also my oil cloth I used for covering my pack. The other camps complain in like manner."

"When the chief's papers had been examined, he sat awhile, then inquired for tobacco. Capt. Cooper gave him 2 pieces, it being with us a scarce article. The Pimos are a lively, merry race - apparently very happy, very talkative, and each laughs heartily at everything he says. At night they all left for their villages. They have a few guns and pistols - and some will take powder, shot, caps for corn."

"Friday, 21st - Heavy dew last night - not cold. Started about 9 o'clock to the next village, a large party of Pimos accompanying us, and joining us on the road, so that by the time we arrived we had quite a procession. Sun warm. Sky clear. The chief lives here. Our animals we turned loose, & are endeavouring to pick up a little food among the dry vegetation that surrounds us. The interpreter accompanied us to shew the road."

“The women have a blanket around the waist, shoulders & breast generally naked. The men variously dressed - some soldier’s old jacket, some red, or blue or white blankets, others only shirts. Some summer pantaloons, others legs naked. Feet seldom covered. A company of some sixteen or twenty of young men variously accoutred, but all having the bow & arrow, come up this evening for some purpose, and stop in 3 platoons like soldiers.”

“There are eight villages of Pimos, and more than 10,000 souls, so the interpreter (who is a Maricopa) informs us. The villages are all on this side of the river, and of course in Mexican territory. While I am writing, the Indians come around, seemingly very curious in regard to what I am doing. The Maricopas, the interpreter says, number a thousand, in three villages. Both are friendly. The Yumas are not friendly with the Pimos, and killed their chief, Juan Antonio, mentioned by Emory. The Yumas attack only in the night, to steal the mules - are not apt to attack in the daytime.”

“Watermelons look very well, but have been kept too long. Bought some excellent wheat flour - better than sifted Taos [flour]. A tin cup has been stolen to-night. We regret that we are compelled to watch these people so closely. Their dogs, too, are troublesome. They would seem to be fit subjects for Christian missions, so amiable are they. Many are Catholics at St. Xavier none Christians here, that I learn. Beef costs \$32, [torn]hed 700 lbs - as good as any I ever saw. Shortly after it was butchered, the whole herd came close to camp, lowing around us.”

“Some Indians shooting at arrows this afternoon. A yell from the chief at dusk carried off nearly all the tribe - a few only still lurking near. Our men are busyily (*sic*) engaged smoking their beef for carrying along. Night clear & warm. A good many fine cattle through this second village. The chief’s name is Shalam - and a very clever old fellow.”

“Saturday, 22d. We remain here to-day, to finish smoking beef, feed corn, fix up &c. The interpreter came over to-day to explain to us the character of the road we are to travel. We laid before him Emory’s large map - showing him Independence and our route. He exclaimed in Spanish ‘a long, long road.’ He seemed to be familiar with the country down the Gila to the Colorado, on both sides, and had been out on the San Francisco to see the Apaches. He pronounced the route on the north side impracticable & that on the south side fully as bad as represented by Emory. His name is Francisco. He speaks Spanish readily.”

“Heavy dew this morning. Stock fed and turned out on the commons. The rest may do them some good. We feel the want of small change, frequently paying more for an article than we would

if we could make the change. Shirts, white, red and calico, coats - odds & ends, extra baggage of all kinds - is disappearing for corn, flour, beans. And to-day some of the men give portions of their beef of yesterday for corn, flour &c. The middle of the day is quite warm."

"The Indians are scattered about the tent & fires thickly, or out on the plain near us in groups. Trade for awhile is not so brisk. We have bought our wood for a trifle. They stole a stick of wood from us to-day. While I am writing, a small party have got sight of a book lying by me, and are now examining it with great curiosity. The interpreter was asked if there [were] many deer or bear in the neighborhood - he replied there were, but the Pimos preferred work to hunting - a remark which indicates the first great step in civilization.."

"We are now scattered - our company once united, into small parties, knowing not what various fortune may betide us &c &c. Misfortune may follow some &c. Crowing of the cocks of a morning and the baying of the dogs. Howling of wolves around us shew there are great numbers of this animal here. They manufacture a white blanket, very heavy & large, for which they asked us \$10. Extensive enclosures - good fences. There has once been a numerous people here, as their ruins indicate. The chief who sold us the beef has only two others - he was anxious to get silver for a ten dollar gold piece we gave him. They seem to prefer Mexican money. Each village has a Captain - all the rest are under the command of Azul, Captain chief."

"Sunday, 23d. Started this morning for the Maricopas - warm day. I stopped at next village to buy corn for a few caps, powder. Delay with Indian's pistol - 3 or 6 attempts to put it in order for him. Attempting to follow my companions, got off the road, mule got in old zequia (*sic*) 2 or 3 times. An Indian came down & guided me around, gave him some powder & shot, which appeared to satisfy him. Came up to another wigwam, where all were at work busily - an old fellow, who spoke Spanish a little, ran down and carefully pointed me out the road. Large fields enclosed - cotton on scaffolds everywhere. The interpreter who came with us yesterday had to work, as he said, that day, but finally, on giving him a shirt to hire some one in his place, he remained with us through the day. He is a good looking, intelligent, pleasant fellow in his manners. I infer from the circumstance that they have regular days of work to which each is assigned."

"On our march to-day, the salt efflorescence became very abundant, covering the whole ground for miles. Once I strayed down to the Gila - thick mesquite - not a blade of grass. In about 12 miles came to a large patch of grass on this salty efflorescence. The mules do tolerably, though we have abundance of corn for



them. Some of us take wheat, some corn in order to mix them in feeding - a good deal of corn will be taken. We are still amongst the Pimos, and it is understood we will take the 40 mile stretch without water. We propose to start at 2 o'clock to-morrow and to travel till moon down, thinking that will be best for our animals. They are in tolerable condition. Heavy dew night before last. This morning like May - birds singing - flights of geese."

"Monday, 24th. To-day warm - light dew this morning - last night pleasant. Preparations for the 40 mile stretch. The mules herded last night and to-day - So tolerably - they are well fed on corn. Many think they have not got enough of corn. I as yet have only seven pint cups full. I sold five cups full of flour to-day for 50 cts. - part of my dry beef for the same - yesterday I sold a flannel shirt for \$10.00. Have now \$1.60 to get me corn. Have 3 cups full of flour - 4 cups full of red beans - two small pieces of bacon - a little dried beef - & plenty of pinole. My object is to have very little weight - so that I may carry corn for my mules."

"Our large company is now scattered along the road - and I can learn little of them at present. Some have gone on the Jornada - some are recruiting in this neighborhood. Part of the 'wagon company' we met at Tucson will, I understand, go with us. The Indians are around us, but do not bring in much corn at present. We had talked of spending our Christmas in San Diego - we are still a great distance from there - and not a very merry Christmas before us."

"Continued our trade with the Maricopas till the last moment, many of us not being yet supplied with as much corn as we needed. I had much less than I required to do my mules justice. I succeeded in getting the last 20 pints that came in. All ready at 2½ o'clock. Started. Immense forest of Cereus near the hills - variety of cactus. A mile or two from our camp some better grass than we had had - regret that we had not found it sooner - the first was eaten down. Moonlight ride - pleasant travel. An occasional stampede or pack off. About 11 began to weary, and our Texas friends encamped."

"We went on patient, and anxious for the moon to go down, as it was understood we would not stop till then. Dark mountain ridges on each side; crossed several dry beds of creeks and one which seemed as if a large river had washed over it. At length, far in the pass, horsemen & footmen, weary indeed, threw ourselves down for rest about 12 o'clock. We had marched pretty well into this pass, to a point where its sides narrow the road hems it in. Mules fed, and turned on the rugged hillsides to pick what they can. Bats flying on our path. Some got coffee, but most of us content with a snack & water, and slept soundly till day" (Hayes 1849-50).

On Christmas day Hayes' party reached the Gila River again and camped after going down the river one-quarter of a mile. As they were breaking camp about 4 o'clock that afternoon,

".... four Maricopa warriors or hunters suddenly made their appearance, and came up to camp. Armed with bows & arrows, not much painted - small arrow-head of stone - shaft of light cane - gourd full of water tight (*sic*) round one's waist, & corn in a handkerchief fastened over his left arm. All pleasant & polite. They were probably part of a regular company which the Maricopas keep up to guard their frontier against the incursions of the Apaches" (Ibid).

### *The '49ers at the Pima Villages*

The analyses of '49ers' journals by Hackenberg (1974a I: 235-237) and Dobyns (1982) are generally valid, with some qualifications as to whether the Pimas' provision of foodstuffs resulted from an "economic miracle." The agricultural productivity of the Pimas and Maricopas was already well established. When '49ers crossed the desert between Tucson and the Gila, they normally did so in two or three days. The emigrants had had opportunities to acquire the same kinds of supplies at Tucson, and their problems en route were mostly due to insufficient water and forage. The Pimas and their watermelons were nonetheless a welcome sight. Some of the observations by these travelers differed from those made by Kearny's army and the Mormon Battalion and are worth noting.

One point is the number of persons who passed through. From the standpoint of the Gila River Pimas and Maricopas, there were an awful lot of people around; thousands of Americans, who followed an almost equal number of Mexicans. George Evans, while at the Pima Villages, said that three or four companies of Californians were encamped there (Evans 1945: 154). Six weeks later, in early October, William Hunter heard that there were 800 Americans amongst the Pimas (Robrock 1992: 161). A letter written from California later that year reported that there were about 15,000 emigrants on the Gila, "not more than half of whom have yet arrived in California" (Foreman 1939: 313). During July, forty-niner James Spencer had followed Kearny's route, one of the more difficult passages, and before he reached the Pima Villages, the advance portion of his party "passed many other companies strung all along the road, perhaps a thousand emigrants" (Ibid: 310). Most of these companies barely stopped at the villages and very few would have remained for two weeks, as Isaac Duval's party did. They paused to rest and recruit their livestock in part, but also suffered a loss of incentive because they "had heard nothing concerning gold in California since leaving Texas," and thought they might be too late (Dillon 1987: 103-106)!

The argonauts displayed remarkably little interest in the names and numbers of their native hosts, or in the names, number and location of their

villages. According to the Maricopa interpreter, Francisco, there were more than 10,000 Pimas and a thousand Maricopas (Hayes 1849-50). At the opposite extreme, Asa Clarke estimated the number of persons in the two tribes at about 2,000 (Clarke 1988: 73). Benjamin Harris, more realistically but again from unknown sources, said that these people numbered about six thousand souls (Harris 1960: 80).

As for the principal leader, most diarists referred to him as the “old chief,” “Head Chief,” or simply “the chief” (Dunbar 1937: 1441; Bloom 1945: 173; Hammond and Howes 1950: 210; Goodman 1955: 12; Dobyns 1961: 64; Aldrich 1950: 54). Since at least the late 1830’s, Mexican writers had called Culo Azul the leader of the Gila River Pimas, and two of the ‘49ers did likewise (Hayes 1849-50; Bieber 1937: 219). However, three of the gold-seekers agreed with Emory and Cooke that the principal Pima chief was Juan Antonio or Juan Antonio Llunas (Harris 1960: 80; Watson 1981: 152; Clarke 1988: 71).

The confusion as to whether there was one individual or two is reflected in the editor’s footnote in Harris (1960: 80). The answer is that they were the same person, as Ezell (1961: 45, 46, 55, 58, 66, 128) deduced some years ago; his blue blanket coat became something of a trademark, noted by a number of diarists. Although Lieutenant A.W. Whipple said that the Yumas killed Llunas by 1851, boundary commissioner John Bartlett conferred with Culo Azul as recently as 1852 (Whipple to Graham, Jan. 10, 1852, in U.S. Senate 1852: 223; Bartlett 1965 II: 254, 256-257). The “Juan Antonio” whom Hayes (1849-50) said was mentioned by Emory and had since been killed by the Yumas, may have been “the Maricopa chief, Antonio,” referred to in Cooke’s journal (Bieber 1974: 173). The incident perhaps was the return of the defeated war party after the loss of their “king” that Cave Johnson Coutts witnessed near the end of October in 1848 (Dobyns 1961: 64-65).

As for the villages, no ‘49er has left us a name, and the only one who enumerated the settlements in the tradition of earlier visitors was Benjamin Hayes. His information - eight villages of Pimas and three of Maricopas - was from the Maricopa interpreter, Francisco. Pancoast had mentioned “numerous Villages” and Durivage passed through “various little villages” of Pimas and Maricopas for fifteen or sixteen miles, spaced “some distance apart and a long way from a river, being in an open plain” (Pancoast 1930: 244; Bieber 1937: 220). Robert Eccleston said much the same, but added that some Maricopa villages lay north of their camp across the river (Hammond and Howes 1950: 210, 211, 213). Since they were camped near Maricopa Wells and therefore close to the village of Hueso Parado at the time, this must mean that two of the Maricopa villages in 1849 were on the north side of the Gila. Their names are not known; Culo Azul in fact had invited John Durivage to a scalp dance at a Coco Maricopa village across the river (Bieber 1937: 220; Hackenberg 1974a I: 326).

All of the Pima villages in 1849 lay on the south side of the Gila River with the easternmost site at Sweetwater/Stotonick or Old Mount Top Village. Nothing indicates that any village had been established farther east between 1846 and 1850. The eight Pima villages were spaced westward along the middle Gila valley over a distance of twelve to fifteen miles, by reference to four journals

(Jordan 1849; Bieber 1937: 220; Evans 1945: 154; Aldrich 1950: 55). However, it is possible to refine this somewhat. Harris (1960: 81-82) said that after leaving the Pimas they proceeded down the river five or six miles to the Maricopa village, passing the small Papago (Kohatk?) settlement en route. This suggests a boundary zone, largely unsettled, between the Pimas and Maricopas. In turn this conforms with the rather specific statements by H.M.T. Powell and William Hunter that the Pima Villages extended for about ten miles, "or I might rather call it a continuous village" (Watson 1981: 152, 154; Robrock 1992: 164-165). It would appear then that the length of the settled area had not changed since Kearny's visit in 1846, and perhaps not since 1825 or before. The old claim about settlements extending down the river for twenty-five miles had been laid to rest; not one of the '49ers mentioned this.

The principal change in the years since 1846 was an increase in pilferage. Many of the '49ers complained about the Pimas' propensity to abscond with items of clothing, tools and other small articles (Pancoast 1930: 243, 245-247; Bieber 1937: 320; Foreman 1939: 282; Hammond and Howes 1950: 212-213; Goodman 1955: 12; Aldrich 1950: 54; Watson 1981: 153; Robrock 1992: 165-166). This was done in a context of hospitality and good fellowship, without threats or even a hint of violence; almost as an adjunct to trading. Some travelers complained and others did not; those who did sometimes carried their grievance to Culo Azul, who might exhort his people to return the property or alternately advise the argonauts to move their camp.

Although most exchanges were still by barter, the Pimas had become monetized to a limited extent and sometimes accepted silver money, preferably Mexican. There was even the beginning of standard prices, such as the 25¢ a bundle for corn fodder that some parties paid. Brass buttons were still traded, and clothing and fabrics were as welcome as ever. The Pimas also benefited from the travelers who lost their teams or had to lighten their loads, and consequently left chains, yokes, wagons and other property along the roadside (Foreman 1939: 328-329; Hammond and Howes 1950: 214-215; Aldrich 1950: 55; Robrock 1992: 166-167).

A few diarists may have suspected that the armed parties of Pimas and Maricopas whom they met were patrolling to protect their own villages and incidentally the '49ers, not simply to raid the Apaches or Yumas (Dunbar 1937: 1441; Hammond and Howes 1950: 215; Ezell 1961: 119). The only conspicuous lapse or failure of this system was the massacre of the Oatman party, which occurred well to the west of the villages. As Dobyms (1982: 4) observed, most migrants were not aware of the degree of the Gileño organization, but Benjamin Hayes witnessed these patrols on December 21<sup>st</sup> and 25<sup>th</sup>, and recognized them for what they were - regular companies guarding the frontier against Apache incursions. Fifteen years later when a contingent of thirty Maricopas and an equal number of Papagos formed a regular escort for several territorial officials, their military organization brought favorable comments (Nicholson 1974: 115-120).

Very little that was new about the fields, fences and crops of the middle Gila farmers found its way into the travelers' narratives. Even the canal system elicited little comment, though most writers had probably never seen irrigation

until they crossed New Mexico. H.M.T. Powell managed to say that large acequias for irrigation ran for miles, while Charles Pancoast placed the Pima Villages in a horseshoe bend, to irrigate which the Indians had dug a canal for thirty miles (Pancoast 1930: 244; Watson 1981: 154). George Evans (1945: 153) may have been the only one who noticed a dam or weir, which lay opposite their camp above the Pima Villages. The Gila there was a deep, narrow, and rapid stream of water - the Little Gila River. Small canals then conveyed the water over the bottoms and onto the fields. Asa Clarke (1988: 73) considered that the acequias drew off nearly the whole of the Gila River, to irrigate the little squares of land with sluices between. Most of the fields evidently lay between the villages and the river, but nothing was said as to the size, number and location of the canals or the acreage under cultivation.

Finally, Isaac Duval's small party camped for nearly two weeks near Maricopa Wells and had unusual opportunities to look around the area. They found a site, probably of recent origin and apparently quite similar to the one that Emory described east of Casa Grande. According to Duval,

“The ground for about 100 yards square had been cleared. .... In the center of the clearing was a circle of small, round and equal-sized stones that was about twenty-five feet in diameter. In the center of this circle was another ring of small stones that was about five feet in diameter. From the center circle of stones there radiated out about twenty lines of stones. The size of the stones forming the radial lines graduated from about two inches in diameter at the inner circle to very small stones at the end. The length of these lines of stones was about three feet. None of us knew what this meant, ....We saw no Indians near these stones” (Dillon 1987: 107).

#### *Continuity on the Middle Gila*

Narratives from the Mexican War and the period immediately following it, including the journals of California-bound '49ers, provide the most comprehensive look at the middle Gila River Valley since the Garcés - Anza entradas of the 1770's. The major change in the intervening years was that the Cocomaricopas, now called the Maricopas, had abandoned the lower Gila entirely and moved to the middle Gila just below the Pimas. The Pimas occupied the same four leagues or ten miles along the river in 1846-1849 as they had in 1775, although their villages had increased in number from five to eight and all now lay on the south side of the river. The Pima population had grown as well, probably because of other Pimans joining their linguistic kinsmen and also in tribute to their effective organization for defense. The number of Maricopas had decreased significantly, a consequence of their wars with the Yumas and Mohaves.

American influence on the people of the middle Gila began in the middle 1820's with the appearance of beaver trappers. Thirty years later the Gadsden Purchase lands, which included the homes of the Gileños, became part of the U.S.

During this time the Indians both retained their land base and did not have to suffer outsiders moving in amongst them. This absence of threats, other than by hostile Indian neighbors, was an immense help in continuing their self-sufficiency and in maintaining the good-natured hospitality so much in evidence to travelers. Their relative wealth and willingness to provide foodstuffs through trade would continue for another twenty years, and mark the early Pima and Maricopa experience with Americans as much more benign than the relations of the latter with virtually any other native Arizonians.

## Chapter VII

### THE MIDDLE RIO GILA IN THE 1850'S

The Treaty of Guadalupe Hidalgo legalized American acquisition of two former Mexican provinces, New Mexico and California. New Mexico in 1848 included lands that reached from the western boundary of Texas to the Rio Colorado, with the Gila River as part of the southern boundary. One treaty provision obligated the United States to restore Mexican captives and to prevent Indians living north of the border from raiding south into Mexican territory.

#### *John Hays and the Sub-agency on the Rio Gila*

It soon proved impossible to stop Indian raids from the American side, but some efforts were made initially to carry out this provision. In the spring of 1849, James S. Calhoun was made Indian agent for New Mexico and a former Texas Ranger, Colonel John C. Hays, received a separate appointment as sub-Indian agent on the Rio Gila. The Commissioner of Indian Affairs knew little about the Indians of that region, and one of Hays' instructions was to keep the newly-created Department of the Interior well-advised of affairs in this remote area. Hays received one year's salary and the funds for his sub-agency in advance. How, where, and among whom he chose to perform his duties were left to his discretion. A new concern was the American '49ers passing through that country.

His instructions and title would have allowed John Hays to become the first American agent for the Pimas and Maricopas, or whatever portion of them lived on the north side of the Gila. In 1849 his responsibility would have carried wide latitude, since the U.S.-Mexico boundary was yet to be surveyed, and no one in official Washington knew what Indians lived in this newly acquired country. Hays left San Antonio, Texas with his own party in early June, 1849. At Doña Ana, New Mexico, he allowed two emigrant companies to join him. Like the others, Hays was en route to California, and they traveled together as far as Tucson. Hays' biographer (Greer 1987: 228-252), a diary by one member of the Frémont Association (Hammond and Howes 1950), and a reminiscence chronicled this part of the journey (Nugent 1878).

In crossing southern New Mexico, agent Hays may never have seen an Indian until he arrived at the Pima Villages. He did make attempts to contact the Gila Apaches and parley with them, probably with the intention of making a

peace treaty. One meeting had been set up at Ben Moore Mountain, now known as Soldier's Farewell, on October 15<sup>th</sup>. Instead, the Indians rode into the path of Sonoran military Inspector José María Elías Gonzáles' 400 cavalrymen and lost five killed and several children captured in the ensuing battle. After exchanging amenities with the Sonorans, Hays and the emigrants pioneered a new route to Tucson by way of the Puerto del Dado (Apache Pass) and Nugent's Pass, upon General Elías' recommendation.

At Tucson the parties separated and Hays, according to his biographer, reflected on the government's inability to solve the Indian problem – "to attempt to affect any good with these Indians" – with the few resources available. It was probably the worst possible time for an American Indian agent to have arrived. The Mexican states of Chihuahua and Durango had just enacted laws that provided generous bounties for Apache scalps or captives, and Sonora would enact its own law the following February. Bounty hunters roamed northern Mexico in 1849, and one writer claimed that the greater part of the 17,896 pesos that Chihuahua paid for trophies went to American '49ers. In the end this scalp hunting accomplished very little (Hammond and Howes 1950: 174-203; Smith 1964, 1965; Greer 1987: 242-248).

Hays did visit the Pimas and Maricopas in the latter part of November and camped there for three days. When his party was ready to leave, the natives presented them with some jars of saguaro syrup – "preserves," as most of the '49ers called these. Once arrived in California, Hays penned his resignation, because of his "inability to be of any service whatever, with the means furnished," as he put it. It would be eight years before the people of the middle Gila would see another Indian agent (U.S. Senate 1850: 226-230; Abel 1915: 34-35).

### *The Cholera Year*

The Pimas and Maricopas would be repaid for their hospitality to the '49ers in the cruelest way possible. 1849 was a cholera year; in St. Louis the epidemic began in May and killed an estimated 4,500 to 6,000 residents, while in Milwaukee it raged during August and then reappeared the following year, 1850 (Miller 1997: 18-20, 196). Approximately 600 succumbed to it in San Antonio, Texas where the epidemic started April 1<sup>st</sup> and continued for six weeks. Some of the '49ers who arrived in San Antonio while the cholera was still virulent continued their journey after they had recovered and carried the infection with them (Greer 1987: 229-230). One of the most effective bounty hunters in Chihuahua nearly died from it and a former governor-general was killed, as was General José Urrea, a former Tucsonian and son of Mariano de Urrea, at his home in Durango (Smith 1965: 124, 138; Officer 1987: 72, 244).

Cholera struck in Sonora in 1850, where miners returning from California by ship supposedly transmitted it to residents at Guaymas. In December the epidemic spread northward to Hermosillo and other towns, and by the summer of 1851 it was striking down people in Tucson, Santa Cruz, and communities in the Altar Valley, where more than 1,100 people died from the disease (Officer 1987: 251-255, 387). The mortality figures were probably accurate and Tucson may

have lost nearly one-quarter of its population. On the other hand, boundary commissioner John Russell Bartlett spent the fall months of 1851 in northern Sonora and although he himself fell ill in early October, he made no mention of the cholera epidemic that should have been all around him.

Among the Pimas no less than three calendar sticks listed “black vomiting” as prevalent in all of the settlements and killing Indians by the hundreds (Southworth 1931: 45). The calendars of Mejoe Jackson and John Hayes dated this epidemic to 1849-50 with Jackson adding “in the summer,” while Juan Thomas placed it in 1850-51 (Jones 1961; Southworth “Excerpts”). None of the argonauts mentioned it nor did William Miles (1916), whose party passed through the Pima-Maricopa towns in late October of 1850. Lieutenant A.W. Whipple was at the Pima Villages early in December, 1851, and said nothing about cholera there (Bartlett 1965 II: 598-600). In 1852, the well-known Maricopa interpreter Francisco told Bartlett that when cholera had appeared among them two years before, they abandoned their dwellings on the Gila and went to live along the Salt River to escape the pestilence (Ibid: 241).

The weight of evidence is that cholera probably visited the Pimas in 1850, while elsewhere in Sonora the record suggests that the epidemic struck in 1851 (Officer 1987: 254-255). Only two years before, in 1847-48, the calendars of John Hayes and Meloe Jackson showed that measles had prevailed in the villages, killing both adults and children.

#### *Native Relations in the Early 1850's*

Between the bounty hunters (who didn't limit their collecting to Apache scalps), the epidemics, and the continuing round of attacks, raids, and counterattacks recorded on the Pima calendar sticks, this was a violent period. With respect to the Apaches, each group of their victims perceived itself as a special target, though most Apache depredations were actually directed against Sonora. Americans in both military and civilian roles continued to pass through the Gila Valley, but they saw only the occasional return of a Pima-Maricopa war party or the grave of an emigrant.

Lieutenant Whipple worked his way down the Gila River to the Pima Villages by early December 1851, making astronomical and meteorological observations as part of the U.S.-Mexico boundary survey. Although at times “a great body” of Pinaleño Apaches surrounded his party, he passed through their strongholds without incident. On the other hand, he saw bones bleaching by the roadside where “Scores of our own citizens .... have been slaughtered by these roving robbers” (Bartlett 1965 II: 598-600).

Whipple also wrote that within the last year, many Maricopas had been killed and driven by the Yumas “from their settlements near the Salinas [meaning the Salt River], into closer proximity to the Pimos.” Perhaps this was the episode that led a large band of Maricopas to travel to Ures, the Sonoran capital. There they petitioned the governor for arms to defend themselves from the Yumas “who had, a short time before, made an attack on them and taken away much of their property” (Bartlett to Stuart, Feb. 19, 1852, in U.S. Senate 1853b: 98-99). This



may have marked the end of the settlement established on the Salt in the cholera year, as well as the two Maricopa villages on the north side of the Gila. Whipple added, “the Maricopas would gladly return to their fertile fields upon the American bank of the Gila” if protected from the incursions of the Apaches and Yumas (Bartlett 1965 II: 599). He claimed too that Juan Antonio Llunas, commander-in-chief of the confederated tribes, had been killed in the past year.

Some but not all of these calamities are borne out by the calendar records. One of the abandoned settlements was probably Maas Akimel, mentioned in the Gila Crossing calendar record for 1841-42 (Russell 1908: 40). This would have lain near a lake-like section of the Gila with clear water, called by the same name. As for being driven from the settlements near the Salt River, the Gila Crossing calendar stick had this happening in 1850-51 while one of the Salt River records placed it in 1852 (Hall 1907: 420; Russell 1908: 44-45). In contrast with Whipple’s evaluation that the Maricopas lost that fight, both calendar records made it an unqualified Maricopa victory with 134 Yumas killed. Whipple’s statement about Juan Antonio Llunas being a victim is inaccurate because boundary commissioner Bartlett met Llunas (Culo Azul) in 1852, and John Hayes’ calendar stick recorded the death of Antonio Azul’s father in the winter of 1854-55 (Jones 1961). The variations between these sources illustrate the difficulty in determining the timing and even the nature of some major events.

#### *The U.S.-Mexico Boundary Commission, 1852*

John R. Bartlett was not the first or the last U.S. Commissioner of the U.S.-Mexico Boundary Survey Commission, but his *Personal Narrative* was that body’s most enduring monument. The purpose of this international commission was to define and mark the new border between the United States and Mexico, according to the Treaty of Guadalupe Hidalgo.

This was done in several segments. Between Upper and Baja California, and along the Rio Grande between Texas and Mexico, the survey went smoothly. From the Rio Grande west to the Colorado River, there was a cloud over its work from the beginning when the two commissioners compromised on locating the initial point opposite Doña Ana, New Mexico. The delays and increased expenses that followed caused Bartlett’s own government to eventually reject his work.

As background, Goetzmann’s (1959: 153-206) overview of the border survey is still a classic; more recently The Albuquerque Museum published a well-illustrated catalog to accompany their exhibit “Drawing the Borderline” (Hall 1996). Here we need only to highlight the survey’s early operations and on-the-ground activities before describing what it found among the Pimas and Maricopas. In 1852 part of the international boundary – the middle course of the Gila River – was literally in their front yard.

The boundary survey had both technical and non-technical sides to it. The latter – the controversies spelled out in government documents, Bartlett’s (1965) accounts of the desert Southwest; and the numerous illustrations by artists of the expedition (Hine 1968; Hall 1996) – is by far the best known. This included the

work of the scientific corps, the field scientists sponsored by learned societies. The technical side was the delineation of the border itself by surveyor A.B. Gray, Lieutenant Whipple, Major Emory, and their assistants. Their work has been virtually ignored, although it was the reason for creating the commission.

Bartlett, a Rhode Islander, received his appointment as U.S. Commissioner on June 15, 1850, and by early August the 100+ staff members and their military escort sailed for Texas. After landing at Indianola they traveled overland to El Paso, where Bartlett and his Mexican counterpart, General Pedro García Condé, met for the first time on December 3, 1850. They set the initial point near the Rio Grande opposite Doña Ana, New Mexico, from whence the line was to run west for three degrees of longitude, then north to the Gila River and down the Gila to its junction with the Colorado River. This 500-mile stretch between the Rio Grande and the Colorado lay across little known and entirely unsurveyed lands.

On the technical side, Whipple did much of the work. Rather than have men start at one end and run lines of sight, establish distances, and place mileposts along a continuous boundary line, he made observations at a number of astronomical and meteorological stations. This was akin to establishing GPS locations today. There were forty-six such stations along the Gila alone; others he set up between the Gila and the Rio Grande. Whipple and his assistants took elaborate observations to establish the true position of each station, but none of these were tied directly to another. Apparently not more than half a dozen were ever monumented on the ground (Bartlett to Whipple, Sept. 29, 1852, in U.S. Senate 1853b: 77-78; Bartlett 1965 II: 597-602).

### *The Boundary Commission Along the Gila*

In the meantime, the official surveyor of the commission, a civil engineer named A.B. Gray, did run a continuous “chain and compass” survey from just below the San Carlos branch of the Gila down the latter to within sixty miles of its junction with the Colorado. He had to stop there for lack of money. Gray and Whipple both worked out of the Pima Villages and probably traveled in company during the two and one-half months of their survey, but they did not mention one another in their reports. Bartlett made a point that “This survey [Gray’s] was independent of that made by Lieut. Whipple” (Bartlett 1965 I: unpaginated Introduction; II: 255, 543). Gray’s notes, if these survive; Whipple’s “Plat and topographic sketches of survey of the Rio Gila, numbered from 1 to 51;” and the “... Copy of the field-book containing a plotted map of that portion of the river lately surveyed,” have not been used in recent years and might be well worth examination (Bartlett to Stuart, May 17, July 9, 1852, in U.S. Senate 1853b: 120-122, 138).

A splendid new map of the boundary area was made, using the technical data, and published with Gray’s report by the U.S. Senate (1855). This showed good detail and was accurately drafted at a scale of only ½ inch = 15 miles, or about 1:1,900,800. The text of Gray’s fifty-page report was largely taken up with the controversy over the initial point location.

Neither Bartlett in his instructions to Whipple regarding monuments, nor Whipple in his report, mentioned the placing of a boundary marker at the junction of the Salt and Gila rivers. Yet the 1855 map clearly showed one there, at what is now known as Monument or Meridian Hill. A decade later, following the creation of Arizona Territory, the Commissioner of the General Land Office ordered the Surveyor General of New Mexico to initiate surveying operations in Arizona by using that monument as the Initial Point to establish an east-west baseline and a Gila & Salt River Meridian (Wilson to Clark, Sept. 11, 1866, in Arizona Dept. of Library, Archives & Public Records).

People were engaged in nearly continuous coming and going while Bartlett had charge of the boundary survey, which makes it difficult now to track all of the parties. Major Emory arrived at El Paso in late November 1851, to replace both A.B. Gray and Colonel James D. Graham and serve as chief astronomer and surveyor. He brought with him “a small corps of experts” to add to those already present, C.C. Parry probably being among the newcomers. Emory referred to him as botanist to the boundary commission; Parry signed himself as C.C. Parry, M.D., Botanist and Geologist U.S.B.C. (Goetzmann 1959: 182, 199; Parry 1857: 23).

Parry’s report included a geological reconnaissance along the Gila River made in early March 1852, several months before Commissioner Bartlett arrived there in late June. Parry noted the sloping terraces to either side of the valley, which supported a shrubby growth of mesquite and whereupon the Indians usually constructed their dwellings. These overlooked the lower-lying alluvial bottomlands and cultivated fields. He estimated the amount of land capable of cultivation as “quite extensive,” a belt on each side of the [Gila] river often several miles in width and extending east-west for twenty miles or more. In early March the river itself measured about forty yards in width, with an average depth of two feet. The riverbank at this season was set off with lagoons and marshes, “and everywhere bordered with a dense willow growth” (Parry 1857: 20).

#### *The Boundary Commission at the Pima Villages*

The Pimas were obviously irrigating at this time because Parry claimed that “the extensive irrigating ditches drawn from above” had considerably diminished the river’s volume. To draw off the river water, dams or weirs were “constructed of old willow trunks and snags; these, in the course of time, entangling the loose soil and sediment borne down by the river, furnish a bed for the willow growth, thus becoming more permanent with age” (Parry 1857: 20). As earlier writers pointed out, the river could also wash away these structures.

By April, Parry had also collected the first word list in the Gila River Piman dialect, which he submitted to Emory, who enclosed it to Henry Rowe Schoolcraft. Schoolcraft promptly published it in Part III of his multi-volume *Indian Tribes of the United States*, together with a synopsis of the Pimas drawn from the writings of Manje, Nentvig, Font, Garcés, and Captain A.R. Johnston (Schoolcraft 1853: 296-306, 460-462). Readers in the United States already knew about the Pimas from the reconnaissance reports by Emory and Johnston; now

they had accounts of these people as much as a century and a half earlier in time, from Spanish authorities.

As for Bartlett, he considered himself a scientist, ethnologist and philologist as well as an explorer. He clearly had little understanding of the technical work, which lay in the hands of the Corps of Topographical Engineers, represented by Whipple and Emory. This left Bartlett free to wander across the Southwest, northern Mexico and even California, pursuing his inquiries wherever opportunities allowed. There were plenty of these, and much of what he learned was incorporated into his *Personal Narrative*, structured as a travelogue. When he was dismissed as boundary commissioner in 1853, he rushed this report into print the next year, with minimal illustrations, to help justify his actions. His priority in publication may have had a great deal to do with the overwhelmingly favorable reception that the book received, which helped to absolve him of responsibility for the financial and other difficulties the commission experienced.

Bartlett first met people from the middle Gila far to the south, when fifty Cocomarcopas arrived at Ures, Sonora, late in December 1851, to petition the governor for firearms to defend themselves against the Yumas and Apaches. He managed to collect a vocabulary and even recorded the names of three who claimed to be “captains” or chiefs – She-pan-wa-ma-ki, Hum-su-il-lya, and Che-ma-dul-ka-keo (Bartlett 1965 I: 451-453). Bartlett’s expedition then continued on its way, and it was the end of June in 1852 before his entourage finally made its way up the Gila. He spent some thirteen days among the Maricopas and Pimas while waiting for Whipple to complete his observations along the lower Gila.

Much of what John Bartlett wrote about them was similar to what the argonauts of 1849 and diarists with the Army of the West had said, and there is no need to repeat these descriptions. But he also saw other things and made more specific observations, perhaps because of his demonstrated interest in ethnology, or because he had the leisure to do so. On the other hand, his narrative (and related correspondence) lacks any mention of cholera in 1851 or 1852; of the names or numbers of the villages; or any distance figures that might indicate whether the Pima settlements were expanding or contracting, as well as where they lay along the river.

Since Bartlett and his company approached from the west, their initial contact came at what was later called Maricopa Wells, with people from “the first Coco-Maricopa Village” or “the nearest village of the Coco-Maricopas,” distant a mile or more from the commission’s own camp (Bartlett 1965 II: 210, 233). This village would have been the original settlement of Hueso Parado, which probably lay towards the northwest. There is an implication that other Maricopa towns existed, but when Bartlett’s party crossed the dry bed of the Gila and continued downstream along the north side on July 3d, none were mentioned. Perhaps the villagers whom Whipple said were driven south in 1851 relocated along the south side of the Gila, either up or downstream from Hueso Parado. Whipple and Bartlett both made the point that there was little good agricultural land along the north or American side of the Gila River (Ibid. 233, 599).

Bartlett’s description of the Pimas’ *kiik* or houses was similar to Cooke’s; these varied from five to seven feet in height and measured from fifteen to

twenty-five feet in diameter. When Cooke was there in December these had a fire inside; Bartlett in early July said that their cooking was done out of doors (Ibid. 233-234). He was also the only one since Manje and Lieutenant Martín in 1697-98 to notice the numbers of houses:

“The villages consist of groups of from twenty to fifty habitations, surrounded by gardens and cultivated fields, intersected in every direction by acequias” (Ibid. 233).

No one until Bartlett had ever counted or estimated the number of houses in a village along the middle Gila; the earlier figures had all been for Sobaipuri communities in the San Pedro Valley and on the upper Santa Cruz. The average there was seventy-five to seventy-seven houses per named village with a minimum number of twenty. While the minimum remained the same, it appears that the average number had shrunk. To Bartlett's eye, there were no distinguishing characters in Pima vs. Maricopa villages. Their settlements and cultivated fields occupied the bottomlands for about fifteen miles along the south side of the Gila and from two to four miles in width, with the Pimas living in the eastern portion (Ibid. 232, 261-262).

“From information obtained from the chiefs, and the Mexican officers in Sonora,” the commissioner placed the number of Pimas and Maricopas at not more than 2,000, of whom two-thirds were Pimas (Ibid. 263). This was the same as the estimates by Captain Johnston and Dr. Griffin in 1846 and by Asa B. Clarke in 1849. Others at the time gave higher figures. While the recent measles and cholera epidemics had no doubt left many deaths, this number seems very low when compared with the rather consistent estimates from earlier times and the figures from censuses taken in 1858, 1859 and 1860. These tabulated the Pima and Maricopa population at between 3714 and 4635 individuals, the Maricopas being about 11 percent of the total (Hackenberg 1974a I: 296, 306-307, 331; also Chapters 8-9).

Most of Bartlett's ethnographic information came through four or five Maricopas, the only persons who spoke Spanish at the Pima Villages. Their statements that the constant attacks of the Yumas and Apaches had nearly annihilated their own people may have been essentially correct. Only ten members of the *Cawinas* (Kohuanas) remained in 1852; they lived among the Pimas and Maricopas, where they had sought refuge. A claim that the Cocomaricopas had taken up residence immediately adjoining the Pimas about thirty years ago could also be quite accurate, considering that the earliest known reference to the Cocomaricopa village of Hueso Parado is from 1823 (Bartlett 1965 II: 213, 219, 221, 251-252, 256, 262).

The commissioner also looked for differences between the Pimas and Cocomaricopas. The most obvious ones were their languages, which were totally different, and the Pima practice of burying their dead while the Cocomaricopas burned theirs. As individuals he was unable to distinguish one from another, except by some slight difference in the method of wearing their hair. He had a

long talk with a crippled Maricopa informant on the manners and customs of his people, and it was probably from him that he learned the Cocomaricopas

“... came hither for protection, and formed an alliance, offensive and defensive, with the Pimos. They found the latter possessing the arts of weaving, of building more comfortable dwellings, of making better pottery, enjoying a more peaceful mode of life, than that to which they had been accustomed. These arts and habits the Maricopas gradually adopted” (Ibid. 221, 261-262).

These arts and habits included agriculture, about which Bartlett did not expand much upon what was already known. The whole valley or bottomland was intersected by irrigating canals from the Gila, “by which they are enabled to control the waters, and raise the most luxuriant crops.” As for techniques, he said only that their mode of irrigation was the same as that practiced in various parts of Mexico. Fields were fenced with crooked stakes wattled with brush; nothing was said about the size of these fields or what grew in them, except for some large patches of wheat a long distance from any village. In his opinion, the difference in agriculture along the middle Gila from that of other tribes was a matter of application:

“... I may be safe in saying, that the system is more extensively and methodically practiced than elsewhere. ...the Pimos and Cocomaricopas have made agriculture more of a system. Their lands are better irrigated, their crops are larger, and the flour which they make from their wheat and maize is quite as good as the Mexicans make, except in their grist-mills” (Ibid. 232-233, 262-263).

Another factor in this productivity was the steel hoes and axes, harrows and occasional long-handled spade that the Pimas and Maricopas obtained from the Mexicans (Ibid. 223). Although Bartlett would not have known it, his was the first reference to these. Their use probably dated back no more than a few decades.

Bartlett added a few direct observations to his interesting implication that the Pimas made better pottery when they and the Cocomaricopas came together. Water, he said, was invariably brought by women in large earthen vessels that rested upon a small cushion placed on their heads. Some of these vessels held six gallons. Pottery jars or small vases held the ‘molasses’ extracted from pitahaya (saguaro) fruit and also the finely ground flour made from mesquite beans (Ibid. 217-218, 224). The commissioner described this pottery and even illustrated a few examples:

“The pottery made by these tribes is all red or dark brown, the latter a blending of black and red. The articles made are very limited, though, perhaps, quite sufficient for their wants. In fact,

they are the same as those made and in use by the Mexicans. They consist of ollas, or vases, of every size, the largest holding about two pailfulls (*sic*), and the smallest half a pint; jars with small apertures, resembling bottles; basins of different sizes and forms, from that of a milk-pan to a saucer; and oblong vessels of small dimensions used as dippers. All these vessels are painted or ornamented with black lines arranged in geometrical figures, and of a character resembling those on the head-bands” (Ibid. 226-227).

When the Gileños began to receive brass kettles later in this decade as part of their annuity goods, much of the pottery making probably stopped.

The headbands spoken of were three to four inches in width and woven from locally grown cotton. Nearly all of the men wore these, “gracefully put on in several folds, with the braided ends hanging down to their shoulders.” They might also be worn as a belt or girdle around the waist. These white bands or sashes were decorated with a variety of angular figures that resembled those on the ancient pottery found among the ruins of the country. The figures were made of wool, probably from yarn or unraveled fabrics, in quite brilliant colors of red, blue and buff (Ibid. 224, 226, 229). One photograph of Antonio Azul, said to date from 1872, shows him wearing such a headband (Dobyns 1989: 59).

Their blankets and other cloths were of various sizes and textures, woven of white cotton, lacking any ornamentation save a narrow selvage of buff. The smaller ones were worn by the women as skirts and sometimes fastened with a belt. The painted blanket-dresses of the Sobaipuris were not even a memory. A few of the men had native blankets of large size that they wore over their shoulders in the manner of a *serape*. By this time pantaloons and shirts, especially of red flannel, were much desired and men acquired these in trade for foodstuffs (Bartlett 1965 II: 224, 228-240).

The commissioner described other aspects of personal appearance and local customs and gave the first accounts of ruins in the Salt River Valley, though it is not possible to say to which sites his descriptions applied. Bartlett visited Casa Grande on July 12<sup>th</sup>, the same day that Lieutenant Whipple finished his notes and calculations. On the following day everyone set off towards Tucson.

### *Trail Drives to California*

As early as 1849, Texas cattlemen in search of new markets began driving herds to California. Sheep drovers soon followed them. At first their stock brought fabulous prices; in 1849 sheep sold for as much as \$25 per head in California, while beef cattle were worth \$300 to \$500! The demand for meat and premium prices provided a genuinely lucrative market. In 1853, the same year the Santa Fe newspaper claimed the grazing lands of New Mexico had been depleted without meeting the demand, Kit Carson drove a herd of 6,500 sheep to California over the central route. He was pleased with the \$5.50 a head he received there (Quaife 1935: 146-147; McCall 1968: 53-54). Eventually the sheep and cattle raisers managed to glut the market; sheep declined to \$5 a head

by 1854 and cattle to as low as \$6 - \$7 a head in 1855 (Wagoner 1952: 30; Haley 1979: 17-18; Frazer 1983: 52).

Thousands of both sheep and longhorn cattle moved west along the Gila route. Bartlett encountered one herd of 14,000 sheep at Tucson, on their way to San Francisco, in July of 1852 (Bartlett 1965 II: 293). Five months later, F.X. Aubrey left Santa Fe with nearly 5,000 sheep and took the southern route for a second time, in spite of his own warnings about the 100 miles without wood or water in crossing the Colorado desert. The following November a St. Louis paper estimated 50,000 sheep would start that month for California by way of the Gila route alone (Wyman 1932: 6-7; Bieber and Bender 1974: 376-377). That summer, and again in 1860, Francisco Perea and other owners drove almost 50,000 sheep from New Mexico to the markets of California over the Gila route (Allison 1913: 216-217).

Large herds of cattle were also driven west along the Gila. The Pimas and Maricopas are said to have had some horses and mules at this time but few cattle or oxen and no sheep. Within the next few years these herds and flocks would increase, in part from animals lost, strayed, or traded along the way. One drover estimated that in 1854 alone some 3,000 head of cattle were lost along the trails south of the Gila, mostly to Indians (Wagoner 1952: 30).

At least two cattlemen traveled through the Pima Villages within days of one another, in late September of 1854. Each left a journal. One made only brief comments (Haley 1979: 82), but the other diarist, James Bell, was more observant (Haley 1932). He gave an account of how the Pimas prepared their mesquite bread that differed from Russell's (1908: 75). According to Bell,

“Their food is the Mezquite Bean; prepared by pounding in a mortar made in the earth, and with a Woden [*sic*] pestle. The pod alone is made into meal, the bean being too hard and not easily broken. When sufficiently beaten it looks something like cob meal. This is put into a water tight basket, water poured on, several times, before it is fit for bread – the liquor is like new metheglin [“a beverage usually made of fermented honey and water; mead” – Webster's 1976: 533] and used as a drink. The pulp is then taken in the hand and pressed until the water is all out, put into a small round bottomed vessel, again p[r]essed down and allowed to remain to harden. Now it is ready to eat. It has a honey sweet taste; and would be palatable but for their dirty manner of making it” (Haley 1932: 49-50).

This method of preparing mesquite agreed exactly, even to using a hole dug into the earth as a mortar, with what Cabeza de Vaca witnessed in south Texas more than 300 years earlier (Bandelier 1972: 105).

Bell's other observations generally paralleled what earlier travelers had said, though prices had apparently stabilized at 25¢ for any size of melon. His comment that “The Pemos can muster about two thousand warriors, of as fine looking men as any southern tribe;” was provocative in that it leads one to wonder



if the population estimates by Bartlett and others may actually have been the number of warriors, rather than the population total. The censuses for 1858 and 1859 reported 1,350 to 1,500 Pima and Maricopa fighting men (Haley 1932: 50-51; Hackenberg 1974a I: 296, 306-307).

The trail drives in any event continued until the Civil War, and afterwards resumed until about 1870 (Wagoner 1952: 30-36; Haley 1979: 19). By that time good prices were being realized in Arizona and some drives ended there.

### *The Mexican Boundary Survey of the Middle 1850's*

The middle 1850's saw no letup in traffic along the middle Gila, although sheep and cattle drives diminished and the '49ers were only a memory. The Gadsden Purchase or Treaty, signed on December 30, 1853, added some 29,670 square miles of land south of the Gila River to the United States, and shifted the U.S.-Mexico boundary between the Colorado and Rio Grande rivers south to its present location. The boundary survey continued under the direction of Bartlett's successor, Major William H. Emory, and concluded its work in 1855. One year later the last formalities were concluded and the Pimas, Maricopas, and most of the Tohono O'odham became residents of the United States (Goetzmann 1959: 195-197; Wagoner 1975: 294; Wilson 1995: 74).

The final *Report on the United States and Mexican Boundary Survey*, published in three large volumes, was a scientific and cartographic landmark, though somewhat repetitious in content and chaotically organized. It gave no clear picture of the survey itself, and the contributors added only a few new details about Native Americans who lived in the area (Goetzmann 1959: 197-205). Lieutenant Nathaniel Michler had charge of the field surveyors.

In May 1855 he led them up the Gila. Michler had a viameter and with this he recorded that it was indeed forty miles across the "forty-mile desert" between Gila Bend and Maricopa Wells, and fifteen miles from the latter point to the Pima village of Culo Azul. There they purchased a large supply of corn, and an old Pima showed the lieutenant their domains from a little hillock used as a lookout near the village – no doubt the Pimo Lookout Rock mentioned before. Fourteen miles further up the river and the road turned south towards Tucson (Michler 1857: 117, 132).

Michler commented favorably on the industriousness of the Pimas and Maricopas. They were great warriors, good farmers, and an all-around wealthy class of Indians with fine horses and mules, fat oxen and milk cows, pigs and poultry. From his account, it appears that their skills at animal husbandry had improved substantially in the previous few years. Many miles of acequias irrigated their lands, and the rich fields were filled with ripening wheat, cotton, sugar, peas and corn. The peas were presumably black-eyed or garden peas (Rea 1997: 328-329, 343-344).

While no one else seems to have mentioned “sugar” in the middle Gila Valley at this time, Emory had noted sugar cane among the Yumas. The Yumas reportedly grew sugar cane ninety years later as well (Spier 1978: 64; Castetter and Bell 1951: 88, 90). In the case of both the Pimas and the Yumas, this would have been sweet sorghum (Rea 1997: 334-336). The 1,950 gallons of sorghum molasses tabulated in the 1860 Census were actually saguaro syrup (Table 2; U.S. Census 1864 II: 179). One observer mentioned sorghum specifically for the Pimas in 1877 (U.S. Senate 1965a: 45), while newspapers listed both sugar cane and sorghum as grown by American farmers in the Salt and Gila River Valleys (*The Weekly Arizona Miner*, Aug. 27, 1870, p. 2 cols. 1-2; *San Diego Union*, Nov. 21, 1872, p. 3 col. 6).

As of 1855, no one in Michler’s party had to trade the shirt off their back for food or forage. A money economy was now firmly in place:

“From the large emigration passing through they have learned the value of American coin, and you can use it in the purchase of anything” (Michler 1857: 117).

The lieutenant also mentioned a new source of anxiety – land titles:

“They were anxious to know if their rights and titles to lands would be respected by our government, upon learning that their country had become part of the United States” (Ibid.).

Technically this part of Arizona became part of the United States only on June 25, 1856, but Antonio Azul and six other chiefs of the Gila Pimas and Maricopas accompanied Michler nearly 200 miles to his meeting with Emory at Los Nogales, late in June. Emory in his published account said he assured the delegation that all their rights and privileges under Mexico were guaranteed to them by the United States, and a land title good under the Mexican government was good under the United States (Emory 1857: 95-96). The major wrote up a statement to this effect, which everyone signed, and identified the Pima and Maricopa signatories (all with the honorific of Captain) as follows:

Antonio Azul,	alias Che-T-A-Ca-Moose	Head chief of the Pimas
Francisco Luke,	“ See-Cool-Mat-Hais	Coco Maricopa chief
Malai		Coco Maricopa chief
Shalan,	“ Ki-Mah	A chief of the Gila Pimas
Ojo de Burro,	“ Wah-La-Whoop-Ka	War-chief of the Pimas
Tabaquero	“ Vir-Ah-Ka-Ta	A chief of the Gila Pimas
La Boca de Queja,	“ Ki-Ho-Chin-Ko	A chief of the Gila Pimas
José Victoriano Lucas		Head chief of the San Xavier Pimas
José Antonio		Chief of the San Xavier Pimas

In this statement Major Emory was on solid ground, but in the narrative of his report he seemed less certain:

“I hope the subject will soon attract the attention of Congress, as it has done that of the Executive, and that some legislation will be effected securing these people in their rights” (Emory 1857: 96).

Emory also qualified what he had told the Pimas in a letter to the commander of the Military Department of New Mexico, and in this he acknowledged the importance of the Pimas and Maricopas as auxiliaries:

“The Pimo Indians with their neighbors & friends the Maricopas, mustering it is said, two thousand warriors & at present acting under the authority of the Mexican Government, as the advanced guard of the Mexican outposts, visited my camp and manifested much anxiety to know if the transfer of Territory would affect the grant of lands ceded them by Mexico, which they now cultivate with so much success.”

“I did not hesitate to tell them their authority remained intact for the present, and that it was my impression titles under Mexico were secured them by the Treaty. I have known these Indians since 1846 and recommend them to the authorities as worthy at present of all confidence. They are important auxiliaries in the defense of the new frontier” (Emory to Garland, Aug. 11, 1855).

Emory may have assumed that the Pimas and Maricopas of the middle Gila were the beneficiaries of a Spanish or Mexican land grant. A few years later Sylvester Mowry would make the same claim. What, if anything, this was based upon is not now known, as neither Emory nor Mowry offered a further explanation. In 1807 a land grant had been made to the Pimas and Papagos at Tumacacori, on the upper Rio Santa Cruz (Kessell 1976: 206-214), but on the Gila there was no active or impending conflict with Spanish settlers or miners over lands, and no need for a grant there. In 1869 Antonio Azul said "I do not know anything about a grant. The Mexicans never had any land to give us" (Grossmann to Andrews, October 31, 1869).

Before they spoke with either Michler or Emory, a delegation of Gila Pimas had arrived in Santa Cruz to see Ayudante Inspector Bernabé Gómez to ask what would happen to them if their territory became part of the United States? Gómez wrote to the governor and commandant general of Sonora. The general could not say. Nothing could be determined until the new boundary was surveyed. He greatly appreciated their service to the Mexican nation (Kessell 1976: 317). In a roundabout way, he was advising them to ask the Americans. The nature of his response leaves it virtually certain that the Gila River Pimas and Maricopas had never been the recipients of a land grant. Without such a grant,

their legal claim to the lands they lived on was no better than that of any other citizen.

Administratively, the Mexican Boundary Survey was entirely separate from the Pacific Railroad Surveys, but the two are easily confused. Parties from both criss-crossed Arizona at the same time and the Corps of Topographical Engineers carried out both projects. Lieutenant Whipple was assigned to both projects (not at the same time) while Major Emory gave enthusiastic support to construction of a railroad along the 32d parallel. The scientific data collected during the two surveys had little to do with either delineating a boundary or determining routes for a railroad.

### *The Pacific Railroad Surveys*

Almost ten months before the Gadsden Purchase was signed, Congress passed a Pacific Railroad Surveys bill. This directed the Secretary of War to conduct a reconnaissance along all practicable railroad routes across the trans-Mississippi west to the Pacific Ocean, weigh their respective merits, and submit a report. The result was something quite different; a determination that several very practicable routes existed, and a vast encyclopedia of information about the western United States, all presented in thirteen oversized volumes that one historian characterized as

“.... one of the most impressive publications of the time [and] a little like the country they were intended to describe: trackless, forbidding, and often nearly incomprehensible” (Goetzmann 1959: 274-275, 295, 313, 336).

Nonetheless, the findings in several fields of science were immensely valuable.

Initially, four main parties were ordered into the field at the same time, all under the supervision of the Corps of Topographical Engineers. Lieutenant Whipple had charge of the one that operated along the 35<sup>th</sup> parallel, from Fort Smith via Albuquerque and Zuni to California. Most of his group assembled at Fort Smith, Arkansas, and took the field in July 1853 (Ibid: 275, 287-289). Whipple’s “Report Upon the Indian Tribes” had more to say about the Pimas and Maricopas, scattered through Part III in Volume 3 of the *Pacific Railroad Reports*, than did reports from the investigation along the 32d parallel or Gila River route. This was in spite of the latter receiving most of the attention and its selection having been almost a foregone conclusion (Ibid. 302-303, 331-332).

Lieutenant John G. Parke, who led the 32d parallel survey, received his orders on December 20, 1853 because it was necessary to obtain permission from the President of Mexico to extend this survey across what was still Mexican territory. He was already in the field in California and by mid-February 1854 his company, numbering fifty-six souls, reached the Pima and Maricopa villages. They remained there only a day to rest and recruit their animals (Parke 1855: 3-5; Goetzmann 1959: 289-291).

Apart from the need to stop Apache depredations, Parke showed little interest in the natives along the 32d parallel route (Parke 1855: 3-5; 1857: 35-37). His geologist, Thomas Antisell, offered a more sophisticated appraisal of the geology and geography of the middle Gila country than did his predecessor, Dr. Parry. The flats on either side of the Gila above its junction with the Salt River were "broad and well supplied with coarse grass." Will C. Barnes recalled that as recently as c. 1900, Sacaton grass, *Sporobolus wrightii*, extended as heavy stands from the old stage station at Maricopa Wells down the Gila as far as Gila Bend. Big galleta grass, *Hilaria rigida*, grew in the mountains and foothills (Lister 1936: 5). Antisell described the Maricopa Wells as several holes dug seven feet down, each being a small body of water resting on yellow clay and slightly saline, the water rising to within 2½ feet of the surface. The wells, and the vegetation, obviously tapped the local water table.

The soil of the Pimas' agricultural lands was alluvial, a fine sandy (granitic) clay in Antisell's terminology. Each of their fenced fields measured "scarcely 150 feet each way" while an acequia "runs around half a dozen fields, giving off branches to each." Corn, cotton, pumpkins, melons and squash were their chief crops. Only a small portion of the valley along the riverbank was under cultivation, the river here having much less volume than below its juncture with the Salt. Although the valley farther away from the stream was susceptible of being made productive, "More care and economy in the use of water would be necessary under a greater breadth of cultivation" (Antisell 1856: 137).

His estimate of the average field size at about one-half acre was virtually the same as that given by Emory in 1846 (Calvin 1951: 133). The indication of subordinate ditches served by a main canal or acequia corresponded to the description by '49er Asa Clarke, who said that nearly the whole of the Gila was drawn off by acequias for irrigating the land, "... which is laid out in little squares, with sluices between, to admit the water from the zequias" (Clarke 1988: 73).

Taken together, the implication is that the Pimas were probably following the Mexican system of farming in checks or check beds (Wilson 1988: 346-348) but without terracing the fields, which made necessary the drainage ditches that Emory observed in order to remove the excess water. This reconstruction would be consistent with Antisell's suggestion that the use of water may have been excessive, which would actually have been necessary to flush away the salts and avoid any buildup of these in the fields.

The only truly original part in Whipple's accounts was the brief Pima word list contributed by Whipple himself (Whipple et. al. 1855: 94). Short sections on the Pimas and Coccomaricopas, drawn from Emory, Captain A.R. Johnson, John R. Bartlett and other writers, focused on the collection of linguistic materials (Ibid. 94, 101-102). His Chapter 6 on the condition of New Mexico (and Arizona) natives, drawn from the writings of Fray Marcos de Niza, Francisco Vásques de Coronado, and Fernando Alarçon, would have been new to American readers although much of this chapter was taken from a rare, early publication, Volume 3 of Richard Hakluyt's *The Principal Navigations, Voyages, Traffiques and Discoveries of the English Nation* (Hakluyt 1600).

More recently Henry Wagner (1967: 109-115) gave a brief history of how Emory, Schoolcraft, and other scholars gradually made nineteenth century American readers aware of these sixteenth century Spanish narratives. An unremarked step in this unfolding story was Whipple's Chapter 6, and some of his footnoted comments are still interesting (Whipple et al 1855: 106-107). An additional section on the Pimas, Papagos and Cocomaricopas derived from one of Father Garcés diaries, as copied by don José Cortez and recopied in a 1799 version of his manuscript (Whipple et. al. 1855: 123). Elizabeth John has since published the original document (Cortés 1989).

Whipple's long essay on the Indian tribes was actually a lost opportunity, because it consisted mostly of a compilation from older authorities rather than an account of what members of the Pacific Railroad Surveys saw for themselves (Goetzmann 1959: 331-333). Whipple, himself a veteran of the original boundary survey, probably considered Bartlett's "very complete and graphic account" of the Cocomaricopas and Pimas to be all that needed to be said about them (Whipple et. al. 1855: 94, 102).

With formal acquisition of their homeland by the United States in 1856, life changed gradually for the Pimas and Maricopas during the first years. It would be almost twenty-five years before a railroad was actually built, but the people of the middle Gila valley were now relatively well known, thanks to Emory's writings and the reports by Schoolcraft and the Pacific Railroad Surveys. The time when only passing travelers would write about them was at an end. In 1857, Americans from the east would begin living next to them.

## **Chapter VIII**

### **NEW PEOPLE ON THE MIDDLE GILA, 1857-1859**

Within months after the Gadsden Purchase lands became part of the United States, the U.S. began to extend control and develop lines of communication across the new territory between the eastern states and California. Major Enoch Steen and four companies of the 1<sup>st</sup> Dragoons arrived in November 1856 and set up camp near Calabasas on the upper Santa Cruz, moving to a site on Sonoita Creek (Fort Buchanan) the next year. Indians at the time were quiet.

Present-day southern Arizona remained part of New Mexico Territory until the end of 1863. Governor David Meriwether, in his role as Superintendent of Indian Affairs, estimated in 1856 that the Gadsden treaty had added about 5,000 Indians to that superintendency. A large portion of these people he referred to as Pueblo Indians (Ann. Rpt. Comm. Ind. Affs. 1856: 183-184; Wilson 1995: 74, 86). Other documents in the late 1850's also used this terminology, which included the Pimas, Maricopas, Tohono O'odham at San Xavier, and the so-called 'tame' Apaches at Tucson, all of whom farmed and lived in fixed habitations. The Governor asked that an additional agent or sub-agent be appointed for those Pueblos near Tucson.

### *Agent John Walker Arrives*

In a remarkably short time, his wish was granted. A week after President James Buchanan's inauguration, he appointed John Walker as Indian Agent in New Mexico for a four-year term from March 12, 1857 (John Walker appointment file, 1857). Walker, born in Kentucky in 1800 but currently of Rogersville in eastern Tennessee, was in reduced circumstances at the time and needed the position in order to support his wife and five children. Although some documents referred to him as Colonel Walker, there is no record of his having served in the military. He arrived at Santa Fe on June 22, 1857, and a few days later was placed in charge of the Indians in the neighborhood of Tucson. During three and one-half years of service, his Tucson Agency was sometimes referred to as the Indians of the Gadsden Purchase (Casey to Moses Kelly, March 30, 1857; Denver to Collins, May 14, 1857; Collins to Denver, June 26, 1857; Walker to Thompson, June 26, 1857; Ann. Rpt. Comm. Ind. Affs. 1857: 277, 287-296; Walker to Dear Sam, October 17, 1859; Lockwood n.d.).

The new Superintendent of Indian Affairs, James L. Collins, wrote out a five and one-half page set of instructions that covered Agent Walker's responsibilities. He would have charge of the Pueblo Indians within his jurisdiction as well as some portion of the "wild tribes" of the Apaches, if he should meet any. His most important duties would be to gain the confidence of the Indians and try to prevent the Apaches from depredating into Mexico (Collins to Walker, July 7, 1857). Walker left Santa Fe on July 8<sup>th</sup> and arrived at newly established Fort Buchanan sometime in August. He lay there sick for the next four months and in his own words accomplished nothing except to lose his instructions and vouchers. The post commander, Major Steen, may have acted as an agent during Walker's illness (Collins to Denver, July 13, 1857; Walker to Collins, September 1, 1857; Walker to Dear Sam, October 17, 1859).

### *Stage Lines and Wagon Roads*

The same day that Agent Walker rode into Santa Fe, the U.S. Post Office Department awarded James E. Birch of the California Stage Company a contract to carry the mail between San Antonio, Texas, and San Diego, California. For \$149,800 a year, Birch agreed to commence and run a semimonthly service over a distance of almost 1,500 miles, for four years. The runs were to begin on July 1, 1857 (Austerman 1985: 90; Wilson 1995: 80).

This was essentially a consolation prize to Birch for not receiving the award to carry a semiweekly mail from St. Louis or Memphis to San Francisco. John Butterfield and his associates received this contract, to run for six years, on September 16, 1857. They had a year in which to begin operations, which were subsidized to the amount of \$600,000 a year (Conkling and Conkling 1947 I: 112-118). Both lines were to follow a southern route, crossing the Southwest from El Paso to Fort Yuma, via Tucson and the Pima Villages.

In the meantime, California's U.S. senators were less than pleased with the outcome of the Pacific Railroad Surveys and pushed through Congress a bill

to create a Pacific Wagon Road Office under the Department of the Interior. Since the main purpose of this Act was to provide roads for California-bound emigrants, the wagon road construction was not coordinated with the new mail route contracts. Nonetheless, the Leach or El Paso and Fort Yuma Wagon Road did largely coincide with the lines followed by the mail and express companies across southern New Mexico. It deviated at the western base of the Peloncillo Mountains and took a more northerly route until the road rejoined the old Gila route at the Pima Villages. Wagon road construction began in late October 1857, and this work was completed by October 1, 1858, just in time for the commencement of the Butterfield Overland Mail. What, if anything, was done at the Pima Villages and Maricopa Wells in the way of roadwork was not stated. In its inaugural issue *The Weekly Arizonian* indicated that very little was done at all (*The Weekly Arizonian*, March 3, 1859, p. 1 col. 3; Conkling and Conkling 1947 II: 130-131; Goetzmann 1959: 342-346; Campbell 1969: 77-93).

The Pima Villages had changed very little when a traveler from Texas, John Reid, passed there with his party in April 1857. He understood that 1,500 warriors “acted as a kind of standing army” and found Pima settlements on both sides of the Gila, “nearly connecting with the Maricopa village on the left bank below.” The people were friendly, and the older men sought an opinion as to whether the United States would confirm the title to their lands. As for the effectiveness of this standing army,

“They .... have exterminated scores of our enemies, the Apaches; as their *ears* strung (as trophies) before their huts show” (Reid 1935: 228-230).

On an entirely different note, when more than halfway across the “forty-mile desert” towards Gila Bend, Reid offered a specific identification that the most abundant grass (all grasses were scarce) was “guy-et-ta,” which grew in bunches, two feet high and as many in diameter. His description suggests that this was probably Big Galleta, *Hilaria rigida*.

With John Walker still on his way to Tucson and the wagon road crew en route to El Paso, James Birch and his superintendents were trying to get his San Antonio and San Diego Mail Line running. It got off to a shaky start with the first westbound mails leaving San Antonio on July 9 and 24, 1857, and arriving together in San Diego on August 31. A small party of riders left San Diego on August 9 with the first eastbound mail. In the early months of operation, the line had no stations and relied upon relays of riders as well as on whatever coaches and wagons were at hand (Mahon and Kielman 1957; Austerman 1985: 90-104; Wilson 1995: 80).

### *Massacre on the Gila*

One of the principal rendezvous for the hand-off of mail between east- and westbound couriers was Maricopa Wells. It was there that general superintendent Isaiah Woods, leading a supply train to San Diego, became a nervous spectator at



a major battle between the Quechans (Yumas) and Mohaves on one side, and the Maricopas with their Pima allies on the other. The fighting began just before daylight on September 1, 1857, and may have been over in half an hour. Woods gave an eyewitness account, and a series of white men and Indians left secondary descriptions. More recently, two scholars collected every known reference to this affair and used these as a basis for studying the causes and nature of warfare (Kroeber and Fontana 1986). Because this was a large-scale battle with high casualties and the last one fought between ancient enemies on the middle Gila, both Woods' description and the Pima tradition from Owl's Ear's calendar stick are worth repeating.

Woods, plagued with equipment breakdowns, had camped on the banks of the Gila about midnight on August 31. Then, from his journal,

*“September 1. – Off at daylight this morning; reached the first village of the Pimos about sunrise, and there I bought the corn necessary for our mules, .... Camped for breakfast at the Maricopa wells, which we have since selected as the site for our station; remained at the wells until 3 p.m. waiting for our agent to come up whom I yesterday left behind on the road. Finally he came along, and we prepared for a start.”*

*“While camping at the wells I was witness to the largest Indian battle of the times. The Yuma Indians, aided by the Mojaves and Tonto Apaches as their allies, attacked the Maricopas just before daylight this morning. The Maricopas and Pimos are allied strongly together. The former being comparatively few in numbers, are rather under the protection of the more numerous Pimos. The Maricopas are the more western of the two tribes, and as the Yumas approached from down the river, their villages were consequently the first attacked.”*

*“Some warriors and their families were killed, and their huts fired before the presence of the Yumas was known. We saw the huts blazing and thought they were signal fires. Besides warriors on foot, every Indian that could get a horse was in the fight, many of them going a half dozen miles to reach the battleground. One aged chief, whose wife had been killed by the Yumas, rode furiously up to our camp, foaming at the mouth, and begged of us in good Spanish to aid them against the Yumas; of course we declined. When the battle was over he refused to speak or understand a word of Spanish.”*

*“The principal fight was along the bank of the Gila, not half a mile from our camp. One hundred and four Yumas left their villages at the junction of the Gila and Colorado led on by a young and ambitious chief, whose new dignity required some striking act to dazzle his people. He and ninety-three of his warriors were killed within an half hour, on the side of a hill in plain view from the spot where I was reclining under a tree.”*

“At this place the river makes what is termed ‘the big bend’ of the Gila; the road lies nearly due east and west, while the river makes a horse shoe, probably four times as long as the distance from the Maricopa to Tazotl [*sic*; Tezotal] at which place the road touches the river again. By the schedule of distances, you will perceive it is forty miles from Maricopa to Tazotl.”

“We started from Maricopa Wells at 3 p.m. and drove all night, reaching Taztal for our breakfast camp a little after sunrise. Made 69 miles to-day” (Woods 1858; also Loomis 1968: 106).

Woods’ was the only eyewitness account, written on the spot or soon afterwards. It was put into print scarcely six months later. Another American version, obtained by Lieut. Joseph C. Ives from a Yuma survivor and apparently written down in January 1858, matched Woods’ story very well (Kroeber and Fontana 1986: 17-19). There are a number of Indian versions – Pima, Maricopa, Mohave and Quechan – scattered through the literature. Kroeber and Fontana (1986: 21-32) gathered these together and added their own comments. None were contemporary with the event and whether any of these derived from participants or an eyewitness is not known. One of the calendar stick owners, Owl’s Ear, was certainly alive in 1857. His account, put into writing in 1901-02, forty-four years after the fight, was the earliest extensive Indian description.

The battle that he depicted from the year notch for 1857-58 was a more formal and drawn-out affair, perhaps in accord with Maricopa (and Pima?) ideals of how a pitched battle should be fought (Russell 1908: 40-41, 200-204; Spier 1978: 160-162, 168-175). According to Owl’s Ear,

“In the summer the Yumas came again, accompanied by the Mohaves. They sent scouts ahead, who found the Maricopa women gathering mesquite beans. They killed all the women except one, whom they kept to act as a guide. She was the sister of a well-known Maricopa warrior, and they compelled her to lead them to her brother’s home. When they reached it she was killed with a club and the man was chased, but he was as good a runner as he was fighter and they could not catch him. A Yuma told him to stop and die like a man, but he answered that if they could overtake him he would show them how to die like a man.”

“The Maricopas fled from their village and the Yumas burned it. Messengers went to all the villages that day and under cover of the night the Pimas and Maricopas gathered. They kept coming until late the next forenoon. They found the Yumas encamped near the river at a spot where they had assaulted some women and a Pima had been killed while defending them. The Yumas had spent the night in singing their war songs. Now and again a medicine-man would come forward to puff whiffs of smoke in order that their cause might find favor with the gods. The Pima-Maricopa council ended about noon and it was decided

to surround the Yumas and to make special effort to prevent them from reaching the river to obtain water.”

“Formed in a semicircle, the Pimas and Maricopas shot down the Yumas upon three sides. Soon the Yumas began to waver and become exhausted from thirst in the heat of the day. They made several attempts to break through the line, but failed, and finally gathered in a compact body to make a last attempt to reach the river.”

“At that moment the Pimas and Maricopas who were on horseback rushed in upon the enemy and rode them down. After a hand-to-hand combat the Yumas were all killed except one, who was stunned by the blow of a club and lay unconscious under a heap of dead. During the night he recovered his senses and escaped. This was the bloodiest fight known, and the Yumas came here to fight no more” (Russell 1908: 46-47).

Some anthropologists have indicated that the location of the battle was the village of Sacate or its predecessor, at Pima Butte (Kroeber and Fontana 1986: 23-27; Spier 1978: 173-174). This may derive from the version given by Spier’s informant, Kutox, who was a Halchidhoma himself and lived at the Halchidhoma village near Pima Butte at the time. He did not actually say that the battle was fought there but narrated it from the standpoint of a person at his village. Most of the other accounts made it clear that the fighting scene was the Maricopa village (Hueso Parado) near Maricopa Wells as well as along the bank of the Gila River.

Major Enoch Steen, writing two months later from Fort Buchanan, left some observations on the military readiness of the Pimas and Maricopas that are worth citing. He appreciated their abilities and the American army soon accepted their service as auxiliaries, in the pattern of the earlier presidial garrisons. When the chiefs of the tribes visited Fort Buchanan in August,

“... they expressed themselves much pleased with their reception, and with the propositions made to them by our Government. They said they were ready to fight for the United States whenever called upon to do so, and that if the Government would furnish them with five hundred Rifles, Powder and Lead, they would make one campaign against the Gila Apaches, and that afterwards the United States would have no trouble to make a firm and lasting peace with them, and that for one hundred miles on each side of this place they would protect the overland mail route and all that passed over it, this latter an object of no small importance” (Steen to Denver, November 2, 1857).

Steen endorsed their request for arms, the first of many such, and added that they needed farming implements as well. Had the government actually provided these weapons, the Pimas and Maricopas might have effected significant changes in the cultural geography of the Southwest. Steen gave his opinion that

“these Indians will do as good service as any mounted Regiment in the Army, and save many lives and hundreds of thousands of dollars.” In regard to their recent experience with fighting,

“In August last, these Indians were attacked by the Yumas and two other tribes living on the Colorado and Salt Rivers. In the fight they killed eighty-nine of the Yumas. In two other fights with the Gila Apaches, this last summer, they killed about thirty of them, took fifteen or twenty prisoners, and large numbers of horses and mules” (Ibid).

The major also observed that Colonel Walker, the Indian agent, was now fast recovering his health.

### *Sylvester Mowry and the Promotion of Arizona*

Although the 1857 report of the Commissioner of Indian Affairs included no communication from Agent Walker, it did publish a lengthy letter “in relation to the Indian tribes of the Territory known as Arizona, or the Gadsden Purchase.” This marked the appearance of an individual whose name would, for a time, loom large in the history of that area – Sylvester Mowry. An army lieutenant who served at Fort Yuma 1855-57, Mowry took a leave of absence in May 1857 and went East. By that fall he was in Washington D.C. as an elected but unofficial and unrecognized “delegate from Arizona,” while still on leave from the army (Altshuler 1973a: 64-66).

Mowry’s letter of November 10<sup>th</sup>, written at the request of the Commissioner so he said, gave some highly dubious ‘history’ and little actual information about any of the Indian groups in Arizona, except to reiterate the Pimas’ anxiety about the tenure of their lands. Sylvester Mowry’s interests lay with the promotion of mining and the creation of a Territory of Arizona. He also wrote a “Memoir” of the proposed Territory of Arizona, filled with praises for the country and its prospects, but again with little of substance about the natives (Ann. Rpt. Comm. Ind. Affs. 1857: 296-305; Mowry 1857). Within two years, Mowry would be rendering a genuine and lasting service to the Pimas, but his interests shifted around and his motivations then were as obscure as they are today.

### *Stage Station at Maricopa Wells*

Back in this newly-proposed territory, Superintendent Woods was making his way through the mud and quicksand up the Gila River, eastbound from California after putting the San Antonio and San Diego Mail Line into operation at the California end. After bogging in the mud and sending ahead for help, he rode into Maricopa Wells with two coaches on the night of November 14<sup>th</sup>. There were now so many people at hand – mailmen waiting or in transit, the agent, herdsmen, passengers, et al, that some had to sleep out-of-doors. In the two and

one-half months since Woods had been there last, the agent had built a comfortable house by putting upright poles in the ground, thatching these with tules [reeds or rushes] and covering the sides with the same, also constructing a “decent brush corral” for safeguarding the animals.

On the 15<sup>th</sup> the superintendent had a conference with the Indians [Pimas and Maricopas], who said that the grass, water, and lands around them belonged to their tribe and that Woods must pay them for protecting as well as feeding all of the mules they saw grazing there daily. He gave them a number of presents – tobacco, beads, cotton cloth, shirts and fancy handkerchiefs, but Woods’ journal was silent about what arrangements, if any, he made for compensation (Wood 1858: 25-26; Loomis 1968: 111-112).

From the numerous references to Maricopa Wells and Maricopa station in Woods’ narrative and other sources, the San Antonio and San Diego Mail Line company maintained this stop until the company suspended use of stagecoaches in June of 1861. “Maricopa,” evidently Maricopa Wells, was designated a post office between April 13, 1858, and March 16, 1859, with Francis J. Mullen as postmaster. Mullen also served as the San Antonio and San Diego agent (Theobald 1961: 76). This line continued to carry passengers even though it lost the contract to carry mail between El Paso and Fort Yuma to the Butterfield service in 1858 (Austerman 1985: 143). Maricopa Wells in fact grew into a small community while serving as a stopover for emigrant trains and freighters as well as a mail and stage station, a vedette or outpost for the army, trading post, and military telegraph station. Its decline began when the Southern Pacific railroad arrived at Maricopa Junction in 1879 (Barney 1941, 1955; Conkling and Conkling 1947 II: 170-171; Altshuler 1983: 41). This was the first non-Indian settlement on the middle Gila.

### *John Walker and the Beginnings of the Tucson Agency*

John Walker reported himself “in pretty good health” by mid-December 1857 and he had met some of the people under his agency. He was fifty-seven years old; elderly by Arizona standards, and at the time of the 1860 Census he was the second-oldest Anglo-American in Arizona after Powell (Pauline) Weaver, then sixty-three. Superintendent Collins referred to Walker as a large, heavy man, presumably meaning that he was overweight (Collins to Dole, June 23, 1863).

Walker’s agency was intended to serve the Pimas, Maricopas, Papagos, and the ‘tame’ Apaches at Tucson. He had a budget with \$400 to \$500 to pay out each quarter for feeding Indians and defraying their expenses when they came to visit, to cover the travel expenses of the agent and care of public animals, but not to provide rations or buy farm implements for his charges. A visit from their headmen while Walker was still confined at Fort Buchanan led him to report initially that the Pimas and Maricopas were very destitute. The Papagos and ‘tame’ Apaches appeared to be no better off, and he planned to visit all of them soon (Walker to Collins, September 1, 1857; Collins to Denver, October 5, 1857;

Walker to Denver, December 15, 1857; Collins to Walker, May 22, June 30, 1858; Collins to Mix, May 31, 1858).

With his health recovered, John Walker sought to become an Indian agent in fact. He had no previous experience and his surviving correspondence shows that he was slow in learning his responsibilities and office procedures. Divided lines of authority did not help. Superintendent Collins patiently reminded Walker to read his instructions. Some expenditures were disapproved as improper, vouchers for payments were not in proper form, and it took about a year for his reports to begin arriving on schedule, but no one questioned his integrity or good intentions. When writing to Washington, Collins consistently supported Walker and asked that his shortcomings be overlooked (Collins to Walker, May 22, June 30, July 10, 1858; Collins to Mix, November 25, 1858; Collins to Greenwood, August 7, October 2, 1859; July 6, 1860).

### *Encouraging the Farmers of the Middle Gila*

The Pimas and Maricopas saw an opportunity with the San Antonio and San Diego station at Maricopa Wells and were encouraged "to farm more largely as they can find a good market for a great portion of their grain at home" (Walker to Denver, January 16, 1858). Walker finally visited the middle Gila in early February 1858, and estimated the aggregate population at about 8,000 souls. Later in the year, that estimate would be almost halved. He also gave the very first approximation of the amount of land under cultivation - more than 1,500 acres (Walker to Comm. Ind. Affs., March 1, 1858; Walker to Collins, March 1, 1858).

The natives there wanted hoes, axes, spades, shovels and other farming implements. Walker promised that he would write to the Indian department and ask for instructions on that subject. Collins could only say that the farming equipment had been bought (in the East) and would be forwarded at the first opportunity after its arrival (Collins to Walker, May 22, 1858). Unfortunately this soon escalated into a serious misunderstanding with the Indians.

By May of 1858 the Butterfield mail party was establishing a 'stand' some five miles above the Pima Villages (i.e., at Sacaton station) and in late August, Walker reported that the Butterfield operation now had stations some four miles above *and* below the villages. The Pimas, who frequently made two crops a year, had 2,000 acres in cultivation and "beautiful acequias" that furnished plenty of water for irrigation. With a fine market waiting, the Indians really needed those tools (Walker to Collins, May 5, August 31, 1858).

Collins sat in Santa Fe with the implements, intending to forward them in time for planting next spring. At the Pima Villages, Juan José had run out of patience. When Lieutenant A. B. Chapman passed through in August or September, a Maricopa chief offered to pay in gold for the spades and axes in the officer's possession. Chapman had to decline as he lacked authority to sell government property, whereupon Juan José called Chapman and his people a nation of liars for making promises and not delivering on them. This exchange reflected the exasperation of the Indians and not only reached Washington but

appeared in print in the Annual Report of the Commissioner of Indian Affairs (1858: 187, 204-205).

Walker, caught between the Indians and a remote administration in the Indian office, tried to repair the damage. He explained to Collins about growing two crops a year, and that the natives did their sowing during December, January, and February. Now, in November, they "annoy me very much" about their missing farm implements. They were preparing to enlarge their plantings and also engaged in taking out acequias four miles above their villages, "where they have never planted before" (Walker to Collins, November 30, 1858; Walker to Mix, December 1, 1858). This was probably a reference to what Southworth and Hackenberg called the Old Maricopa Ditch. Mejoie Jackson's calendar stick dates what he called "digging of the Island ditch" to 1856-57. This date fits the Old Maricopa Ditch nicely but is too early for the Island, which was first put under cultivation in 1862 (Southworth "Excerpts," Hackenberg 1974a II: 37-38).

In his next letter, the agent was even more insistent; it was "the more important for them to have their implements as soon as possible." The Overland Mail Company now had *three* stations within convenient distances of the native villages, and to increase their plantings the Pimas and Maricopas needed those tools (Walker to Collins, January 1, February 4, 1859). While the Indians had a sufficient number of men, they would have to leave their new acequias and commence sowing instead because they did not have enough tools to do both. This in turn would prevent them from expanding their acreage by perhaps 150 acres, as they intended. "Those Indians," Walker said, "are making considerable effort to increase their planting. .... They seem inclined to work and love to make money." To encourage this, he distributed some American seed corn. Finally in late March of 1859 he received and distributed their farming implements (Walker to Collins, January 1, February 4, March 31, 1859).

According to journalist and Interior Department Special Agent J. Ross Browne, the Pima and Maricopa wheat surplus amounted to 100,000 lbs. in 1858. They sold this to the Overland Mail Company, and quantities of tepary beans, pumpkins, squashes and melons as well (Browne 1974: 110). Browne, who was not there in 1858, reported what he was told six years later. Special Agent Silas St. John put their surplus production and sales during 1858 at 110,000 lbs. of wheat, 30,000 lbs. of corn, and 5,000 pounds of beans, which brought an average price of 1.5¢ per pound, besides a large amount sold to emigrants and itinerant traders (St. John to Greenwood, September 16, 1859).

There are a few suggestions that John Walker tried to introduce a new crop that, had it been successful, would have had a major impact on the Indians' well-being. He hoped to provide them with a few fanegas of barley, a grain they had not planted before. In 1859 he included barley as one of their productions (Walker to Collins, November 30, 1858; February 4, 1859). The Pimas may have planted some barley that year although the 1860 Census agricultural schedule listed only corn and wheat. A Butterfield passenger traveling through in June of 1860 mentioned that the Pimas and Maricopas furnished "all the corn and barley required here for the use of the Overland Mail Company" (*Daily Alta California*, July 1, 1860, p. 1 col. 7).

*The Butterfield Overland Mail and the Pimas*

The three Butterfield Overland Mail stations at and near the Pima Villages, plus the San Antonio and San Diego 'stand' at Maricopa Wells, served also as the first stores or trading posts on the middle Gila. In his July 31, 1858 report, Walker noted that he had licensed a Mr. John G. Caperon [*sic*; Capron] to trade with the Pimas. Capron lived at the Pima Mail Station on the Gila, some three miles from their villages, where he sold them such goods as they needed and took their surplus grain and beans in payment (Walker to Collins, July 31, 1858). Just two months before, the San Antonio and San Diego Mail Line superintendent complained that the Indian agent (Walker) had granted an *exclusive* privilege to "some person" to trade with the Pimas and Maricopas while Mr. Mullen, the San Antonio and San Diego agent, was notified that he would be allowed only to trade out his present stock. Mullen was at Maricopa Wells, where his company maintained a house and corral. Woods' complaint was that the smaller line could be compelled to purchase supplies from speculators instead of getting them directly from the Indians (Woods to Mix, May 25, 1858). Almost from the first appearance of the stage lines, the companies and traders sought a commercial monopoly on the produce from the Pima Villages.

Walker made references to Butterfield Overland Mail stations in May, July, and August 1858, when he referred to the station we know as Sacaton at five, three, and four miles above the Pima Villages (Walker to Collins, May 5, July 31, August 31, 1858). The journals of two passengers, on the first eastbound and westbound stages in October 1858, both located a station forty miles from Picacho Pass that one called Capron's Rancho. A contemporary timetable or "memorandum of distances" identified it as Sacaton, however (Lang 1940: 86, 109, 116-117). The westbound traveler saw fifteen Pimas there. The 1858 census of Pimas and Maricopas listed 204 Maricopas under Juan José at "Socatoon," which was evidently a native village several miles down the Gila. As late as December 1861, Ammi White wrote, "There are no Indians living within four miles of Sacaton Station" (White to West, December 14, 1861).

The "memorandum" and both travelers' journals clearly listed the next station to the west as Maricopa Wells, twenty-two miles from Sacaton by the Overland Mail Company's table of distances (Lang 1940: 87, 109, 116). At this time there was no mention of an intermediate station at Casa Blanca, and Agent Walker had noted Butterfield stations only at some four miles above (i.e., at Sacaton) and [four miles] below (i.e., at Maricopa Wells) the Pima Villages (Walker to Collins, August 31, 1858). His reference on January 1, 1859 to *three* Overland Mail Company stations would be the earliest, indirect mention of a new station at Casa Blanca, a name that first appeared in the 1858 census (Walker to Collins, January 1, 1859; Ann. Rpt. Comm. Ind. Affs. 1858: 208).

After beginning its runs in September 1858, the Overland Mail Company continued to add intermediate stations, such as the Desert Station between Maricopa Wells and Gila Bend. Casa Blanca was another addition, by January 1859. The few known passengers' letters and journals from 1859-61 seldom



mentioned individual stations, and a timetable in the October 25, 1860 *Mesilla Times* gave the earliest specific reference to Casa Blanca - ten miles from Maricopa Wells and twelve miles to Pimo Village [i.e. Sacaton] - as a Butterfield station. The Conklings (1947 II: 167) claimed that the station at Casa Blanca was established in the latter part of 1858.

*Butterfield Stations on the Middle Gila*

For specific descriptions of Butterfield stations and their locations, scholars have largely relied upon the Conklings' three-volume compendium (Conkling and Conkling 1947). This had no annotations to show the sources of their descriptive details, although it included an ample bibliography of printed references. The authors had followed the route on the ground and identified, sometimes even mapped, certain sites as the remains of stations. At least one of their locations (the Goodsight station, in New Mexico) is now known to be incorrect, but many other identifications have since been accepted. The Conklings may have had access to unpublished materials that they did not cite. Another author has asserted somewhat different locations for the same stations, based upon his own on-the-ground inspections and in one case a local informant's identification (Ahnert 1973). Without additional evidence it is not possible to resolve these differences.

The Conklings said that the Sacaton station site was in the fenced yard of a Pima Indian's home on the south side of Highway 87, one and one-quarter miles east of the present (1930's) town of Sacaton. "Nothing but a large shapeless mound of adobe remains to indicate the site of the original station building." They did not give the name of the Pima family (Conkling and Conkling 1947 II: 165-166). On the other hand, Henry Schurz, a Pima Indian then in his 80's, showed Ahnert (1973: 61-62) the site he identified as the Sacaton station. Mr. Schurz placed it almost directly across the road from his own house, the road in this case apparently being Casa Blanca Road. In 1858 the Sacaton station lay literally "on the [Little] Gila river" (Lang 1940: 86) and while the adobe ruins were said to have still been standing in the early 1900s, they have since melted away. The building itself began as Capron's Rancho, but was almost certainly used for other purposes after the Butterfield line ceased operation.

A dozen miles to the west lay the Casa Blanca station, which none of the travelers' narratives described. It lay at or adjacent to the Pima village of Casa Blanca, first mentioned by name in the 1858 census. Since it predated the appearance of Ammi White, it wasn't his store nor was White the station-keeper (Conkling and Conkling 1947 II: 167). By his own statements, White came to Casa Blanca in 1860 and maintained a store there, in a building which both the U.S. Census schedule for 1860 and a map drawn by White in December 1861 show was separate from the Overland Mail station (White to West, December 14, 1861 (enclosure), also White & Noyes to Carleton, May 25, 1862; U.S. Census, 1860, Arizona County N.M.; U.S. Senate 1965b: 53).

White's map showed the Casa Blanca station as west of his own mill and store and labeled it a "Large B. [building] in good order." The store, according to

the Conklings, stood a short distance west of the present (1930s) church, where a fair-sized cottonwood marked the site (Conkling and Conkling 1947 II: 167). Ahnert (1973: 64-65) apparently used the Conklings as his source and plotted the station location about one-half mile west and slightly north of the mound at Casa Blanca, to the northwest of a church.

The Butterfield station at Maricopa Wells lay ten miles west of Casa Blanca, and again no one described either the station or its location. A passenger on the first westbound stage said the six or eight wells, whose water was very good, lay in a large plain of alkali soil and coarse grass (Lang 1940: 87). The Conklings gave the location as only in Section 17, Township 3 South Range 3 East (G&SRM) and, after describing the San Antonio and San Diego station there accurately, added that

".... the Butterfield Mail contractors erected a substantial group of adobe buildings and a large corral near the wells. .... One building of the original group of station buildings, which has been rehabilitated from time to time by native ranch men, is still preserved" (Conkling and Conkling 1947 II: 169-170).

This would appear to be possible since Maricopa Wells served as a stage and military telegraph station, and at times had a store, blacksmith shop and even a hotel as recently as 1881 (Conkling and Conkling 1947 II: 170-171; Barney 1941, 1955). However, White's December 1861 sketch showed the Maricopa Wells station as "burned down" (White to West, December 14, 1861 (enclosure)). The account in Ahnert (1973: 67-69) is unreliable and offers no specific location for the Butterfield station at Maricopa Wells. From one source and another we learn that the station-keepers ("hostlers") in 1859 were John Capron at Sacaton, James Lee at Casa Blanca, and Andrew B.C. Dyer at Maricopa Wells. Capron and his partner, Hiram Stevens, moved their store to Tucson in September 1859.

#### *The First Census of the Pima Villages*

Lieutenant A.B. Chapman, 1<sup>st</sup> Dragoons, passed through the Pima Villages at least twice in 1858. Sometime that year he took the first-ever census of the Pimas and Maricopas. His census was printed as an appendix to Special Agent G. Bailey's report of November 4<sup>th</sup> on the Indians of southern Arizona and New Mexico (Ann. Rpt. Comm. Ind. Affs. 1858: 202-208). Bailey had ridden the first stage east, and the November report followed his earlier one to the Postmaster General about the inception of mail service along the Butterfield route (Conkling and Conkling 1947 II: 359-365). The census table "furnished me by Lieutenant Chapman") he referred to without comment. Both Russell (1908: 20-21) and Hackenberg (1974a I: 296) reprinted Chapman's table. This census is as follows:

MARICOPAS				
Pueblos	Captains	Warriors	Women & Children	Total

	Juan Chevereah, head chief	....	.....	.....
El Juez Tarado		116	198	314
[ <i>Hueso Parado</i> ]	} Juan José			
Socatoon		<u>76</u>	<u>128</u>	<u>204</u>
		192	326	518
PIMAS				
Pueblos	Captains	Warriors	Women & Children	Total
Buen Llano	Antonio Soulé, head chief; Ojo de Buro, & Yiela del Arispa	132	259	391
Ormejera, No. 1 [ <i>Hormiguero</i> ]	Miguel [Medio] & Xavier [Ignacio]	140	503	643
Ormejera, No. 2	Cabeza del Aquila	37	175	212
Casa Blanca	Chelan	110	425	535
Chemisez	Tabacaro	102	210	312
El Juez Tarado 263	Cadrillo del Mundo &		105	158
[ <i>Hueso Parado</i> ]	Ariba Aqua Bolando			
Arizo del Aqua [ <i>Agua Raiz</i> ]	Francisco [Kapt]	235	535	770
Aranca, No. 1 [ <i>Arenal</i> ]	La Mano del Mundo	291	700	991
Aranca, No. 2	Boca Dulce	<u>.....</u>	<u>.....</u>	<u>.....</u>
		1,152	2,965	4,117

The bracketed names in italics are the names shown for the same villages in the 1860 Census schedules, insofar as a correspondence can be made. Another table, omitted here, listed 1,890 Papagos in nineteen pueblos. By these figures, the number of Pimas and Maricopas exceeded the entire non-Indian population of Arizona (4,573) in both 1860 and 1864 (Wagoner: 1970: 41).

Apart from the lieutenant's bad Spanish, there were some problems with his census. We have no idea how it was taken, or when, or for what purpose. Special Agent Bailey said only that Lieutenant Chapman furnished it to him, which might mean that other persons did the recording. Writing in July, Superintendent James Collins had reminded Walker that

“You were also instructed to ascertain, as near as might be possible, the number of Indians in each pueblo, the condition of their farming operations, the quantity of land belonging to each pueblo available for the purposes of agriculture, the description of products raised by them, &c &c” (Collins to Walker, July 10, 1858).

Walker replied on August 31<sup>st</sup>, saying that the Pimas and Maricopas had twelve pueblos that averaged from three to five hundred to the pueblo, and giving some other figures but without mentioning any census (Walker to Collins, August 31, 1858). The agent volunteered very little else and his response may well have been viewed as unsatisfactory. One apparent omission in Chapman's list was any population figures for one Pima pueblo, Aranca No. 2. The numbers of Maricopas and Pimas at El Juez Tarado [Hueso Parado] were listed separately.

The number of villages would be eight of Pimas, one Maricopa, and one with both Pimas and Maricopas. This matched rather well the eight villages of Pimas and three of Maricopas that '49er Benjamin Hayes – the only previous visitor in the American period to mention the number of settlements – had noted (Hayes 1849-50). The communities may not have been at exactly the same locations, however, since two of the Maricopa villages lay on the north side of the Gila in 1849.

Hueso Parado in 1858 presumably lay where it had been since 1823 or before; at least we have no reason to think otherwise. Kroeber and Fontana (1986: 7), following Russell (1908: 22), suggest that the Pima name for Hueso Parado was Hínamâ [Hina Mo'ô], or Hina Head, after *hina*, a kind of fish. At a later date the Hínamâ people moved to the south bank of the Salt River east of the Mormon community of Lehi. Census returns consistently listed Hueso Parado by that name or a recognizable variant of it.

Moving east, the distance between Casa Blanca and Tucson, according to a traveler in 1859, measured ninety miles (Box 1869: 325). This agreed well with the figures – between eighty-seven and ninety-three miles – on various schedules of the San Antonio and San Diego, and Overland Mail Co. lines. We recall also that in 1855, Captain Michler's viameter recorded fifteen miles from Maricopa Wells to the Pima village of Culo Azul. Since one stage company listed Casa Blanca as twelve miles from Maricopa Wells, Culo Azul's home must have lain three miles east of Casa Blanca, which would be just right for Old Mount Top Village. In the U. S. Census for 1860 his son, Antonio Azul, lived in Buen Llano. If we presume that father and son lived in the same community, then Buen Llano was the Spanish name for Old Mount Top Village. Whether the location was the same in 1858 as in 1825 is not certain, but the thirty-six leagues from Tucson to Buen Llano shown in Colonel Urrea's table suggests that the 1858 site was very close to if not identical with the earlier one. Even the population totals were almost unchanged.

As for the other Pima villages in 1858, Ormejera No. 1 [Hormiguero] must have been synonymous with Old Stotonic village – “Many Ants” – while Arizo del Aqua was Agua Raiz in the 1860 Census and Aranco No. 1 equated with Arenal. None of these can be located precisely, but they would have lain between the Sweetwater/Stotonic area and Pima Butte to the west, and may have been represented in a general way on the 1859 plats of the Pima and Maricopa Indian Reservation.

With respect to Maricopa villages other than Hueso Parado, the Halchidhoma village near Pima Butte was probably still occupied, and Ammi White's map from December 1861 indeed showed a Maricopa settlement at the

right location. That map also plotted a Maricopa community on the south bank of the Gila River several miles northwest of the Sacaton station, about where the Old Maricopa Fields and Old Maricopa Ditch were shown on the Southworth maps in 1914. The associated fields and residence area would have been a new Maricopa village listed as Socatoon / Sacaton in the 1858-1859-1860 censuses. What little is known about this community is summarized in Chapter 9. Until the Island or Blackwater ditch was completed in 1862 and the Island of the Gila was brought under cultivation, there would have been little reason to live any further east than Sacaton village (Hackenberg 1974a II: 37-38).

As for the numbers of people in 1858, Meister (1975: 94ff) has considered the population dynamics from 1846-58 and his reasoning is sound. He assumes some underenumeration and one recalls that no figures were given for Aranca No. 2. The 1859 census listed 420 persons there. If this number were added to the 4,117 Pimas enumerated in 1858, the total would be at the low end of Meisner's base range (4575-5900) for the Pima population in 1858. This indeed indicates a relatively stable Pima population from 1846 to 1858.

The great loss appears to have been among the Maricopas, whose numbers declined from an estimated 1,000 in 1846 to Meisner's adjusted total of 575 to 750 people remaining in 1858. The difference he would account for as losses in battles and raids between 1848 and 1857, to which we could add disease (Ibid. 94-104). The census total was only 518. The calendar sticks of Mejoie Jackson and John Hayes indicate that the Maricopas may have suffered substantial setbacks at this time (Jones 1961; Southworth "Excerpts"). Special Agent Silas St. John, writing in early 1860, claimed that the Maricopas had been reduced "above 50 percent in numbers" during the past four years. The reasons he gave were men marrying Pima women and being classed with that tribe, while the diseases associated with prostitution led to a decrease in the number of Maricopa women (St. John to Greenwood, January 18, 1860). The Maricopa population, unlike that of the Pimas, did not recover.

#### *The Government and the Pimas, 1858-1859*

From the acquisition of the Gadsden Purchase to the Civil War, the single incident that had the longest-lasting impact on the Pimas and Maricopas was probably the hasty visit by Special Agent Goddard Bailey in late September 1858. His account of the Pimas and Maricopas, the services rendered by them through the years, and the lack of faith by the United States government, could hardly have failed to make an impact in Washington.

He recommended that their lands be confirmed to them, i.e. that they receive a reservation; that an annuity of agricultural implements, seeds, and clothing be distributed; that they have a resident agent; and that arms and ammunition be provided in light of "their efficiency as a frontier militia, in keeping the Apaches in check." Two intriguing comments, which he attributed to Lieutenant Chapman, were that some of the Pima and Maricopa pueblos lay more than five miles from the river proper, where they were supplied with water by

acequias, and that the acequias “of crystal water” ran from pueblo to pueblo all over the valley (Ann. Rpt. Comm. Ind. Affs. 1858: 203, 205).

Events followed Bailey’s letter at almost lightning speed. His recommendations were exactly in line with the current thinking of the Commissioner of Indian Affairs. This was to create small reservations and encourage the Indians assigned there to support themselves by cultivation (*Appendix to the Congressional Globe* 1859, p. 41; *The Weekly Arizonian*, March 24, 1859, p. 1 col. 3). In his statement to Congress on November 6, 1858 (two days after Bailey submitted his letter), the Commissioner referred to the accompanying report of his special agent and endorsed it:

“Concurring generally in the suggestions made by him, I would call special attention to his recommendations in regard to the Pimas and Maricopa bands. .... Measures should be adopted to secure them in the possession of their lands, and they should be furnished with some agricultural implements and seeds; and also the means of defense against the wilder tribes,....” (*Appendix to the Congressional Globe* 1859, pp. 41-42).

The annual appropriations bill for expenses of the Indian department during fiscal year 1859-60, as drafted, provided for an agent and annual presents to the amount of \$15,000 for the Pimas and Maricopas. Congress was not inclined to accept this as written because its recent experience with Indian reservations had, in the words of one Representative, “proven to be an entire failure” in some parts of the country. This was particularly the case in California, where the natives would not settle or stay on reserves, each of which had a salaried agent, or learn to support themselves. The Senate Committee on Indian Affairs had a better idea: create more reservations, keeping the Indians where they were accustomed to live, but without any additional expense to the government. The provision for a Pima and Maricopa reservation was added in Committee (*Congressional Globe*, February 3, 1859, pp. 734-736; February 28, 1859, pp. 1406-1407; *Appendix to the Congressional Globe* 1859, pp. 40-41).

This curious notion happened to fit the Pimas and Maricopas very well. Senator Sebastian of Arkansas had been thoroughly informed about them and while the Committee did not include the provisions in its original bill, it did propose three amendments on February 2d. The Senate agreed to these with minimal debate. One authorized the President to cause to be surveyed a tract or tracts of land now occupied by the Pimas and Maricopas, with an appropriation of \$1,000 for the expenses. “It is for a cheap kind of survey,” the Senator added. A second amendment authorized the President to set aside the tract or tracts of land as a reservation for the Pimas and Maricopas. The third amendment appropriated \$10,000 for suitable presents to these Indians, in acknowledgement of their loyalty to the government. Carefully omitted here was any implication of an annuity, an annual distribution of goods, which was another sore point with Congress at this period. Annuity distributions were usually made because of treaty stipulations, but by 1859 this expense had increased to almost half of the

annual appropriation to the Office of Indian Affairs. The Pimas and Maricopas of course had no treaty with the government (*Congressional Globe*, February 3, 1859, pp. 735-736; *Appendix to the Congressional Globe* 1859, pp. 40-41).

On February 26<sup>th</sup> a conference committee submitted its report to the House and a short debate followed. The key point of agreement was that additional reservations would be allowed, provided that no new agents were employed there and no additional expense was incurred. The Committee made one modification to the amendments presented earlier: the size of the Pima and Maricopa reservation could not exceed 100 square miles (*Congressional Globe*, February 28, 1859, p. 1407).

In the appropriations act, approved February 28, 1859, the three amendments had been incorporated and now read as follows:

“Sec. 3. *And be it further enacted*, That the President of the United States be, and he hereby is, authorized and required to cause to be....surveyed, and the boundaries thereof permanently marked, the tract or tracts of land lying on or near the Gila River, in the.... Territory of Arizona, New Mexico, now occupied by the confederated bands of Pima and Maricopa Indians, and the sum of one thousand dollars is hereby appropriated to defray the expenses of the said survey.”

“Sec. 4. *And be it further enacted*, That the President of the United States be, and he hereby is, authorized and required to set apart the tract or tracts of land aforesaid as a reservation for the confederated bands of Pima and Maricopas: *Provided*, That the said reservation shall not exceed one hundred square miles in extent.”

“Sec. 5. *And be it further enacted*, That the sum of ten thousand dollars is hereby appropriated to enable the Commissioner of Indian Affairs to make suitable presents to the Pimas and Maricopas, in acknowledgement of their loyalty to this government and the many kindnesses heretofore rendered by them to our citizens” (*U.S. Statutes at Large*, vol. 11, p. 401).

Ironically, there was also an acknowledgement of the Commissioner’s third recommendation; Sec. 2 of the bill provided that no part of the money appropriated could be used to purchase arms or ammunition for the Indians. The Pimas and Maricopas, whose assistance to southern emigrants and warring upon the Apaches was so appreciated, would have to fight their battles with native weapons.

In the various reports and legislative actions that led up to passage of the appropriations act, there was nothing to suggest that anyone outside of Congress and the Office of Indian Affairs had influenced the provisions for the Pimas and Maricopas. The background information could easily have been found in the

Pacific Railroad Surveys volumes, which were widely read at the time, and in the 1858 Annual Report of the Commissioner of Indian Affairs. Yet at least two individuals who would help to carry out parts of the act were then in Washington, from Arizona.

Sylvester Mowry served as an unrecognized delegate to Congress from Arizona. He claimed in an updated version of an 1859 address that “The U.S. Government have since, under urgent pressure of the writer, made some small appropriations for the Pimos Indians” (Mowry 1863: 15). Silas St. John, employed by the Butterfield Overland Mail Co. and badly wounded at the Dragoon Springs stage station in 1858, was “urging the establishment of law in this portion of Arizona” (*The Weekly Arizonian*, March 10, 1859, p. 2 col. 4). Of the two, St. John was undoubtedly the more effective. The Overland Mail Co. had one of the highest profiles of any company on the American business scene, while the legislative record shows that Mowry’s efforts to create a Territory of Arizona were going nowhere.

#### *Agents and Special Agents to the Pimas*

Silas St. John in fact received an appointment as Special Agent for the Pima and Maricopa Indians, dated in Washington on February 18, 1859. The appointment letter made it clear that he would receive no compensation from the government and he was still employed by the Overland Mail Co., whose interests were to be on friendly terms with these people, upon whom they depended for grain. He would nonetheless act as their agent in all respects, with as much zeal as though he was a salaried officer. In addition, the Commissioner placed in his hands \$2,000, out of which he was authorized to purchase hardware and agricultural implements in San Francisco, not exceeding \$800, of the kind most suitable to the wants of the Indians (Denver to St. John, February 18, 1859).

St. John, whom Denver later referred to as “an honest and conscientious man,” promptly went to San Francisco, bought the goods (which apparently included plows, mills, hoes and spades) and arranged for transportation. He distributed them following their arrival at the Pima Villages on June 28<sup>th</sup> (St. John to Mix, April 19, 1859; St. John to Greenwood, September 16, 1859; Denver to Greenwood, October 28, 1859). About this time (June 21, 1859), he received an appointment as postmaster at the Pimo Village (Theobald 1961: 76).

In the meantime, agent John Walker in Tucson received the delayed shipment of his farming equipment – plows, harrows, spades, shovels, axes, blacksmithing and carpenter’s tools – and distributed these individually to the heads of families in late March. He also made arrangements with the Overland Mail Co. superintendent for his agency to pay a blacksmith to work on the Indians’ tools, probably at the Casa Blanca station (*The Weekly Arizonian*, March 24, 1859, p. 2 col. 3; Walker to Collins, March 31, 1859). It was the end of May before Walker learned that there was now a Special Agent for the Pimas and Maricopas, i.e. Silas St. John. He learned this when St. John visited him in Tucson and showed him his instructions. Although this came as a surprise, Walker was initially well pleased because it would save him a good deal of



traveling to the Pima Villages. He observed, shrewdly and probably correctly, that the real object of St. John's appointment was to superintend the purchase of all grain raised by the Pimas and Maricopas for the Overland Mail Co. (Walker to Collins, May 30, 1859).

If the Pimas felt neglected before, they were now being overwhelmed with attention. Sylvester Mowry had also been appointed a Special Agent on or about May 12<sup>th</sup> (Mix to Mowry, May 12, 1859; Mowry to Greenwood, May 16, 1859). Superintendent James Collins in Santa Fe was completely out of the loop in these maneuverings, but he did write to the Commissioner in late June concerning the \$10,000 appropriated for presents. Collins was told that the duty of distributing presents from this appropriation had been assigned to Special Agent Mowry, but he (Collins) was being given an extra \$3,000. This he could use for presents to any Indians in his superintendency other than the Pimas and Maricopas (Greenwood to Collins, July 29, 1859; Collins to Greenwood, August 7, 1859).

Sylvester Mowry received both the \$1,000 for surveying a reservation and the \$10,000 to buy suitable presents for the Pimas and Maricopas. According to the Commissioner, this was because Mowry's high character and acquaintance with the Indians and their condition showed that he could be relied upon to execute the trust in a faithful manner (Ann. Rpt. Comm. of Ind. Affs. 1859: 20, 353). Mowry's own lengthy report and letters and other letters by both Walker and St. John indicate that the Commissioner's faith was well placed. The newest Special Agent arrived at the Pima Villages during the last week in July. He called the chiefs together, announced that he had a large amount of money to buy presents, and asked for their guidance in purchasing articles for their use (Ibid: 353).

Sylvester Mowry was not a familiar face on the middle Gila. Antonio Azul perhaps assumed that he was either naïve or a fool, and started to reply that the Pimas were sick of promises, didn't believe a word of it, had been neglected with regard to presents, etc. etc. Mowry promptly squelched that kind of talk and they got down to business. The result was something like a shopping list, which Mowry adjusted by deleting arms and ammunition, prohibited in any case, and by reducing the proportion of agricultural implements by the numbers that Walker and St. John had recently provided. This left a margin to purchase goods suitable for women.

Transportation costs unfortunately absorbed much of the money, but Mowry traveled to San Francisco and bought the best tools and other goods on the market. These he itemized in his report – 706 butcher knives, 618 shovels, 516 hoes, axes, sickles, harrow teeth, picks and a great variety of other items, together with a complete set of tools for both a carpenter's shop and a blacksmith's shop. Most of the goods for the women, 2,500 yards of manta (cotton cloth), 2,500 yards of blue drill, 1,000 yards of calico, etc., and two tons of seed barley (“a new grain for them”) he was able to buy at good prices in Arizona City, opposite Fort Yuma (Ibid: 354-357; Mowry to Greenwood, August 5, August 21, September 2, 1859).

Mowry had an unusual cast of mind and his writings tend to mislead a reader, leaving an impression often at odds with the truth. His source of support

is a mystery after resigning his commission as an Army lieutenant, effective July 31, 1858. From the fall of 1857, when he was first elected delegate from Arizona, one or more of the mining companies active at that time in southern Arizona probably paid him a retainer or agent's fee. This he never acknowledged, but between 1857 and 1859 the emphasis in his writings shifted heavily to the promotion of mines and mining interests in Arizona. The middle Gila held no mining prospects, apart from some small gold placers, and the legislation in effect would have prevented him from receiving a salary as a Special Agent although it allowed for travel and other expenses. After his report to the Commissioner of Indian Affairs in November 1859, he had nothing more to say about the Pimas and Maricopas.

Whatever his reasons for wanting the position, Mowry kept them to himself, and there were no hints of fiscal irregularities later. Two distributions were made of the goods he purchased; the first during the second week of September with Mowry, Walker, and St. John all present and all working in apparent harmony. At this time the entire population of both tribes less a war party had assembled, not less than 3,500 people in Mowry's estimation, and the presents were distributed to each pueblo in proportion to its numbers. These were the articles that Mowry had purchased at Arizona City – manta, calico, shirts, flannel, hats, shoes, farm implements – and this was the big talk that Mowry described in his report (Walker to Collins, September 14, 1859; Ann. Rpt. Comm. Ind. Affs. 1859: 356-357).

The second distribution, the larger one, was held on November 8<sup>th</sup> and presided over by St. John and Walker, Mowry having returned to Washington. Mowry had purchased this hardware in San Francisco. According to St. John,

“All passed off admirably, the large number of articles enabling me to give every Indian something. The hardware was all of first quality and received in good order” (St. John to Mowry, November 9, 1859).

According to agent Walker, *he* made the distribution. The Indians were said to have been very satisfied. Walker cautioned the residents of the Pima Villages that this kind of generosity might not become a general policy. He had written to the Commissioner of Indian Affairs earlier that this was too much all at once (Walker to Greenwood, August 6, 1859; Walker to Collins, November 14, 1859; *The Weekly Arizonian*, November 17, 1859, p. 2 col. 3).

The harmony that John Walker, Silas St. John and Sylvester Mowry displayed originally began to unravel during the summer of 1859, over matters such as authority, distribution of presents, the conduct of traders, and Walker's growing suspicions about the motives of the Overland Mail Co. Another issue seems to have been the U.S. Indian Agency at the Pima Villages, which St. John had built upon Mowry's recommendation. This, in Walker's opinion, was a gross extravagance:

“... it now remains for Govt. to take such notice of his [St. John’s] operations as they in their wisdom think best as he has already spent some \$2,000 of Gov’t funds in building such castles as I think are not much acquisition to the Indian department...”  
(Walker to Collins, October 21, 1859).

To call this a castle was an exaggeration, but a crisp elevation shows two buildings with a picket fence or corral between them. By scaling from Gray’s 1859 plat map, their location would have been about 3,500 feet northwest of the ruin mound at Casa Blanca and some 800 feet from the Overland Mail Co. station, which itself lay approximately 4,200 feet west-northwest of the Casa Blanca mound.

According to St. John, the Indians set aside this ground for agency purposes on May 20, 1859, and construction began during June (St. John to Mowry, October 6, 1859). The Special Agent made a sketch map that showed one structure, built of adobes with a flat roof, to be the blacksmith shop. It measured eighteen by twenty feet and had two forges. The nearby carpenter shop, fifty feet in length by fifteen in width, had been divided into a smaller storeroom and a larger shop. A third room, somewhat smaller, stood at one end; perhaps this was the agency office. This second structure was built of pickets [i.e. *jaca*] lathed with willows and plastered on the sides, with a pitched roof of thatch construction. Apart from the adobes, the Indians furnished all of the materials and erected the buildings, under the supervision of the agency mechanic, Cyrus Lennan (St. John to Mowry, September 12, 1859). Silas St. John must have paid whatever costs were involved out of the \$1,200 balance remaining from the money placed in his hands at the time of his appointment in February. The shops were furnished with sets of blacksmith and carpenter tools purchased by Mowry (St. John to Greenwood, September 16, 1859).

John Walker wrote that he had appointed William Buckley blacksmith for the Pimas and Maricopas on April 1, 1859. The location of Buckley’s first shop is not known (Ann. Rpt. Comm. Ind. Affs. 1859: 352). Then in September, St. John employed Cyrus Lennan, “an experienced farmer and mechanic,” to instruct the Pimas and Maricopas and keep their tools in repair. As of October first, C. S. Hopkins assumed charge of the blacksmith shop at St. John’s agency. He succeeded Buckley. The New Mexico Superintendency of Indian Affairs paid his salary and he continued there for at least another year (St. John to Greenwood, September 16, 1859; January 18, 1860; Ann. Rpt. Comm. Ind. Affs. 1860: 169).

In spite of his shortcomings, Silas St. John did have some progressive ideas. One was his suggestion that a school be started for the 500 children of school age at the villages. It would be another ten years before schooling began, following repeated recommendations. He did arrange for two boys, one Pima and one Maricopa, to work in the carpenter shop under Cyrus Lennan’s direction. In November, Francisco, the young son of the captain of the Pima pueblo Arizo del Agua, was placed in the blacksmith shop to learn the trade, this at his father’s urging. Within two months Lennan evaluated Francisco and the other apprentices as apt and willing, very proud of their respective positions (Lennan to St. John,

December 25, 1859; St. John to Greenwood, January 18, 1860). How the boys fared later is uncertain because Lennan's salary apparently ran out in the middle of January 1860, about the time (January 11, 1860) he succeeded Silas St. John as postmaster at Pimo Village. He stayed around and evidently worked for Ammi White, his half-brother, after White arrived at the Pima Villages that year (Walker to Collins, November 14, 1859; Ammi M. White file, ASU Library; Theobald 1961: 76).

*Surveying the Pima and Maricopa Indian Reservation, 1859*

Mowry had a second responsibility, in addition to distributing Indian goods, and on his first visit to the Pima Villages in July he brought along A. B. Gray. Eight years earlier Gray had been the surveyor with the Mexican Boundary Commission. Now he surveyed mining properties and was a director in the Maricopa Mining Company, which sought to develop the Collins silver mine on the San Pedro River. Mowry had engaged him to survey the reservation for the Pimas and Maricopas (Mowry to Greenwood, June 23, 1859; *The Weekly Arizonian*, July 21, 1859, p. 2 col. 2; Greeley 1987: 17).

With Antonio Azul and the other chiefs, they discussed the intent of the survey, which was to enclose the present Pima and Maricopa villages and planting grounds and mark the boundaries to prevent encroachment by American settlers. Encroachment was becoming a real prospect. Antonio Azul stated that the Pimas claimed as their own property the entire Gila valley from the Pinal Mountains to the Tezotal, a distance of upwards of 100 miles. Mowry obviously did not bring up the 100 square miles limitation imposed by Congress, but instead he pointed out that if they held a valid title to any lands beyond the present survey, it would be a matter for future consideration by the government. This seemed to satisfy everyone and working parties were detailed to assist Gray. Mowry and Gray then established the initial points for the reservation and indicated the lines to be followed on both banks of the Gila. With this much done, Mowry departed for Fort Yuma and San Francisco to make his purchases, while Gray left for Tubac and Fort Buchanan on other business (*The Weekly Arizonian*, August 4, 1859, p. 2 col. 2; Ann. Rpt. Comm. Ind. Affs. 1859: 357-358).

A. B. Gray returned to the Pima Villages on September 5<sup>th</sup> and worked continuously until October 17<sup>th</sup>, when he completed his last observations and the erection of monuments for demarcating the reservation boundaries. It had been impossible to work during June, July, and August because of the heat, and he had to chain upwards of seventy miles to fix the limits of the reservation. According to Silas St. John, Gray found the chaparral (i.e., the mesquite and other brush) very difficult to chain through and on some days he was not able to proceed a mile (Mowry to Greenwood, September 2, 1859; St. John to Mowry, October 6, 1859). In his report to Mowry, Gray indicated that it proved to be a much bigger job than he had anticipated, but the reservation as surveyed included all of the Indians' gardens or planting grounds and gave them a great extent of water for their acequias, as well as being abundantly wooded. Mowry quoted Gray's report

in full in his own report on the expenditure of appropriations under the Act of February 28, 1859 (Ann. Rpt. Comm. Ind. Affs. 1859: 358-359).

In a conference ten years later, Antonio Azul had a somewhat different recollection as to what was said or promised at the time of Gray's survey:

“When this Reservation was laid out, Colonel Grey [*sic*] asked us what lands we wanted. We told him that we wanted it as far up as the Yellow Cottonwoods, above Florence, that there we found our mesquite beans and cactus fruit, and that there we had planted years ago. The sun was hot and Colonel Grey got thirsty and did not like to go away from the River, so as to give us land for pasturage. I told Colonel Grey that we claimed all the Gila River and Salt River valley from the Picach to Vacua Monte. Colonel Grey promised us all this land and said only one trader should be allowed on the Reservation. .... At the time the lines were run, one of the Indians told me that Colonel Grey was running the northern line of the Reservation almost along the Gila River bank. I saw Colonel Grey about it and I told him that we would never be satisfied with the present limits” (Grossmann to Andrews, October 31, 1869).

Malaya, the Maricopa chief credited by Ammi White with establishing a village at Sacaton (Chapter 9), also recalled the A. B. Gray survey:

“I was with Colonel Grey, when he surveyed this Reservation, and told him that our mesquite ground had been left out, but Colonel Grey said that he felt tired and would not go higher up the river. Again when I asked him to enclose our pasture grounds on both sides of the River, he said the Cattle might range where they pleased so long as we would live on the Reservation ourselves” (Ibid.).

Mowry, and Gray, of course knew that the size of the reservation had to conform to the limits set by Congress, and they probably saw their convenient explanations as necessary to allow the survey to proceed.

The reservation that Gray marked out consisted of two tracts joined together at their ends, each trapezoidal in shape and roughly equal in area, aligned with their long axes paralleling the Gila River and offset from one another by about 1¼ miles. Each trapezoid measured approximately thirteen miles in length by four miles in width, and the enclosed area included some twenty-six river miles of the Gila with its flood plain and parts of the lower terrace to either side. Immediately after completing the boundary monuments Gray had other work waiting, but he promised to return to Washington as soon as that was done and make a full report with a detailed map showing the topography, statistics &c. of the reservation (Gray to Mowry, October 17, 1859).

The plat map of the reservation exists in four versions; two at the National Archives in Washington D. C. and two in the Bureau of Land Management records at Phoenix, Arizona. While none of the plats bears an actual date, the original was probably completed later in 1859 or in 1860 and at least one of the copies within the next two years. Gray himself was killed in a steamboat explosion in 1862. If he ever made a "full report," it has not been found.

The earliest known survey plat bore A. B. Gray's autograph signature, although the phrase "Tracing of unfinished sketch" in its legend implies that it is not the original. It emphasized the boundaries and lines of sight. While it showed some internal features on the reservation, none of these related directly to the Indians (NA, RG75-CMF-391). A second plat, probably made about the same time and marked "Drawn by Geo. Gunn from the original notes of Survey" (NA, RG75-CMF-147), exhibited many additional lines of sight, topography, and more schematically, the "Indian Gardens," "Cultivated Ground," and "Pimo Villages." The latter, all unnamed and not clearly distinguished, extended from about three miles below the base point at the U. S. [Indian] Agency near Casa Blanca to approximately 4.5 miles above that point. The gardens continued for several more miles in either direction. Hueso Parado would clearly have lain another half-dozen miles beyond the western boundary. Enclosing it within the 100 square mile limitation for the reservation would have been virtually impossible, as Mowry and Gray must have recognized.

In his report to Mowry, Gray said that he ran the lines and triangulations with a transit, fixed one astronomical point (at the U. S. Agency), and determined the elevation above sea level of a great many positions (Ann. Rpt. Comm. Ind. Affs. 1859: 358-359). The two plats in the National Archives reflect well on Gray's professional competence.

The plats in the Phoenix Area Office were traced, separately, from the plat made by Geo. Gunn or from an earlier tracing of the latter map. While they showed the same native features in about the same locations, all of the lines of sight were omitted. None of the latter included bearings anyway, so to re-establish the reservation boundaries meant relocating Gray's monuments, as was done (in part) in 1876. The plats in Phoenix appeared to add no details for the reservation as it was in 1859, but one was marked-up with township and range lines when public land surveys were extended to the vicinity of the reservation. All public land surveys in Arizona post-date the survey of this reservation.

Since Gray used a transit, he necessarily kept a field notebook to record his observations, and the field notes were normally submitted together with a plat to the appropriate Surveyor General or General Land Office at the completion of a survey. In this case, it did not happen. Late in 1861, the Surveyor General of New Mexico told the Commissioner of the General Land Office that no field notes, or plat, from this survey had been filed with his office (Clark to Edmunds, November 30, 1861). The General Land Office in turn asked the Commissioner of Indian Affairs to furnish a transcript of the field notes (Edmunds to Dole, December 24, 1861). The GLO Commissioner subsequently acknowledged receiving a plat of the Pima and Maricopa Indian Reservation, and confirmation

that the survey field notes had not been received (Edmunds to Mix, February 15, 1862).

Indeed, these notes are still missing. The microfisch records of the Arizona State Office of the Bureau of Land Management contain neither the plats nor the field notes from the 1859 survey. A determined effort was made to locate these field notes during the present project, in conjunction with Mr. Pierre Cantou of the Bureau of Indian Affairs' Phoenix Area Office. Finding aids to various record collections in the National Archives were researched and inquiries then directed to the National Archives. Diligent searches by National Archives personnel and in the BLM's Arizona State Office confirmed that A. B. Gray's field notes were not to be found.

Even with a plat in official hands, the absence of field notes made a description of the reservation impossible. Without a description, no Executive Order could be drafted that would enable the President to set aside the tract or tracts of land as a reservation, as required by Sec. 4 in the Act of 28 February 1859. The requirements of this Act have therefore never been fully complied with. It would be possible to do so now because surveyor Theodore White, who relied upon one of the 1859 plats during his 1876 resurvey of the reservation boundaries, recovered a number of Gray's boundary monuments. The 1876 field notes are extant.

#### *Life at the Pima Villages in 1859*

Samuel Cozzens, a lawyer from Mesilla, New Mexico, paid a visit to the Pima Villages just as Gray finished his survey, or so Cozzens said. There were no contemporary references to his visit and Cozzens' book shows much reliance upon imagination, but its statements about the Pimas may be largely reliable. Their lands, cultivated for hundreds of years, still yielded a full thirty-fold in crops. Cozzens learned that

“... they had at least four hundred miles of acequias already constructed upon the reservation, and for many years had raised fine crops of wheat, corn, tobacco, and cotton. Wheat is sown in January, and harvested in May and June. Cotton and tobacco in February. Two crops are always raised on the same ground in a year” (Cozzens 1967: 186).

There were ten villages, composed of about seventy-five or a hundred “wigwams” each. Earlier visitors had mentioned granaries in passing, but Cozzens said that each family had a granary or storehouse “which is much larger and better constructed than their huts,” and which they used for sleeping as well as shelter.

By his reference to “nearly a thousand separate enclosures, which are divided by very excellent fences, made of crooked sticks and mesquit,” he apparently meant the agricultural fields, separated by their silt fences or traps. This statistic must also have come from Gray, and if true it would indicate about one ‘enclosure’ per family (949 families in the 1860 Census). Cozzens claimed

that during the year of his visit, the Pimas and Maricopas sold the Overland Mail Co. more than 400,000 lbs. of wheat, besides large quantities of corn, beans, pumpkins and melons (Cozzens 1967: 185-189). These figures considerably exceeded the numbers reported by either Silas St. John or Special Agent M. T. Mahon, as will be seen. Colonel B. L. E. Bonneville, commanding the Military Department of New Mexico, confirmed that the Indians under agent Walker had sold their corn and beans to such an extent that year that they left themselves destitute, and were obliged to dig mescal [agave] (Rpt. of Sec. of War for 1859, p. 305). The Pimas themselves admitted as much (Walker to Collins, May 9, 1859).

By the latter part of 1859, the Pimas and Maricopas were better situated, with greatly improved access to goods and services, than at any time in their past. Their regular agent, John Walker, reported that

“They are certainly now in a very prosperous condition, and, while remaining among them, I discovered that they nearly all had money, in amounts varying from fifteen to twenty-five dollars, .... They also have fine stock in cattle and horses, &c.; and this year, as I stated in a former communication, their surplus has increased to a much larger amount than I had anticipated” (Ann. Rpt. Comm. Ind. Affs. 1859: 351).

On his part, Silas St. John wrote a long report after he returned to Washington D. C. early in 1860, but he made a more interesting statement back in September:

“They [the Pimas and Maricopas] have under fence and in cultivation fifteen thousand acres of land this year, an increase of one third over last year. During 1858 they produced and sold one hundred and ten thousand pounds of wheat, thirty thousand pounds of corn and five thousand pounds of beans, at an average price of one and one half cents per pound, beside a large amount sold to emigrants and itinerant traders, of which I have no means of ascertaining the quantity.”

“They have this year disposed to the trading posts here, two hundred and twenty five thousand pounds of wheat at two cents per pound, and the corn and bean crops – planted upon the same ground from which the wheat is harvested during the months of May and June – now promise an amount equally as large, showing an increase of above one hundred per cent over the productions of last year. From the preparations now making, by the extension of irrigating ditches &c, the increase for the ensuing year will be still larger, for all of which they will have a ready market at home.”

“They also have a small trade with the frontier towns of Sonora, where they dispose of corretas [*sic*; baskets], blankets, and other articles of domestic manufacture. The proceeds of these sales are mostly applied to the purchase of clothing. Three years since, nine tenths of the men wore no more than the Tapa, at



present many have ample clothing, they are also clothing their women and children”(St. John to Greenwood, September 16, 1859).

Special Agent M.T. McMahon wrote later that the Pimas and Maricopas actually disposed of more than 300,000 pounds of wheat to the Overland Mail Co. in 1859 (McMahon to Mix, December 18, 1860).

*The Census of 1859*

A number of other events in 1859 showed that the outside world was beginning to close in on the middle Gila. Silas St. John wrote the Commissioner of Indian Affairs that he found the 1858 census by agent Walker and Lieutenant Chapman incomplete, so he had taken another one:

PIMOS							<u>Antonio Azul, Chief</u>			
<u>Pueblos</u>	<u>Captains</u>	Aged	Men	Women	Boys	Girls	Pop'lt'n	Total	Horned	Horses
Buen Llano	Malarco and Ojo de Burro		120	126	73	87	406	26		90
Hormiguero	Xavier	40	270	173	43	40	566	407		116
Casa Blanca	Candela	50	146	103	105	87	491	30		46
Cochinilla	De Gurre	1	154	99	60	42	356	20		70
Arenal No. 1	José		161	160	65	71	457	60		111
El Cerro No. 1	Cuchillo del Mundo		77	91	44	38	250	27		87
Hormiguerito	Ortiz		30	33	28	22	113			23
El Cerro No. 2	Ignacio		65	52	53	23	193	73		55
Arizo del Agua	Francisco	45	218	168	58	29	518	119		167
Arenal No. 2	Francisco	11	124	127	80	78	420	37		85
Totals		147	1365	1132	609	517	3770	799		850

  

MARICOPAS							<u>Francisco Dukes, Chief</u>			
<u>Pueblos</u>	<u>Captains</u>	Aged	Men	Women	Boys	Girls	Pop'lt'n	Total	Cattle	Horses
Sacaton	Juan Cheveriah		58	64	27	13	162			23
Huesoparada	Juan José	40	73	120	31	46	310			130
Totals		40	131	184	58	59	472			153

Since this new census was an enclosure with St. John's letter of September 16<sup>th</sup> to the Commissioner of Indian Affairs, it would have been taken in the second week of September, at the time Mowry distributed his first round of goods. The methodology left something to be desired if it followed the system used for distributing presents in November, which was to call up one village at a time, form a circle and count the number of people (Walker to Collins, November 14, 1859). Still, St. John used five population categories instead of two, and he

enumerated cattle and horses as well. There were two Maricopa villages again but some forty-six fewer persons than in 1858, with forty-two of this decrease being in the Sacaton count. St. John showed Juan Cheveriah as the chief or captain at Sacaton, which was evidently a mistake as the 1860 U.S. Census listed him at Hueso Parado.

For the Pimas, St. John enumerated ten villages, seemingly an increase of two. Buen Llano, Casa Blanca, Hormiguero and Hormiguerito (i.e., No. 1 and No. 2), and Arizo del Aqua (or Agua) were presumably the same. St. John's use of Spanish was reasonably good, but whether his Arenal No. 1 and No. 2 were the same as the Aranca No. 1 and No. 2 of the year before is uncertain. Entirely new in 1859, apparently, were El Cerro No. 1 and No. 2. Except for Hormiguerito these were the two smallest of the Pima pueblos, possibly indicating that they were indeed new settlements. According to this enumeration, the Pimas numbered 3,770 persons and the Maricopas 472.

On even brief analysis, this census bears little resemblance to reality. The most curious thing about it is why, after he counted almost 400 fewer persons, St. John should have thought that the earlier census was incomplete. The numbers suggest that the reverse may have been the case (St. John to Greenwood, September 16, 1859; Hackenberg 1974a I: 296, 306-307). St. John's tabulations suggest that he drastically undercounted the number of children, or overstated the number of adult men and women, if not both. The clue is that for neither the Pimas nor the Maricopas did the combined total of boys and girls even equal the number of women, which would mean less than one child per family, a population in a precipitous decline. This, as the regular census of 1860 shows, was not the case. He may however have encouraged nearly all of the adult males to be present, in order not to miss out on the manta and other clothing, tobacco, beads and farm implements handed out in September.

As for the placements of the Pima and Maricopa villages and the size, number and locations of their fields, St. John's census tells us nothing. The 1859 census was simply an enumeration and if it was taken in the manner suggested above, Silas St. John may not have known where all of the settlements were. Unless the village names were in Gray's lost field notes, the opportunity to link this census with Gray's plat of the reservation has been lost.

Silas St. John soon had other concerns. On October 1, 1859, Mr. William Buckley, superintendent along the segment of the Overland Mail Co. route that included the Pima Villages, informed the Special Agent that the company had discontinued his services. In the agent's version, the principal reason was

“... it was not intended that I should attend to any business, in the capacity of Indian Agent, except that in which the ‘O. M. Co.’ were immediately interested” (St. John to Mowry, October 6, 1859; St. John to Denver, October 18, 1859).

If so, then he had been in a potential conflict of interest from the first.

The regular agent, John Walker, had another version of what happened. He wrote that St. John had little influence with the Pimas although he lived there

(at Casa Blanca), and he had been a bit too obvious in promoting his own interests by buying grain from the Pimas, then attempting to resell it at a profit to his employer (Walker to Collins, October 21, December 2, 1859). In his letter to Mowry, St. John virtually admitted as much. Still a Special Agent but now without an income, St. John first asked for appointment as a regular Indian agent and then in late November he departed for Washington (St. John to Denver, October 18, 1859; Walker to Collins, November 14, 1859). While there, he soon lost whatever influence he had remaining, and on May 10, 1860, Silas St. John resigned as Special Agent for the Pima and Maricopa Indians (St. John to Greenwood, January 18, May 10, 1860).

### *Trading Posts on the Middle Gila*

The San Antonio and San Diego agent at Maricopa Wells, a Mr. Mullens, appears to have been the first operator of a trading post on the middle Gila. The date when he began trading with the Pimas and Maricopas (September 1857?) and whether he continued to do so after May of 1858 are uncertain (Woods to Mix, May 25, 1858). Superintendent Woods mentioned “a man in Tucson,” to whom the exclusive rights of trading had been sold. This referred to John Capron, proprietor of Capron’s Rancho, whom agent Walker licensed to trade with the Pimas and Maricopas in July 1858. Capron was a Vermont native who came to Arizona in 1856. His ranch became known as Sacaton station, where

“.... he sells them [the Pimas and Maricopas] such articles of goods as they need and takes their surplus grain and beans &c., which all seems to be doing very well at present” (Walker to Collins, July 31, 1858).

Neither trading post was actually at a Pima or Maricopa village. As late as January 1859, agent Walker thought that some good man might be induced “to undertake and carry on a regular shop within their villages....” (Walker to Collins, January 1, 1859).

In the spring of 1859 Thomas Dicky set himself up as an Indian trader at Maricopa Wells. In July he opened a second store at an Indian village six miles from there with his son, R.R. Dicky, as clerk. Agent John Walker had granted the senior Dicky a license on March 26, 1859. Silas St. John, writing from his agency at the Pima Villages (Casa Blanca), investigated complaints that Dicky was selling liquor to the Indians. Satisfied that this was the case, he told Dicky that his license was revoked.

The trader ignored him and St. John sent the depositions he had collected on to the Commissioner of Indian Affairs (St. John to Collins, July 12, 1859; St. John to Greenwood, July 14, 1859). The Commissioner wrote back that Dicky had no valid license and both agents (Walker and St. John) should investigate the charges (Greenwood to Collins, September 8, 1859). Walker at least did so, and he reported that the episode was apparently part of an effort by the Overland Mail Co. to buy out the property and monopolize all trade with the Pimas and

Maricopas. St. John did buy out Dicky and closed the store. Agent Walker observed that

“The trading house spoken of is entirely outside of the reserve and immediately adjoining a mail station at Maricopa Wells. There is now no trade among these Indians except that of the Overland Mail Co. and a small trade to emigrants, teamsters &c” (Walker to Collins, September 14, 1859).

The Dickys, who were not listed in the U.S. Census of 1860 for southern Arizona, presumably left the country.

One of the depositions that Silas St. John collected was from Hiram Stevens, who had made the original complaint. Stevens was described as the Indian Trader at the “Upper Pimo Village” and therefore of course a competitor of Dicky. In September 1859, Stevens and Capron relocated their business from Sacaton station to Tucson, perhaps because agent Walker did not renew their license, or for better business opportunities (*The Weekly Arizonian*, September 29, 1859, p. 3 col. 2).

#### *Future Prospects*

In spite of the rosy picture of conditions on the middle Gila at the end of 1859, both Sylvester Mowry and Silas St. John foresaw problems. The new reservation included the villages then occupied and the lands cultivated by the Pimas and Maricopas. However, the natives claimed the entire Gila Valley from the Pinal Mountains to the Tezotal (the Great Bend area). In his printed report, Mowry called the attention of the Office of Indian Affairs

“...to the necessity of an early settlement of the titles of the Pimo and Maricopa Indians to the lands above and below their present reservation on the Gila”. .... “There are some fine lands on the Gila, and any extensive cultivation above the Indian fields will cause trouble about the water for irrigation, and inevitably bring about a collision between the settlers and the Indians” (Ann. Rpt. Comm. Ind. Affs. 1859: 358-359).

Silas St. John’s report postdated Mowry’s and seemed almost to echo it. The Pimas’ understanding of their reservation was that it had been set aside for gardening and planting grounds. They did not understand why they should not have the whole of their original claim, which St. John said was from Casa Grande to the Tezotal. The land above them was liable to be occupied by Americans at an early date, and should it be occupied,

“.... it would be necessary to procure water from the river Gila for its cultivation. At a low stage of the river this would deprive the Pimos, which would undoubtedly be a fruitfull (*sic*) source of contention and difficulty unless some law be made for the use of

the water as is in use in all sections of the country where water is used for irrigating purposes” (St. John to Greenwood, January 18, 1860).

Within the next ten years these conditions would indeed arise, and become worse in the decades that followed.

## Chapter IX

### THE PIMA VILLAGES IN 1860

#### *A Time for Gifts*

According to Cyrus Lennan, the Pimas said “San Juan [Silas St. John] is mucho bueno Capitan.” Lennan of course had been appointed mechanic at St. John’s U.S. Indian Agency, and when the Special Agent left for Washington D.C., Lennan told the Pimas that St. John had gone to talk with the President, who would send them some more farming implements next year (Lennan to St. John, December 25, 1859). Silas St. John did go to Washington, and in the latter part of 1860 the Pimas and Maricopas probably received some of the 750 pounds of brass kettles, fifty dozen tin cups, twelve dozen weeding hoes, 5,600 needles and various other items of hardware purchased for the Indians of the Gadsden Purchase and shipped through the New Mexico Superintendency of Indian Affairs (J. L. Collins, receipts dated July 19, 1860).

St. John’s trip to the capital had the object of soliciting his appointment as resident agent among the Pimas and Maricopas, in place of his (unsalaried) status as a Special Agent. In support, he submitted a lengthy report with numerous recommendations, together with a stupendous budget of \$14,128. This would have paid for a staff, facilities, and also the costs for a delegation of six persons to visit Washington D.C. (St. John to Greenwood, January 18, 1860). Perhaps he had learned to think big while serving with the Overland Mail Co., but such an unrealistic budget undoubtedly doomed his prospects for another appointment.

At the same time, agent John Walker was writing that

“Those Pimas have been furnished so much that I don't think they will appreciate what they have, for when I told them in November that they would not be likely to receive anything more during this administration, they seemed to think that they expected clothing &c.” .... “They have a great many good implements for farming and fine lands to enclose and increase their farming operations” (Walker to Collins, January 4, 1860).

Some Maricopas had even been down to Sonora, begging and telling people that the American government had never given them anything, although they later denied this.

*Native Government on the Middle Gila*

Between Walker, St. John, and the 1860 Census enumerator (David Miller), we learn some new things about social relations on the middle Gila at this period. Walker saw the need to lessen local conflicts over irrigation water, and he made the Papagos or Tohono O'odham at San Xavier join with the Mexicans there in selecting a "water *Alcalde*," probably the equivalent of a modern ditch boss (Ibid). If someone had done this a decade later on the middle Gila, it might well have relieved the stresses that the Pimas and their neighbors were beginning to feel over use of water from the Gila.

As it was, the Pimas had an internal system of water controllers (Grossmann 1873: 418). Apparently this did not extend even to the Maricopas, because in early 1861 Ammi White, portraying himself as "only a trader among them," wrote from the Pima Villages that the Maricopas complained the Pimas refused to let them use water to irrigate their fields. In consequence, the Maricopas were unable to raise a sufficient crop to support their families. "They are about to secede: already Capt. Malish has gone with one whole Village, and others are about to follow" (White to Sec. of the Interior, February 22, 1861).

White was referring here to establishment of the Maricopa village at Sacaton, three miles or so below the Butterfield station and the modern community of Sacaton along the Gila River. The 1860 Census population and agricultural schedules enumerated the sixty-year-old leader there, Malaya Kapt, as the wealthiest person among the 144 individuals and forty families at Sacaton (U.S. Census, 1860, Arizona County, N.M.). He was probably the same man as Malai', whom Spier (1978: 157) identified as the Halchidhoma chief. At that time, his village would have lain several miles east of any Pima settlement.

Sacaton had existed since at least 1858, when Lieutenant Chapman enumerated it in his census. Antonio Azul stated at a later date that the associated acequia, the Old Maricopa Ditch, was dug in 1848-49. This would place both ditch and settlement too early, but George Pablo's recollection that this acequia had been built during his childhood would be perfect (Hackenberg 1974a II: 23, 25, 58-59). Kroeber and Fontana (1986: 7), following Russell (1908: 22-23), suggested that the Pima name for Sacaton was Tcóútcik Wútcik, Charcoal Laying. The Pimas occupied the village site after the Maricopas moved down the river to below Gila Crossing, where Russell found them in 1901-02.

In his appraisal of the Maricopas, Silas St. John was not flattering. "During the past four years," he wrote, "this tribe have (*sic*) decreased above 50 per cent in numbers." They were fast losing their distinctiveness as a nation. He explained: the men generally married Pima women and were then classed with that tribe. Most of the Maricopa women practiced prostitution, "which with its accompanying diseases is fast decreasing their numbers." Between the Pimas and the Maricopas there were about 400 Indians, mostly among the latter group, who followed neither the plough nor the warpath - "drones" in St. John's opinion. He recommended steps to prevent their numbers from increasing (St. John to

Greenwood, January 18, 1860). The Maricopa head chief, Juan Chevereah, lived at Standing Bone village [Hueso Parado] (Spier 1978: 20).

As for the Pimas, Antonio Azul received recognition as head chief following the death of his father, Culo Azul, in 1855. According to Russell (1908: 196) the head chief was elected, but there had been dissention. Captain Frederick Grossmann attempted to explain the complicated succession (Grossmann 1873: 411-412). Antonio Azul lived in El Llano (Old Mount Top Village; see Chapter 8) where he was relatively well off, with a personal estate valued at \$300. His influence depended primarily upon his qualities of leadership and persuasion.

St. John described the Gila River Pima governmental organization as it was before American policies and Indian Office appointees began to have an effect on their society:

"I find their internal government superior to any other tribe I ever met. The hereditary chiefs are men of but little influence. Their government consists of a Council made up by delegates, two or more being chosen from each pueblo or community. This council controls the affairs of the nation. Separately, their functions are somewhat similar to those of the Mexican Alcalde. These delegates or Alcaldes are generally men of intelligence and the ones to whom it is the policy of an agent to cultivate. An influence gained over a majority of these Alcaldes would render any measure intended to benefit the nation comparatively easy of accomplishment."

"In my intercourse with these Indian officials I have invariably found them highly appreciative of any action intended for the public good, and furthermore received valuable aid from them on occasions when the more ignorant and superstitious portion of the tribe were disposed to make trouble. .... When cases of theft are reported to them, they are zealous in their efforts to make restitution of the property, and are almost invariably successful, besides never asking or expecting reward for the same" (St. John to Greenwood, January 18, 1860).

Anthropologist Leslie Spier (1978: 158) said that the functions of a chief among the Maricopas seemed to have been slight, and his authority more admonitory than coercive. Russell (1908: 195-196) indicated much the same for the Pimas, and the examples from 1849 of how pilferage was dealt with appear to bear this out. Perhaps by the twentieth century the authority structure had changed or relaxed, because in 1860 Silas St. John implied that the delegates or "alcaldes" had all of the power they needed.

This power, however it was actually exercised, extended even to capital punishment. In Schedule 3, the mortality statistics in the 1860 Census, one reads that Tesh Rekeow [of El Llano] "was tried and found to be a dangerous man in the community, and executed by law of the Pueblo" (U.S. Census, 1860, Arizona

County, N.M.). There was a nearly identical entry for Francisco Gonzales of Hueso Parado. Rekeow, age 45, and Gonzales, 25, were executed in July and December [1859] respectively; they were probably the medicine-men, father and son, whom the calendar-stick accounts of Juan Thomas and John Hayes recorded as being killed by their own people for causing sickness (Jones 1961). Antonio Azul was once tried for witchcraft but fortunately was found not guilty (Grossmann 1873: 411-412).

Another entry, this time on Schedule 6, Social Statistics, and under Pimo Villages, showed that the authority to tax existed as well: "Annual taxes - none except labor on irrigating ditches levied by local authority. 30 days per year by each farmer" (U.S. Census, 1860, Arizona County, N.M.). This perhaps was what underlay Judge Benjamin Hayes' observation in 1849 that their interpreter, Francisco, a Maricopa (probably Francisco Dukes or Duque, living at Hormiguero in 1860), said that he had to work on December 23d, although he used a shirt to hire someone in his place. Hayes inferred, perhaps not incorrectly, that the villagers were assigned regular days of work (see Chapter 6).

#### *Arms for the Pimas and Maricopas?*

St. John claimed that there were "at least one thousand professed warriors in the Nation" [Pimas and Maricopas], which would be consistent with the 1,344 warriors counted by Lieutenant Chapman in 1858 or the 1,496 men St. John listed himself at the time of the goods distribution in September 1859. The 1860 Census enumerated only 766 male heads of families, however, to which a small number of adult male children still living with their parents and possibly some of the "Other" single males might be added. Whatever the case, of these 1,000 or so,

".... from three to five hundred of whom are constantly in the field against their hereditary enemy, the Apache. Their weapons consist only of a short club and the bow and arrow, while their adversaries are quite well supplied with guns and ammunition. A few rifles .... would be invaluable to the Pimos. They could then reduce the number of warriors and still have a more effective force,.... (St. John to Greenwood, January 18, 1860).

The result he thought would be to drive the Apaches farther from the Gila, and by relieving the necessity for keeping large war parties in the field, "... add many to the productive class" [i.e., farmers]. The Model 1841 U.S. percussion rifles that he proposed to order from the government arsenal at Benecia, California, were obsolescent in U.S. service, but would have been at least as effective as any weapons available to the Apaches.

Although the Pimas had asked about guns as early as 1848 and they continued to complain, the government provided no firearms until 1862, when Brigadier General James H. Carleton arranged for them to receive some outdated U.S. muskets and rifles (see Chapter 10, also Walker to Collins, June 8, 1860). St. John was aware of the Pima-Maricopa military alliance, though he did not



elaborate upon it. John Walker and David Miller may not even have known of its existence.

### *Agents Come and Agents Go*

By early summer in 1860, the coterie of Sylvester Mowry, Silas St. John, Cyrus Lennan and their supporters had evidently given up trying to have St. John appointed as a regular agent to the Pimas and Maricopas. They now sought for Lennan to become a Special Agent there. Mowry stressed the need for continuing the blacksmith and carpenter shops, while St. John and Lennan whipped up a purported incident between the unnamed station keeper at the Pima Villages and one or more of the natives. John Walker thought that this incident had been much exaggerated, while the Overland Mail Co. road agent said, "he would have no man among the Indians who did not trade fair with them."

The Superintendent of Indian Affairs in Santa Fe explained that the department already had an employee, blacksmith Charles Hopkins, in charge of the public property there. The proposed appointment of the currently-unemployed Lennan as a Special Agent at the Pima Villages, where he would also be the paid representative of an Army contractor (W.H. Russell), was unsatisfactory because it would create the same conflict of interest as existed with Silas St. John. Removing Walker from his Tucson office to the Pima Villages would still leave a need for an agency in Tucson (Mowry to Greenwood, May 7, 1860; Russell to Greenwood, May 10, 1860; St. John to Greenwood, May 10, June 15, 1860; Lennan to St. John, May 26, 1860; Walker to Collins, June 8, 1860; Collins to Greenwood, July 6, August 14, 1860; Ann. Rpt. Comm. Ind. Affs. 1860: 167-169).

What no one had said, although it probably was on everyone's mind, was that no new appointments should be looked for when a presidential administration was in its last year. The Pimas in the meantime were doing fine. Agent John Walker was only twelve hours away in Tucson, thanks to the Butterfield stages. When he visited the Pima Villages in early June, the incident with the station keeper had blown over and the major complaint was a lack of firearms. An itinerant American trader named Gay, "from the Rio Grande," had been trading guns to the Apaches, giving them an advantage. On the other hand, the Pimas had fine prospects for a crop and had "extended their planting operations far beyond any previous year and seem in fine spirits" (Walker to Collins, June 8, 1860). How much beyond any previous year would soon be documented by the U.S. Census.

### *Farming on the Middle Gila*

It was never made very clear just how they extended their planting operations, a process underway since 1858. In the last months of that year, John Walker had said "They are now opening new *asaquais* (*sic*) some 4 miles up the river where they have never cultivated before," in what would appear to be a clear reference to opening the Old Maricopa Ditch. Sylvester Mowry said the same

thing (Walker to Collins, November 30, 1858; Walker to Mix, December 1, 1858; Mowry to Greenwood, November 8, 1860). New irrigation ditches would be one obvious technique for bringing new lands into production.

In another reference, to increased cultivation in 1859, St. John mentioned the *extension* of irrigating ditches. This would be a relatively rapid means to accomplish the same end, provided that suitable lands were available and that the existing ditches had sufficient grade to carry the water farther (St. John to Greenwood, September 16, 1859). Finally, some seven years later when William Bell passed there, he said that the agricultural implements – shovels, spades and hoes – supplied by the government allowed the annual produce of the farms to increase greatly. He added that

“.... when any part of the valley shows signs of exhaustion, they give it rest, repair the old acequias which had previously been abandoned, and thus bring a reinvigorated patch of waste land again under cultivation” (Bell 1965: 174).

A few of the ‘49ers had mentioned soil impregnated with soluble salts, principally in the area between the Pima Villages and Hueso Parado, but this was never mentioned as a problem for the farmers. So long as sufficient water was available and the lands were not too low to drain readily, the Pimas could flush the salts away by flooding their fields (Forbes 1902: 169, 193; Olberg and Reed 1919: 55-56; Castetter and Bell 1942: 122-124).

#### *Ammi White Comes to the Middle Gila*

Early in 1860 another individual arrived to join the tiny colony of non-native residents on the middle Gila. This was Ammi White, a native of Maine and forty-three years old at the time. Two years earlier he had owned a ranch on the lower Gila some fifty miles above Fort Yuma (*Daily Evening Bulletin*, November 8, 1858, p. 3 col. 3; Ammi M. White file, ASU Library). He was listed as postmaster at Casa Blanca as of January 12, 1860, although superseded in office two months later (Theobald 1961: 75).

The 1860 Census population schedule listed him as a merchant at Casa Blanca with his half-brother, Cyrus Lennan, and partner E.S. Noyes. Schedule 5 (Products of Industry) on the other hand showed White and Noyes, blacksmith, at the Pima Villages with one employee and a single forge (U.S. Census, 1860, Arizona County, N.M.). White & Co. may have taken over the buildings at St. John’s Indian agency, which included a blacksmith shop, but in any case they were entirely separate from the Overland Mail Co. station. In the earliest extant correspondence mentioning White, agent John Walker referred to him as a trader at the Pima Villages (Walker to Collins, December 31, 1860). He was probably the only independent trader there at the time and in any event would become a local fixture for some years.

#### *The Pima Villages in the 1860 Census*

At the end of October, deputy U.S. Marshal David Miller rode into Hueso Parado, probably on a Butterfield stage. Miller was the 1860 Census enumerator for Arizona County, a new county created by the New Mexico Legislative Assembly on February 1, 1860, and abolished two years later without ever having been organized (Coan 1922: 256-257). Miller had come to New Mexico by 1856, and in 1857-58 he was an associate editor of the *Santa Fe Weekly Gazette*. Thereafter he served for twenty years as the Chief Clerk and translator with the Surveyor General's office in Santa Fe. Adolph Bandelier made his acquaintance when he arrived at Santa Fe in 1880 and they shared interests in the history and archeology of the Southwest until Miller's death in 1887. His work, in an era when fraud clouded many of the Spanish and Mexican land claims, was always well-regarded (McMurtrie 1929: 404; Towne 1960: 116; Lange et. al. 1975: 358, 527; Meketa 1982: 86; Hall 1984: 100-106).

Over the next week and a half, through November 12<sup>th</sup>, David Miller enumerated the residents of the eight Pima and two Maricopa villages. Census takers received two cents for each person they counted, giving them the incentive to do a thorough job (Hurtado 1982: 248). Miller listed the natives not only on Schedule 1, the Population Schedule, but on Schedule 3, persons who died during the year ending June 1, 1860; Schedule 4, Productions in Agriculture during the year ending June 1, 1860; Schedule 5, Products of Industry; and Schedule 6, Social Statistics. Scholars and statisticians normally refer to the published census volumes, but the handwritten schedules contain very interesting data. Schedule 4 apparently has seen little use, apart from the citations that Wilson (1985, 1987) and Miller (1989) have made for other counties in Arizona and New Mexico. Hurtado (1982) employed the 1860 federal census schedules to analyze regional patterns of Indian household life in California.

The population schedule for Arizona County may be seen on National Archives Microfilm Publication M-653 Roll 712, but the other four schedules and a recopied version of Schedule 1 can be found only on a New Mexico State Records Center and Archives microfilm. The Pimas and Maricopas were excluded from the decennial censuses of 1870 and 1880. Most of the population schedules from 1890, which did include them, were badly damaged in a fire and subsequently disposed of (Meister 1975: 61; National Archives Trust Fund Board 1979: 86; U.S. Census 1894b: 137-140). The Gila River Pimas and Maricopas were tabulated in a census taken by their agent in 1870, which is discussed in Chapter 12.

From what is known of village distributions at this time, it appears that David Miller enumerated the ten communities in order from west to east, beginning with Hueso Parado at the western end and continuing through the Pima settlements in the order shown, concluding with Sacaton on the east. Sacaton was the Maricopa rancheria by that name rather than the Overland Mail Co. station several miles farther up the Gila, as explained earlier. The population figures have been retabulated from the schedules and found to match those published for the same communities in the 1860 Census population volume, which listed the number of males and females as well (U.S. Census 1864 I: 568). The published

volume on agriculture, however, combined the statistics for Arizona County into a single entry (U.S. Census 1864 II: 178-179).

The only ethnic identifications given in 1860 were “Indian,” apart from fifteen Whites at Casa Blanca who were part of Ammi White’s enterprise there. In a note on Schedule 3, Miller did make it clear that Maricopa Indians inhabited Hueso Parado and Sacaton, while the Pimas lived in the other towns. Together these were known as the Pima Villages. Other Indians may have been present; the 1870 agency census included tribal affiliations and almost five percent of the 4,352 persons counted then were Papagos and ‘tame’ Apaches, with a few from the Colorado River (Andrews to Comm. of Ind. Affs., March 12, 1870).

Miller’s figures from Schedules 1 and 4 are summarized here in Tables 1 and 2 in a manner intended to make them as comparable as possible with the less formal censuses of 1858, 1859 and 1870, and with some of the derived statistics given by Radding (1997). Derived figures such as persons per family, persons per dwelling, and the number of children per woman are easily calculated from the other numbers. Since some of the village names differed in the 1858, 1859 and 1860 listings, while the number of communities apparently went from eleven to twelve to ten, the only means for identifying the same village consistently in these three sets of data is by the name or names of the village chief(s).

Occasionally David Miller appended notes that supplemented his regular entries. For example, on the Hueso Parado population schedule he explained the unoccupied houses:

“These ‘unoccupied’ houses are generally storehouses – built as such by several families, and used for the storage of grain &c. &c. The remark applies to all the Pima Villages.”

Also at Hueso Parado, the personal estate of Boca Arriba Aguila, aged seventy, valued at \$400, included two Yuma Indian scalps with long plaited queues, appraised at \$100 apiece. Their owner evidently took pride in his possessions; these were the only property of this type evaluated in the Pima Villages. A note on the Sacaton population schedule said that twenty-eight unoccupied dwellings (houses) lay some twenty miles above the Indian Pueblo of Sacaton “and seem to have been deserted from fear of the wild Indians.” No ethnic identification was offered for this deserted settlement. The location indicates that it was probably at what became known as White’s Ranch. Agent Frederick Grossmann wrote later that the Indians had cultivated the soil there years ago, and White had used their old acequias (Grossmann to Andrews, October 19, 1869).

The population statistics for Hueso Parado suggested that this village was in serious trouble, perhaps as a delayed consequence of the battle there on September 1, 1857. That Pima-Maricopa ‘victory’ may have been a hollow one. The population declined in 1858-1859-1860 from 314 to 250, paralleling losses in the number of persons at Sacaton and in the overall totals for the Maricopas, incidentally confirming Silas St. John’s remarks about a sharp drop in the number of Maricopas. Perhaps the vanishing natives were simply being incorporated into the Pima population, although their numbers also dropped from an indicated high

of 4,117 in 1858 to 3,320 in 1860. Hueso Parado continued to exist until 1870, when it was deserted because of the water being too alkaline for drinking or for irrigation (U.S. House 1871: 5). The 1870 Census schedule did not include this community.

More telling about conditions at Hueso Parado was the number of children per adult woman or female family head; only 1.2 children per woman. This community was far short of reproducing itself and it fell well below the other four

### Schedule 1 - 8 Pima Villages

<i>Pima Villages West ↗ East</i>	No. of dwellings	No. of un- occupied	No. of families	No. of conju- gal families	Persons/ family	Persons/ dwelling	Male heads	Female heads/wives	Children Boys	Children Girls	"Others" M&F	Children /woman	Adult male median age	Adult female median age	Non-conj./ all families	Popula- tion
Agua Raiz	117	65	135	125	3.87	4.47	125	135	131	104	28	1.74	35	30	7.4%	523
Cerrito	51	30	70	60	3.67	5.04	61	69	51	67	9	1.71	34	28	14.3%	257
Arenal	124	99	140	129	4.12	4.65	132	137	166	132	10	2.18	33	30	7.85%	577
Cachanillo	99	78	122	99	4.13	5.09	114	106	153	109	22	2.47	32	30	18.85%	504
Casa Blanca	58	50	77	60	4.0	5.6	71	66	82	87	17	2.56	35	30	22.0%	323
Hormiguero	102	72	129	111	3.95	5.0	119	121	131	115	24	2.03	30	27	18.95%	510
Cerro Chiquito	43	31	55	43	4.22	5.4	49	49	78	47	9	2.55	35	30	21.82%	232
El Llano	81	46	107	86	3.68	4.86	93	100	92	90	19	1.82	30	27	19.63%	394
<i>Totals or Average</i>	<i>675</i>	<i>471</i>	<i>835</i>	<i>713</i>	<i>3.98</i>	<i>4.92</i>	<i>764</i>	<i>783</i>	<i>884</i>	<i>751</i>	<i>138</i>	<i>2.09</i>				<i>3320</i>
<b>Schedule 1 - 2 Maricopa Villages</b>																
Hueso Parado	56	21	74	58	3.38	4.46	64	68	55	27	36	1.2	34	25	21.62%	250
Sacaton	31	8	40	32	3.6	4.65	38	34	28	29	15	1.7	35	34	20.0%	144
<i>Totals or Average</i>	<i>87</i>	<i>29</i>	<i>114</i>	<i>90</i>	<i>3.46</i>	<i>4.53</i>	<i>102</i>	<i>102</i>	<i>83</i>	<i>56</i>	<i>51</i>	<i>1.4</i>				<i>394</i>
<i>Totals: Pimas &amp; Maricopas</i>	<i>762</i>	<i>500</i>	<i>949</i>	<i>803</i>			<i>866</i>	<i>885</i>	<i>967</i>	<i>807</i>	<i>189</i>					<i>3714</i>

**Table 1**

## Schedule 4 - 8 Pima Villages

<i>Pima Villages West → East</i>	No. of farmers	Acres of improved land	No. acres/ farmer	Value of farm implements	No. of horses	No. of oxen, cows, cattle	Value of livestock	Wheat (bushels)	Indian corn (bu.)	Peas & beans (bu.)	Tobacco (lbs.)	Cotton (no. of 400- lb. bales)	Saguaro molasses (gallons)	Bu. of wheat /acre	Bu. of corn /acre
Agua Raiz 35.60	108	1,148	10.63	\$912	299	239	\$18,190	25,650	40,875	1,399	1,336	3	200	22.34	
Cerrito	48	431	8.98	\$375	111	21	\$4,815	9,590	15,995	519	325	1	100	22.25	37.10
Arenal	101	993	9.83	\$888	239	164	\$15,060	24,640	31,525	1,207	580	4½	300	24.81	31.75
Cachanillo	92	872	9.48	\$749	218	64	\$10,345	21,125	26,100	943	632	2	250	24.23	29.93
Casa Blanca	59	587	9.95	\$490	164	102	\$9,600	15,375	18,875	554	405	2½	200	26.19	32.16
Hormiguero	109	1,110	10.18	\$884	203	83	\$10,385	31,250	38,675	1,250	750	5	500	28.15	34.84
Cerro Chiquito	46	468	10.17	\$476	88	19	\$3,945	15,300	18,200	482	285	1	100	32.69	38.89
El Llano	84	850	10.10	\$484+	111	20	\$4,990	28,250	32,650	925	325	2	100	33.24	38.41
<i>Totals or Average</i>	<i>647</i>	<i>6,459</i>	<i>9.98</i>	<i>\$5,258</i>	<i>1,433</i>	<i>712</i>	<i>\$77,330</i>	<i>171,180</i>	<i>222,895</i>	<i>7,279</i>	<i>4,638</i>	<i>21</i>	<i>1,750</i>	<i>26.5</i>	<i>34.5</i>

## Schedule 4 - 2 Maricopa Villages

Hueso Parado	50	442	8.84	\$440	62	0	\$2,790	10,020	14,125	396	235	1	100	22.67	31.96
Sacaton	39	390	10.0	?	24	0	\$1,065	13,500	15,450	390	105	1	100	34.62	39.62
<i>Totals or Average</i>	<i>89</i>	<i>832</i>	<i>9.35</i>	<i>?</i>	<i>86</i>	<i>0</i>	<i>\$3,855</i>	<i>23,520</i>	<i>29,575</i>	<i>786</i>	<i>340</i>	<i>2</i>	<i>200</i>	<i>28.27</i>	<i>35.55</i>
<i>Totals: Pimas &amp; Maricopas</i>	<i>736</i>	<i>7291</i>	<i>9.90</i>	<i>\$5698</i>	<i>1519</i>	<i>712</i>	<i>\$81,185</i>	<i>194,700</i>	<i>252,470</i>	<i>8,065</i>	<i>4,978</i>	<i>23</i>	<i>1,950</i>	<i>26.7</i>	<i>34.6</i>

Table 2





villages where the indicated number of children per woman stood at less than 2.0. While most Pima-Maricopa villages had fewer female children than males, Hueso Parado again stood out in having 50 percent fewer female than male children. And finally, at Hueso Parado the proportion of single adults who lived as part of the household in a conjugal family, to the total population, was 14.4 percent, more than twice the percentage at any other village. While some of these persons may have been captives or servants, they could also have been the remnants of broken families. All in all, the situation at Hueso Parado in 1860 appears to have been both unstable and in decline. The same may have been true for Sacaton, which was also failing to reproduce itself, although the statistics suggest more stable families there.

The most striking feature in the population figures for both Pima and Maricopa communities was the asymmetry in the numbers of male and female children. In the 1860 Census, six of the eight Pima Villages as well as Hueso Parado showed such a difference. A year earlier, at least five of the Pima settlements (not necessarily the same ones) and both of the Maricopa ones displayed up to 50 percent fewer children of one sex (usually girls), although as we noted, that census bore little resemblance to reality (see Chapter 8). Again in 1870, agent Frederick Grossmann's census of the Indian population showed seven out of ten Pima Villages and one of the two Maricopa towns with greater than 5 percent fewer female than male children (see Chapter 12).

Captain Grossmann also gave the reason, which was that "infanticide, both before and after birth, prevails to a very great extent. This is not considered a crime, and old women of the tribe practice it" (Grossmann 1873: 415). No one else who studied the Pimas and Maricopas reported infanticide, but the statistics clearly showed that it was practiced and even to "a very great extent," although not at every village. Grossmann's reasoning, that women did not care to have many children because they would have to provide for them if their husbands should die, was probably a rationalization because the schedules showed very few female family heads; i.e. widows. Instead, a non-conjugal family would join a conjugal one. The reason(s) for infanticide among the Pimas and Maricopas must lie elsewhere. Disease, or casualties during raids and warfare, would presumably have struck down male and female children alike. That it was a matter of choice and not a universal practice was shown by its apparent absence at three of the villages enumerated in 1860 and at four towns in 1870, where the numbers of boys and girls were similar.

The nuclear or conjugal family predominated as a residence group in both the Pima and Maricopa communities. Several things show this: the equal or slightly greater number of conjugal families compared with the number of dwellings; the relative equality in the numbers of adult males and females in households; and the high proportion (almost 85%) of conjugal families in the 949 families tabulated by the census enumerator. If the additional sixty-four broken families, i.e. those with one adult missing, who were living in the same dwellings with conjugal families were included as well, then the percentage of such family groups under one roof rose to more than 91 percent. The balance consisted of a small number of individuals and broken families who lived alone. From the

census data, it is not possible to say whether persons who did not appear to be immediate family members were siblings, stepchildren, an older parent or parent's brother or sister, perhaps even slaves, servants and non-relatives. Corris Amm, a forty-year-old farmer at Hueso Parado, was the only person with two wives.

Except perhaps for Hueso Parado, the adult population at the Pima Villages had not been notably subjected to recent losses from warfare, disease, or other disasters. Mortality rates from the measles and smallpox visitations since at least the 1770's are not known. In 1860, David Miller wrote on Schedule 3 that

“The Pima Villages .... [are] a remarkably healthy locality, lying on the Gila river, 90 miles from Tucson. Occasional cases of intermittent fever and chills & fever occur tho' rarely fatal. General debility is so common it may be termed a disease of the people” (U.S. Census, 1860, Arizona County, N.M.)

While reports by agency physicians commenced in 1870, these listed few deaths.

Anthropologist Leslie Spier (1978: 139) claimed that among the Maricopas, all the old men knew their age exactly, because they knew the year of their birth as recorded on the calendar sticks. No one else who wrote about the calendar records made such an assertion, and in 1860 at least it is doubtful that any of the Pimas or Maricopas knew their age. This is shown by David Miller having entered most of their ages at quinquennial increments, so that persons were listed as twenty, twenty-five, thirty, thirty-five, forty, etc. years of age. The use of such numbers, at all of the villages, suggests that he simply made his own estimates. This of course does not mean that they were inaccurate. Some of his other figures were also estimated, as will be seen.

Some interesting comparisons can be drawn using the 1860 figures. Radding, from a sample of the 1796 *padrón* or census data of the native population of Sonora, calculated the mean age of male household heads at thirty-seven and for the wives in male-headed households at around thirty. For the women especially these were very close to the figures here (Table 1). The number of persons per family were virtually identical; 3.96 in 1796, and 3.98 among the Pimas in 1860 (Radding 1997: 123-124). Reaching further back to the statistics gathered by Juan Mateo Manje and Lieutenant Martín in 1697 (see Chapter 2), they gave no age or family data, but the number of persons/house (4.59 Manje; 4.68 Martín) had increased slightly to 4.87 in 1860. Or if one considers only the Sobaipuri villages along the San Pedro in 1697, then the number of persons per house was almost identical (4.76 for Manje; 4.86 for Martín) with the 1860 figure. Whatever the vicissitudes the Pimans faced over two centuries, their family structure remained very stable.

#### *Mortality in the 1860 Census*

From Schedule 3 of the persons who died during the year ending June 1, 1860, a crude death rate statistic can be calculated as 15.89 per 1,000 (59/3714 x

1000). When one considers that the crude death rate was reported to be 12.5 per 1,000 for the United States as a whole and 13.95 per 1,000 for New Mexico, the figure for the Pima Villages was remarkably low and in line with David Miller's notes about the healthy locality. However, the 1860 Census volume on mortality warned that actual death rates were greater than as represented, and the suggested correction would raise the U.S. figure to around 22 per 1,000 (U.S. Census 1864 IV: 212; U.S. Civil War Centennial Commission 1963: 19). It was apparent from Schedule 3 that infant mortality in the Pima Villages went completely unrecorded, and only one death of a one-year-old and one of a two-year-old were shown. The actual rate therefore was greater, by an unknown amount. If we assume that the same omissions were made elsewhere and simply compare the crude death rates to one another, the Pima Villages indeed seem to have been "a remarkably healthy locality" at that time.

Arizona County as a whole, however, was not. The county, minus the Pima Villages, had a population of 2,768, and a total of 134 deaths. With some 946 fewer persons than the Pima Villages and more than twice as many deaths, the crude death rate for Arizona County outside of the Pima Villages was 48.4 per 1,000. Not only was life much healthier in the communities along the middle Gila, it was also safer.

There are no grounds for challenging the 1860 Census figures on matters other than infant mortality, and no other numbers or estimates exist that would be any more reliable. However, in viewing the Pima Villages population totals from 1858 (4,635), 1859 (4,242), 1860 (3,714), and 1870 (4,352), an explanation might be sought as to why the 1860 figure was 500 to 600 (or more) lower than the others. In other words, was this decline apparent or real?

On close examination, the numbers of Pima men (1,365) and Maricopa men (131) enumerated in 1859 were both absolutely and proportionally greater than in any of the other tabulations. The reason probably lies in the method of counting. As we saw earlier, Silas St. John evidently counted everyone when they gathered together by villages to receive their farming implements and other presents in September of 1859. For such an occasion, every Pima and Maricopa male had an incentive to be there in order not to lose his share. If so, then the 1859 count may be the most representative from that period as to the number of adult males, and it agrees well with more casual estimates of up to 1,500 warriors (Walker to Collins, March 1, 1858; Walker to Greenwood, August 31, 1859). Perhaps the undercounting in the 1860 schedule was real, and explained by the 300 to 500 men whom St. John said were constantly in the field (St. John to Greenwood, January 18, 1860).

#### *Agriculture in the 1860 Census*

Schedule 4, Productions in Agriculture, provided for the first time a calculated total – 7,291 acres – rather than an estimate of the amount of land in cultivation at the Pima Villages. The enumerator gave the size or quantity of various crops grown in 1859-60 as well, where the schedule provided a column heading for entering these amounts, and the numbers of livestock present (Table

2). The crop figures were included in the production statistics for New Mexico Territory and Arizona County (U.S. Census 1864 II: xxix, xlvi, lxxiv, xcvi, 178-179). These totals, as will be seen, exceeded any estimates from earlier years, but still were not unreasonable.

Until 1860 the estimates of land under cultivation had varied widely, from John Walker's figure of 1,500 acres in early 1858 (Walker to Collins, March 1, 1858), to Silas St. John's claim of 15,000 acres in cultivation in 1859 (St. John to Greenwood, September 16, 1859). The only consistency was agent Walker's periodic assertions that the Pimas and Maricopas were increasing their plantings, with which St. John and even Sylvester Mowry agreed (Walker to Collins, November 30, 1858; January 1, February 4, November 14, 1859; June 8, December 31, 1860; St. John to Greenwood, September 16, 1859; Ann. Rpt. Comm. Ind. Affs. 1859: 360-361). With 7,291 acres of improved land under cultivation, there is little question that the 736 farmers in 1860 had indeed increased their cultivated acreage, doubling it or more in two years.

David Miller tabulated the crop returns, for the year ending June 1, 1860, under the headings on the printed Schedule 4 form. The largest totals were for wheat and Indian corn. The third major crop, cotton, yielded the equivalent of twenty-three 400-lb. bales. Lesser amounts of tobacco, peas and beans (probably tepary beans), and saguaro 'preserves,' tabulated here as molasses, were also listed. The two tons of seed barley that Mowry purchased in 1859 would have been delivered but not yet sown, since the Pimas would have treated it like wheat and planted it as a winter crop, probably in the winter of 1860-61 for the first time. As many had noted by now, the Pimas and Maricopas grew two crops a year from the same lands, planting wheat in the winter between late November and February, and corn during July or early August. Beans, and probably pumpkins and melons as well, would have been interplanted with the corn. Tobacco probably grew along the margins of the fields. Schedule 4 showed that every farmer grew corn and wheat and nearly everyone raised beans, but while almost all of the Pima farmers produced tobacco, only 58 percent of farmers in the two Maricopa villages did so.

There were column headings on the schedule for oats, rice, Irish potatoes, honey, clover seed, flax, cane sugar, wine and other agricultural products, but with no production shown for the Pima towns. For wine this was an omission since the boiled and fermented syrup of the saguaro fruit became the occasion for an annual bacchanal in mid-June, which Miller may not have known (Russell 1908: 72, 170-171). The absence of any figures for cane sugar in the schedule helps to clarify references to sugarcane in the late 1860s as a crop grown primarily by settlers. The crop was actually sweet sorghum (see Chapter 7). No doubt other cultivated plants such as amaranths and chenopods went unrecognized. A much more substantial omission was the muskmelons, watermelons, pumpkins and squash that must have been in evidence, but which were not tabulated because there were no columns for these. Wild food products such as mesquite beans were not part of an agricultural census.

The tabulations showed a pattern in that farms at the western end, at Hueso Parado and Agua Raiz, ranged in size from five to twenty-five acres,

mostly by increments of two to five acres, with few farms at either extreme. The range of sizes gradually lessened and centered on ten acres per farm as Miller moved eastward, until at Sacaton each of the thirty-nine farmers was shown as having ten acres of improved land. Perhaps Miller simply became tired, and increasingly resorted to a figure he considered to be an average. Ten acres per person was the requested acreage when allotments were proposed in 1911 (U.S. House 1912:10).

Castetter and Bell, on the other hand, estimated that the average cultivated acreage for a Pima family in early historic times was two to five acres, and for the Maricopas only one-third to one-half acre per family (Castetter and Bell 1942: 132; 1951: 78). Superintendent George Andrews wrote in 1869 that “no one Indian family cultivates more than six acres of land and this is caused by the short allowance of land” (Andrews to Parker, November 9, 1869). The year following, Captain Frederick Grossmann’s Pima-Maricopa census listed 2,732 acres in cultivation, and he added that their fields did not average more than from ten to fifteen acres to the family (Ann. Rpt. Comm. Ind. Affs. 1870: 116; Grossmann 1873: 418). The areas under cultivation along the Gila River would not have been entirely the same in 1860 and 1870, however.

David Miller noted on Schedule 6, Social Statistics, that the usual average crop of corn was forty bushels to the acre and for wheat, thirty bushels per acre. In his listings for wheat and corn in Schedule 4, it is evident that he often used a multiplier of anywhere from twenty to thirty-five bushels per acre to calculate the size of a farmer’s wheat harvest, and thirty, thirty-five, thirty-seven and one-half, and forty bushels per acre for corn. As he moved from west to east through the villages, he relied increasingly upon a multiplier for the amounts of the principal crops. If one takes his figures for each farmer and multiplies these out, the resulting totals are astronomical; 194,700 bushels or 11,682,000 pounds of wheat, and 252,470 bushels or 14,138,320 pounds of corn.

These numbers assume that all of the 7,291 acres reported in cultivation were double-cropped; that is, sown to wheat during the winter and spring and to corn in the summer months, with the vine crops interplanted. This leaves the acreage used to grow the equivalent of twenty-three 400-lb. bales of cotton to be accounted for. In her paper on cotton among the Hopis and Pimas, Huckell (1993: 172) made certain assumptions about the number of bolls per plant, planting intervals and other factors to arrive at a figure of 210 pounds of lint per acre as the estimated aboriginal yield for the Pimas. By calculation, the twenty-three bales would have required only 43.8 acres of land for their growth, or just 0.6 percent of the lands in production. The adjustment (reduction) would be 1,168 bushels of wheat and 1,515 bushels for corn. A one-acre Pima field would produce enough cotton fiber for approximately 47 blankets (Huckell 1993: 174).

While the wheat and corn statistics may appear to be unrealistically high, they are official. The 1870 figures for wheat production on the same reservation, although not necessarily from the same areas, gave an average of fifteen bushels per acre. This figure multiplied by the number of acres in 1860 would still total more than 6.5 million pounds of wheat.

The only known analyses of agriculture in the Southwest from the mid-nineteenth century are found in the 1851 and 1852 agricultural volumes of the U.S. Patent Office. These reported the average production of wheat as fifty-six to seventy-five bushels per acre (assuming forty-five pounds per acre as the sowing rate) and seventy-five to 100 bushels of corn to the acre in the Mesilla Valley of southern New Mexico (U.S. House 1852: 478-479). At Albuquerque and Santa Fe, the cooler climate permitted only one crop per year. The yields there were said to be about one-half of the above figures – or approximately the same as the number of bushels per acre that David Miller reported for the Pimas (Op cit: 484, 489-490; U.S. Senate 1853a: 346, 348).

As recently as 1914, individual fields on the Gila and Maricopa Indian Reservation averaged close to ten acres in size and under favorable conditions yielded twenty-five to forty bushels of wheat per acre, “quite as much as the whites” (Southworth 1919: 117). On the other hand, Castetter and Bell (1942: 55, 82, 117) found in their studies that the soft native varieties of corn grown by the Pimas seldom yielded more than ten or twelve bushels per acre, although the fields at the U.S. Field Station at Sacaton produced twenty to twenty-five bushels. Wheat yielded ten to twenty bushels with native culture and forty to fifty bushels at the Station. For the Maricopas and other Yumans, Castetter and Bell offered no production figures.

The consensus from all of this is that while the yields in the 1860 Census schedule were achievable, Miller’s averaging may have been on the high side and the actual figures somewhat less than what he reported. John Walker, writing on June 8, 1860, said that the people at the Pima Villages “.... have a fine prospect for a crop. They have extended their planting operations far beyond any previous year” (Walker to Collins, June 8, 1860). Later, “.... The Pimas are making a large crop and selling largely” (Walker to Collins, October 1, 1860). As for their sales, Samuel Cozzens claimed that the Pimas sold the Overland Mail Co. more than 400,000 pounds of wheat in 1859 besides large amounts of corn and other produce (see Chapter 8). David Miller said elsewhere that they sold 500,000 pounds of grain in 1860 (*Daily Alta California*, December 14, 1860, p. 1 col. 5). How much they may have sold to emigrants, teamsters and other private accounts beyond the 40,000 pounds of wheat bought by Ammi White for an army contract is not known (Browne 1974: 110-111).

The amount of land cultivated at each village was directly related to the number of families since the median number of acres per farmer was nine or ten everywhere and the average 9.9. Apart from three interpreters, the only listed occupation was that of farmer, shown for 76 percent to 94 percent of the adult male household heads, while most of those for whom no occupation was given probably worked as farm laborers. Assuming that the co-residents of a dwelling represented an economic unit, the 4.5 (Maricopa) to 4.9 (Pima) persons per dwelling should easily have managed a ten-acre farm. Following Castetter and Bell (1942: 55) and allowing only eighteen bushels of corn per acre, one acre of corn should sustain an individual for a year. The Pimas and Maricopas as of 1860, allowing for non-consumables such as cotton, should easily have met their

own needs and sold as much as they could find buyers for without selling too close, as John Walker put it, and having to resort to roasting mescal again.

Another aspect of the agricultural scene was livestock. Most of the Pima farmers had a horse and many had several, with stock ownership clustered in the villages towards the west. The Maricopas were less well off with only one horse per family head at Hueso Parado and fewer at Sacaton. The census schedule had three headings for cattle – milch cows, working oxen, and other cattle – and of 712 head in all, the Maricopas had exactly none. Why this was so, no one explained; Silas St. John's 1859 census also listed no cattle with the Maricopas.

Holdings among the Pimas were fairly well divided among the three types of cattle, with ownership again concentrated in the more westerly communities. Working oxen were used for plowing, in conjunction with what was called a Mexican plow. Agent Walker said they used the Mexican plow mostly and had very fine work cattle, although they didn't 'grub' their land well and plows were continually being broken from having been run into mesquite roots. In later years we learn that working cattle were scarce and the farmers had to wait their turn to use them, which caused delays in getting their crops into the ground (Walker to Collins, December 31, 1860; Ann. Rpt. Comm. Ind. Affs. 1876: 7; Castetter and Bell 1942: 138-140; Conner 1956: 16). There were no sheep or swine at the Pima Villages, and the 1860 Census schedule had no column for listing poultry.

In his year-end report, John Walker had recently visited the villages on the middle Gila and found them all quiet and seemingly well satisfied, the people preparing to seed a large crop for the next year (Walker to Collins, December 31, 1860). He didn't mention Special Agent, M.T. McMahan, who had passed through earlier in the month and delayed long enough to write an eleven-page report on the Pimas and Maricopas for the Commissioner of Indian Affairs. McMahan reiterated what other correspondents had said throughout the year; the Pimas were industrious, reliable, a considerable asset to the Overland Mail Co., and valued allies for the protection they gave travelers and settlers from Apache marauders. They did need a blacksmith to keep their plows and other agricultural implements in repair (McMahan to Dole, December 18, 1860).

They were also anxious to learn, and McMahan lent his recommendation to one made earlier by Silas St. John, "that a competent teacher familiar with the English and Spanish languages be located among them .... to afford them the desired instruction." This, he judged, was necessary, whereas no need existed for establishing another military post among people fully competent to take care of themselves, and others. Within the next few months, war clouds from the east would rearrange these priorities. After being left to their own devices for awhile, the Pimas would have a key role in aiding Federal forces to regain control of the Southwest during the Civil War.

## Chapter X

## THE CIVIL WAR YEARS AT THE PIMA VILLAGES

### *The Indian Agency In Decline*

Indian agent John Walker concluded his year-end report, saying that he had made arrangements to leave Tucson about January 15<sup>th</sup> [1861] and was anxious to hear if he had been granted a leave of absence. He added that he wanted to get to Washington before March 4<sup>th</sup>, perhaps to settle his accounts (Walker to Collins, Dec. 31, 1860). He evidently heard nothing back from Superintendent Collins. Walker passed through Mesilla, N.M. in late March, bound for Santa Fe and then back to Tennessee. His appointment by Democratic President James Buchanan was due to expire on March 12, 1861. The agent no doubt considered his retention unlikely, and his sympathies in any event lay with the South. In early April, the superintendent wrote that Walker had been a good agent and always faithful in his duties, but had returned home after telling Collins that he did not expect to return (Collins to Comm. Ind. Affs., April 10, 1861).

A correspondent in Tucson spoke of Walker as “beloved by the whole people of the Territory [Arizona]” and one who aided the Indians under his charge to rely upon their own efforts and materially better their condition (Altshuler 1969: 160). This would have applied especially to the Pimas and Maricopas. Yet there were a few clouds; more than a year after his departure, a government auditor who tried to settle his accounts found a balance due the United States of \$1,382.70, mostly for hay and grain purchases (Treasury Dept., 2<sup>nd</sup> Auditor’s Office, June 13, 1862). Almost nine years hence, Antonio Azul would claim that “The first Agent we ever had, Walker, stole from us and sold our goods at Tucson” (Grossmann to Andrews, October 31, 1869).

The Pima leader did not elaborate on this charge, and whatever it was that Walker might have sold is a mystery. On his part, the agent had warned that the Pimas were little acquainted with the twenty-five large American plows furnished them or with harnessing horses to draw the plows (Walker to Collins, November 14, 1859). Horses among the Pimas and Maricopas were not used as draft animals. In his final letter, Walker said it was the Indians who had traded off nearly all of their plow harness and some of their American plows, with very little to show for them (Walker to Collins, December 31, 1860).

The Indians of the Gadsden Purchase (Pimas, Maricopas, Papagos, and ‘Tame’ Apaches) should have been receiving annuity or Indian goods as well – butcher knives, pans, brass kettles, tin cups, hatchets, half-axes, awls, needles, and shears. One shipment was receipted for at Santa Fe in July 1860; another was received in New York on February 28, 1861 (J.L. Collins, receipts dated July 19, 1860; James R. Roche, receipt dated February 28, 1861). The first lot presumably made it to Tucson; whether the second one did is more problematic. Walker certified to the issue of similar articles during the second quarter of 1860 (Walker, returns of property, June 30, 1860). The following February, Superintendent Collins sent a lot of farming implements (spades, hoes, etc.) to Mesilla, but these were never forwarded to Tucson (Collins to Labadie, May 23, 1861; Collins to Dole, August 11, 1861).



To Captain Frederick E. Grossmann ten years later, it was like none of this had ever happened. In his first annual report as Special Agent for the Pima and Maricopa Indians, Grossmann wrote:

“I also learned that the government had from time to time purchased presents for the Indians of this agency; that some of these had been issued, while others, according to the statements of the Indians themselves, had been purloined, sold by the agents to the traders, and afterward had been resold by the latter to the Indians.”

Grossmann had read Mowry’s report in the 1859 Annual Report of the Commissioner of Indian Affairs, and from this

“.... I learned that a large assortment of agricultural implements and tools had been issued by him, and that he had erected a blacksmith and carpenter shop. Not a vestige of either tools or shops remains, and even such articles as anvils, grindstones, &c., (which could hardly have been worn out in the short space of eleven years), had totally disappeared.”

“Indians had been in the habit for years past of selling to traders and others a large portion of the goods issued to them by the government” (Ann. Rpt. Comm. Ind. Affs. 1870: 119).

In his view, their farming “was still carried on in the most primitive manner.” In spite of this, the Pimas and Maricopas continued to increase their productivity year by year.

By late May of 1861, Superintendent Collins reassigned Lorenzo Labadie to Tucson from one of the Apache agencies in New Mexico and started him on his way (Collins to Labadie, May 23, 1861; Collins to Dole, May 25, 1861). Labadie made it as far as Las Cruces, N.M., where a ‘committee’ of Southern sympathizers from Mesilla waited upon him and advised that they had a fine barrel of tar, and feathers, waiting for the first officer appointed by President Lincoln, unless he departed from the Territory of Arizona. Labadie was understandably alarmed, and Collins told him to return (Labadie to Collins, June 16, 1861; Collins to Dole, June 22, 1861).

### *Southern Mail to California*

The next to leave southern Arizona was the Overland Mail Company. Secessionists confiscated stock and equipment at stations in Texas and stopped the mails at Fort Smith, Arkansas. In Arizona, Apaches began to disrupt operations, initially at Apache Pass during February and later by attacks on the stages themselves. Congress authorized the Postmaster General to discontinue mail service on the southern (i.e., Butterfield) route and make a new contract for

the company to carry mail along a central route through Denver and Salt Lake City to San Francisco.

Segments of the old stage line continued in operation for several months. The latest mail from the East brought a load of overdue pouches from Tucson to San Francisco in early April, but company personnel were removing stock and other property to California as late as June, picking up any waiting mail en route. Coaches ran on an irregular schedule from San Francisco to Tucson; the last east-bound mail from Tucson was made up and sent out on March 6<sup>th</sup>. It cleared El Paso on March 9<sup>th</sup> and reached Missouri on March 21<sup>st</sup> (Conkling and Conkling 1947 II: 325). A final stage from California arrived in Tucson during the first week of April, riddled with Apache arrows and bullets, and rolled on as far as Mesilla, N.M. The *Los Angeles Star* reported on June 15<sup>th</sup> that the mail from the West was stopped at the Pima Villages. Some of the stations were subsequently destroyed; a sketch by Ammi White, dated December 1861, showed the Maricopa Wells station as “burned down” while those at the Pima Villages and Sacaton Station were still in good order (*Semi-Weekly Southern News*, March 20, 1861, p. 2 col. 4; *The Mesilla Times*, April 13, 1861; *Los Angeles Star*, May 11, 1861, p. 1 col. 4; June 15, 1861, p. 2 col. 3; Claim of White & Noyes, 1862; Conkling and Conkling 1947 II: 325-327; Altschuler 1984: 32; Wilson 1995: 83, 88-89).

In this first spring of the Civil War there was “an air of unreality about the national crisis,” as one historian put it. Texas ratified its ordinance of secession on February 23<sup>rd</sup> and Congress annulled the Butterfield contract on March 2<sup>nd</sup>. At the same time and seemingly in spite of Texas’ action, the U.S. awarded George Giddings, an experienced expressman and mail contractor from Texas, a new contract to link San Antonio, Texas and Los Angeles with the coaches of his San Antonio and San Diego Mail Line. Giddings had succeeded James Birch as head of the mail line after Birch’s death in 1857. This agreement was to extend from April 1, 1861, to June 30, 1865. Giddings arrived back in Texas late in March and promptly set about putting his new operation in order, buying some of the other line’s stock from its divisions between Tucson and Fort Stockton, Texas.

During April and May, Henry Skillman assumed charge of the western division and made a serious effort to reestablish and stock the old stations and put everything in order. Despite a spectacular disaster in Doubtful Canyon late in April, the first through mail to Los Angeles left Mesilla, N.M. on May 18<sup>th</sup>. The company began regular stage service from San Antonio as far west as Mesilla by June 1<sup>st</sup>, and a mail from Tucson reached Los Angeles on June 20<sup>th</sup>. At almost the same time, Captain Skillman arrived at Mesilla with the first California mail on June 10<sup>th</sup>, six days from the Pima Villages, while the second west-bound mail departed Mesilla on the 18<sup>th</sup>. By the end of June the line was in “complete running order” with bimonthly service between San Antonio and Los Angeles, and by mid-July weekly mail service from California had commenced. One week before the Confederate invasion and capture of Fort Fillmore, N.M. on July 27, 1861, Robert Doyle (superintendent of the Western Division) managed to send a final mail through to Mesilla from San Diego (*The Mesilla Times*, May 17, June 1, June 30, July 20, 1861; *The Semi-Weekly Southern News*, June 21, 1861, p. 2

col. 1; *Los Angeles Star*, June 29, 1861, p. 2 col. 2; July 27, 1861, p. 2 col. 5; Austerman 1985: 161-170, 179-180; Wilson 1995: 83-84).

Giddings' San Antonio and San Diego Mail Line enjoyed about a month of revived operation under his contract with the U.S. Government, in part across country now dominated by the Confederacy, until Congress rescinded it in July. Whether he received any payment from the U.S. is unclear. To confuse matters, Giddings accepted a Confederate Post Office Department contract in June, to provide mail service between San Antonio and El Paso. Then in August, he signed a new contract with the Confederate postal authorities to carry mail from San Antonio all the way to Los Angeles twice a month, for \$250,000 a year.

He got this line into operation as well. On August 12<sup>th</sup> Henry Skillman, escorted by Lieutenant Levi Sutherland and some fifteen Confederate soldiers, left Mesilla with a mail for California. Sometime before the 23<sup>rd</sup> they arrived in Tucson. This was probably the San Antonio and San Diego mail received in Los Angeles the evening of August 31<sup>st</sup>. Skillman intended to withdraw the stock from this line until Indian affairs had quieted and probably did not go beyond Tucson himself (*The Mesilla Times*, July 20, August 17, 1861; *Los Angeles Star*, July 27, 1861, p. 2 col. 5; *San Francisco Herald*, September 3, 1861, p. 1 col. 3; *Daily Alta California*, October 24, 1861, p. 2 col. 3; *War of the Rebellion, Official Records [WR-OR]* vol. 50(1): 588; Records of the Confederate States of America, vol. 98 p. 34; vol. 99 pp. 174-175, 179; Conkling and Conkling 1947 II: 328; Austerman 1985: 180-181).

The removal of their horses and other property effectively shut down Giddings' mail line between Mesilla and Tucson, but someone made at least one more mail run in September. A letter dated September 20<sup>th</sup> from Los Angeles said that the last mail from the East arrived there "the week past," and the service had been suspended. A Mr. Reed "of the late San Antonio (Texas) and Los Angeles mail line" left Fort Yuma with some of his employees from Tucson on September 24<sup>th</sup>, bringing 'advices' from Tucson to September 18<sup>th</sup>. The Los Angeles correspondent, without naming names, referred to this most recent incarnation of the San Antonio and San Diego Mail Line as "the hybrid mail" and he had strong reasons to suspect that

"it has been the medium of constant intercourse between traitors here and rebels in Texas and the East. In other words, the mail, conducted at the expense of the Federal Government, belonged to the Southern Confederacy, and was used to forward their designs" (*Daily Alta California*, September 29, 1861, p. 1 col. 2; October 8, 1861, p. 1 col. 3).

The correspondent's suspicions were well-taken but he was only half right. After Giddings began his contract with the Confederacy in August, it had been entirely a Southern operation. Jefferson Davis, had he wished to do so, could have written directly to Antonio Azul during this time, although no Confederate postmasters were appointed west of Mesilla. By November, the Confederate Post Office Department officially 'curtailed' this route and listed

Giddings as having received \$135,000, presumably for six and one-half months of services (Records of the Confederate States of America, vol. 99 pp. 254, 365).

*Ammi White and the Pima Villages in 1861*

Some of the mail runs during June or July may have used stages, but the later ones relied upon couriers, which reduced the need for stations. In June, two recent arrivees at Los Angeles claimed that the Pimas were becoming disaffected and that the stock of goods at the villages belonging to the Overland Mail Co. had been sold to Messrs. Neville and McKenzie about a month since. Shortly afterwards the Indians attacked the house and helped themselves to everything (*Los Angeles Star*, June 15, 1861, p. 2 col. 3). During August, one diarist who traveled from Tucson to California mentioned all of the stage stations as far as Maricopa Wells by name, but he gave no indication that any of these were still manned (Altshuler 1984: 68-69).

The Federal commander at Fort Yuma, assured of their patriotism and intelligence, had asked Ammi White and his partner at the Pima Villages, Eben. Noyes, to send him information about any hostile (i.e., Southern) expeditions (Andrews to Noyes & White, Aug. 9, 1861). White watched and occasionally did report from his store at the Pima Villages, but mostly he looked after his own interests. He was not above advertising in a pro-Confederate newspaper, *The Mesilla Times*, and his first-run ad in the August 24, 1861 issue advised "Emigrants, Travelers on their way to California," that they could "obtain supplies of Flour, Corn-meal, Pinola, Beans, Salt, Sugar, Bread, Bacon, Hay, and Grain, at reasonable prices," from White & Noyes at the Pimo Villages. Although not explicit, this may be the earliest indication that he had a gristmill in operation. Just one day earlier he had replied to Lieutenant Colonel Andrews at Fort Yuma, advising about the arrival of the Confederate escort at Tucson and enclosing copies of *The Mesilla Times* with reports of Confederate activities.

Lieutenant Colonel John R. Baylor, commanding Southern forces in the Mesilla Valley of southern New Mexico, got wind of White's activities and vowed (probably in December 1861) that "I will hang White for his unlawful trading with the Indians" (*WR-OR* vol. 50(1): 588, 899). Baylor was not given to idle threats, and it was White's good fortune that Baylor had already departed for the East by the time the merchant was brought to the Rio Grande as a prisoner in 1862 (Finch 1996: 135-136).

At the same time that Ammi White began advertising, the newspaper editors smiled upon the Pimas and Maricopas to the point of advocating that they be armed as a means of holding back Apache encroachments, which were threatening even Tucson (*The Mesilla Times*, August 24, 1861, p. 2 col. 2). By 1861 this was not an original idea, nor was it practical, for want of arms. Such a proposal from a Confederate source is unexpected because it would have introduced an armed force of unknown loyalties into an already unstable area.

Three years later, an Interior Department Special Agent wrote that the Indians had sold 400,000 lbs. of wheat to the Overland Mail Company in 1860. Early in 1861 the company pulled out and the grain market virtually disappeared,

while the departure of agent John Walker left the natives without a source of agricultural implements and annuity goods. Their planting of wheat for 1861 probably continued the trend of recent years and increased, because the wheat crop was already in the ground before anyone on the middle Gila knew about the Butterfield withdrawal and the loss of that market. At year's end their grain was still not half sold. As for prospects in 1862, Ammi White said that "The new crop [wheat] will come in in May and a very large amt. of land is planted and looks well" (White to Carleton, January 16, 1862).

Whether any of Mowry's two tons of seed barley was sown is unknown. Some army officers preferred barley to corn for their grain-fed American horses and mules, especially in the summer months. The Overland Mail Co. had favored wheat, while at Fort Breckenridge, an army post on the lower San Pedro occupied from May 1860 through July 1861, the horses were fed corn (White to Carleton, January 16, 1862; Wilson 1975; Altshuler 1983: 18; Miller 1989: 81). The result was that a market normally existed for all of these grains and the Pimas specialized in supplying wheat.

Until the Civil War and the arrival of the California Column in Arizona, there is no record of Army purchases, by contract, at the Pima Villages (personal communication, Dr. Robert W. Frazer, December 23, 1997). According to Captain John Cremony, before the war White had traded with the Indians for wheat. He converted it into flour and sold it back to them, as well as to the people of Tucson and other Mexican towns, to emigrants along the road, and to the Overland Mail Co. (*Daily Alta California*, June 29, 1862, p. 1 cols. 4-5).

Special Agent J. Ross Browne said that in 1860, Ammi White purchased 40,000 lbs. of wheat for Fort Breckenridge. What actually happened was that White bought more than 1000 bags of wheat averaging 100 lbs. each, "say 100,000 lbs. at 3 cents per lb.," to fill a contract with William S. Grant (another Maine man). Grant, as the army contractor, purchased wheat locally as well as in Sonora, then when flour was desired he processed it at his two gristmills in Tucson (White to Carleton, January 16, 1862; Browne 1974: 111; Frazer 1983: 167-169). Grant left Arizona at the end of July in 1861 when the U.S. troops withdrew. This left Ammi White with 100,000 lbs. of wheat on his hands, purchased by him for W.S. Grant's contract with now-abandoned Fort Breckenridge but never delivered.

Browne claimed that the Pimas sold White 300,000 lbs. of wheat, 50,000 lbs. of corn, 20,000 lbs. of beans, and a large amount of dried and fresh pumpkins in 1861, "all intended for the supply of the California column" (Browne 1974: 111). By White's own statement he had on hand, besides the 1000 bags of wheat, 30,000 lbs. of flour, 200 sacks (16,000 lbs.) of corn, twenty 100-lb. sacks of beans, six sacks (1,000 lbs.) of salt, 200 chickens, and thirty large hogs, the latter for bacon (White to West, December 14, 1861; White to Carleton, January 16, 1862). A month later, one William Walker claimed that White was taking in 140 to 180 sacks of wheat per day from the Pimas, costing him two cents per pound. White himself said that he had bought another 500 sacks of wheat during the fall and winter, and made the first specific reference to having his own gristmill, which he thought capable of producing 2,000 lbs. of flour per day (*WR-OR* vol.

50(1): 899-900). White had traveled to Fort Yuma in October, and beginning in December he worked to stockpile food and forage for the Union army about to be called the California Column. Colonel James H. Carleton would soon lead this force from California to Fort Yuma and then up the Gila Valley, with the intention of driving the Confederates from the Southwest.

*The Civil War in Southern Arizona*

Back in late July of 1861, Lieutenant Colonel Baylor had occupied southern New Mexico with six companies of his 2<sup>nd</sup> Regiment, Texas Mounted Rifles, and set up a Confederate Territory of Arizona with himself as governor. Thanks to the San Antonio - Los Angeles mail service, Federal authorities in California were soon better advised about affairs in Confederate Arizona than they were regarding Union strength in New Mexico. Southern New Mexico and Arizona greeted Baylor's arrival with an enthusiasm not shared by the rest of New Mexico Territory. By December, the commander of the Department of the Pacific in San Francisco began serious planning to have Colonel Carleton lead an expedition east across the desert to expel the rebels from the Southwest (Wright 1964: 45-46; Miller 1982: 4). That same month, Confederate Brigadier General H.H. Sibley led the 2,700 men of his Sibley Brigade to El Paso and the Mesilla Valley, adding substantially to the rebel strength there.

Confederate agents were active at Tucson and even attempted to subvert the Indians, but up at the Pima Villages, White felt confident that "the Indian Telegraph" would alert him a long time before any force from Mesilla could reach there. The Pimas meanwhile had been keeping up their own war skills, counting more than 100 Apaches killed in 1861 while losing but two men in battle (White to West, December 14, 1861; White to Carleton, January 16, 1862). The implicit understanding seemed to be that the Americans could fight one another while the Pima and Maricopa warriors, hopefully with a donation of firearms, would keep the Apaches at bay (White to Sec. of the Interior, February 22, 1861; Lennan to Sec. of the Interior, July 10, 1861).

While Ammi White accumulated provisions and forage at the Pima Villages, contracts were made at Fort Yuma to have hay cut and deposited at the old Overland Mail stations both east and west of the Colorado River (Keen to Carleton, January 10, 1862; *WR-OR* vol. 50(1): 139, 781, 809, 866, 869). Farther east, Colonel Baylor was making his own moves. On February 10<sup>th</sup> he ordered Captain Sherod Hunter and his Company A, Arizona Rangers, to take possession of western Arizona and maintain order there, make a treaty with the Pimas and Papagos, recruit, and spy on the enemy.

Hunter's company, with a strength estimated at seventy-five to 100 men, rode west for two weeks and entered Tucson unopposed on February 28<sup>th</sup> (*WR-OR* vol. 50(1): 944, 1088; 50(2): 152; Finch 1969; 1996: 114-123). Acting on rumors that Federal troops from California were already marching up the Gila River, Captain Hunter started with his command on March 3<sup>rd</sup> for the Pima Villages. Ammi White's moccasin telegraph failed to give warning and upon arrival (March 7<sup>th</sup>) Hunter arrested White for trading with the Indians,

"purchasing wheat &c., for the Northern troops." The incriminating letter from Lieutenant Colonel Andrews also damned him as a spy (*WR-OR* vol. 50(1): 707-708; Andrews to Noyes & White, Aug. 9, 1861; *The Tri-Weekly Telegraph*, May 12, 1862, p. 3 cols. 1-2).

Hunter said he negotiated friendly relations with these Indians and recommended appointment of an agent for them "at the earliest possible convenience," but he made no treaty (Hunter to Sibley, April 18, 1862). He confiscated White's property, which he listed:

Pima Villages  
Mar. 8<sup>th</sup> 1862

Inventory of goods Seized from A. White

7 prs. Shoes  
7 flannel shirts  
5 Buck skins  
14 prs. Linen Pants  
9 Common Wool Hats  
2 Boxes Candles  
1/2 Box Pols(?) Soap  
1 Doz. Calafornia (*sic*) Bridle Bits  
3 Pr. Spurs  
1½ Doz. Pistol Scabbards  
1 Gross Maches  
1 Box Axes  
2 Minnie Muskets  
2 Citizen (?) Rifle  
4 Muskets  
3 Cans waggon grease  
½ Doz. Brooms  
1 Coil Rope  
4 lbs. Saleratus  
1 Pair Counter Scales  
½ Sack Coffee  
7 pr. cotton drawers  
4 Regatta Shirts  
14 packages envelopes  
25 lbs. Bacon  
2 B. mats  
50 lb. Sugar  
2 Shot guns (Hunter, inventory, March 8,  
1862)

The 1,500 sacks of wheat that White had stored up, Hunter distributed among the Indians. He had no means of transportation and thought this a better

policy than destroying it or leaving it where it could fall into the hands of the enemy (*WR-OR* vol. 50(1): 707-708).

Captain Hunter delayed near the Pima Villages awaiting the arrival of a rumored train of fifty wagons en route to take away the wheat. The rumor was untrue, but about this time Union Captain William McCleave, then stationed at a hay camp east of Fort Yuma, became concerned about the safety of one of Carleton's scouts or spies last seen heading towards the Pima Villages (*WR-OR* vol. 50(1) 899; Finch 1996: 128). The captain and nine men from his company of California Volunteers rode up the Gila, hoping to meet the scout. Both Union and Confederate sources, and eventually a reminiscence by McCleave himself, tell what happened when McCleave's party reached the Pima Villages. One version, penned in early June by Captain John Cremony signing himself as "Vidette," appeared in the *Daily Alta California*:

"A piquant story is told of the manner in which Capt. McCleave, of the 1<sup>st</sup> Cavalry, was made prisoner by the rebels, and although I will not vouch positively for its truth, yet it is nearly correct, according to the account given by his own men who were captured with him" (*Daily Alta California*, June 29, 1862, p. 1 cols. 4-5).

McCleave's men were released on parole at Tucson in early April and carried this story back with them. Their capture is dated variously to March 9, 10, or 11, 1862 (Finch 1996: 128, 266). Cremony continued,

"It appears that McCleave reached the Maricopa Wells, from which place this letter is dated, with ten men, and leaving seven of them here, proceeded as far as Casa Blanca, a large adobe mill, owned by a Mr. White, who traded with the Indians for wheat, and converted it into flour, which he sold back to them, the Overland Mail Company, while in operation, the people of Tucson, and other near Mexican towns, and emigrants along the road.

Just then, White had sold a large quantity of wheat to the United States, and being a loyal citizen, was holding it for the use of our troops. The rebels, however, heard of it, and at the time of McCleave's visit, were in possession of the mill, and he held White a prisoner in his own house. McCleave, innocent of this fact, and without making suitable inquiry, pushed on to White's with three men, and on arriving, after dark, rode into the corral, dismounted, and knocked at the door, which was opened by one of the rebels, a member of Capt. Hunter's company of Texas Rangers" (*Daily Alta California*, June 29, 1862, p. 1 cols. 4-5).

A Confederate correspondent, present in Arizona but not part of Hunter's command, said that Captain McCleave arrived at White's about 2 o'clock A.M.



(*The Tri-Weekly Telegraph* May 12, 1862, p. 3 cols. 1-2). The captain knocked on the door, which one of the rebels opened, and asked:

"Does Misthur White live here?" asked McCleave, with a broad brogue.

'Yes,' replied the sentinel.

'Arrah! then give him Capt. McCleave's compliments, and say I want to see him.'

Upon this the rebel departed into another room, and informed Capt. Hunter, who was there with thirty-five of his company. At Capt. Hunter's appearance, McCleave said:

'Are you Misthur White?'

'Yes,' answered Hunter, 'what do you want, and who are you?'

'I am Captain McCleave, of the 1<sup>st</sup> Regiment Cavalry, California Volunteers; I am here with three men, and I require supper for myself and men, and forage for my horses.'

'Very well, Capt. McCleave, you can have what you require; take off your sword and pistol, dismount your men, and make yourself at home, I am glad to meet you,' remarked Hunter.

McCleave did as he was desired, seated himself in an arm chair, filled and lighted his pipe, and commenced a conversation, in which he imparted a good deal of valuable information to the supposed Mr. White.

As soon as Hunter had extracted all the intelligence he required, he quietly remarked, after the manner of Don Caesar de Bazan: 'If you are Captain McCleave of the 1<sup>st</sup> regiment of cavalry, California Volunteers, I am Captain Hunter of the Confederate army, and you are my prisoner,' at the same time, the doors all opened from the various apartments, and the room was filled with his men. Of course, McCleave quietly submitted; and the next morning Hunter rode to Casa Blanca [*sic*; Maricopa Wells], and captured the seven men left there by McCleave" (*Daily Alta California*, June 29, 1862, p. 1 cols. 4-5).

More than a week after the event, two travelers brought a garbled account of McCleave's capture to the lieutenant commanding the outpost at Stanwix Station, an old Butterfield station nearly eighty miles east of Fort Yuma (*WR-OR* vol. 50(1): 939-940). Then about the end of March, the commander at Fort Yuma heard a more complete account from a prisoner, "of unsound mind," who claimed to have learned what happened when he was in Tucson. This essentially matched Cremony's version (*WR-OR* vol. 50(1): 965-966).

During February and March, the Union forces at Fort Yuma and several forage contractors worked industriously to turn the old stations between that post and the Pima Villages into hay camps. Tons of hay, much of it locally cut, were accumulated to support the animals of the California Column whenever the troops

began their advance into Arizona. Then, just about the time that Major Edwin Rigg at Fort Yuma was listening to the prisoner, the war came a good deal closer.

Hunter's scouts had been moving down the Gila, burning the hay at each camp, until by the end of March they were about 100 miles west of the Pima Villages and more than half the distance to Fort Yuma. On March 29 or 30 the rebels met up with two Union sentinels near Stanwix Station and shouted at them to surrender. When they fled instead, the Confederates opened fire and wounded one. In this, the westernmost skirmish of the Civil War, a company of California cavalry gave chase, but their horses were too tired and Hunter's men got away (Keen to Carleton, January 10, 1862; *WR-OR* vol. 50(1): 825, 866, 868, 979; Finch 1969: 177-178; 1996: 130).

The advance of the California Column into Arizona was a cautious one. Captain William Calloway marched from Grinnel's (Stanwix Station) on April 6<sup>th</sup> under orders to take possession of the Pima Villages. He reached there on the 12<sup>th</sup> with three companies and, according to "Vidette,"

"This service was so well performed, that Capt. Calloway's command reached the Pimo villages without his approach being known even to those Indians, and then moved forward toward Tucson" (*Daily Alta California*, May 14, 1862, p. 1 col. 5; *WR-OR* vol. 50(1): 978-979; Finch 1996: 141).

When Carleton himself arrived at the Villages, the reception was quite different:

"the Chief of each tribe placed himself at the head of a hundred mounted warriors, in full feather and paint, and gave him a regular military reception in the best style of their art. It was quite a novel and curious spectacle" (*Daily Alta California*, June 29, 1862, p. 1 cols. 4-5).

Hunter's company had departed from that part of Arizona and on May 14<sup>th</sup> he abandoned Tucson as well. California cavalymen reoccupied the town on May 20<sup>th</sup>, reestablishing Federal control of southern Arizona (Finch 1996: 153).

One year after the Confederates had left the middle Gila, Joseph Reddeford Walker's party of some twenty-six prospectors met an unexpected reception when they arrived at the Pima Villages from the direction of Tucson:

"The Pimas arose *en masse* against us, under the impression that we were the Texans of the Rebel army that they had been cautioned against by the authorities of the United States. Their commotion was general and continuous until they were drawn up in a line of battle. A white flag was improvised on the moment and served the purpose of bringing about a pow-wow, which ended in peace and good understanding" (Conner 1956: 65, 100).

This story is somewhat suspect since the Confederates had given everything back to the natives at Casa Blanca. Perhaps the Pimas mistook Walker's party for Apaches, as happened with John Russell Bartlett a decade earlier.

The Confederate departure from the middle Gila did not bring peace there. Two of Carleton's couriers were "bounced" (attacked) by a large party of Apaches at Maricopa Wells in late May. An Apache foray on May 13<sup>th</sup> left two or three Pimas dead and led to renewed warfare between the Pimas and Maricopas and the Apaches (*Daily Alta California*, June 11, 1862, p. 1 col. 7; June 23, 1862, p. 1 cols. 4-5; *WR-OR* vol. 50(1): 1070-1071). Despite their lack of firearms, the Pimas campaigned aggressively and within six months had cause to celebrate the deaths of seventy enemies and the capture of fifteen children, as they prepared for yet another expedition (*Daily Alta California*, November 13, 1862, p. 1 col. 2).

### *White's Mill In 1862*

Colonel and soon-to-be Brigadier General James Carleton's 2,350-man California Column had its own encounters with Apaches, but being far removed from its source of supplies in California, subsistence and forage were the major concerns. One gristmill at Tucson had been destroyed, which made Ammi White's establishment at Casa Blanca all the more important.

Major Rigg's prisoner gave an accurate assessment of the Casa Blanca site. Captain Hunter had carried off the flour, livestock, and anything else of value to the Confederates. Although the mill was not burned, it had been much injured. The burrs were all sound and undamaged but the leather bands [belts] and running gear had all been removed or destroyed, he thought by the Indians. As for the wheat Hunter had returned to the Pimas, "they have it, and will sell it cheap to any one who will furnish them with manta [cotton cloth], being much in want of that article" (*WR-OR* vol. 50(1): 965-966).

We saw in Chapter 8 that White's mill was probably at the location of Silas St. John's Indian Agency, approximately 3,500 feet northwest of the ruin mound at Casa Blanca. The writer in an 1864 letter placed White's house "a mile off" from the Pima Village of Casa Blanca (Nicholson 1974: 112). Lieutenant Colonel Joseph West of the California Volunteers arrived in early May of 1862 and established a military post at White's mill (*WR-OR* vol. 50(1): 1061). Ammi White himself was still in Confederate custody but his business partner, Eben. Noyes, had returned with Colonel West and quickly grew concerned about the premises and buildings being "converted to the use and service of the United States and .... now occupied by their forces under the name of Fort Barrett" (Claim of White & Noyes, 1862).

Carleton, prompt as always, ordered a Board of Officers to assemble on May 25, 1862,

".... to enquire into all the particulars of a claim to certain buildings, enclosed within the walls of Fort Barrett, which has been made by White and Noyes in a communication of this date,...." (Claim of White & Noyes, 1862).

The records of this board provide many details about White's mill as of 1862. Examination of Eben. Noyes quickly established that the firm had no title to the land, only the consent of the Indians and a license from the Indian agent to trade with the Pimas and Maricopas. From their own examination, the officers found the following buildings on the premises:

- One building 30 x 15 feet used as a mill, with common adobe walls, covered with poles, and a thatched roof. Without windows or doors or a floor.
- Room used as a store 23 x 18 feet, with adobe walls, pole and thatched roof; no windows, doors or floor.
- One front room adjoining the store 20 x 12 feet with ordinary walls made of poles and mud, and covered with a thatched roof. This room is separated from the store by a pole and mud partition.
- One back room adjoining store 12 x 10 feet with walls and roof similar to those already mentioned.
- One kitchen 13 x 12 feet with walls and roof as above described (Claim of White & Noyes, 1862).

None of these entirely matched the Indian Agency buildings that Silas St. John listed in his September 12, 1859 letter to Sylvester Mowry, although the blacksmith shop, 18 x 22 feet and constructed of adobes, was probably the structure that White now used as his store. Walls that lacked doors or windows did have doorways and window openings. Specific rooms cannot be identified with J. Ross Browne's illustration of White's mill, from early 1864. By that time, a substantial amount of work may have been accomplished towards converting the gristmill to a steam-powered establishment, as happened a few months later (Ann. Rpt. Comm. Ind. Affs. 1864: 153; Browne 1974: 106).

Some of the testimony given to the Board of Officers shed more light on affairs at the mill. Private William Durnell, one of those paroled after McCleave was captured, said that Sherod Hunter carried off certain provisions but the house was not injured. Second Lieutenant Ephraim Baldwin arrived with Captain Calloway on April 12<sup>th</sup>, and at that time found the house stripped of everything that was valuable, the machinery connected with the mill entirely broken up and destroyed. It remained for Ignacio Robledo, who had lived at the Pima Villages for the last eighteen months and was present when the Confederate troops arrived there, to explain what happened.

Captain Hunter took bacon and flour, about seventy hogs and 400 hens and chickens. All that was left (wheat, flour, and more bacon) he gave to the Indians. Before he departed, Hunter destroyed the bolting cloth of the mill. He took the spindle to Tucson with him. Otherwise the mill and the house were in the same condition as when he found them. Hunter did however tell the Indians that it all belonged to them. Some days later, the Indians were trying to see how the mill worked, and in the process one of them became entangled in the machinery and had his leg broken. This so enraged the others that they proceeded to destroy the mill, tear out the doors and windows of the houses, and carry off

the wheat and other stores. They wanted to burn down the buildings as well, but Robledo dissuaded them from that (Claim of White & Noyes, 1862). All of this matches what Major Rigg was told by his informant "of unsound mind," who may also have been correct about much of the equipment damage having been to the belting (*WR-OR* vol. 50(1): 966, 979, 1049).

The United States had not been a party to any of this and in 1862 Messrs. White and Noyes "had on hand no goods of any description with which they could trade to advantage with the Indians." Since the exigencies of the service demanded that the buildings now be occupied by U.S. troops, \$800 or \$1,000 would amply compensate the firm for any losses. Whether they ever received the money is unknown.

Before the last rebels left the Southwest in early July, they released both Ammi White and Captain McCleave. On Carleton's orders, the army helped White repair his mill and even loaned him some mules to run it. The general had let the miller have a bolt and a belt as well and granted exclusive trading privileges with the Pimas and Maricopas to White and Cyrus Lennan. By mid-August, Ammi White and his half-brother announced they were ready to make flour again, once they located an iron called the "driver." The expectation was that the partners would work off their debt by grinding for the government.

In September a sample of their flour finally arrived at the desk of Major David Fergusson, commanding at Tucson. The major opined that although ground "in a very superior manner .... it is moldy, and tastes as if it had been buried in the ground." He doubted that they could meet the army's demands. Fergusson had already bought more than 20,000 pounds of flour in Sonora, payment for which was made in gold or silver (Claim of White & Noyes, 1862; *WR-OR* vol. 50(1): 125, 1044, 1133, 1159-1162; 50(2): 74, 110, 188, 353-354; Miller 1989: 16).

### *White's Ranch*

Ammi White's store, gristmill, and adjoining rooms were not his only properties. When Lieutenant Colonel West led the advance of the California Column east from Fort Barrett on May 14, 1862, his men camped the second night out at ¼ mile below White's. West evidently had a viameter and measured the distances from Fort Barrett to Sacaton Station as 11.39 miles and from Sacaton to White's ranch as 15.42 miles (*WR-OR* vol. 50(1): 140, 1078). He offered no description. Three years later Lieutenant Colonel Clarence Bennett fed his animals cornstalks at White's ranch (*WR-OR* vol. 50(1): 423). An 1870 map of claims improvements on a proposed reservation extension showed White's ranch in the southern part of the NE¼, Section 12, T5S R8E (G&SRM) (NA, map RG75-CMP-393).

Ammi White made his only known reference to this ranch in an article published a few months before his death in 1870, at a time when settlers above the reservation were complaining about the Pimas and Maricopas.

"About ten years ago I went about eight miles above their reservation where at the time they dared not go, unless in large bands, from fear of the Apaches, and I took up a tract of 640 acres of land. The Indians approved of it, and everything was right, until settlers planted themselves on the Gila River above them" (*The Weekly Arizona Miner*, January 15, 1870, p. 1 col. 3).

This area had come into contention between the Pimas and the settlers by 1869, when the Special Indian Agent, Captain F.E. Grossmann, wrote that

"It is a well known fact that years ago the Indians cultivated the soil on what is now known as White's Ranch and Mr. White has since used, at least in part, their old acequias" (Grossmann to Andrews, October 19, 1869).

In Chapter 9 we saw that the 1860 Census recorded only twenty-eight unoccupied dwellings at this location, which would place the beginning of White's ranch some time after November 1860.

#### *Fort Barrett and the Vedette Stations*

Fort Barrett, established on April 19<sup>th</sup> and supposedly abandoned June 22, 1862, was never much more than a massive adobe wall around Ammi White's mill and store. At the end of March, when Colonel Carleton ordered Lieutenant Colonel West to proceed to the Pima Villages without delay, part of his orders were to establish an entrenched field-work that would be garrisoned and used as a sub-depot for supplies (*WR-OR* vol. 50(1): 969). The post received the designation Fort Barrett on May 10, 1862 and at the end of May a correspondent signing himself "Dragoon" described it as follows:

"It is situated in the heart of the Pimo Villages, two miles from the river, out upon an open and barren plain, without a tree to shade or adorn the grounds. Some adobe buildings, once occupied by White, serve as hospital and commissary, while fronting the parade ground are several sheds for the accommodation of passing troops. Around the building occupied as a hospital, a fortification is being erected by the troops, and promises to be a very substantial work when completed" (*Daily Alta California*, June 23, 1862, p. 1 cols. 4-5; *WR-OR* vol. 50(1): 1061).

A week and a half later Captain Cremony ("Vedette") noted that several companies of infantry were still at the Pimos,

".... making adobes for the construction of a very considerable fort, the walls of which are already four feet above the surface of the earth, and about twelve feet in thickness. This fort will

accommodate from four to five companies, and will be permanently established" (*Daily Alta California*, July 9, 1862, p. 1 cols. 7-8).

The captain was a poor prophet because just ten days after he wrote this letter, Fort Barrett's garrison was withdrawn. One company probably remained until mid-July, and afterwards the uncompleted fort may have reverted to being a sub-depot and vedette station or outpost (*WR-OR* vol. 50(2): 22-23). Sergeant George Hand confused matters a bit in early August by writing that his company passed the Casa Blanca, called White's, and 200 yards farther on was the foundation for Fort Barrett. A wall of adobes had been commenced, a deep wide ditch around it, and then abandoned. "The mill, now being repaired, is inside of the fort" (Carmony 1996: 59).

Apparently there was a short-lived plan to establish a successor to Fort Barrett. On June 21, 1862, now-Brigadier General James Carleton ordered Major Theodore Coult, commanding at Fort Barrett, to move his garrison without delay "... to some suitable point on the left [south] bank of the Gila River within a mile and a half of what is known as the Sacaton Station." There, again without delay, he was to establish a defensive work large enough for a two-company garrison and storehouses for 200,000 rations (*WR-OR* vol. 50(1): 1152). The post return of Fort Barrett dated June 30<sup>th</sup> noted that General Carleton and staff left for Tucson on June 22<sup>nd</sup>, and the same day the command moved up the Gila River eleven miles to a point known as Sacaton Station (Fort Barrett Post Return, June 30, 1862). There were no later post returns and in spite of intentions, it is unlikely that anything was built at Sacaton Station. When Sergeant Hand stopped over at "Pima Station" [i.e. Sacaton] on August 3-4, 1862, he said only "The station here is very small" (Carmony 1996: 60).

What Sergeant Hand referred to was the beginning of a series of picket or "vedette" stations that eventually stretched from the Rio Grande to the Colorado River. These small outposts typically had six to ten men at each, part-infantry and part-cavalry, assigned to old Butterfield locations such as Blue Water, Pima Villages (Casa Blanca) and Gila Bend. Carleton explained the necessity for these as sub-depots to provide hay and grain needed by the teams of government wagon trains, also for the support of couriers who conveyed mail and messages, and as watching posts (*WR-OR* vol. 50(1): 1017). Always exposed, they were rarely attacked. In 1863 and 1864, Corporal John D. Walker had charge of the seven-man vedette at the Pima Villages.

Carleton blew hot and cold on continuing vedettes because these seriously drained his troop strength, but in the absence of any mail service across southern Arizona, California soldiers manned the stations west of Tucson until August 1864. Always under orders to practice the utmost economy, the troops would have patched up any available buildings. With mail routes reestablished in 1865, the vedettes gave way to civilian forage agents (*WR-OR* vol. 50(1): 434, 1017; 50(2): 47, 129, 246, 269, 352, 396-397, 525; Coult, "List of Post and Picket Stations," July 1, July 15, September 4, 1864; Wagoner 1970: 49-50).

*Buying From The Pimas, 1862-1863*

From the time Carleton received his appointment to lead the California Column, he began organizing every aspect of his command to the last detail. Indeed, in a flattering appraisal written one year later, one subordinate characterized the colonel as "Constantly watchful, the minutest detail received his personal attention" (*WR-OR* vol. 50(1): 144). Requests, requisitions and orders flowed endlessly, in part to ensure that his largely inexperienced volunteers, and their officers, would eventually be able to march or ride the 860 miles from Los Angeles to the Rio Grande. Most of their needs would be met with purchases in California and from supplies stockpiled at Fort Yuma and the old Overland Mail camps. Additional amounts of wheat, flour, beef and forage would have to be procured at the Pima Villages, in Tucson, and in the Mexican state of Sonora (*WR-OR* vol. 50(1): 773-780, 943, 945, 1017-1019, 1100-1101, 1145); Miller 1982: 8-9; 1989: 13).

In his December "memorandum of supplies needed..." Carleton had included 5,000 pounds of presents for Indians and 10,000 yards of manta, i.e. shirting calico, with which to purchase wheat (*WR-OR* vol. 50(1): 776). The nearest modern equivalent to nineteenth century manta would probably be muslin. When Lieutenant Colonel West was ordered to the Pima Villages at the end of March, 1862 he was told that 10,000 yards of manta were on the way, and he could also use old-fashioned army clothing for purchasing wheat and other supplies. Three weeks later these had still not come up, and when West did reach the Pima Villages he was reduced to using credit to eke out a daily supply of forage, "trading under every disadvantage," as he put it (*WR-OR* vol. 50(1): 970, 1022, 1050).

West, trying to lay in stocks of wheat, flour and hay for the army that would soon follow, wrote increasingly desperate letters asking for the manta to deal with the shrewd natives who had reluctantly been accepting his promises but were holding back unknown amounts of produce. He even negotiated a scale of prices; e.g. four quarts of flour for one yard of manta, seven quarts of wheat for one yard, or fifty pounds of hay, and came up with a daily consumption of 400 yards of manta just for the forage needed by his present command. For the moment, everything was priced in yards of manta, and the entire 10,000 yards would have bought exactly 131,250 pounds of wheat. Finally on May 12<sup>th</sup> the manta, calico, flannel, etc. arrived at Fort Barrett. By the following day West had taken in about 30,000 pounds of wheat and paid off nearly all of the outstanding credits. Eleven days later Carleton had purchased 143,000 pounds of wheat from the Pimas and Maricopas, which would have required all of the manta and reduced to army to paying with vouchers once again (*WR-OR* vol. 50(1); 1050-1054, 1070, 1095).

Both James Collins, who was still the New Mexico Superintendent of Indian Affairs, and Special Agent J. Ross Browne wrote that the Pimas sold more than 1,000,000 pounds of wheat to the government in 1862, as well as



".... pinole, chickens, green peas, green corn, pumpkins, and melons for the entire California column, subsisting nearly a thousand men for many months" (Ann. Rpt. Comm. Ind. Affs. 1862: 239; Browne 1974: 111).

Browne added that the wheat included a portion of the previous year's crop. These claims are difficult to evaluate because the voluminous correspondence from this period includes little documentation of the army's purchases from the Pimas and Maricopas. Captain John Cremony noted that the Pimas and Maricopas raised large quantities of wheat, corn, beans, melons, pumpkins, etc., "much of which they are now disposing of for the subsistence of the California column" (*Daily Alta California*, June 29, 1862, p. 1 cols. 4-5). From this standpoint, the timing of the column's entrance into Arizona could hardly have been better. Carleton and West both estimated that the Indians would have about 200 tons of wheat for sale from their new crop, which they began harvesting in late May (*WR-OR* vol. 50(1): 1071, 1095, 1103).

Carleton was very short on cash, and the controversy that arose later over Lieutenant Coleman's vouchers indicates that the army continued to buy wheat on credit. The Indians became more reluctant to trade their wheat for pieces of paper. Accustomed to straightforward sales to the Overland Mail Co. and barter exchanges with traders, the Pimas must have had reservations about dealing with the government.

With only a single small gristmill in operation in Arizona, the most immediate use for wheat was to feed the horses and mules, as a substitute for the preferred feed grain, barley. The army anticipated being able to buy barley at Tucson and from Sonora. Subsistence stores continued to be freighted in from Fort Yuma, and because of transportation delays some rations actually had to be reduced (*WR-OR* vol. 50(1): 1050-1054, 1064-1065, 1070-1071, 1089, 1100-1101, 1144-1145; 50(2): 48).

From the standpoint of provisioning the California Column, the situation grew worse instead of better. Three days after Major Fergusson took command at Tucson and tasted White's moldy flour, he wrote that he feared no one but Lieutenant James Coleman could settle with the Pima Indians. Their tickets (i.e. vouchers for wheat purchases) had been written in such a way that he alone (Coleman) could unravel the business. Not only that, but Ammi White had been buying the tickets from the Indians at a great discount. A week or so later, White 'resigned,' although from what is not clear. Fergusson railed that the papers Lieutenant Coleman gave the Pimas were worthless as vouchers for any other officer because they failed to state quantities. "None but Coleman should be put in a position to have his disbursements disallowed on account of his own stupidity." Carleton got involved and told Colonel West in effect to settle the matter, but by this time Coleman had resigned.

In the interim, the long-awaited 5,000 pounds of Indian goods - tobacco, knives, vermilion paint, beads, needles, small looking-glasses, fishhooks, hoes - finally arrived in Tucson on October 9<sup>th</sup>. These were intended for barter rather than as gifts, and a luckless Lieutenant George Burkett took them up to the Pima

Villages to make a distribution and reduce some of the Government's indebtedness. Somehow he resolved this situation (*Daily Alta California*, November 19, 1862, p. 1 cols. 4-6; *WR-OR* vol. 50(1): 776, 1152; 50(2): 110, 129, 171-172, 188).

By the spring of 1863, Major Fergusson had not received funds for nearly a year and he had been paying purchases with certified vouchers, which no one wanted anymore. Debts mounted until the quartermaster's department alone owed almost \$100,000, while supplies of pork, bacon, salt beef and forage at the army's Tucson depot were entirely exhausted. The credit of the quartermaster's and subsistence departments, as the major put it, "non est." The Pimas and Maricopas probably stood on the fringes of this situation (*WR-OR* vol. 50(2): 353, 524-525).

By that fall, things were back to normal and another officer reported that the Indians at the Pima Villages were very well satisfied with the agent purchasing their wheat for the government and said he had dealt very fairly with them (*WR-OR* vol. 50(2): 660).

#### *Maricopa Wells and the Pima Villages in 1862*

Captain Cremony described his campground at Maricopa Wells as "an extensive alkaline plain, covered with short, horny, saltish grass, with a few mesquite trees here and there." The nearest Maricopa village was about three miles distant, "the first of the line of villages inhabited by the Maricopa and Pimo races" (*Daily Alta California*, June 29, 1862, p. 1 cols. 4-5). He explained further that

"Their villages are compactly built for the distance of some thirteen or fifteen miles, alternating with each other, so that the traveler from California meets first with a Maricopa village on the right-hand side of the road, and then, about a mile further, with a Pimo village on the left-hand side, and so on, the last being Pimo."

Sergeant George Hand's diary entries from early August 1862 gave a similar impression. His company marched to the Maricopa Wells, rested the next day, went on to a Maricopa village and then struck out for the Pimas. They passed the Casa Blanca at 9:30 P.M. and continued through the Pima Villages during the night, until at sunrise they arrived at Pima Station [Sacaton], where they were "now in the Maricopas' again, who are on both sides of the Pimas." Hand also offered the second-known Anglo opinion (after Texas cattleman James Bell) on the palatability of mesquite bread: he thought it looked and tasted much like desiccated potatoes (Carmony 1996: 58-60).

From these accounts, the California Column seems to have found some of the Pima and Maricopa villages at new or different locations along the middle Gila. The Maricopas had shifted upstream as compared with earlier descriptions and the settlements shown on Ammi White's December 1861 sketch (Claim of White & Noyes, 1862). The calendar records of Juan Thomas and Mejoie Jackson explained this expansion by the completion of the Island Ditch in the early

summer of 1861-62, with the Pimas' planting of melons, pumpkins and corn. In 1863-64 they put the Old Santan fields (with the Old Santan Ditch) under cultivation, which yielded bountiful crops (Southworth "Excerpts;"; Southworth 1931: 47; Jones 1961; Hackenberg 1974a II: 23-24, 37-38). These were probably the first irrigation canals completed after the Old Maricopa Ditch and their initial use may have been in 1862. The California soldiers had no way of knowing that the village distribution they saw in the summer of 1862 was different from what they would have seen in 1860 or 1861.

*Arms (At Last) For the Pimas*

As far back as 1848 the old Chief, probably Culo Azul, had asked Major Graham for 1,000 guns. Nothing came of this and ten years later Special Agent Goddard Bailey recommended that the Pimas and Maricopas be supplied with arms and ammunition. Bailey's other suggestions were acted upon promptly, but not this one (Ann. Rpt. Comm. Ind. Affs. 1858: 205; Dobyns 1961: 67). In his last report, Silas St. John proposed ordering 100 'Mississippi' rifles for them from the U.S. Arsenal at Benecia, California (St. John to Greenwood, January 18, 1860). Again, nothing happened.

The Pimas asked their regular agent, John Walker, for firearms and still there was no action. When the California Column appeared in May of 1862 the Pimas complained once more, first to Lieutenant Colonel West and then to Colonel Carleton. By now the Apaches had firearms, but the Pimas and Maricopas could get none. This time something happened, though not immediately. Carleton wrote to the Adjutant General in San Francisco and asked for 100 stand of old muskets, with bullet molds and a generous supply of ammunition, to be sent to him at Fort Barrett for issue directly to the chiefs (*WR-OR* vol. 50(1): 1070, 1095).

Through the fall and winter of 1862-63 both the army and the Indians waited for the arms, said to be en route, including a specific rumor of 100 'Mississippi' rifles. The rifles eventually arrived at Fort Yuma, but apparently went no further. On April 17, 1863 an exasperated Colonel Fergusson ordered Lieutenant Burkett to the Pima Villages to make a distribution of 100 stand of old arms and ammunition, weapons sent from Fort Craig and Mesilla, New Mexico, to the chiefs and captains of the Pima and Maricopa villages. These, they were told, were for defending themselves and for making vigorous campaigns against hostile Apaches. More arms would follow (*WR-OR* vol. 50(2): 109, 269, 271, 395, 405).

The sub-Indian agent, Abraham Lyon, accompanied the lieutenant to indicate the captains of the various villages to whom arms would be issued. These weapons may have been smooth-bore muskets, now obsolete in the army (Conner 1956: 74). The military evidently delivered the rifles delayed at Fort Yuma at a later date; perhaps they were even the same 100 'Mississippi' rifles that the arsenal listed for Silas St. John more than three years before.

In Western Arizona, first called the District of Western Arizona and then the District of Arizona, the martial law restrictions imposed by Carleton were

gradually lifted as courts and civil officers became established (*Santa Fe Weekly Gazette*, July 22, 1865, p. 2 cols. 3-4; *WR-OR* vol. 9: 561-562). With Federal control restored in 1862, the New Mexico Superintendent of Indian Affairs had quickly appointed Abraham Lyon as a sub-agent to fill the vacancy at the Tucson agency. Lyon's tenure would be a short and unhappy one.

## Chapter XI

### INDIAN AGENTS, SETTLERS, AND LIFE ON THE MIDDLE GILA, 1863-1869

#### *Abraham Lyon, the Unhappy Agent*

In his annual report of October 10, 1862, Superintendent of Indian Affairs James L. Collins said that Abraham Lyon, a newly appointed agent well-acquainted with the Pimas, Papagos, and Maricopas, was en route for the agency with a small lot of farming implements (Ann. Rpt. Comm. Ind. Affs. 1862: 240). Lyon, born in England, was thirty-one years old in the 1864 Census, single, and a miner by occupation. Although he claimed to have resided in Arizona for eight years, the 1860 Census of Arizona County did not list him (U.S. Senate 1965b: 111).

Collins appointed him a sub-agent effective September 21, 1862. Lyon complained later that the office was in a manner forced upon him by General Carleton and the Superintendent of Indian Affairs, although with a salary of \$800 a year (Collins to Dole, November 13, 1862; Collins to Lyon, May 15, 1863; Lyon to French, March 7, 1866). His instructions made him a special agent for various tribes, including the Pimas, Papagos, Apaches, Yavapais, Mohaves and others as far west as the Colorado River and even beyond (Lyon to Dole, June 19, 1864).

A month after his appointment, Special Agent Lyon set out for Arizona. When he reached Mesilla, he found a large lot of agricultural implements that had erroneously been invoiced to the army there as quartermaster stores. He signed for these and undoubtedly had them shipped or took them along. They would have been most welcome; included were 75 axes, 185 axe helms, 116 lbs. of brass wire, 320 knives, 191 spades, and lesser amounts of shovels, awls, plough shares, plough points, and even three saws (Abraham Lyon, receipt, October 29, 1862). Most numerous after the knives were 235 pairs of shears, presumably for cutting the bolts of manta into suitable lengths. These tools might even have been the same farming implements that Superintendent Collins sent as far as Mesilla in early 1861 (Collins to Labadie, May 23, 1861).

Abraham Lyon arrived at Tucson by December 1862, but few records survive and his accomplishments with the Pimas, Maricopas, and other groups are poorly known (*WR-OR* vol. 50(2): 240). By April 1863 the army commander at Tucson stood ready to issue 100 stand of old arms at the Pima Villages because

the rifles that General Carleton had asked for were still at Fort Yuma. Lyon went along with Lieutenant George Burkett to issue the arms and collect receipts for them (Ibid. 395, 405). He had been there at least once before, probably to distribute agricultural tools. Like his predecessor, this agent made his office in Tucson. He claimed later that he had "written time and again to him [Superintendent Collins] on important subjects," but these letters have either not survived or have not been found (Lyon to Dole, June 19, 1864).

President Abraham Lincoln signed the law establishing a Territory of Arizona on February 24, 1863. This news was probably current in the Southwest within a month or less, although it would be the end of the year before the suite of officials appointed to administer the new territory finally arrived and began to organize the government. In May, Superintendent Collins advised Lyon that he was now in a new territory and a new Superintendent of Indian Affairs had been appointed for it - Charles D. Poston. Lyon should therefore make up his accounts to the end of June, but plan to continue exercising his office until the new superintendent arrived. This, as it turned out, would extend through December. During the year, gold discoveries in west-central Arizona around modern-day Prescott and Wickenburg brought miners flocking into the country (Collins to Lyon, May 15, 1863; Wagoner 1970: 26-31). The Pima Villages were a crossroads for this traffic and Ammi White soon began supplying the mining camps with much of their flour.

Lyon's discontent arose from his not having been paid his salary or even reimbursed for his expenses. In a long complaint to Commissioner Dole, he wrote that "I have been in a manner impoverished by this office" to the amount of several thousand dollars, for which he had received a draft of \$500 that he had been unable to cash. Two traders who evidently helped to support the agent were John Allen, who may already have had a store at Maricopa Wells, and George F. Hooper, a long-established trader at Fort Yuma. Hooper hoped to build his own flourmill at the Pima Villages (Hooper to Heintzelman, September 21, 1863; Abraham Lyon authorization, February 11, 1864; Lyon to Dole, June 19, 1864; Nicholson 1974: 163). Charles Poston relieved the agent soon after he arrived in southern Arizona (Poston to Lyon, January 10, 1864).

Abraham Lyon would have been far less happy had he known that the annual salary for the special agent at Tucson was \$1,500, of which Superintendent Collins already had in hand the pay for two quarters (\$750). Not only that, but Collins had received \$2,500 for the incidental expenses of that agency in the same period. These expenses would have included the costs of maintaining an office, travel, and presents for the Indians (Office of Indian Affairs, January 15, 1863). Lyon apparently saw none of this money. Poston had told him to settle his accounts with Collins, but the New Mexico superintendent was removed from office in May 1863, under circumstances that have never been thoroughly explored. An order to suspend payment on all outstanding drafts threw the financial accounts of the superintendency into confusion (Reeve 1938: 54-59). When Lyon did forward a voucher for payment of his salary, the acting superintendent in New Mexico, Dr. Michael Steck, returned it. Lyon finally sent his accounts directly to Commissioner Dole (Lyon to Dole, July 4, 1864).

In spite of agent Lyon's brief term of about one year, he left a good impression. Antonio Azul quickly tired of Superintendent Charles Poston's insults, deceptions and fraud, and told the military commander at Tucson that all the chiefs wanted "to have back again Mr. Lyon, the Commandante they had before." He would answer their questions civilly and not curse them (Altshuler 1977: 35, 37). By 1869 however the Pimas had evidently forgotten him (Grossmann to Andrews, October 31, 1869).

*The Treaty of 1863*

Abraham Lyon was probably in Tucson during the second week of April in 1863 when representatives of the Pimas, Maricopas, Mohaves, Yavapais and Chemehuevis signed a treaty at Fort Yuma. So far as known, this is the only treaty that the Pimas and Maricopas ever signed. It first became known publicly in 1940 when Mary Juan, daughter of the Maricopa Captain Juan José, agreed to let other people examine the treaty fragments in her possession (Anonymous 1940, 1942). This discovery, called a treaty of peace, received wide publicity as a solemn agreement kept faithfully for seventy-seven years. The one signature still preserved on Mary Juan's fragmentary copy was that of Harvey Lee, a Lieutenant Colonel in the Fourth Infantry, California Volunteers, who commanded Fort Yuma during March and April of 1863 (*WR-OR* vol. 50(2): 306, 325, 353, 408).

Another copy said to have been filed in the Adjutant General's office at Fort Yuma apparently no longer exists; the National Archives has advised that post records for Fort Yuma in Record Group 393 are non-existent for this period. However, a letterbook kept by Arizona Superintendent of Indian Affairs Charles Poston included a summary of the treaty on pages 47-48, done at the time Poston's party passed through the fort in late December, 1863. Poston's summary was much more complete than what can be read from Mary Juan's fragments, and the two versions seem to be in substantial agreement. The wording indicates that it was primarily a mutual defense treaty. It obliged the tribes named in the document to assist one another in prosecuting a war against the Apaches and to assist Americans, in fact to protect American prospectors and miners against any and all wrongs or injuries by members of the tribes represented. The final article also established peace among the signatories, putting aside their former differences (Poston 1863-64: 47-48).

The old mountain man Pauline Weaver engineered this treaty, for the very good reason of gaining some measure of security for the miners who were beginning to pour into west-central Arizona. Poston's summary dated the document to April 9, 1863; Mary Juan's copy bore the date April 11, 1863. Weaver later billed the United States for eighteen months of volunteer services as an Indian agent in Arizona, which included making a treaty of peace with the Americans and the Yumas, Maricopas, Pimas, etc. The Commissioner of Indian Affairs passed that claim to the Secretary of the Interior, who referred Mr. Weaver to Congress for recognition of his services (Weaver to Poston, May 6, 1864 (encl.); Usher to Dole, February 9, 1865). It is unlikely that Weaver received the \$2,250 he sought.

Treaties between Indian groups, initiated by individual whites, are not unknown (Ancatash et. al., January 22, 1858; Thrapp 1967: 39; Khera and Mariella 1983: 40-41). In the present case, the parties represented were the Mohaves, Pimas and Papagos, Maricopas, Yumas, Chemehuevis and Walapais. Iriteba [Irrateba] signed it as Chief of the Mohaves, Juan Chivareah [Chevereah] for the Maricopas, Antonio Azul as Pima representative, and one chief for the Chemehuevis and one for the Yavapais (Poston 1863-64: 47-48). Poston did not mention Lieutenant Colonel Harvey Lee, who either signed as a witness or authenticated the copy. Lee's junior officers believed with good reason that their commander slipped in and out of insanity, which complicates the circumstances even more.

Benefits from this treaty were probably very short-lived. The Americans and the Walapais fought a war in 1866-68, and at the same time the Yavapais began fighting back against miners and settlers who had been putting heavy pressure on them. War broke out between the Mohaves and Chemehuevis in 1865-67 that resulted in the Chemehuevis being temporarily driven back into the desert (McGuire 1983: 27; Khera and Mariella 1983: 41; Stewart 1983: 56). The Apache wars of course continued for another decade.

#### *Charles Poston and the Pimas*

Charles D. Poston became involved with silver mining in Arizona as early as 1856, through the Sonora Exploring and Mining Company and its successors. He outlived most of his contemporaries and later claimed to be the "Father of Arizona," a title more appropriate for Samuel P. Heintzelman (Sacks 1964: 87-95; Sheridan 1995: 70). He spent about three years in Arizona prior to the Civil War and left with the general exodus of Anglo-Americans in the summer of 1861. From his behavior in 1863 and particularly his treatment of the Pimas, one historian has questioned whether he "learned anything beyond what was under his immediate view at Tubac and at the Santa Rita mine" (Altshuler 1977: 23-24, 37). The answer is that he did have a broad knowledge of Arizona's native peoples, but his personal liabilities made this knowledge all but useless.

Poston's appointment as Superintendent of Indian Affairs for the new Territory of Arizona was dated March 13, 1863 (notation on Poston to Dole, April 15, 1863). A month later he wrote from New York, summarizing what he knew or believed about the various Indian tribes in Arizona and recommending that an agent be appointed for the Pimas and Maricopas. The Commissioner replied that there being no specific appropriation for agents' salaries, none could be appointed (Ann. Rpt. Comm. Ind. Affs. 1863: 383-391). When Poston left the East Coast later that year he continued on to San Francisco and received \$20,000 worth of Indian annuity goods there (Altshuler 1977: 24).

Ammi White and two Pimas - Antonio Azul and his interpreter Francisco [Duque] - were in San Francisco themselves at this time, apparently as a reward for good behavior and to meet General George Wright. After Poston arrived he chanced to meet up with journalist J. Ross Browne, who already held a commission as a Department of the Interior special agent, and he persuaded

Browne to accompany him to Arizona. They sailed for Wilmington [Los Angeles] on the same ship with Ammi White and the two Pimas, and then traveled in company to Fort Yuma (Ann. Rpt. Comm. Ind. Affs. 1864: 150-151; Hunt 1951: 147-148; Browne 1974: 28-55; Altshuler 1977: 24-25).

Poston's writings show his continuing interest in promotions and schemes that hopefully offered rich rewards, beginning with an early venture at Colorado City in 1854 and continuing with silver mining (Poston 1963: 55-64; North 1980: 14-17). Until the creation of Arizona Territory his successes had been few, and an appointment as Superintendent of Indian Affairs was probably the best he could have hoped for. The \$2,000 a year salary was the standard one for that position, although as he said, Federal greenbacks or paper money were heavily discounted in the West (*WR-OR* vol. 50(2): 336; Poston 1963: 113). In 1863 he was also involved in a sale of the old Sonora Exploring and Mining Company interests, which he subsequently reacquired (North 1980: 175).

As events were to show, Poston reached some agreement with Ammi White during their return to Arizona that involved White gaining a monopoly on trading for the Pimas' wheat. White used the Indian goods that Poston brought to help pay for the wheat and then milled it into flour for sale. This complicated scheme began to unravel in March of 1864. By early May an army investigation had found Poston guilty of fraud by misappropriation of Indian goods (Altshuler 1977: 24-40). Antonio Azul remembered this experience quite well:

".... Next came Supt. Poston. I went with him [*sic*; Ammi White] to San Francisco and came back with him. He had lots of presents for the Indians of Arizona. A portion thereof, shovels, axes, spades etc. he gave away at Fort Yuma to the Yumas and Cocopas."

"Then he said to me: 'Antonio, I shall take the remainder to your people.' But when he arrived at our villages, he only gave us a few of the presents, the balance was sold to us by Mr. White in his Store" (Grossmann to Andrews, October 31, 1869).

Poston gave an entirely different version of events in his second and last report. According to him, the Pimas and Maricopas

".... received the goods that were taken to them with so much expense and trouble without manifesting any gratitude, and clamored for more" (Ann. Rpt. Comm. Ind. Affs. 1864: 152).

Poston and company first arrived at the Pima Villages on January 8<sup>th</sup>. Browne described a "grand pow-wow" at Sacaton that probably took place on a return visit there in mid-March. Poston did distribute a few axes, hay forks, hay rakes, knives and tin cups and plates to each village. These made little or no impression (Nicholson 1974: 112; Altshuler 1977: 35). Then in a letter written from there, Browne unknowingly confirmed what Antonio Azul would say much later:



".... Mr. Poston and myself have deemed it expedient to make a small issue of farming implements to them, which will be carried into effect as soon as the goods arrive from Fort Yuma. We have thought it best to reserve the greater part of the articles purchased, for such of the tribes of Arizona as are actually in need of assistance" (Ann. Rpt. Comm. Ind. Affs. 1864: 164-165; Browne 1974: 125-128).

Although Commissioner Dole had notified Poston in July 1863 that there was no specific appropriation for Indian agents in Arizona and none could be appointed at present, Poston listed nine appointments that he made with salaries between \$1,000 and \$2,500 per year, \$14,500 all together. At least some of these persons did serve and were paid, as Interior Department referrals of their payment claims show. The most interesting Poston appointees were probably assistant superintendent George H. Leihy, appointed July 1, 1864, and Ammi White, agent for the Pimas and Maricopas, January 1, 1864. White would have replaced Lyon, and he apparently did serve unofficially but could not be approved because he was a licensed Indian trader. Poston backdated the appointment of his old friend Herman Ehrenberg as agent for the Colorado River Indians to May 15, 1863 (Poston 1863-64: 51; Ann. Rpt. Comm. Ind. Affs. 1864: 158; Van Valkenburgh to Leihy, September 8, 1865).

Arizona elected Charles Poston its territorial delegate to Congress in July 1864. He resigned as Superintendent of Indian Affairs effective November 30, adding his disinterested (?) opinion that the superintendent's salary should be fixed at \$5,000 per year (Ann. Rpt. Comm. Ind. Affs. 1864: 158). At the time, \$5,000 was the annual salary of a U.S. congressman and twice the amount a territorial governor received. The wonder is that his letter was even published.

Poston later made a dubious claim that he "wound up the Indian service with loss of about \$5,000 out of my own pocket" (Poston 1963: 120). The Secretary of the Interior recommended that Congress appropriate \$12,900 "to pay the indebtedness incurred by C.D. Poston while he was Superintendent of Indian Affairs in Arizona" (Usher to Dole, February 9, 1865). This probably covered all of his deficiencies, unallowable expenses, and any missing receipts, allowing a final settlement of Poston's accounts. Documents in National Archives Microcopy M-734 indicate that the army's investigation of Poston was on target and that he profited from multiple kickbacks through sales of Ammi White's flour to the Indian department. For this he was never brought to account.

#### *Grain at the Pima Villages: The Army vs. Poston*

By 1863 it was becoming clear that the middle Gila lacked mineral wealth. The only resource worth controlling was the Pimas' and Maricopas' wheat, or access to it. The Indians had a good crop year in 1863, according to J. Ross Browne, although the harvest was smaller than usual due to the breakage of their "main acequia" during a critical part of the irrigation season. They furnished the

government (i.e. the army) with 600,000 lbs. of wheat, for which they would have received about 3¢ per pound or \$2.00 a bushel. In addition, they disposed of around 100,000 lbs. of flour to miners and traders, presumably sold through Ammi White (Coult to Walker, March 8, 1864; Ann. Rpt. Comm. Ind. Affs. 1864: 164; Browne 1974: 111). Judge Joseph Allyn, writing in April 1864, put the amount of wheat raised in the past year at 1,000,000 lbs., with 250,000 lbs. of corn (Nicholson 1974: 109).

George Hooper, as we saw earlier, had solicited permission to build a flouring mill at the Pima Villages in 1863 (Hooper to Heintzelman, September 21, 1863). His request was ignored. When Poston arrived there he granted White a license to trade with the Pimas, "there being no other applications and no other persons being prepared to trade at this place" (Poston to Dole, January 10, 1864). Poston intended this to be an exclusive privilege, but neither he nor Browne mentioned that a trader named John B. Allen was already present at Maricopa Wells (Coult to Toole, March 3, 1864, jacket; *The Arizona Miner*, September 7, 1864, p. 3 col. 1; October 5, 1864, p. 3 col. 1; Nicholson 1974: 163). Ammi White did offer some condescending remarks, no doubt directed at Allen, about "petty traders" who invariably attracted persons "whose example is very bad" (White to Poston, June 30, 1864). Allen responded in July by filing a preemption claim that covered his store and grain station at Maricopa Wells (Barney 1941: 14-15).

White had been a stalwart for the Union cause at the time of the Confederate invasion, and with the arrival of the California Column, Carleton approved a contract with him, presumably for flour (*WR-OR* vol. 50(2): 48). This relationship soured, probably because of the problem with moldy flour and the discovery that White was buying vouchers from the Pimas at a discount. As of June 16, 1863, the army awarded Allen a contract to supply grain (i.e. wheat) for the public animals, "as required" at 3¢ a pound, in return for exclusive trading privileges for one year with the Pimas and Maricopas. Ammi White might purchase as much wheat from the Indians as his mill could convert monthly into flour. Poston was determined to break this agreement in order to exert his own authority and give White the monopoly on trading (Altshuler 1977: 31; Miller 1989: 26-27). The Pimas and their wheat would be at the center of this conflict.

Inspector-General N.H. Davis and General James Carleton explained that by March of 1864, wheat had become very scarce in the Southwest. This came about because of a number of unanticipated demands, not least being the sudden surrender of many Navajo Indians and the need to transport nearly 6,000 of them to the Bosque Redondo while providing for their subsistence (*WR-OR* vol. 34(2): 674-675; Carleton to Poston, March 18, 1864). Davis authorized Lieutenant Colonel Theodore Coult at Tucson to reduce the ration allowance to both troops and the public animals, reporting at the same time that that post had no pork, bacon or fresh beef, very little hay or grain, flour for only twenty days, and no money on hand. Carleton, apprised of these matters, ordered both officers and men at all of the posts in New Mexico and Arizona to draw only half-rations. Unless they could be supplied, garrisons in Arizona would have to be withdrawn

(Davis to Coult, March 1, 1864; Davis to Babbit, March 4, 1864; Carleton to nineteen commanding officers, March 10, 1864; *WR-OR* vol. 34(2): 674, 677).

Davis, obviously with Carleton's backing, took an even more drastic step in authorizing Coult to secure all of the grain at the Pima and Maricopa Villages, except a reserve to supply the wants of the Indians. Coult was well aware that this could produce a collision with Poston's special agent there, Ammi White, although when it came, the collision was with Superintendent Poston. He had managed to stop grain deliveries to Tucson, earning the implacable enmity of the officers there by upsetting their one dependable supply arrangement. Coult reported that Poston was inflexible and would consent to nothing. The Lieutenant Colonel told him that he intended to have the grain by one process or another, and in the emergency it was his duty to take it at all hazards (Coult to Davis, March 10, 1864; Altshuler 1977: 30-31). Coult's intention was to seize the grain, not from the Indians, but from Ammi White or others who might be holding it.

On March 8<sup>th</sup>, Poston and J. Ross Browne started for the Pima Villages to buy wheat for their own purposes. Lieutenant Colonel Coult dispatched an expressman with instructions to pass Poston's party after dark and meet Corporal John D. Walker at Blue Water. Walker, until recently in charge of the vedette station at the Pima Villages, was ordered to return there promptly and take possession of whatever grain White had in his possession and that might be purchased by him or others, giving receipts at the contract rate of 3¢ per pound (Toole to Walker, March 7, 1864; Coult to Walker, March 8, 1864; Coult to Davis, March 10, 1864).

There is an abundance of correspondence from this period, published and unpublished, but none of it reports directly on what happened at the Pima Villages. Corporal Walker undoubtedly followed his orders and took possession of whatever wheat Ammi White had on hand and held it to await transportation (which was also scarce). The amount seized is not known. White, in Colonel Davis' eyes, was a rascal who speculated in grain purchased of the Pimas and was not to be trusted (*WR-OR* vol. 34(2): 593). Poston was no better and after the episode, Davis said that he was cross as a bear and terribly down on Davis, although partly this was because the military would not aid in furthering his pecuniary interests and political aspirations (*WR-OR* vol. 34(3): 209-210).

The Pimas and Maricopas, said Davis, were unhappy with Poston and wanted another superintendent or agent because he had made false representations to them (Ibid. 210; also Walker to McDowell, April 4, 1866). This led directly to Antonio Azul traveling to Tucson to tell Lieutenant Colonel Coult about Poston's dealings, which was followed by the board of officers' investigation that found Poston guilty of fraud, as outlined earlier (Altshuler 1977: 32-40). By this time supplies were arriving from Sonora, Fort Yuma, and the Rio Grande, and the crisis passed.

#### *Campaigns Against the Apaches, 1864*

Problems with the Pinal Apaches developed after miners began flocking to the new diggings in the Peoples Valley and along Little Chino, Granite, Lynx and

upper Hassayampa creeks in the mountains of west-central Arizona. King Woolsey, a rancher and Indian-fighter, led a party of men from the upper Hassayampa on an expedition against the Pinals in late January and February, 1864, during which he was joined by fourteen Maricopas under Juan Chevereah and twenty-five Pimas. The Pimas quit on the second day out, however, and returned home. The campaign climaxed with what is known as the Bloody Tanks massacre that left some twenty-four Tonto and Pinal Apaches dead. According to one source Juan Chevereah, the Maricopa chief, "fought with great courage, and did good service" (Conner 1956: 171-176; Woody 1962: 161-164; Thrapp 1967: 27-31; Browne 1974: 120-124).

Woolsey led two more expeditions into the field in 1864. These were judged successful, even if the results were less spectacular. Carleton had already provided the Pimas and Maricopas with 200 stand of arms and ammunition, and when Poston left the Pima Villages on March 21<sup>st</sup> some thirty well-armed Maricopas and twenty-eight Pimas formed his military escort. Part of them joined Woolsey's company in the field for the second time, and at the mining camp of Weaver, Juan Chevariah "was the lion of the hour" for his earlier exploits. The majority became disgusted with Poston and returned home (Carleton to Goodwin, April 20, 1864; *WR-OR* vol. 34(3): 203; Nicholson 1974: 116-123; Altshuler 1977: 35-36).

By April General Carleton had worked out the plan for a coordinated campaign against the Apaches in Arizona. This would involve his California Volunteers, one or more companies of Arizona citizens, parties from the Pimas, Maricopas and Papagoes, and even Mexicans whom he had authorized in letters to the governors of Sonora and Chihuahua to cross the border in 'hot pursuit.' This came on the heels of his successful round-ups of the Mescalero Apaches and the Navajos, and he had reason for optimism that similar tactics would end the Apache problem in Arizona as well (Carleton to Goodwin, April 20, 1864; *WR-OR* vol. 34(3): 200-201, 206, 209; Wilson 1995: 95-97).

Carleton launched his Gila Apache Expedition in May with the army using Fort Goodwin, a new post on the upper Gila River, as its depot or base of operations. He asked Governor John N. Goodwin of Arizona to urge the Pimas and Maricopas to put four parties of fifty men each in the field for sixty days. Goodwin held a long conference at the Pima Villages on May 15<sup>th</sup>. The result was that all of the Maricopas led by Juan Chevariah agreed to go with Woolsey and four parties of Pimas of fifty men each proposed to take the field (Carleton to Goodwin, April 20, 1864; Goodwin to Carleton, May 16, 1864).

Woolsey left his Agua Fria ranch on June 1<sup>st</sup> and remained out for eighty-seven days, but his report made no mention of the Maricopas (*WR-OR* vol. 50(2): 868; Woody 1962: 170-176). The calendar stick of Juan Thomas did accurately record the death of Cyrus Lennan, "Many Whiskers," on the January expedition, and the rod from Salt River noted a Pima-Maricopa campaign in 1864-1865. On the latter foray, the allies met up with an Apache band and captured all of the arms and other property the Apaches had taken from an army party (Russell 1908: 50-51; Southworth 1931: 47). Overall, General Carleton considered the results of the Apache Expedition disappointing. The army itself accomplished little beyond

scouting, and with the enlistments of his California Volunteers about to expire, the department commander allowed this campaign to fade away (Utley 1967: 255-259; Wilson 1995: 97-99).

*The Pima Villages in 1864*

J. Ross Browne said that there were ten Pima and two Maricopa villages as of 1864. Joseph Pratt Allyn, who visited the Pima Villages at exactly the same time as Browne, claimed that eleven villages stretched along the Gila River for about twenty miles, each one a duplicate of another, mere straggling collections of brush huts. The Indians lived outdoors except in cold weather, when they huddled around a fire inside. Between their villages and the river, distant half a mile to a mile, lay the cultivated fields. Allyn put the number of Pimas at 6,000 and the Maricopas at 1,000, whereas Browne placed the total population at 6,000 (Browne 1974: 110; Nicholson 1974: 108-109, 112). Poston estimated 7,500 souls (Ann. Rpt. Comm. Ind. Affs. 1864: 152).

Browne referred back to A.B. Gray's survey of the reservation as his authority that it was about twenty-five miles in length by four in width, and that though it the Gila River flowed from one end to the other. He continued,

"Three large acequias take their head near the upper boundary; one on the south side of the river two miles below Sacatone, and the other on the north side. These, with their various branches, comprise nearly five hundred miles of well-defined acequias, and extend over a tract of land eighteen miles in length" (Browne 1974: 107).

This, the most explicit statement to date on the Pima and Maricopa canal system, he unfortunately marred either by miscounting or by failing to note the location of a third acequia. The first-named canal must have been the Old Maricopa Ditch, and the second may have been the Sratuka (Wet Camp) Canal, if we consider that the location given later for the heading of the latter should have placed it in T3S R5E instead of T3S R7E. Whether by a third large acequia Browne meant the Old Santan Ditch, the Blackwater or Island Ditch, or some other unknown canal, there is no way to say (Hackenberg 1974a II: 25-38). In 1869 the Maricopa chief, Malaya, testified in reference to Colonel Gray's survey that "The Village at Blackwater did not exist at the time of the survey, but there were some Pimas living on the Island opposite Blackwater and a large acequia had been taken out by others as far up as White's Ranch" (Grossmann to Andrews, October 31, 1869). Nothing was said about how the fields at Casa Blanca were irrigated.

Special Agent Browne did confirm that the Pima-Maricopa lands produced two crops a year without manure or renewal of any kind, except for the river-deposited silt, their return in wheat being twenty-five fold. If they sowed at the rate of forty-five lbs./acre this would have meant a return of 18.75 bushels per acre - lower than the average in the 1860 Census but greater than the figure in 1870 (see Chapter 9). Another observer put the average yield of wheat at twenty-

nine fold (U.S. Senate 1965a: 45). Wheat was sown in December and January, tobacco and cotton generally about the 1<sup>st</sup> of March. The wheat harvest had been completed by late June and corn was then planted in the same ground, also pumpkins, melons, and other warm-season vegetables (Browne 1974: 107-110).

Judge Allyn found their fields marked off by "perfectly impenetrable brush fences," with the desert transformed into a garden by tiny threads of dirty water, scarcely observable. Around their fields the brush thickets, as he termed them, were pierced by apertures, through which you crawled on your knees. One evening, starting back after taking a walk, Allyn found himself "entangled in a perfect network of alternating ditches and fences" that required him to go about twice the distance on his return (Nicholson 1974: 109).

Both Browne and Allyn, who were at the villages at the same time in 1864, gave additional details about civil government, courtship and marriage, warfare practices, and death and burial customs, although their short stay must have meant that this information came from Ammi White rather than from personal observations. Allyn stressed that the habits and customs of the Maricopas differed materially from those of the Pimas, one difference being the proverbial chastity of the Pima women. The Pima fighting men felt compelled to return from a war party as soon as blood was shed, while the Maricopa prided himself on not turning back when on the warpath. When a Pima warrior died, his family took possession of the body, tied it up with a *reata* or hide rope, drawing the legs up to the chin. It was then buried in a sitting position with the head towards the east or the sun, while the bow and arrows, blankets, beads, paints, jews'-harps and other personal effects of the deceased were buried with him. Cattle were driven up, slaughtered, and a grand festival held over the grave. His other property - the fields, grain, cattle, chickens and dogs - was fairly and equitably distributed (Browne 1974: 107-113; Nicholson 1974: 108-113). Captain Frederick Grossmann gave a similar description a few years later, adding that the grave was about two feet in diameter and four to five feet deep (Grossmann 1873: 414).

The Maricopas burned their dead, and Captain John Cremony gave the following description, perhaps from witnessing such an event while his company was at Maricopa Wells:

"When a Maricopa dies a large funeral pyre is made, and every article the deceased possessed while living, is placed upon it with the corpse. All his clothing of every description; his horse or horses; all his poultry; all his wheat or other crops; his bows and arrows; in fine, every article of any kind whatsoever - the fire is put and all reduced to ashes, which is (*sic*) then cast to the winds, amidst howlings and lamentations, which last one day and one night" (*Daily Alta California*, July 9, 1862, p. 1 cols. 7-8).

Cremony's account of a Maricopa courtship was considerably more colorful than Allyn's version of the Pimas' rituals, but otherwise they were similar (Ibid; Nicholson 1974: 111).

Amami White, writing on June 30, 1864, said that the Indians on the Pima and Maricopa Reservation had been unusually blessed during the past year with good health and a bountiful crop of wheat, corn, beans, melons and pumpkins. He estimated the surplus of wheat beyond what they needed for consumption as in excess of 1,000,000 pounds (White to Poston, June 30, 1864). Judge Allyn claimed, as we saw earlier, that they raised 1,000,000 pounds of wheat and other crops during the past year, and that their wheat and corn production had quadrupled since White first came among them (in 1860) (Nicholson 1974: 109).

A quadrupling of wheat and corn in four years sounds like a dubious claim, but using some of the assumptions made in Chapter 9, 6,000 acres would have provided sufficient wheat or corn to feed approximately this same number of Indians for a year. An additional one million pounds of grain, with a conservative production estimate of twenty bushels per acre, would have required only 1,667 acres. With almost 7,300 acres in production in 1860, the Pimas and Maricopas should easily have been farming 7,667 acres by 1864. At this time, they still had exclusive use of the Gila River's waters, apart from whatever Amami White diverted for his ranch. If Poston was correct in saying that they formerly manufactured a strong, durable cotton blanket, cotton growing had evidently gone into a decline. Poston claimed that he furnished them with 500 pounds of cottonseed, however, which would have been far more than General Carleton imported for distribution (Ann. Rpt. Comm. Ind. Affs. 1864: 153; U.S. Senate 1965a: 39). The source(s) of this cottonseed is unknown.

Some time before the end of June, Amami White got his steam flouring mill into operation. He offered no description of this, so it is not known whether he kept the existing burrs and equipment while adding a steam engine, or imported a completely new flour mill and steam plant. He presumably stayed at the same location. If White can be relied upon, the benefit to the Pimas was that they could sell their surplus wheat gradually, at 3¢ to 5¢ per pound, while the miners at Prescott for the first time had an ample supply of flour at a price reduced from 30¢ down to 14¢ a pound (White to Poston, June 30, 1864; Ann. Rpt. Comm. Ind. Affs. 1864: 153). No more moldy flour, or as the Prescott newspaper put it,

"Pimo Flour, from the steam mill of White & Noyes, is now much used in Prescott. It is good and sweet, though not so white as some of the flour from the States. By McMullen's train Messrs. W. & N. sent a sack each to the Governor, the Secretary, and Attorney General, a nice present in this country of high prices" (*The Arizona Miner*, August 24, 1864, p. 3 col. 1).

Opinions on this flour varied in later years, some pronouncing it excellent.

White and his rival at Maricopa Wells, John B. Allen, were probably the only traders at that time but they were far from being the only non-Indians who lived along the middle Gila. The first election for territorial officials in Arizona, held July 18, 1864, saw Precinct 4 First District at the Pima Villages return forty votes for Charles D. Poston as the successful candidate for Delegate to Congress.

His opponent received four votes (*The Arizona Miner*, July 20, 1864, p. 2 col. 2; August 24, p. 2 col. 3). Indians of course did not vote. Poston, who claimed that he had broken up the Pima and Maricopa trade with Allen, soon left Arizona to claim his seat as delegate. Allen continued in business at Maricopa Wells with a store, blacksmith and tinsmith shops, "and other industrial enterprises" (*The Arizona Miner*, Sept. 7, 1864, p. 3 col. 1; October 5, p. 3 col. 1).

Although a school had been recommended for the Pima children prior to the Civil War, the path leading to public education in Arizona would be a long and difficult one (St. John to Greenwood, January 18, 1860; Wagoner 1970: 50-51). One of Charles Poston's truly innovative steps was authorizing the commencement of a school at the Pima Villages under the charge of Corporal John D. Walker of the California Volunteers, "who has taken pains to learn them the language" (*sic*). He asked for an appropriation to pay the teacher's salary (Ann. Rpt. Comm. Ind. Affs. 1864: 153). This and his other recommendations for a resident agent and a blacksmith would have been progressive, but in the midst of a Civil War they were also unrealistic. Poston probably wrote his report of September 30, 1864 from New York City, where he would not have known that Walker was no longer at the Pima Villages in consequence of the vedette stations being discontinued in August. Walker in any case remained in the army until discharged with his unit, Company I, 5<sup>th</sup> Regiment of Infantry, California Volunteers, at Mesilla, New Mexico on November 30, 1864 (Orton 1890: 713). A later agent, C.H. Lord, renewed the recommendation of Walker as a competent person to teach school there, as he lived with the Pimas "and understands their language almost perfectly" (Ann. Rpt. Comm. Ind. Affs. 1866: 113).

As one historian put it, life on the Gila returned to normal with Poston gone (Altshuler 1977: 40). He had asked that his resignation as Superintendent of Indian Affairs take effect on November 30, 1864, after which Arizona lacked an appointee to this office for the next half-year (Ann. Rpt. Comm. Ind. Affs. 1864: 158; Hooper to Poston, April 12, 1865). His successor, George W. Leihy, assumed the duties of superintendent on June 10, 1865, although he found it impossible to accomplish much for want of funds (Leihy to Dole, June 15, 1865; Ann. Rpt. Comm. Ind. Affs. 1865: 503). Leihy, then forty-seven years old, was a miner at La Paz on the Colorado River. He came to Arizona in 1863, probably with the gold rush that year, and in 1864 he had been elected to the Territorial Council (U.S. Senate 1865b: 99; Wagoner 1970: 43).

Ammi White is sometimes referred to as an agent or special agent for the Pimas and Maricopas in 1864-65, but his appointment was never confirmed because of his being engaged in trade with the Indians (Van Valkenburgh to Leihy, September 8, 1865). By shedding the Poston influence he seems to have regained respectability. He also gained some new competition as of September 1864 when the Prescott newspaper announced that J.B. Allen had sold out, dissolving his existing co-partnership with George F. Hooper & Co. at Maricopa Wells. Henry Grinnell & Co. bought Allen's stock to continue a "general merchandise business" under that name, in partnership with George F. Hooper & Co. (*Arizona Miner*, January 24, 1866, p. 4 col. 5). By 1866 the new firm had a license to trade with the Pimas and Maricopas as well as a second store, at the



Pima Villages. The new Special Agent, M.O. Davidson, claimed that "the best feeling exists between these two trading firms" (Leihy, license to Hooper, October 23, 1865; Leihy to Cooley, January 3, 1866; Davidson to Cooley, January 12, 1866).

*The Pima and Maricopa Companies in the Arizona Volunteers*

In January of 1865 the army shifted military jurisdiction in Arizona to the Military Division of the Pacific, which created a District of Arizona and sent Brigadier General John S. Mason to command it. Judge Allyn warned that in the settled portions [i.e. mining camps] of central Arizona "industry is to-day completely paralyzed by the hostile Indians" (*WR-OR*, vol. 50(2): 1187; Utley 1967: 259). When General Mason arrived in May, he found that most white residents south of the Gila had deserted their farms and many had sought refuge in Tucson. North of the Gila,

".... The roads were completely blockaded, the ranches with but one or two exceptions abandoned, and most of the settlements were threatened with either abandonment or annihilation" (Miller 1989: 50).

The situation at the Pima Villages was much better, if perhaps not entirely a scene of tranquillity, thanks to the efficient native militia. Elsewhere in Arizona the settlers considered the need for action to be compelling.

General Mason had the novel idea of enlisting 200 Pima and Maricopa warriors as soldiers, for one year. They would be provided with arms and ammunition, pants, shirts, blankets, provisions, and be paid for their services. He expected them to make constant campaigns against the Apaches, in between which they could return to their homes. At departmental headquarters in San Francisco his ideas found support, and the War Department agreed when it approved raising a regiment of Arizona Volunteers (*WR-OR* vol. 50(2): 1247-1248, 1251).

Mason apparently based his strategy on Kit Carson's successful winter campaign against the Navajos, and upon Carleton's plan in the previous year's Gila Expedition to blanket Arizona with numerous light columns of soldiers, miners, and Indian allies, who would drive the hostiles into the arms of their pursuers (Utley 1967: 257; Miller 1989: 50-51). Arizonians imbued with the imagined success of King Woolsey's partisans and Indians in 1864 must have welcomed Mason's ideas - "I really want my enlisted men with arms in their hands in active campaign against the Apaches" - he wrote back to departmental headquarters (*WR-OR* vol. 50(2): 1248).

The general seems to have designated his location at any time as headquarters of the District of Arizona. Fort Whipple shared this distinction with

Maricopa Wells, Tubac, Fort Goodwin, and other locations. Early in 1866 Mason moved his headquarters to Sacaton, a more central position for communication with all of the posts. So-called public opinion, meaning contractors and others dependent upon the army at Prescott, was outraged (Altshuler 1991: 223).

It was the governor's responsibility to raise volunteer troops, who would then be sworn into Federal service. With the War Department's permission in hand, Governor Goodwin moved quickly to appoint an Adjutant General and recruiting officers for six companies. In the end they raised five companies: A, B, C, E, and F. Just over 350 men enlisted from the local Mexican, Pima and Maricopa populations, plus a few Anglo-Americans. Thomas R. Ewing, a teamster at the Pima Villages, recruited ninety-seven Maricopa Indians from around Maricopa Wells for duty in Company B. Six more Maricopas joined the company later. John D. Walker, also living at the Pima Villages since his discharge from the California Volunteers, enlisted ninety-four Pimas for Company C (Underhill 1983: 2-3, 17-19). Company B of the First Arizona Volunteer Infantry was mustered into Federal service at Maricopa Wells on September 2, 1865, as were eighty-nine men of Company C. The other three companies, composed almost entirely of Arizona Hispanic residents, mustered into service in October and November. Only the Indian volunteers furnished their own horses and also fed them.

The composition and services of the Arizona Volunteers have received a great deal of attention, assisted by the survival of their muster rolls and other primary sources that relate to these companies (Thrapp 1967: 33-38; Reed 1977; Underhill 1979, 1980, 1983). The names of all of the volunteers in Companies B and C have been preserved, although their renderings into English were at best inexact and often inconsistent from one muster roll to another. The listings published by Underhill (1983: 62-64) include such errors. Thomas Ewing commanded Company B from the beginning with Charles Riedt, who spoke Maricopa fluently, as second lieutenant. Juan Chevereah the Maricopa chief was mustered in as captain of Company B but from November 10<sup>th</sup> he was posted on detached service. Antonio Azul served initially as a sergeant in Company C and received a commission as second lieutenant in that company on August 1, 1866. John D. Walker, who spoke Pima, commanded Company C from the date of his enrollment (Underhill 1983: 23-24). Their ready adaptation to army life and effective service suggest that one or more units of the existing Pima and Maricopa militia had enlisted almost as a body. It only made sense from their standpoint to receive a rifle, money, and elements of a uniform to do what they would have been doing anyway.

Companies C, E and F were issued .54 caliber U.S. Model 1841 percussion rifles; not state-of-the-art weaponry but adequate for the task at hand. Company B was not included in the ordnance report. Each Indian volunteer also received a blue blouse trimmed in red for the Maricopas and in blue for the Pimas; one pair of blue pants, one pair of shoes, and one yard of red flannel for a headdress. They entered service just when raiding by the Tonto and Pinal Apaches was reaching new heights in central Arizona. Their mission was to destroy the Apache camps, crops and supplies, and to hunt down and kill those

who resisted (Underhill 1979: 69; 1983: 24, 29). Their problems would lie mostly with shortages of clothing, shoes and rations, and bad weather.

On September 4, 1865, Companies B and C together with three companies of the 7<sup>th</sup> Infantry, California Volunteers, 464 men and seven officers in all, marched out of Maricopa Wells and headed for a point seven miles up the Verde River from its junction with the Salt River. There on the 7<sup>th</sup>, they

".... formed a permanent Camp called Camp McDowell. The Command having cut [i.e. through the brush] and made the road from Maricopa Wells to this point, this being the first command that came in this direction with wagons" (Muster Roll of Co. B, October 31, 1865).

One year before, both Governor Goodwin and Colonel N. H. Davis had recommended either the lower Verde or the Tonto Basin as the best location for a new post (*WR-OR* vol. 34(3): 202, 206, 209).

The very next day after their arrival, the two companies formed part of the command sent out towards the east-northeast to explore the Tonto Basin and scout for Apaches. Four days and eighty-seven miles along, they reached Green Valley. There on the 13<sup>th</sup>, with Companies B and C in advance and about nine miles east of Green Valley, they met up with an Apache band. A firefight left one Apache dead, several wounded and the balance driven into the mountains. The troops burned the captured ranchería and returned to Camp McDowell on September 19<sup>th</sup>, without further incident (Muster Roll of Co. B, October 31, 1865). In October the camp was named Fort McDowell (Reed 1977: 8).

An order on October 4<sup>th</sup> sent Company C to the north and Company B south on another scout and pursuit operation. October 7<sup>th</sup> witnessed Company C's rout of an Apache band near the mouth of Tonto Creek, about fifty miles from Fort McDowell, where the soldiers killed five and captured eight. On the 15<sup>th</sup>, John Walker and three guides surprised three hostiles. Walker killed one of them and the others escaped (Muster Roll of Co. C, October 31, 1865; Reed 1977: 7; Underhill 1979: 40).

During October the troops were directed to begin building quarters and storehouses at the new post, and urged to hurry the work because winter was approaching. Companies B and C assisted in this. The chosen location allowed the troops to act as a buffer against Apache raids, affording protection to people as well as their crops. Settlers had already begun farms along the Verde and Salt rivers and at other places north of the Gila, (*WR-OR* vol. 50(2): 1282; Underhill 1979: 38).

Company B left the garrison again, probably on November 24<sup>th</sup>, and this time the men encountered rain, snow, and cold weather that made trailing impossible. They returned on December 11<sup>th</sup>, having left one pack mule behind but reporting that the troops killed three Apaches and had brought in seven prisoners (Reed 1977: 8; Underhill 1979: 40). Walker led eighty-two Pimas of his Company C and forty Pima volunteers east from Fort McDowell on December 1<sup>st</sup>, heading for the Mazatal Mountains. Caught in a snowstorm two days out, the

men suffered greatly because they had no blankets or extra clothing. The Pima volunteers and twenty-five of his enlisted men were forced to turn back.

On the morning of December 7<sup>th</sup>, Sergeant Antonio Azul noticed smoke and the command charged down the mountain to attack an Apache camp, where they captured one young man and one woman. They also found a \$100 legal tender note, and named the nearby stream Greenback Creek. When Walker returned to his supply camp that evening, he found that the guard, Corporal Maw Chuk and five privates, had surprised an Apache camp across the valley, killing one woman and taking seven captives (Reed 1977: 11-12; Underhill 1979: 40-43).

Forays and encounters like these continued, and when not on the offensive the troops helped build the fort. Sometimes they took casualties themselves. On January 1, 1866, two Pima enlisted men raced into the fort and gasped that their party had been ambushed on the road between Fort McDowell and the Salt River. A detachment rushed to the scene and found the bodies of privates Juan Lewis and Hownik Maw Kum of Company C. The command discovered an Apache camp in a deep canyon nearby, and followed the trail of an estimated seventy-three hostiles for twenty-five miles before they gave up the search. Company B retaliated during January and February, killing thirty-three Apaches and taking eight captives (Reed 1977: 13; Underhill 1979: 43).

In early March the two companies were out on a scout between Fort McDowell and the Palos Blancos. After two days the party halted at sunset and the Indians gathered around their prophet, a "tobacco mancer." He fell into a stupor, then arose and told his vision about a ranchería with many warriors (see Russell 1908: 360-361, 363). Walker and Ewing led their men up a mountain by moonlight, and the scouts reported a ranchería at the mouth of a canyon just below. They descended the mountain until one soldier discharged his musket accidentally, alerting the Apaches. Then, as Ewing reported later,

"Our boys leaped over the stones, scrambled through the brush and got down in time to bring down some of the hindermost as the [Apaches] climbed up the rocks on the opposite side of where their huts were situated" (Peters 1966, 3<sup>rd</sup> Sect.: 2; Underhill 1979: 44-46).

The volunteers chased the Apaches until sunrise, killing twenty and wounding several more, destroying the huts, baskets, cooking vessels, clothing and mescal at the ranchería (Reed 1977: 19-20).

At the end of March, Lieutenant Ewing and Captain Walker took both companies east up the Gila River, accompanied by 260 Papagos and Pimas and forty Maricopas. On the night of March 30-31 they spotted a campfire in the distance and hastened toward it, moving quietly through the rocks, rifles in hand. The Apaches, alerted too late, ran from their huts and the volunteers shot them down. Here, at a place called AmeKwenorse ["Big Square Mountain" or Pinal Mountain] the volunteers killed another twenty-five Apaches, took sixteen prisoners and captured eight horses as they burned the camp. Private Au Papat of Company C died on April 1<sup>st</sup> of wounds received in this battle (Muster of Roll

Co. C, September 13, 1866; Anonymous 1941: 15; U.S. Senate 1965a: 36-37; Reed 1977: 21-22; Underhill 1979: 46-48). James M. Barley (1999: 40), who was not present, wrote a highly romantic and inaccurate account of this fight. The California soldiers meanwhile garrisoned Fort McDowell (Reed 1977: 15, 21-22).

Captain Charles Whittier gave an interesting assessment of Pima and Maricopa tactics, including an appreciation of their ability to mobilize rapidly ("it seemed scarcely a second") and assume the offensive. They preferred hand-to-hand combat, which would have appalled either Apaches or soldiers in the army, both of whom normally avoided close contact with an enemy (Ann. Rpt. Comm. Ind. Affs. 1868: 142; Wetzler 1949: 231-232). Captain Grossmann said they liked to ambush the Apaches when they crawled through the low doors of their huts, while archeologist and historian Arthur Woodward described the use of their principal weapons, the ironwood and mesquite war clubs (Grossmann 1873: 416; Woodward 1933: 165-167).

In September 1866 the enlistments of Companies B and C were up. The men were paid in full and allowed to keep their firearms. The muster rolls showed that in Company B, Sergeant McGill, Corporal Yo se, and privates Gosha Zep and Duke died in battles with the Apaches. There was no record of illnesses. In Company C, Apaches had killed the three Pimas mentioned above and, as with the Maricopas, there was no record of illnesses. In the other three companies of the First Arizona Volunteer Infantry another five men had been killed, while five more died of illnesses. Discipline was described as good throughout the companies and the desertion rate was remarkably low, less than 6 percent, when compared with the experience of the Regular Army (Utley 1967: 40-41; 1973: 23). Their effectiveness in the field was demonstrated by the toll of 150 to 173 Apaches killed, thirty-eight seriously wounded, and fifty-eight captured. The possibility of double counting made the mortality counts uncertain (Underhill 1979: 84-89; 1983: 55-56). At least seventy of the Pimas and Maricopas showed their liking for military life by enlisting again, for a shorter tour of duty as spies and scouts (Ann. Rpt. Comm. Ind. Affs. 1867: 163).

Although mustered out of service, the Arizona Volunteers were not forgotten. The Prescott *Weekly Miner*, still the only newspaper in the territory, gave them lavish praise, as did the new Governor, Richard McCormick. Governor McCormick estimated the number of hostile Indians in the territory at fewer than 1,000, primarily in eastern and central Arizona, and the Volunteers had thinned those ranks considerably. In the fall of 1866 the Third Arizona Territorial Legislature passed a memorial that praised the Volunteers for their outstanding service, oftentimes pursuing the Apaches barefoot and on half-rations, and inflicting greater punishment than all of the other troops in the territory. Although the territory's finances made a bonus impossible, the legislators could congratulate the soldiers for a job well done (Wagoner 1970: 48-49; Underhill 1983: 50, 56-58). They were remembered again in 1924 when the seven surviving Maricopa and Pima veterans, and four widows, finally received government pensions (Anony-mous 1941: 3, inside back cover; U.S. Senate 1965a: 38).

*Settlements Above the Pima Villages*

In 1865 General Mason gave a hint of the possible long-term results from a successful campaign in the Pinal and Tonto country. Settlers between the Verde and the Colorado rivers and north of the Gila were deprived of protection, he said, and operations by the troops would relieve this in great measure (*WR-OR* vol. 50(2): 1282). Even with momentary relief, this allowed the first Mexican settlers to locate on the Gila River above the Pimas in 1866. In the latter part of 1867, a settlement was commenced about twenty-five miles east of Sacaton, at a point known as Florence. This community of Mexicans and Anglo-Americans grew rapidly, while to the west in the direction of the reservation, other ranches and stores were soon taken up. Because of the safety that the Pimas and Maricopas had provided and continued to offer, settlers were able to move onto these lands along the Gila and divert the river's waters above where these could irrigate the Indians' lands. In making the country safe for settlers, the Pimas and Maricopas unknowingly contributed to their own fields becoming desolate wastes. By 1868 friction had already developed over water rights, much as Sylvester Mowry and Silas St. John had predicted almost a decade earlier (Ruggles to Dent, November 4, 1867; Devin to Dent, March 14, 1869; U.S. House 1871: 10-11; Nicklason 1976: 605, 617-620; U.S. Senate 1976: 17-18; Miller 1989: 77-79).

*Agents and Superintendents, 1865-1869*

Arizona Territory held its first regular election in September 1865 and Governor John Goodwin replaced Charles Poston as the territorial delegate in Congress. One year earlier, Poston's departure for Washington had left Arizona without a superintendent of Indian affairs, until his deputy George W. Leihy received the appointment on April 1, 1865 (Ogle 1939: 360). Leihy assumed the office on June 10<sup>th</sup> and served until his sensational murder by Indians along the road west of Prescott, on November 18, 1866. His replacement, General Grant's brother-in-law, George W. Dent, had been appointed on September 8<sup>th</sup> and was already on the way to Arizona. When he appeared at La Paz, Arizona on December 19<sup>th</sup> to assume his duties, he found the office vacant by virtue of his immediate predecessor's abrupt demise (Ann. Rpt. Comm. Ind. Affs. 1865: 503; 1867: 154; Feudge to Cooley, December 15, 1866; Ogle 1940: 18-19). Brevet Colonel George L. Andrews replaced Dent as superintendent on July 31, 1869, following his appointment in May (Ann. Rpt. Comm. Ind. Affs. 1869: 204).

As for agents, Poston's choice of Ammi White never received official sanction because White was a licensed trader. Nonetheless he performed services such as receiving and distributing presents. Poston's appointee as an agent to the Papagos was M. O. Davidson, superintendent of the Heintzelman mine. He apparently served unofficially for at least a year and a half, then returned east and gained a regular appointment as Special Agent for the Pimas and Maricopas as of September 7, 1865. Poston saw Davidson displacing his own preference, Ammi White, and protested bitterly (Davidson to Van Valkenburgh, September 12, 1865; Poston to Cooley, December 12, 1865; January 20, 1866; Hooper to Poston,

December 18, 1865 (extract); Leihy to Davidson, January 11, 1866; Ann Rpt. Comm. Ind. Affs. 1864: 158; 1867: 164).

Nearly all of Davidson's numerous letters were dated from his home in Fordham, New York, but by the end of the year he was back in Arizona, where he visited the Pimas and Maricopas briefly and appointed Dr. Charles H. Lord, surgeon at the Enriquetta Mine, as his deputy. Davidson was then seen no more. He offered his resignation in April 1866 (Davidson to Cooley, April 20, 1866).

Dr. Lord served as a "deputy agent" for the Pimas, Maricopas and Papagos and filed a good report that might have led to his own appointment, except that Levi Ruggles had already been made sub-Indian agent for the Pimas and Maricopas by the time the report arrived in Washington (Davidson to Cooley, January 12, 1866; Davidson to Lord, February 1, 1866; Ann. Rpt. Comm. Ind. Affs. 1866: 111-113; 1869: 206-207). Although Ruggles' appointment was dated April 28, 1866, he took up his duties at the end of October and held the office until relieved by Captain Frederick E. Grossmann on October 1, 1869 (Ann. Rpt. Comm. Ind. Affs. 1870: 118; National Archives n.d.: v).

#### *The Pimas Prosper and Seek More Land*

Amidst this coming and going of superintendents and agents, and the typical absence of either along the middle Gila, the Pima Villages continued to prosper. Deputy agent C. H. Lord, writing in 1866, found the Pimas and Maricopas living very contentedly on the Rio Gila, and as a general thing with enough water to meet their needs. He added a new element to the agricultural scene in noting that this year they had gone above the reservation and were working "an unoccupied piece of land on the river, which is very fertile. They do this to let their old lands have one season's rest" (Ann. Rpt. Comm. Ind. Affs. 1866: 112). Lieutenant John D. Walker also referred to this movement upstream, which may have been to the eastern end of the "Island of the Gila:"

"They [the Pimas] claim fields now cultivated about six miles above the line of the reservation and last spring one of the sub-chiefs determined to take them by force, but was dissuaded from doing anything by Antonio Azul until he could find out what the government was going to do" (Walker to McDowell, April 4, 1866).

A visitor in 1867, William Bell, appears to have been the only other person to specifically note the practice of allowing fields to lie fallow:

"As the ground is soft and friable, hoes, spades, and shovels are more in vogue than ploughs; and when any part of the valley shows signs of exhaustion, they give it rest, repair the old acequias which had previously been abandoned, and thus bring a reinvigorated patch of waste land again under cultivation" (Bell 1965: 174).

Russell (1908: 87) made no mention of fallowing, and while he denied that the Pimas practiced crop rotation, agent John Walker noted that they "alternately raise wheat, barley [!], corn, beans, cotton, &c." in an 1859 letter (Walker to Collins, February 4, 1859).

Captain Frederick Grossmann, writing in 1870, described what he saw at the Pimas' Blackwater Village:

"These Pimas have lived here fully three years, have cleared a large tract of land on the island opposite their village, and have taken out two large acequias, one of which waters their fields on the island, and the other, lands cleared this year on the north bank of the Gila River, and above the farms owned by Campio, Lopez, Salazar, Gandra, Corello, and D. C. Thompson."

"All attempts made by me to prevail on these Indians to return within the limits of the reservation proper have failed, and I have come to the conclusion that nothing short of compulsion will ever induce them to move back. In view of the facts that they have held this land for years, that they were allowed to believe by former agents that they would be permitted to stay there, and that they are, above all others, the best behaved Pimas of this agency, I would respectfully urge, no matter what action Congress may be pleased to take upon the proposed extension of the reservation, the lands and water privileges now held by these Indians should be granted to them by all means" (U.S. House 1871: 14-15).

The Pimas were a key source of supply in the Southwestern economic system and a peaceful island in the Indian wars that practically engulfed central and southern Arizona at this time. William Bell crossed the Southwest in 1867 as a railroad surveyor and said that Western men claimed there were only two spots in New Mexico and Arizona where you could be certain of absolute safety: Zuni pueblo, and amongst the Pimas on the Rio Gila (Bell 1965: 169). Two years later, Levi Ruggles asserted that throughout Arizona, there were not ten miles of highway where life and property were safe from the Apaches for a single moment, outside of the Pima Reservation, its immediate vicinity, and thickly populated settlements (Ann. Rpt. Comm. Ind. Affs. 1869: 212). The reason, as Bell reiterated, was that the Pimas and Maricopas maintained a complete military organization, which they continually exercised.

Since the survey of their reservation in 1859, the Pimas and Maricopas had insisted that their lands extended from the Pinal Mountains on the east to the Tezotal ("the foot of the so-called 'little desert'") on the west, a distance of 100 miles (Walker to McDowell, April 4, 1866). Their claim on the waters of the Gila was implicit up to the time when Brigadier General Thomas Devin wrote

"One thing is certain, that the Indians not only consider the land as inalienably theirs but the water of the Gila also in so far as it may



be necessary for the cultivation of their land" (Devin to Dent, March 14, 1869).

Their insistence on gaining a recognized title to not only the 100 square miles of their 1859 reservation, but to all of the lands they claimed, dated at least from 1855 (see Chapter 7). Charles Poston had renewed the earlier prediction that an American preemption of land and water above the Pimas "might produce discontent," but it was the movement of some Pimas onto lands above their reservation early in 1866 that led to an effort to have their reservation enlarged (Ann. Rpt. Comm. Ind. Affs. 1864: 386).

### *The Question of a Reservation Expansion*

In the 1860s it was not unusual for the military, rather than the Indian office or Arizona politicians, to take the lead in creating or increasing the size of an Indian reservation. Major General Irvin McDowell, commanding the Department of California (to which the District of Arizona belonged), inspected the Pima and Maricopa companies at Fort McDowell on February 12-13, 1866 and was favorably impressed (*Arizona Miner*, February 28, 1866, p. 3 col. 2). Less than two months later and "agreeably to a suggestion from you during your late trip here," Lieutenant [a captain as of August 25, 1865] John D. Walker sent McDowell a report on the current status of the Pima and Maricopa reservation. He also gave reasons why it should be enlarged and by how much (Walker to McDowell [extract], April 4, 1866). McDowell forwarded this to territorial delegate John Goodwin with his own strong endorsement. Goodwin thought the request very reasonable and praised the Indians himself when he urged the Commissioner of Indian Affairs to grant this request (Goodwin to Cooley, June 7, 1866; Nicklason 1976: 616-617).

As of June 15<sup>th</sup>, Commissioner Cooley sent Superintendent George Leihy instructions for enlarging the boundaries of the Pima and Maricopa Indian Reservation. Leihy was chronically short of funds and could not do an actual survey, but shortly before his murder he composed a "Notice" that spelled out, with references to mileage and landmarks, what the new boundaries were to be and prohibited any entries, improvements or other claims within them. He dated this at Maricopa Wells on November 8, 1866.

The superintendent expanded the reservation's width to eight miles and its downstream limit to the mouth of the Salt River, but upstream only to a point two miles above White's Ranch (U.S. House 1871: 15-16). This "Notice," while never officially acted upon, received publicity and due regard as if it was in effect. Captain Frederick Grossmann said that Levi Ruggles gave it due notice and that copies were posted up at various places; the one in Grossmann's possession had remained posted at Casa Blanca for two years. At the time Leihy issued his notice, the communities of Adamsville and Florence did not exist (Grossmann to Andrews, October 19, 1869).

Leihy's own death so soon after writing this "Notice" probably enhanced its effect. The matter of a reservation expansion quickly came to dominate

official correspondence from Arizona. Apache hostilities, the question of presents for the Indians, contracting interests and agricultural production now attracted little attention. Although the first additions to the reservation came only in 1876, Superintendent Leihy's "Notice" may have aided that extension by discouraging settlers in the interim from trying to take up lands at the eastern end of the reservation. Adamsville was approximately two miles east of White's Ranch while Florence lay farther up the river (Grossmann to Andrews, October 19, 1869, enclosure A). John D. Walker was one of those who claimed a substantial ranch or farm within the proposed addition, however.

*Traders and Trading on the Reservation, 1867-1869*

There were some changes on the reservation itself. Levi Ruggles, the first resident agent since Silas St. John, arrived and "fitted up a nice house and office" at the Pima Villages (*Arizona Miner*, April 6, 1867, p. 3 col. 1). In early February 1867, Henry Grinnell sold his business interests at Maricopa Wells, Sweetwater and Sacaton to his partner, George F. Hooper. Hooper restructured his organization to place younger members of the firm in charge of its daily operations, with James M. Barney at Maricopa Wells. A Mr. Riordan replaced Frank Larkin at Sweetwater (*Arizona Miner*, March 23, 1867, p. 3 col. 1; April 6, p. 3 col. 2; May 4, p. 3 col. 1; Barney 1955: 63, 65).

At Casa Blanca, Ammi White carried on with his store and steam flouring mill, but at age fifty he was no longer a young man and may already have had health problems. At some point he had formed a partnership with William Bichard, and as of May 10, 1867 William Bichard and his brother Nicolas bought out White's interest and continued as W. Bichard and Company. In August they signed contracts to provide the army with almost 300,000 pounds of flour. White retired to San Francisco, where he died in 1870 (*Arizona Miner*, May 4, 1867, p. 3 col. 1; June 1, 1867, p. 3 cols. 1, 3; Miller 1989: 165).

For four days in early September 1868 a heavy rainstorm pummeled the Gila River Valley, completely destroying three Indian villages. Their names were not given. George F. Hooper & Co. lost a large adobe storehouse and 75,000 lbs. of grain at Sacaton, while at Casa Grande, Bichard & Co.'s flouring mill, their storehouses filled with grain, corrals et. al. were tumbled into one vast pile and completely ruined. The army lost more than 28,000 lbs. of flour stored there. The Gila itself reportedly flowed more than four miles in width; "Old Indians say that it is 60 years since anything like it occurred" (*The Weekly Arizona Miner*, September 26, 1868, p. 5 col. 2).

Another consequence was that Levi Ruggles relocated to a farm fifteen miles east of the reservation (Ann. Rpt. Comm. Ind. Affs. 1870: 118-119). The Bichards dug out their old mill at Casa Blanca and rebuilt a store at almost the same location while they erected a new gristmill, the "Pioneer Mills," at Adamsville in 1869. In June they signed contracts to deliver 400,000 lbs. of flour to two Arizona army posts (*The Weekly Arizona Miner*, October 17, 1868, p. 2

col. 4; Grossmann to Andrews, October 12, 1869; Myres 1980: 240; Miller 1989: 165).

William Bichard's new facility at Casa Blanca was termed a "road station" with a store, storehouses, granary, office, dining room, kitchen, a large corral and three wells. He also had an adobe building at Blackwater, built in 1867 and used as a store. Neither Hooper nor Bichard limited their commerce to grain purchases and sales of dry goods; Maricopa Wells featured a "well-appointed bar room" while Wm. Bichard had a territorial license as a wholesale liquor dealer (Grossmann to Andrews, October 19, 1869; U.S. House 1871: 10-15; Miller 1989: 165). Intoxicated Indians were an almost everyday occurrence.

Neither the agent nor the Pimas were happy with their situation in the late 1860s. Apart from the questions of a reservation extension, liquor problems, and the beginnings of a water shortage, the army alleged that traders exploited the Indians in the purchase of their principal commodity: wheat. Brigadier General James Rusling scarcely hid his anger when he passed the Pima Villages and Maricopa Wells early in 1867 and noted that the Indian traders bought 2,000,000 lbs. of wheat and corn the previous year, for which they paid from one to two cents per pound, coin, in trade. They then resold this to the government at from six to seven cents per pound, coin, in cash. Rusling's prices were accurate and while this did amount to fleecing the Indians, the government's purchase price was for flour, not wheat (Rusling 1874: 370; Miller 1989: 165). Two and one-half years later the Indians still received about two cents per pound in goods for their wheat while the government now paid eight cents (actually 9¼¢) per pound for Pima flour (Andrews to Parker, November 9, 1869). The natives complained bitterly about this system (Ann. Rpt. Comm. Ind. Affs. 1870: 120).

#### *A New Reservation Extension Proposal*

Everyone could see that a potential crisis loomed over extending the reservation to the east, and postponing or denying this decision would only serve to bring the crisis about (Ann. Rpt. Comm. Ind. Affs. 1869: 219-220). Yet neither in 1866 nor in 1869 were the actions taken to put this extension into effect, and the reasons were almost purely political. Governor Richard McCormick, in his annual message in 1868, invited white settlers to take up the unclaimed lands that lay near the reservation. His successor, Anson Safford, opposed any extension of the reservation, an impression that Safford's report to the Commissioner of Indian Affairs did nothing to dispel (*The Weekly Arizona Miner*, December 12, 1868, p. 1 col. 3; Andrews to Parker, December 9, 1869; Ann. Rpt. Comm. Ind. Affs. 1870: 136-139; Wetzler 1949: 261, 267-268). By 1870 the Prescott newspaper adamantly opposed any extension. Arizona citizens apparently saw no conflict between the long-standing Pima-Maricopa claim to all of the lands from the Pinal Mountains to the Tezotal (Great Bend area), and proffering the protection of these Indians as an inducement to settle on the same lands (Ann. Rpt. Comm. Ind. Affs. 1869: 208-209; *The Weekly Arizona Miner*, August 27, 1870, p. 1 col. 3; Wetzler 1949: 163, 261).

*Farming on the Middle Gila, 1864-1869*

In 1864 Ammi White commented that the Indians had been unusually blessed with good health and bountiful crops of wheat, corn, etc. Superintendent George Leihy wrote in 1865 that the Pimas and Maricopas had produced largely from their reservation, and found a ready market with the troops, miners, and settlers. Another source asserted that they furnished the military with 1,000,000 lbs. of grain (i.e. wheat) that year, or about 16,500 bushels (Ann. Rpt. Comm. Ind. Affs. 1865: 505; Nicklason 1976: 616). For 1866, deputy agent C. H. Lord repeated an estimate (probably from Ammi White), affirmed by Levi Ruggles, that the Indians had a large area sown to wheat and would have 1,500,000 lbs. of grain to sell that year (Ann. Rpt. Comm. Ind. Affs. 1866: 112; 1867: 162). These estimates were low; both Superintendent George Dent and General James Rusling said later that sales of wheat and corn to the traders at Maricopa Wells and the Pima Villages amounted to 2,000,000 lbs. (Ruggles to Dent, March 9, 1867; Rusling 1874: 370).

The natives also made "a first-class agricultural showing" in 1867 according to George Dent, with the estimated amount of wheat, corn and beans produced by the Pimas alone amounting to 1,500,000 lbs., valued at two cents per pound. Captain William Colton, an executive with the Kansas Pacific Railway Company survey, cited more precisely some 750,000 lbs. of wheat and 250,000 lbs. of maize raised on the reservation in 1867. Another 1,000,000 lbs. had been grown by "the few white settlers between the cañon [of the Gila River] and Sacaton" (Ann. Rpt. Comm. Ind. Affs. 1867: 158; Bell 1965: 315-317).

The statistical tables in the 1867 Annual Report of the Commissioner of Indian Affairs included, for the first time, figures for farming operations in Arizona. A single-line entry for the Pimas, Papagos, Tame Apaches, and by implication the Maricopas showed the cultivated acreage totaling 8,400 (Ann. Rpt. Comm. Ind. Affs. 1867: 386). Fortunately the work sheet for the 1869 statistical return survives, and this gave a total of 8,400 acres but with an apportionment to the Pimas of 6,000 acres; the Maricopas, 400 acres; Papagos, 2,000 acres; and zero for the Tame Apaches. Since the total in 1869 was the same as for 1867 and 1868, we can use the Pima-Maricopa proportion (6,400/8,400) to apportion the productions of wheat and corn as well. For 1867, this would be  $6,400/8,400$  or  $.76190 \times 39,500$  bu. = 1,805,700 lbs. of wheat, and by the same calculation, 637,137 lbs. of corn. These figures, probably supplied by agent Levi Ruggles, considerably exceeded the estimates offered by either George Dent or Captain Colton. The Gila River community indeed made a first-class agricultural showing in 1867.

In 1868 both the cultural landscape and local economics were changing, the changes precipitated in part by miners and farmers now pouring into Arizona. In 1867, Mexican and Anglo-American farmers had cultivated an estimated 1,600 acres in central Arizona, which grew to about 4,000 acres planted to corn alone in 1868. In an animal-powered economy, forage was in high demand for the grain-fed horses and other livestock of the teamsters, miners, and farmers as well as the military. One correspondent said that the farms in Yavapai County (which

included the Prescott area, Verde Valley and Phoenix) should yield 6,720,000 lbs. of corn, while the as-yet unnamed settlement on the Rio Gila above the Pima Villages had nearly 1,000 acres of corn growing (*Arizona Miner*, February 1, 1868, p. 2 col. 4; February 8, p. 2 col. 3; April 18, p. 2 col. 4; September 19, p. 2 cols. 3-4; October 17, p. 2 col. 3). After 1867, farmers in these neighboring areas overtook the Pimas and Maricopas as the principal suppliers of forage in Arizona.

Wheat presented another problem, apart from the questions raised later about the quality of wheat grown by the Pimas and Maricopas. The other farmers grew corn and several types of forage but relatively little wheat. In the late 1860s the few flourmills in Arizona could not begin to keep up with the demand for flour, and most of the flour used in southern and central Arizona was freighted in from California, Sonora and even New Mexico. In the late fall of 1868 an acute shortage of flour even developed at Prescott, where the supply normally came from California and was freighted in from La Paz on the Colorado River (*The Weekly Arizona Miner*, November 21, 1868, p. 3 col. 1; November 28, p. 3 col. 3; December 12, p. 3 col. 2; Miller 1989: 165-171). The Gila River flood in September had little effect on the wheat supply since that harvest was in June.

While the proportions of Arizona-grown wheat used for milling and as feed grain are not known, the relatively flat production by the Pimas and Maricopas meant that without improvement of quality, market forces would continue to push them to the margin as suppliers. Frederick Grossmann, their agent from October 1869 into July of 1871, said that much of the Indian wheat was poor and flinty, and he had given one of the traders permission to supply them with good seed wheat (Grossmann to Andrews, November 30, 1869).

Writing in 1868, Captain Charles Whittier noted that the Pimas' and Maricopas' application to agriculture "has been somewhat impaired" by their enlistments in the First Arizona Volunteer Infantry and later as scouts and guides. They continually expected new enlistments. Antonio Azul explained that under (Brevet) Brigadier General Alexander the government paid each Indian one dollar per day, with Azul and Palacio receiving three dollars a day. Alexander had commanded Fort McDowell and the Subdistrict of the Verde from April 1868 (Ann. Rpt. Comm. Ind. Affs. 1868: 142; Grossmann to Andrews, October 31, 1869; Altshuler 1983: 38). From the Pima and Maricopa standpoint this was a more rewarding experience than growing wheat, for which they received trade goods rather than money. The army reportedly had a habit of asking the Pimas and Maricopas to join in expeditions against the Apaches, at the same time that Antonio Azul said their grain was selling badly (Grossmann to Andrews, October 19, 31, 1869). Intoxication was becoming a problem as well, with traders or local Mexicans furnishing the liquor.

Despite these and other problems, agriculture flourished as never before. The statistics reported for the Pimas and Maricopas in 1868, using the same proportion as in 1867 to calculate their wheat and corn production, gives about 2,125,701 lbs. of wheat and 708,262 lbs. of corn raised by them. Other produce amounted to 6,000 bushels of beans and \$1,200 worth of pumpkins (Ann. Rpt. Comm. Ind. Affs. 1868: 369). The great flood of September 7-11 inexplicably seems to have left the summer crops undamaged. In 1869 Dr. Edward Palmer, an

army physician, estimated that the Pimas sold 1,500,000 lbs. of wheat and 500,000 lbs. of corn (Palmer "The Pima Indians...", p. 56). Writing in late June that year, agent Levi Ruggles said the wheat crop was abundant and various trading posts were taking in about 15,000 lbs. daily (Ann. Rpt. Comm. Ind. Affs. 1869: 209). The reported statistics showed 6,400 acres cultivated by the Pimas and Maricopas, as before, and the calculated amounts of wheat and corn raised by them as 1,920,000 lbs. and 469,336 lbs. respectively (enclosure with Andrews to Parker, September 8, 1869). Dr. Palmer's estimate for corn was very good, while he was under by some 20 percent on wheat.

The looming problem with the Pimas' and Maricopas' ability to continue their traditional agriculture went well beyond their being replaced as suppliers, nor was it solely a matter of settlers upstream diverting the Gila River, as often asserted. The hydrology of the Gila was better known by this time, and Captain Grossmann could fairly say that no matter how dry the season,

".... the lands along the Gila as far down as Blackwater will never suffer for water, whilst during a dry season the Indian Villages below Blackwater would be without water or at least have but little thereof, even if there were no settlers above, because there the River sinks" (Grossmann to Andrews, October 19, 1869).

Agent Levi Ruggles had made much the same point two years earlier (Ruggles to Dent, December 21, 1867). As Lieutenant Colonel Roger Jones saw the situation,

"During the past two years, some four or five hundred settlers having located along the Gila, above the Pima reservation, and being engaged in farming, have opened large acequias, with a view of diverting the water of the river for the purpose of irrigation. Instead of being returned to the river after it has served its purpose, it is allowed to run waste, thereby greatly diminishing the volume of water before it reaches the Pima and Maricopa reservations" (Ann. Rpt. Comm. Ind. Affs. 1869: 219-220).

One year later, Captain Grossmann restated this in almost the same words (Ann. Rpt. Comm. Ind. Affs. 1870: 120).

Agent Levi Ruggles, writing at the same time as Jones, expressed a more conventional view, colored no doubt by his ownership of a farm at Florence:

".... at the present time nearly all the productive lands laying [*sic*] within the contemplated [reservation] extension are occupied by American and Mexican citizens, who, in order to cultivate these lands, have constructed numerous acequias, at a large expense, in order to conduct water from the Río Gila on to these lands for the purpose of irrigating them" (Ann. Rpt. Comm. Ind. Affs. 1869: 208).

Ruggles added to the chorus that proximity of these lands to the established reservation made them far more valuable to settlers than lands elsewhere that were equally as fertile, because here they were protected from hostile Apaches "by the vigilance and bravery of the Pima and Maricopa Indians." This vigilance served him well, as his farm was valued at \$20,000 in the 1870 Census (Ann. Rpt. Comm. Ind. Affs. 1870: 118-119; U.S. Senate 1965b: 155).

The new agent, Captain Frederick Grossmann, may not have excelled at making predictions but he did understand the presence of a dynamic or cyclical factor; that the flow of the Gila was not constant and the Pimas had accommodated this in the past by moving upstream at times. This may explain why a village found some distance upstream in 1774 was no longer there in 1775, and why the census enumerator in 1860 noted twenty-eight unoccupied dwellings about twenty miles above the Indian pueblo (not the stage station) of Sacaton, at approximately the location of White's Ranch. This periodic expansion and contraction extended to the Salt River Valley, where the first settlers at Phoenix discovered that a great part of their rich and fertile land "looks as if recently cultivated." Volunteer cotton, tobacco, and castor bean plants still grew over the apparently ancient fields (*Arizona Miner*, February 8, 1868, p. 2 col. 4).

Grossmann differed from (Brevet) Brigadier General Thomas Devin and others when, in his words,

".... they state that the White and Mexican settlements higher up can ever deprive the Indians below of water, although I admit and have seen with my own eyes that the irrigation ditches above are kept in bad repair and that large quantities of water are wasted."

".... It is a well known fact that years ago these Indians cultivated the soil on what is now known as White's Ranch and Mr. White has since used, at least in part, their old acequias" (Grossmann to Andrews, October 19, 1869).

Dr. Edward Palmer, also writing in 1869, observed that the original Pima and Maricopa reservation would only grow wheat with a certainty, as the water for late crops (i.e. cotton, corn, beans, melons) was often not sufficient. He saw the Pimas as requiring new land not solely to have a more reliable water supply but because the lands on the old reservation were "much impoverished by frequent crops" (Palmer "The Pima Indians...", p. 121). The maintenance of fertility demanded an annual renewal by flood-deposited silt, and without such flooding the yields would soon decrease (Forbes 1902: 164; Cook 1976: 68).

Still another aspect of the agricultural problem was the Pima and Maricopa assumption that control of the land carried with it control of the water needed to irrigate that land. If General Devin was right, it was only around 1869 that they realized the white man had a different perspective; that access to water was what dictated use of the land, and that rights to land and water might even be divisible (Devin to Dent, March 14, 1869; Dent to Taylor, April 15, 1869).

If the extension that George Leihy proposed in 1866 had been made effective at the time, it might have helped to reduce the conflict that St. John,

Mowry and Poston all foresaw. Even so, the Pimas would have considered the enlargement grossly inadequate, as the eastern limit of their reservation would have lain at the future community of Adamsville, only two miles east of White's Ranch. Florence, which became the focus of their water problems, lay three miles farther east. The military in Arizona did champion an extension of the reservation as well as the protection of Pima water rights, but by 1869 the settlers and politicians did not. As a result, nothing was done (Hudanick 1983: 63-84). It must have been doubly frustrating to the Indians because, as agent Ruggles noted, without the close proximity of the settlements to the Pima reservation, the Apaches would not permit the settlers to remain there one month (Ann. Rpt. Comm. Ind. Affs. 1869: 211). From the Pima and Maricopa perspective, the only course left open to them was the one they took: hostility.

The problem that marketing considerations posed for a continuing Pima-Maricopa dependence on wheat, and to a lesser extent on corn, was explored above. Antonio Azul complained that not only did their grain sell badly, it was measured by volume rather than by weight. Captain Grossmann added that the Pimas' wheat was of "a very inferior quality." In any event, at 25¢ for six quarts, they received approximately two cents a pound, and then only in trade goods (Grossmann to Andrews, October 31, 1869; Andrews to Parker, November 9, 1869). With eight different trading posts close by the reservation, the solution was not more traders to increase the competition, but a different crop.

Frederick Grossmann, appointed agent on July 23, 1869, took office upon his arrival on October 1<sup>st</sup> (Ann. Rpt. Comm. Ind. Affs. 1870: 118; National Archives n.d.: v). He soon learned that a few Pimas and Maricopas had tried raising barley but the traders, particularly Wm. Bichard, made strenuous efforts to discourage this because they wanted only wheat, which they could then mill into flour or sell as grain to the military. By November the captain was recommending that the Indians be furnished some good barley seed, and he initially requested 1,000 lbs. of barley along with twenty pounds of alfalfa seed (Grossmann to Andrews, October 31, November 9, 18, 1869).

In his first annual report, Grossmann said he issued 3,000 lbs. of seed barley, which produced an excellent crop (1,350 bushels). The reservation farmers received \$3 to \$3.50 in cash per 100 lbs. for the barley, in contrast to less than \$2 worth of goods for the same quantity of wheat. The Indians were not slow to see their own advantage, and the agent obtained 10,000 lbs. of seed barley for the next crop year. The natives planted this and "raised a handsome crop, which they sell at fair prices" although the statistical return for 1871 did not list barley (Table 5) (Ann. Rpt. Comm. Ind. Affs. 1870: 116-117, 120, 123-124; 1871: 359). The Pimas and Maricopas had evidently gained a tiny share of the market for this preferred feed grain. Nothing was said about alfalfa.

Newspaper accounts and census returns indicate that by 1870, barley had become the heavy favorite of Arizona's farmers in the Salt River Valley and on the Rio Gila above the Pimas because of strong demand and good prices. The government alone purchased several million pounds of barley yearly in the territory (*The Weekly Arizona Miner*, July 2, 1870, p. 3 col. 1; July 23, p. 3 col. 1; August 13, p. 2 col. 4; August 27, p. 2 cols. 1-2; Ann. Rpt. Comm. Ind. Affs.



1870: 124; Miller 1989: 76-78, 81-86). Superintendent George Andrews intended to encourage the increased production of barley, which "... finds a more general market, sells by weight and for cash, which has not been the case with wheat" (Ann. Rpt. Comm. Ind. Affs. 1870: 117).

Until Frederick Grossmann's arrival, the Pimas and Maricopas saw little of either their agents or superintendents of Indian affairs. Since the Indians were entirely self-sufficient, official correspondence thinned out following the Civil War. We have no information, for example, about what relocations may have taken place after the flood of 1868 destroyed three Indian villages. Reports focused first upon their military activities and later on the questions of a reservation extension and upstream diversions of irrigation water. The Pima Villages remained a crossroads for travelers and freighters until the railroad came, although no one said much about what transpired there or even where these villages lay on the reservation.

### *Tools and Ox Carts for the Pimas*

The decade-old policy of distributing tools and agricultural implements to the Pimas and Maricopas continued, although the only lists we have are from January and July 1870. The eleven to fifteen dozen axes, shovels and hoes, with lesser amounts of spades, sickles, picks and other articles would have been welcomed, although these could not have gone very far among the 727 families enumerated for the 1870 Census (Andrews invoice, c. Jan. 31, 1870; Andrews consolidated estimate (extract), July 18, 1870). The July estimate included the 10,000 lbs. of barley seed and also four ox carts.

The ox carts and sickles point up another problem with traditional agriculture on the middle Gila, namely that it was tremendously labor-intensive. The need for carts and sets of harness had been raised at least as early as 1866, when deputy agent C. H. Lord recommended one for each of the ten Pima and two Maricopa villages. Indian agent Levi Ruggles echoed this the following year and explained why:

"They also need some ox carts, for the purpose of hauling their grain, and fire wood, all of which is now carried by their women, and often a distance of six miles. .... much could be done to relieve these people (especially the women) of a vast amount of hard labor. The Pimas, Maricopas, and Papagos have raised and sold during the past year about two million pounds of wheat, corn and beans. Seven-tenths of which was carried to market, from one to ten miles by the women on their heads. .... Carts are needed also to haul fire wood which is now carried by the women from two to six miles" (Ann. Rpt. Comm. Ind. Affs. 1866: 113; Ruggles to Dent, March 9, 1867).

We know that carts were present by 1869 because agent Frederick Grossmann complained that one of the chiefs had sold a cart given to him by the

government (Grossmann to Andrews, October 31, 1869). As for sickles, an abstract of Indian goods issued by the Tucson agency in 1860 included thirty-six sickles (Davis and Stevens, June 30, 1860). Perhaps no one explained their use, because a correspondent with the California Column in the early summer of 1862 saw the Pimas' fields as "one vast sea of waving grain," and witnessed their harvesting

".... which is done entirely by the squaws. They do not mow the wheat, but go through the fields, and whenever they find a ripe patch they clip off the heads with a knife, and thus the crop is gathered as it ripens. .... You can imagine the labor expended in harvesting so large a crop of wheat, and all performed by the squaws,...." (*Daily Alta California*, June 23, 1862, p. 1 col. 5).

#### *Trading Posts on the Middle Gila, 1869-1870*

The chief beneficiaries of the Pimas' and Maricopas' labor were the traders who kept their stores on and near the reservation. In 1869, referring to the eight trading posts in close proximity to the reservation, Superintendent George Andrews told the Commissioner of Indian Affairs that none of these traders had applied to him for a license to trade with the Indians (Andrews to Parker, November 9, 1869). Ten months later Frederick Grossmann reported to Andrews that he found six trading establishments on and near the reservation that had been doing business with the Indians without a license since 1866. By the time of his report, the agent had required all of these businesses to post bonds and apply for licenses. He had serious doubts that any of the current traders were, as he said, calculated to improve the condition of the Indians under his charge in either a moral or a pecuniary sense (Ann. Rpt. Comm. Ind. Affs. 1870: 119, 121).

The people who owned or operated these posts can be identified and, allowing for some of them being employees, there appears to have been a considerable turnover since 1867. Beginning at the western end, a Mr. Adams kept a "well appointed bar room" as well as a store and stage station at Maricopa Wells. This was Charles Adams, the namesake of Adamsville. He would have been employed as station-keeper by the actual owner, Hinton, Hooper & Co. in 1868, renamed Hooper, Whiting & Co. in 1869 (*The Weekly Arizona Miner*, December 19, 1868, p. 3 col. 4; January 1, 1870, p. 4 col. 5; Grossmann to Andrews, October 19, 1869; Barnes 1935: 10; Barney 1941: 15). This business would change owners in 1870.

Next in line was Henry Morgan's trading post at the Gila Crossing, otherwise known as Morgan Station. In 1869 there was a Maricopa village there. Morgan had a rope and boat ferry for crossing the river, together with a large, five-room adobe house and a separate corral on the north bank. Grossmann added that H. Morgan and Co. had been Indian traders "for some years past," at present without a license (Grossmann to Andrews, October 19, 1869, enclosure A; U.S. House 1871: 10, 15).

East of there at Casa Blanca, some three miles south of the Gila River, lay the "general trading business" of N. (Nicholas) Bichard & Co., or William Bichard & Co. by another source. When rebuilt following the flood, this establishment had two large adobe houses. Since no milling equipment was mentioned, this confirms that the Bichards moved their steam flouring mill to Adamsville some time in 1869 (U.S. House 1871: 10, 15; Barnes 1935: 10).

Hooper, Whiting & Co. dropped Maricopa Wells, Sweetwater, and Sacaton from their advertised list of retail establishments as of September 1, 1870. This indicates they had sold their ownerships in all of these posts. Moore and Carr apparently bought out the interest at Maricopa Wells. At Sweetwater, F. M. Larkin kept a mail and trading station, otherwise described as a store or tavern, granary, one-room dwelling, and a corral, all except the latter under one roof. This adobe-built establishment lay on the overland road about 5½ miles west of Sacaton (*The Weekly Arizona Miner*, September 17, 1870, p. 3 col. 3; U.S. House 1871: 10, 15). Larkin, one of those who applied for a license in January 1870, had perhaps bought out the unnamed "present proprietor" at Sweetwater Station in November 1869 (Grossmann to Andrews, November 12, 1869, January 1, 1870).

D. C. Thompson now owned the trading location and tavern at Sacaton. The buildings at Sacaton lay to either side of the main road and about 400 feet south of the [Little] Gila River. This was another mail station with a large house, kitchen and dining room all built of adobe; several *jacal* or 'stick' houses, two corrals, a stable, and several storerooms; altogether almost as large as the Bichard establishment at the Pima Villages. Thompson also had 104 acres of cleared land on the north side of the Gila north of Blackwater Village (U.S. House 1871: 9-10, 15).

About 1867 William Bichard erected an adobe building at Blackwater and maintained a store and trading post there. Three-quarters of a mile to the west lay the eastern boundary of the 1859 reservation, while immediately east was the Pimas' Blackwater Village. Most of the people in that village moved there because of the facilities for trading, and by 1870 they had lived there fully three years. The Indians cleared a large tract of land on the eastern end of the Island of the Gila opposite their village and took out two large acequias, one of which watered their fields on the Island (Ibid: 9-10, 14-15).

A detailed map of claims improvements on and near the Pima and Maricopa Indian Reservation and its proposed extensions showed individual plats of five of these trading locations, all except Maricopa Wells (NA, RG75-CMP-393). A companion map featured the locations of these establishments and some of the Indians' fields, but unfortunately not their villages (NA, RG75-CMF-508). The buyout of Hooper, Whiting & Co.'s properties in 1870 left William Bichard & Co. controlling most of the trade on the Pima and Maricopa Reservation. Their efforts to discourage the Indians from planting barley marked the start of a decline in their relationship with the Pima agent that eventually led to a confrontation.

The middle and latter parts of the 1860's saw the first real changes that affected the lives of the Pimas and Maricopas, and their loss of any real power to influence these changes. Because they were self-sufficient and gave effective protection to settlers and travelers, they remained virtually free of control by either the U.S. military or the Office of Indian Affairs. One blessing was the absence of exploitable mineral deposits on or near their reservation, which left them having only passing contacts with miners.

Their military effectiveness allowed settlers to take up farms along the Gila and Salt Rivers. In little more than a year the new arrivees outproduced the Indians in supplying the agricultural commodity in greatest demand - fodder for livestock – and pushed the Pimas and Maricopas to the economic margins of this frontier society. Early diversions of the Gila River's waters and foot-dragging over a proposed reservation extension compounded their problems, and placed them in potential conflict with settlers.

By the end of the 1860s, traders controlled the Gileños economic well-being through the purchase and sale of their surplus wheat and corn, a monopoly that the Indian service and the army did little to discourage. Indeed, these two authorities began feuding with one another when the army thought it saw an opportunity to regain its old control of Indian policy. The Pimas and Maricopas made their own adjustments as the outside world began to close in around them.

## Chapter XII

### CONFLICT AND CHANGE ON THE MIDDLE GILA, 1869-1879

#### *More Settlers Above the Reservation*

Agent Levi Ruggles began to argue forcefully for an extension of the Pima and Maricopa Indian Reservation in the late fall of 1867, at the time settlers first took up land at what would soon be called Florence:

"A portion of the land, which it is proposed to add to their present reservation, is now, and has been for many years past, cultivated by the Pimas, and a portion has been cultivated by Americans and Mexicans, and it is a desire to avoid the probable difficulties which are liable at any time to arise between them and the American and Mexican Settlers, that prompts me to bring this matter again before you. ...." (Ruggles to Dent, November 4, 1867; also December 21, 1867 and March 25, 1868; Ann. Rpt. Comm. Ind. Affs. 1867: 163; Devin to Dent, March 14, 1869).

No one, at this time or later, actually encroached upon the existing reservation. The competition was for lands along the Gila *east* of the reservation boundary.

According to agent Grossmann, writing in May of 1870, three settlers plus the present owner of White's Ranch, all Mexicans, had claims dating to 1866 or

possibly before (U.S. House 1871: 11-12). There was also William Richard's store at Blackwater and immediately east of it the Pimas' Blackwater Village. One of the two large acequias the Pimas had taken out watered their fields on the Island, while the other one irrigated lands they cleared on the north bank of the Gila River in 1870 (Ibid: 14). As Ezell (1994: 377) observed, it is a strain to believe that the founding of Blackwater and the beginning of a land rush by settlers to locations above the reservation were just coincidental.

If the army had added its voice to Levi Ruggles' in the fall of 1867, it's conceivable that a reservation extension might have been pushed through then. But the army waited until the spring of 1869, when many more settlers had arrived, and then turned part of its fire on Ruggles to press for his removal. He was going anyway; the beginning of President Grant's Peace Policy would see to that (Trennert 1986: 45-47). As others have commented, it is not clear that Ruggles was a bad agent, although the army castigated him roundly (Hudanick 1983: 50-54; Ezell 1994: 376). The army's displeasure had other origins, one being a renewal of the feud between the War and Interior Departments over control of Indian affairs (Hudanick 1983: 50; Utley 1984: 125-134).

At almost the same time, disputes with settlers arose at Blackwater and Phoenix, and then between the Indians and some Texas trail drivers at Maricopa Wells. When Major Andrew Alexander rode down from Camp McDowell to quiet the flareup with the Texans, a Pima captain named Kihau Chinkum or Keé-ho-cheeñ-Kum [Gياهو Chiñkam; "Basket Mouth"] mobilized 300 warriors and forced the major into a humiliating backdown (Ruggles to Dent, August 1, 1868; Alexander to Sherburne, October 2, 1868; Grossmann to Andrews, March 12, 1871; Ann. Rpt. Comm. Ind. Affs. 1871: 58; Reed 1977: 43; Eherts 1981; Dobyms 1989: 50). The Pimas had been doing well in pursuing their traditional enemies, while the Army enjoyed more modest success in its war with the Apaches (Thrapp 1967: 61).

Senior officers began to involve themselves in the Indian-settler disputes and the army, according to Ruggles, blamed him for its troubles (Ann. Rpt. Comm. Ind. Affs. 1869: 210-211, 219-220). The disputes led to Superintendent George Dent resigning his position on June 1, 1869, effective June 30. Ruggles asked to be relieved, not knowing that the Secretary of the Interior had finally approved an enlargement of the reservation on June 9<sup>th</sup>. Ruggles' successor, Frederick Grossmann, was appointed on July 23<sup>rd</sup>. The Pimas saw official attention begin to shift, from enlarging the reservation to their conflicts with non-Indians on the Gila (Ann. Rpt. Comm. Ind. Affs. 1869: 207, 210; U.S. House 1871: 2; Nicklason 1976: 621-623; National Archives, n.d.: v).

### *A Reservation Extension Takes Form*

Brevet Colonel George Andrews, the new Superintendent of Indian Affairs, received his appointment one week after Dent left office. Andrews and agent Frederick Grossmann acted on the Commissioner's instructions of August 4<sup>th</sup> and moved ahead with the survey of a reservation extension. Brevet Second Lieutenant Richard Savage of the Engineer Corps did the actual fieldwork. He

produced an excellent plat of the survey as well as a composite plat that showed the details of each property affected (Parker to Andrews, August 4, 1869; Grossmann to Andrews, October 19, 1869, enclosure A; NA RG75-CMF-508, RG75-CMP-393). Savage's two plats superseded the earlier sketch by Captain Grossmann.

One of Lieutenant Savage's narrative reports covered the general features of the proposed extension; a second report listed the claims and improvements thereon. Captain Grossmann submitted his own detailed statement regarding the improvements by settlers within and near the extension, including the trading establishments around the reservation. Andrews endorsed it all. Suddenly there was a wealth of information about non-Indian settlements. (U.S. House 1871). The reservation extension on the east stopped just west of Adamsville.

In December 1870 the Acting Commissioner of Indian Affairs recommended congressional approval of the extension, and in February 1871 the Secretary of the Interior asked for authorization from Congress. Nothing happened. Congress failed to approve the requests and the consequences were immediate. The cultivated acreage on the reservation declined from 6,400 in 1869 to an indicated 2,732 acres to 1870. That year the low state of water in the river made irrigation impossible and the corn crop was diminished. In 1871 the Indians failed to raise a summer crop, apart from some melons and pumpkins. Agent Grossmann predicted that the increasing diversion of water by settlers would soon leave the Pimas and Maricopas with insufficient water to raise any crops (Andrews to Parker, September 8, 1869, enclosure; Ann. Rpt. Comm. Ind. Affs. 1870: 338; 1871: 359; Nicklason 1976: 624-625).

The statistics on production bore out these expectations. In his report on the general features of the reservation and its proposed extensions, Lieutenant Savage said that traders estimated the wheat crop in 1870 at 2,000,000 lbs. (U.S. House 1871: 5). The annual statement of farm operations that year listed healthy totals of 40,850 bushels of wheat (2,451,000 lbs.) and 6,300 bushels of corn (352,000 lbs.), along with 1,350 bushels of barley. The next year the annual statement gave no acreage, and the only figures were ten tons of pumpkins, five tons of melons, and fifteen tons of mesquite beans plus \$6,000 worth of wheat (probably 6,000 bushels)(Ann. Rpt. Comm. Ind. Affs. 1870: 338; 1871: 621). This abrupt drop triggered major population movements.

### *Pima Settlements Off The Reservation*

Captain Grossmann said he was creditably informed that a large village existed above Blackwater at the time of Mowry's survey (i.e. 1859), a claim that Malaya denied. Perhaps the agent had confused the Blackwater settlement with the earlier Maricopa community at Sacaton, which lay east of the established Pima Villages but still well within the reservation limits. Indian settlements off the reservation may have existed as early as 1862 if we consider the Blackwater or Island Ditch, begun in 1862 and completed in 1864. This canal irrigated part of the lands on the Island of the Gila. According to Grossmann, the upper and lower portions of the Island were very fertile while the central part was worthless.

The calendar of Juan Thomas recorded the Blackwater Indians reaping their first crop of corn, melons and pumpkins in the fall of 1865-66, which would document their movement to the Blackwater area as during the Civil War period, actually before Bichard built his store there in 1867. At this time there was no one living above them to divert water from the river except at White's Ranch (Grossmann to Andrews, October 19, 1869; Southworth 1931: 47; Jones 1961: 4; Hackenberg 1974a II: 37-38, 61-62).

Grossmann in 1869 located one Indian village around Blackwater Station, another one above this station south of the river, and a third one on the Island. Some few Pima families had moved still higher up and possessed good fields on the north bank of the Gila opposite John D. Walker's place. Others sought water downstream and now cultivated land west of Morgan's Store (Gila Crossing) and even on the Salt River, sixteen miles west of the reservation line. Some Pimas reportedly were digging an acequia at the Salt River (Grossmann to Andrews, October 19, 31, 1869). Then a few weeks later, in November 1869,

".... some 400 Indians, principally Pimas, left the reservation and moved into the fields of Mexican settlers near Adamsville, Arizona Territory, where they gathered the corn and bean crop belonging to these settlers, and finally turned in their horses to destroy that part of the crop which they had not stolen" (Ann. Rpt. Comm. Ind. Affs. 1870: 125).

In an early letter, Grossmann made a passing reference to the Pimas stealing and destroying the crops of settlers on the Salt River "to such an extent that the Whites there threaten to protect themselves by force of arms" (Grossmann to Andrews, October 19, 1869). Superintendent Andrews, who was also a lieutenant colonel in the army, tried without success to gain military support for punishing Indian thefts. With the small number of troops available, this could not be done, and as a result "the grumbling of settlers must pass unheeded" (Andrews to Parker, March 12, 1870). Apparently there were conflicts with settlers along the Salt River as well.

Another year passed and Kee-ho-cheeñ-kum [Gياهو Chiñkam], chief of one of the lower villages on the reservation, told the agent that he was going to the Salt River with his tribe as there was no water for his fields. The agent told him not to go, but was afraid it did no good. Six or seven other villages would be likely to leave if water did not come soon. Chiñkam, whom Grossmann characterized as "crafty, a liar by nature and extremely impudent when opportunity serves," had not mellowed any since he faced down Major Alexander in November 1868. He now proposed to take the 127 warriors from his village (Shohn-K) "and by force of arms drive the whites from the [Gila] river". Agent John Stout managed to dissuade him from that, but had no doubt that he would leave the reservation (Grossmann to Andrews, March 12, 1871; Ann. Rpt. Comm. Ind. Affs. 1871: 58-59, 349, 354).

Others were already moving. A new agency building at Sacaton had become an attraction; Grossmann reported that "quite a number have burned their old huts and erected new ones in different localities" (i.e. in winter quarters):

"Thus a portion of the village of San Tan has been moved nearer to the Agency Building. Quite a number of Pimas properly belonging to Peep-chulk and Staw-to-ñick [Stotonick] have moved to Blackwater, outside of the Reservation, and others of the latter village and Kaw-Kwet-Kee have taken out a new acequia on the north bank of the north branch of the Gila, opposite Sacaton,...." (Grossmann to Andrews, October 31, 1870).

This probably marked the inception of the Santan Indian Canal, the age of which has been uncertain (Southworth 1919: 133; Hackenberg 1974a II: 41-42).

The Maricopas had left the lower end of the reservation and "gone off some thirty miles, near Salt River, for the purpose of raising a crop" (Ann. Rpt. Comm. Ind. Affs. 1871: 350; U.S. House 1871: 5). The water below Maricopa Wells had become too alkaline to drink or to use for irrigation, while chills and fever (malaria?) prevailed "to an alarming extent." The Indians abandoned the flat below the wells, presumably marking the end of Hueso Parado. Grossmann said that there were two Maricopa villages, and people in the unnamed settlement evidently left as well. The Maricopas' move to the Salt River was probably a second choice, as they told their agent that the Pimas would not let them cultivate arable land along the north side of the Gila, which they would do willingly, risking Apache attacks. The Pimas thought that rancherías there would invite Apache raids (Grossmann to Andrews, January 17, 1870; U.S. Senate 1976: 335).

Conferences and reports at this time all sought to explain what was happening without providing a solution. The chiefs advanced the explanation that they had some bad young men among them, as did the whites, and they could not control them (Grossmann to Andrews, October 31, 1869; Ann. Rpt. Comm. Ind. Affs. 1871: 58). Antonio Azul not unreasonably believed that his people had as much right to take up land as the Mexicans. The reservation was not large enough for their [Pima and Maricopa] wants and they did not have sufficient arable ground to give each family head as much land as needed. Captain Robert Burnett, sent to investigate the depredations near Adamsville, found that these fell mainly upon the Mexican settlers. Most of the "bad men of the Pimas" generally came from one particular village, Santa Anna, which had been almost entirely deserted as the Indians moved into the fields of the settlers and refused to leave. These would have been Arispa's people (Burnett to AAAG, December 2, 1869; Andrews to Parker, December 9, 1869).

Superintendent George Andrews assembled the chiefs in April 1870. They told him that by including in the reservation all of the land south of the Gila from the Pinal Mt. to Gila Bend, they sought to gain mesquite lands "for sake of the beans;" range for their animals; crop lands and water for irrigation (U.S. House 1871: 3). Their original reservation no longer supplied mesquite beans (the trees had been cut), nor fish, and too little pasturage for the Indians' livestock.



Traders took advantage of them and eluded regulations, selling whiskey and conducting business as they pleased. And while the settlers above the Pimas had opened large acequias, they allowed the excess water to run waste instead of returning it to the river, greatly reducing the flow to the reservation. In 1870 the flow of the Gila was very low all summer (Grossmann to Andrews, October 31, 1869; Ann. Rpt. Comm. Ind. Affs. 1869: 219-220; 1870: 117, 119-121; U.S. House 1871: 5, 11).

The developing water scarcity, the result of "an unintelligent irrigating system above them," pushed the Pimas and Maricopas into a water crisis in 1871. This never erupted into open confrontation or fighting because the Pimas were not seeking a fight, which as everyone recognized they would have won. As Captain Burkett put it, these Indians were all mounted, warlike, intelligent, and well-provided with arms of recent pattern and ammunition for them. Their estimated 1,100 to 1,200 warriors could do pretty much as they pleased, while the much smaller number of settlers had little recourse until they increased in numbers to where they could protect themselves. In August 1872, the Pima and Maricopa agent estimated that about 1,200 Indians were living outside the lines of the reservation, where they continued to ignore both his wishes and those of the army that they return (Burnett to AAAG, December 2, 1869; Andrews to Parker, December 9, 1869; Ann. Rpt. Comm. Ind. Affs. 1871: 360; 1872: 317). In another year the government would consider resolving the land and water conflict, not by restoring their water or enlarging the reservation, but by offering to remove the Indians to Indian Territory (Ann. Rpt. Comm. Ind. Affs. 1872: 57).

### *The Reservation Under Frederick Grossmann*

Eleven months after he assumed charge of the Pima and Maricopa agency, Frederick Grossmann submitted his annual report. He spent two pages detailing the evils he found upon his arrival, then summarized his own accomplishments. He had hired a Pima named Louis [Morago] as interpreter, after trying John D. Walker in that capacity for several months. On November 23, 1869, he engaged a physician, Dr. J. T. Harrison, who vaccinated more than 1,800 Indians so successfully that not one case of smallpox occurred although it raged around the reservation. In later months he added a blacksmith, a carpenter, and a farmer. The blacksmith repaired the Indians' tools while the other two men employed themselves with a new building.

Grossmann's predecessor (Levi Ruggles) lived in Florence and he left behind no office records or agency buildings. The new agent first rented a room at the Sacaton mail station to use as an office. On August 1, 1870 he moved into a new, nine-room agency building at Sacaton, which he pronounced "in every respect a suitable one." A plan shows the adobe-built rooms forming a rectangle around three sides of a yard, while in the rear lay a corral with a wagon shed, hay yard and stables. The new structure housed the agent's office and dwelling rooms, an office and quarters for the physician, a storeroom, cellar, and schoolroom for the teacher that Grossmann hoped to hire soon. The Pima and

Maricopa Indian Agency now had a permanent physical presence on the reservation for the first time, and the beginnings of an agency staff. Dr. R. A. Wilbur had replaced Dr. Harrison after June 30, 1870, and he continued to the end of the year, when he resigned and within months received an appointment as agent for the Papagos. Low salaries made it difficult to attract and keep good staff members (Ann. Rpt. Comm. Ind. Affs. 1870: 121-122, 127; 1871: 357-359).

A year and a half later, six of the rooms were in use as an office, school room, dispensary, dining room, kitchen and storeroom, in addition to which the agent and his family, the teacher, physician, farmer and carpenter expected to find lodging there. Everyone was much too crowded and Grossmann's successor asked for authorization to add more rooms and build several separate schoolhouses (Stout to Comm. Ind. Affs., February 8, 1872).

In his September 1<sup>st</sup> (1870) report, agent Grossmann had noted that there were nine Pima and two Maricopa villages on the reservation, with another Pima village outside. This last one was Blackwater, where the Indians now had hundreds of acres under cultivation. He had received orders to take a complete census of the reservation population and did so during January and February, visiting "in person every hut on the reservation," attempting to procure accurate figures. This was intended as part of the U.S. Census of 1870 (Grossmann to Andrews, January 17, February 14, March 1, 1870). His complete census was never published and the manuscript has not been located. A condensed summary does survive (Table 3) while elements of the accompanying "statistical report of farming" may be found in Superintendent George Andrews' annual report and in a

Names of Villages	No. of huts	No. of store-houses	No. of families	No. of male adults	No. of warriors	No. of female adults	No. of male children	No. of female children	No. of Pimas	No. of Maricopas	No. of Papagos	No. of Cocopas	No. of Mojaves	No. of Tame Apaches	Mix. of Pima & Apaches	No. of Handicapped	Population
<b>Antonio Azul,</b> <i>head chief</i>	2	1	1	5	4	5	2		11					1		1	12
<b>Ne-at-top-o-tum,</b> <i>"Sandy Village"</i>	70	49	53	105	82	122	73	67	348		17		2		4	367	
<b>Kee-kee-cop-maw-mut,</b> <i>"Bird nest Village"</i>	88	34	60	103	86	111	72	59	344					1		5	345
<b>Shohu-K,</b> <i>"Spring Village"</i>	133	64	100	171	146	186	109	115	556		23		2		4	581	
<b>Shoh-otk,</b> <i>"Wet or Rainy Village"</i>	112	52	99	147	127	173	102	79	478	1	19		3		3	501	
<b>Peep-chulk,</b> <i>"Bent Back Village"</i>	64	47	52	97	84	90	73	52	302	1	9					312	
<b>Vah-ke-top,</b> <i>"In the House"</i>	76	30	60	111	92	130	87	59	329	1	57				2	387	
<b>Kaw-Kwet-kee,</b> <i>"Rattlesnake Village"</i>	45	17	36	67	54	71	65	50	241		12				2	253	
<b>Staw-to-nick,</b> <i>"Village of Ants"</i>	82	51	69	113	103	132	92	75	372	33	5		2		5	412	
<b>Kee-Kee-ma,</b> <i>"Proud Village"</i>	92	56	79	134	113	150	99	91	434		40				5	474	
<b>Stjóók-e-mas-shoh-o-te,</b> <i>"Blackwater"</i>	68	35	58	98	83	98	78	48	318		4				3	322	
<b>Mat-che-ahmk,</b> <i>[Maricopa]</i>	80	31	46	89	82	95	48	35	26	228		3	2	6	2	2	267
<b>Hol-che-doom,</b> <i>[Maricopa]</i>	14	7	14	37	32	33	25	24	1	118						2	119
<b>Totals</b>	926	474	727	1277	1088	1396	925	754	3760	382	186	3	2	17	2	38	4352

"Recapitulation of the Indian Population Living on and Near the Gila River Reservation, A.T. [1870]"

**Table 3**

contemporary table (Andrews to Parker, March 12, 1870; Ann. Rpt. Comm. Ind. Affs. 1870: 116-117, 123-125, 338).

*The Pima Villages in the 1870 Census*

Grossmann's census probably did not conform with the entries on a regular U.S. census form, but the Commissioner of the Census acknowledged receiving the schedule with his best thanks (Walker to Andrews, September 24, 1870). Because it was a summary, we cannot determine the composition of families or the names and ages of individuals. On the other hand, it included a breakdown of the population by ethnic groups that listed some 210 members of other tribes living on the reservation, primarily Papagos or Tohono O'odham, as well as thirty-eight individuals tabulated according to their handicaps (blind, deaf, mute, etc.). The handicapped totaled less than one percent of the population and were evenly dispersed through the villages; the eight columns of these statistics have been combined into one column here. The population figures from this summary, or Recapitulation as Superintendent Andrews termed it, are reproduced here as Table 3 (Andrews to Parker, March 12, 1870).

Captain Grossmann's order of listing for the ten Pima towns appears to have been from west to east. Compared with the 1858-1860 censuses, the most obvious departure was the use of pseudo-phonetic native village names in 1870, in contrast with the Spanish names used before. This was done without explanation. Since we cannot show equivalence between Spanish and native names, most of the 1870 communities cannot be compared directly with settlements a decade earlier. Many of them indeed may have been different towns.

The English translations do allow the identification of Blackwater Village, while Staw-to-ñick would have been Stotonick or Hormiguero, "Many Ants," and Vah-ke-top was Vahki or Casa Blanca. Ne-at-top-o-tum, "Sandy Village," might have been a daughter or descendant of Arenal, and Kaw-Kwet-kee possibly ancestral to Snaketown. No other obvious correspondences are seen and the English names for the two Maricopa settlements were not given. Hueso Parado, as we noted above, was abandoned about this time.

In the absence of maps that show the location of any named 19<sup>th</sup> century village except for Blackwater, the actual whereabouts of native settlements on the reservation is poorly documented. With at least five of these and 50 percent or more of the Pima-Maricopa population in what Grossmann would have called the lower villages, below Casa Blanca, the 1870 Census represents village distributions as they were just prior to the acute water shortage in 1871 and the resultant dispersals. Lieutenant Savage's map from April-May 1870 included the "Indian Fields" in the same general areas (NA RG75-CMF-508).

If determining settlement sites is a challenge, identifying village chiefs is even less easy. As of 1871, Antonio Azul lived within a few hundred yards of the agency, perhaps where Grossman noted that a portion of the village of San Tan had moved. San Tan, first mentioned by name in October 1870, had not been listed in the 1870 Census. Chiñkam (Kee-ho-cheeñ-Kum; Ki-co-chen-cane), a village chief, was mentioned several times during this period and named as the

chief of Shohn-K. Arispa's band was identified with the village of Santa Anna, another one not on Grossmann's list and perhaps almost as ephemeral in its duration (Burnett to AAAG, December 2, 1869; Andrews to Parker, December 9, 1869; Grossmann to Andrews, October 31, 1870, March 12, 1871; Ann. Rpt. Comm. Ind. Affs. 1871: 59, 355; Dobyns 1989: 50).

More importantly, agent John Stout later identified seven Pima chiefs with six villages, of which six of the chiefs can by synonymy be linked to five of the settlements in the 1870 Census. Finally, fourteen Pima/Maricopa chiefs and headmen signed the report of a council held in May 1872, and while several individuals who marked this document are now recognizable, no village names were included (Ann. Rpt. Comm. Ind. Affs. 1871: 58-59; 1872: 168).

The 1870 Census data and contemporary documents leave us with no way to locate any of the named villages more than approximately, except for Blackwater Village. Blackwater, which an 1876 township plat showed as an unnamed Indian village, lay outside of the reservation on the east. It seems almost unbelievable that, with the amount of information that has been winnowed, the locations of native communities should continue to be a matter of such uncertainty, but the situation persists throughout the 19<sup>th</sup> century. Just as in the earlier centuries, village locations may also have shifted, perhaps fairly often, while the names remained the same. Around 1870 the pace of this change apparently quickened because of the water shortages, so that many and perhaps even most of the communities enumerated that year declined or even disappeared as their people relocated to places on the Salt River and to upstream areas along the Gila. Maps of the middle Gila represented the reservation's boundaries but few internal features, until the Meskimons map in 1904.

As for the number of people, the Pima population rose from 3,320 to 3,760 between 1860 and 1870, a healthy increase of almost 14 percent, while the number of Maricopas remained stable at 394 (in 1860) and 382 (1870). Other demographic trends were more negative. The number of children per adult female among the Pimas declined to 1.22 in 1870, in contrast with an average of 2.09 in 1860, while the Maricopas experienced a decrease from the already low figure of 1.4 to only one child per adult female in 1870. This may reflect an increase in infant mortality, which we have no way to measure otherwise.

The disparity in the numbers of male and female children suggests the continuation of female infanticide, inferred for five of the eight Pima villages and Hueso Parado in 1860. This difference in 1870 amounted to 20 percent or more at seven Pima villages and one of the two Maricopa towns, calculated on the number of female children, while at the remaining four settlements the differences between the number of children of each sex were statistically insignificant. Captain Grossman mentioned infanticide specifically, although not whether everyone practiced this. His explanation for it appeared to be incomplete, and perhaps masked more serious problems that he did not entirely understand or did not want to go into:

"The custom of destroying all the property of the husband when he dies impoverishes the widow and children and prevents

increase of stock. The women of the tribe, well aware that they will be poor should their husbands die, and that they will have to provide for their children by their own exertions, do not care to have many children, and infanticide, both before and after birth, prevails to a very great extent" (Grossmann 1873: 412, 415).

These reasons were insufficient because the 1860 population schedules showed a very *low* incidence of widows at any of the villages, regardless of whether infanticide was indicated or not. In 1870 only a weak correlation existed, with four of the seven communities that had fewer female children also featuring more adult females than males. The proportion of actual widows is not known. When anthropologist Aleš Hrdlička visited the Pimas shortly after 1900, they told him that infanticide was rare (Hrdlička 1908: 166).

Family stability on the other hand actually seems to have increased, to an average of almost six persons per family in the Pima villages and 6.4 per family among the Maricopas. These numbers were so much higher than the figures of 3.96 to 3.98 calculated for the late 1690s and in 1860 (Chapter 9) that one suspects some explanation other than stability; perhaps an aggregation of unmarried relatives or survivors of broken families around the core of a conjugal family.

Finally, the size of both Pima and Maricopa villages decreased substantially between 1860 and 1870. In the former year, five of the eight Pima towns had from 107 to 140 families in each, while the smallest numbered fifty-five families. A decade later, this spread had been reduced to where the two largest settlements now had only 99 and 100 families, while a majority - six of the ten Pima communities - each contained sixty families or less. In magnitude, the average size had declined by one-third; from 104 families per village to sixty-six. Among the Maricopas this reduction was even more dramatic.

The trend overall was therefore towards more villages with small populations, whose people lived in larger families. With more villages than before - ten instead of eight, and perhaps not even counting the people who lived on the Salt River - the Pimas were dispersing, a good two years before they finally made peace with their old enemies, the Apaches. Yet except for Rattlesnake Village with its fifty-four warriors, the Pima towns continued to be well-protected with eighty or more fighting men in each.

Captain Grossmann based his statistical report on farming mainly on estimates, together with "such reliable information as I could get from traders who purchase a large portion of the Indian produce" (Ann. Rpt. Comm. Ind. Affs. 1870: 123). He probably used the same form as in 1869, which would mean that the statistics were tabulated for the Gila River agency as a whole, not by the individual villages. If we assume the same proportion of farmers to adult males (85%) as in the 1860 Census, then there would have been about 1,085 farmers - virtually the same as the number reported as warriors (1,088). The figures for crops are found at three places, and comparisons have hopefully eliminated the typographical errors and transposed numbers in the printed data (Ann. Rpt. Comm. Ind. Affs. 1870: 116-117, 338; Andrews to Parker, March 12, 1870):

	<u>Bushels</u>	<u>Pounds</u>	<u>Tons</u>	<u>Value</u>
Wheat raised	40,850	2,451,000		\$40,850
Corn raised	6,300	352,800		7,560
Barley raised	1,350			1,592
Hay cut			24	480
Beans raised	3,380			6,084
Pumpkins "		78,700		787
Melons "			22½	450
Mesquite beans gathered		155,000		

**Table 4**

Agent Grossmann reported only 2,732 acres cultivated by the Indians. Their livestock he listed on the same schedule used for the population figures. For the numbers of horses, cattle, etc. his totals were identical with those published by Superintendent Andrews (Ann. Rpt. Comm. Ind. Affs. 1870: 116, 338). There were half again as many horses as in 1860 and more than twice as many work oxen (475 vs. 212 in 1860). Livestock were now distributed through the villages approximately in proportion to the human populations.

*Farming Changes on the Middle Gila*

In part because of the increased numbers of work animals, farming for the Pimas and Maricopas in 1870 was a different proposition than it had been in 1860. Now perhaps half again as many adult males were involved (1,085 vs. 736) but they had only 37.5 percent of the 1860 acreage in cultivation, and indeed less than 43 percent of the lands they had planted in 1869. Wheat production in 1870 averaged only fifteen bushels per acre, much less than in earlier years, but the total yield was still excellent. Barley and hay allowed them to finally begin edging into commercial farming, which other farmers in the Gila and Salt River valleys had entered in a big way in 1868 (Miller 1989: 74-75).

There was a serious problem with their second major crop, corn, for the first time. The 1870 crop amounted to only 57 percent of the 1869 one. As Grossman explained it, the Indians raised less corn this year than before on account of the low state of water in the Gila River, "which made irrigation in the summer impossible" (Ann. Rpt. Comm. Ind. Affs. 1870: 117, 123). Although the Pimas and Maricopas would continue to enjoy good harvests of wheat through the 1870s - equal to or greater than the 1870 yield in most years - this would be the last time they raised any significant amount of corn. Cotton was no longer even mentioned.

Both Superintendent Andrews and agent Grossman encouraged the natives to plant barley. As Andrews explained, this was to keep them employed as much as possible and therefore at home, and to furnish them with a means of earning money since barley found a more general market than wheat and sold by weight



Year	Population	No. acres cultivated	Wheat (bu.)	Corn (bu.)	Beans (bu.)	Barley (bu.)	Hay (tons)	No. of horses	No. of mules	No. of cattle	Melons (tons)	Pumpkins (tons)	Mesquite beans (tons)
1871	4,031		6,000 <sup>1</sup>					2,216		1,218	5	10	15
1872 <sup>2</sup>	4,342	5,400	41,600			4,166		2,100		1,125			
1873	4,326	4,400	40,000	100		4,000	20	2,075		1,100			
1874	4,300	8,000	50,000	500	100	4,000	30	1,800	10	2,000			
1875 <sup>3</sup>	4,300	8,000	45,000	400	150		50	1,750	12	1,500			
1876	4,500	7,300	40,000	150	120 <sup>v</sup>	4,000		1,800	12	800			
1877	4,500	8,200	46,000	50	6 <sup>v</sup>	5,000		1,850	12	800			
1878	4,500	3,500	25,000 <sup>5</sup>	50		3,000	50	1,850 <sup>4</sup>	12 <sup>4</sup>	800 <sup>4</sup>			
1879	4,500	3,500	25,000	150	50 <sup>v</sup>	5,000	50	1,850 <sup>4</sup>	12 <sup>4</sup>	800 <sup>4</sup>			

Population and Agricultural Productions of the Pima and Maricopa Indian Reservation, 1871-1879  
(from Annual Reports of the Commissioner of Indian Affairs)

**Table 5**

Notes: <sup>1</sup>Calculated

<sup>2</sup>Footnote says 23 tons of different kinds of vegetables grown in addition (to other agricultural productions)

<sup>3</sup>125 bushels of vegetables grown in addition to 150 bushels of beans

<sup>4</sup>From 1877 Report

<sup>5</sup>Pimas on Salt River opposite Tempe alone raised more than 300,000 lbs. of wheat (5,000 bu.) on 1,520 acres there last season (from Chaffee to A.A.G., November 24, 1878)

<sup>v</sup>Bushels of vegetables. No column for beans included in published tables

as well as for cash (Ann. Rpt. Comm. Ind. Affs. 1870: 117, 123-124). In 1870 this was an excellent idea; the army at Fort McDowell paid its grain contractor between \$6.20 and \$7.40 per 100 lbs. for barley to feed its animals. The farmers at Phoenix raised between 100,000 and 125,000 lbs. of barley that sold readily at 4½ cents per pound. The Adamsville settlers were alerted to this market as well and planted more than 60 percent of the estimated 811½ acres in cultivation there to barley. For Adamsville and Florence, the yield of 'small grain' (wheat and barley) that year was said to be fully 1,500,000 lbs. (*The Weekly Arizona Miner*, August 13, 1870, p. 2 col. 4; August 27, p. 2 col. 1; September 3, p. 1 col. 2; Miller 1989: 364).

Adamsville and Florence were still small communities in 1870; Adamsville displayed 166 dwellings and 400 people while Florence featured only 66 houses and a population of 218 (U.S. Senate 1965b: 131, 153). The modest number of people farming and the amount of land in cultivation were not yet a serious threat to the Pimas' water supply or well being. The problem, several observers claimed, was that settlers let the unused water run waste instead of returning it to the river (Grossmann to Andrews, October 19, 1869; Ann. Rpt. Comm. Ind. Affs. 1869: 93, 219-220; 1870: 120; Stout to Comm. Ind. Affs., October 25, 1871). This of course resulted in a much-reduced flow below. As the production records show, this shortage had a serious impact on the summer crops (primarily corn) while it affected the winter-season small grains, wheat and barley, very little (Table 5).

### *The Pimas Confront A Continuing Water Shortage*

In their analysis of irrigation in the Florence district, Olberg and Reed accounted for twelve small ditches in more or less successful operation, four on the north side of the Gila and eight on the south, prior to construction of the Florence Canal in 1887. These ditches were capable of irrigating approximately 6,000 acres (Olberg and Reed 1919: 51). Agricultural development progressed with varying degrees of success and the Florence Canal Company absorbed some of these canals, which had been constructed from time to time. Others were abandoned, principally as the result of failure of the water supply (Ibid: 54; Southworth 1919: 144). According to C.H. Southworth, engineer for the U.S. Indian Service, the great damage occasioned by frequent floods also contributed largely to the disuse of these canals (Ibid: 144). The farmer-owners of these ditches constructed them originally with little capital investment or attention to engineering design.

By census figures and newspaper accounts, there were not enough farmers or land under irrigation above the Gila River Indian Reservation as of 1870 to pose a serious, long-term threat to the people on the reservation. The problems at that time were a loss of water during low-flow seasons, specifically during the summer months, and a drying-out of the lower villages, which in any case relied upon seepage or return flow to the river. Even without settlers these conditions were going to exist during a dry season, as Captain Grossmann and the Pimas clearly recognized, but other Anglo-Americans did not.

As late as 1872 Antonio Azul may still have viewed the water shortage as a short-term condition; an annoyance that the Pimas could accommodate if allowed to do so. Superintendent Herman Bendell on the other hand recognized a serious problem:

"I now reiterate the proposition [for extending the reserve to secure a water-head for the exclusive benefit of the Indians], adding thereto the expression of my firm conviction that the water question is paramount to every other condition affecting the progress and well being of the tribes belonging to the [Gila River] reserve" (Ann. Rpt. Comm. Ind. Affs. 1872: 313).

On May 3, 1872, Brigadier General O. O. Howard, a Special Commissioner of Indian Affairs, held a council with the chiefs and headmen of the Pimas and Maricopas at the Gila River reservation agency. Howard included brief comments on this council in his comprehensive report to Major General Schofield, dated June 1872, but a partial transcript of the dialogue exists as well (Anonymous 1872: 626; Ann. Rpt. Comm. Ind. Affs. 1872: 153-154). There are some interesting differences between what we learn about this conference from the transcript, and a report by the Indian agent on his own conference with the same leaders on May 11<sup>th</sup>.

General Howard asked the Pimas if there was any water in the Gila above? Antonio Azul responded that there was and there were two dams above, but very little water below. When asked what was the remedy for their trouble about water, Azul replied "Our remedy is rain." Another remedy was to go where the dam was and ask the Mexicans to let the water run for six days. The Superintendent of Indian Affairs, Dr. Herman Bendell, said he would feed them if they did *not* go. Howard persisted: if the Mexicans did not agree, then what? The Pimas would cut the dam, which the superintendent said was not right and the government would not let them do (Anonymous 1872: 626).

General Howard's questions were on target, as were Antonio Azul's replies, and it is impossible to believe that any sane Mexican irrigators at that period would have denied such a request from a Pima delegation. Most settlers then were of Mexican ancestry, and the fact that they had protested but never confronted the Pimas and their livestock in the settlers' fields, for three years, makes the point.

Howard asked finally; is there any way by which you can have water every year? In response, Antonio Azul said:

"It is impossible. Sometimes the river is dry; and now there are many dams above, and the country is full of ditches that are taking the water. We are thinking of taking out a ditch from Salt River, and bringing it across" (Ibid.).

Dr. Bendell injected himself to ask Azul why one of his chiefs with 300 men went over to the Salt River? In context this would appear to be an unnecessary question, but again Antonio Azul gave an interesting reply:

"I don't know why, unless it is because they have had a ditch there for many years before there were any white men here. When the water failed here, they went over there again to make a crop" (Ibid.).

General Howard had another alternative, and this was removal (Ann. Rpt. Comm. Ind. Affs. 1872: 153-154; Nicklason 1976: 626-629). He broached this in the conference, asking Antonio Azul if he would like to go and look at a country where there was good soil and water enough? After learning that it was a sixty-day round trip, the Pima leader agreed to go and look at it. Howard, writing in June 1872 and perhaps seeking to counter some of the enthusiasm for removal in Stout's May 11<sup>th</sup> report, opined that it was not in the best interests of Arizona for the Pimas to leave. Perhaps the citizens would grant the Indians new privileges on the Gila and Salt Rivers to warrant their remaining. The general concluded the May 3<sup>rd</sup> meeting by inviting the Pimas to a "peace-meeting" with the Apaches at Camp Grant. Azul agreed to this, and on May 21<sup>st</sup> the Pimas and Maricopas made a formal peace with the Aravaipa and Pinal Apaches (Anonymous 1872: 626-627; Ann. Rpt. Comm. Ind. Affs. 1872: 154-155, 167, 317-318).

The whole tenor of the May 3<sup>rd</sup> conference was of the Pimas proposing reasonable solutions to the problems that both nature and outside parties had created for them. Left to do things in their own way, they would have worked things out by negotiating with their neighbors, which they were still able to do from a position of strength, and by changing their farming strategy whenever the river ran dry. Unfortunately the Arizona Superintendent of Indian Affairs obstructed the search for a solution, and the result was a continuing rather than a short-term problem of water deprivation.

Agent Stout's report on the May 11<sup>th</sup> council left the inaccurate impressions that the Pimas were responding to white proposals and acknowledging the permanence of a water shortage. Perhaps even more misleading, that they were willing to look at the new country and decide whether they would like to live there (Ann. Rpt. Comm. Ind. Affs. 1872: 167-168). All of this was self-serving on his part and favored current Office of Indian Affairs policies.

There was plenty of legal precedent within Arizona for finding a solution, as Howard may have recognized intuitively. The Office of Indian Affairs either did not know about or did not want to acknowledge any precedents. Mexican practice with respect to land and water was rooted in Spanish colonial law, which was embodied in the *Recopilación* of 1680. This provided that all waters in the New World should be common to all inhabitants, and that provisions regarding water distribution should be conceived so as to promote the public welfare (Simmons 1972: 139-140). The existence of an *acequia madre* below Adamsville for at least a time shows that such rights and duties were understood locally (U.S. House 1871: 5, 11-13). No one would have questioned the Pimas' rights to share

in the water, and this would have been valuable for setting priorities of use after Anglo-Americans began to buy out the first settlers in the Adamsville-Florence area.

Under Mexican law, all Indians were declared citizens, a status they no longer enjoyed after the United States acquired the Gadsden Purchase (Spicer 1962: 334-336, 396; Hudanick 1983: 13-20, 25, 29). As wards of the government and increasingly treated as reservation Indians, the Pimas and Maricopas lacked status to bring lawsuits in their own behalf. The Commissioner of Indian Affairs recommended in his 1874 report that this be changed:

"There is no reason why these people should be longer kept debarred from the rights and privileges which they formerly had as Mexican citizens. If there cannot be such a recognition of this right as will permit them as other citizens to enter and occupy lands where they find them, the necessity of making provisions for them is immediate and inevitable" (Ann. Rpt. Comm. Ind. Affs. 1874: 60).

It would be another fifty years, the same year in which Congress authorized Coolidge Dam on the Gila River, before Congress extended citizenship to any Indian born in the United States who was not already a citizen under other laws. Only in 1948 did the Arizona Supreme Court give Indians living on reservations the right to vote.

When the Apaches were a serious problem in early territorial years, the merit in letting the Pimas settle matters in their own way was evident to all. This principle evidently did not extend to water, and no one in government was likely to approve of native initiatives in settling water disputes. The policy that evolved in fact was not to settle disputes, probably because of a well-grounded fear that litigation could result in court decisions that favored the Indians.

### *The Continuation of Subsistence Farming*

With both their access to water from the Gila and their agricultural prospects coming under the control of persons outside of their reservation, the Pimas and Maricopas still might have come through the 1870's in better shape than what they did. The remaining difficulty was that with a changing world around them, they made a late start in adapting to it and never caught up. Their annual production of wheat continued at 40,000 to 50,000 bushels through 1877, before dropping back to 25,000 bushels in 1878-79, while the barley harvest continued at about one-tenth the size of the wheat crop - up to 5,000 bushels (Table 5). The settlers above the reservation produced about 4,000,000 lbs. of barley and 500,000 lbs. of wheat by 1873, while the neighboring Pimas and Maricopas raised some 4,000,000 lbs. of wheat and 500,000 lbs. of barley, according to the newspapers (Miller 1989: 77).

Spurred on by the prospect of filling government contracts, Hispanic and Anglo-American farmers increased their demands on land and water resources to

the detriment of their neighbors on the reservation. The Pimas remained virtually locked into subsistence farming, unchanged for more than a decade, and largely outside the new system of commercial agriculture. Their winter grain crops continued to be good throughout the 1870s but wheat constituted as much as 90 percent of these. They consumed part of this wheat themselves and the surplus they exchanged with traders, a system that worked very much to the traders' advantage.

From the standpoint of marketing, the Indians in the 1870s were growing the wrong crop, as the statistics in the paragraph above illustrate. Captain Grossmann labeled their wheat as "of a very inferior quality" (Ann. Rpt. Comm. Ind. Affs. 1870: 120). A later Indian agent characterized it as white, rather small, very dry and brittle, a variety grown by the Pimas so long that the oldest among them were unable to state where or when the seed was procured (Ann. Rpt. Comm. Ind. Affs. 1886: 38). Without wheeled transportation, the Indians also lacked a means to bring their crops to market anywhere but at the traders' stores.

Frederick Grossmann made a start in trying to redirect Pima farming towards commercial agriculture. He issued them 3,000 pounds of seed barley and encouraged them to plant it, which they did in January and February 1870 (Grossmann to Andrews, January 31, March 1, May 10, 1870). The crop statistics showed 1,350 bushels (64,800 lbs.) of barley harvested that year (Ann. Rpt. Comm. Ind. Affs. 1870: 123, 338). The traders resisted this innovation fiercely, as they wanted the Indians to continue their self-sufficiency by growing wheat, exchanging any surplus for goods in the traders' stores.

The natives instead asked for more seed, which they promised to return in equal amounts after harvest, and the next season they planted 10,000 lbs. of government-issued barley. From this they raised "a handsome crop" although the published crop statistics for 1871 gave no figures for the Pimas and Maricopas (Ibid. 124; Ann. Rpt. Comm. Ind. Affs. 1872: 350, 359, 621). The 1872 return listed 4,166 bushels of barley, however. When Grossmann left office on July 24, 1871, any further aid to the Pimas in their agricultural efforts went with him. His successor, John Stout, was more interested in education, controlling personal vices, and maintaining peace.

That the Indians continued to grow as much barley as they did was a tribute to the correctness of Grossmann's views. His assessment of the economic benefits was, if anything, conservative. Although the price fluctuated with demand and availability, dipping to below \$2.00 a hundred pounds in 1874 and 1879, barley generally brought a good cash return to its growers (Grossmann to Andrews, May 10, 1870; Ann. Rpt. Comm. Ind. Affs. 1870: 124; 1871: 358; Miller 1989: 83-84, 364). The settlers benefited accordingly while the Pimas and Maricopas grew poorer. Water, or the lack of it, was only part of their problems.

#### *Frederick Grossmann Confronts the Traders*

President Grant began implementing his Peace Policy in 1869 and by the summer of 1870 all major reservations had been assigned to religious denominations. These bodies were to name agents and take responsibility for

running the reservations. The Dutch Reformed Church received charge of both the Colorado River and Pima agencies in Arizona, a heavy responsibility for a small, conservative organization without experience in this field (Trennert 1986: 46-48). Captain Grossmann would have been aware of these developments, and he anticipated his relief as early as December 1870 (Grossmann to Andrews, November 29, 1870). Dr. Edward Palmer actually received the appointment as agent for the Pimas and Maricopas on February 8, 1871, but the Interior Secretary revoked this almost immediately (Delano to Palmer, February 8, 1871). The army officially relieved their officer from his duty as Indian agent on June 3, 1871, effective whenever his successor arrived at the agency (U.S. War Dept., AGO, June 3, 1871).

Frederick Grossmann tackled the traders in an episode that might have rivaled the confrontation a decade later at the O.K. Corral in Tombstone. There is probably more paperwork surrounding this incident than for any other episode on the Pima and Maricopa reservation in the 19<sup>th</sup> century. Most of these records may be seen in National Archives Microcopy M-734 Rolls 5 and 8. The impression given by the brief published summaries in the Annual Report of the Commissioner of Indian Affairs for 1871 (pp. 349, 353, 361-362) is not entirely accurate. A long buildup led up to this incident and, as sometimes happens, the principal issues and parties were not always what or who they seemed to be. The root of the problem seems to have lain in the Pima and Maricopa loss of control over their own destiny, both socially and economically, because of increasing venereal and other diseases, drunkenness, the weakness or failure of native social controls, and a barter system that worked against them.

When Captain Grossmann arrived in 1869, he found six trading establishments on and near the Pima and Maricopa reservation, all operating without a license. All made proper applications and he granted licenses to five of these. Over the next year, however, he found the traders blocking "the measures of reform which I thought it my duty to inaugurate" (Ann. Rpt. Comm. Ind. Affs. 1870: 119-124). These measures were prohibiting the sale of liquor to the Indians and turning the latter away from growing wheat to raising barley. The bottom line for him was that

"The system kept up by the Indian traders for years past, whereby Indians were compelled to barter their produce for goods, and were refused money, no matter how earnestly they desired the latter, is a pernicious one and should be abolished" (Ibid. 124).

The mechanism for regulating these traders was the denial of a license. Grossmann believed that it was in the best interests of the Indians not to grant one to Wm. Bichard and Co. and he went on to say why. In considerable detail he revealed the whole operation of traders on the Pima and Maricopa reservation:

"I feel well convinced that Mr. W. Bichard has at all times worked against me with the Indians. He is in the habit of giving presents to the Head Chief of the Pimas and thus makes it the

interest of the latter to use what little influence he may have on behalf of the firm. I feel sure that Mr. Bichard has done all in his power to discourage the planting of barley, to do which I had encouraged the Indians. He also is the one who yearly fixes the price of wheat, for, being the only mill-owner in this section of country, he is the only one that can use wheat to an advantage and even the other traders on and near the Reservation have to enter into arrangements with him before they buy any wheat from the Indians, for should he refuse to take their wheat they could have no other market."

"Mr. Bichard is now negotiating for the purchase of the Trading Establishments at Sweet Water and Sacaton. Should he succeed in buying these he will have the whole Indian Trade in his own hands, with the exception of the trade done at Maricopa Wells, which comparatively amounts to but little. Having thus the monopoly he can pay the Indians whatever he pleases for their wheat and no matter how little he may offer they will be compelled to accept it, for there is no other market for their wheat."

"To counteract his influence I encouraged the planting of barley, which will always find a ready market at better prices than wheat. Several similar attempts have been made before, but have always failed because the influence of Traders was strong enough to induce the Indians to sow wheat as their main crop, and I fear that even now the Indians are being advised not to plant barley" (Grossmann to Andrews, January 16, 1871).

Revealing as it is, Grossmann saw only one part of a much larger picture. From the standpoint of Superintendent George Andrews, the problem was one of regulating the traders and controlling drunkenness on both the Colorado River and Gila River reservations. In Washington, the issue was seen as controlling traders in the face of a huge expansion of the reservation system in the West, as Vincent Colyer and General Howard gradually brought the various Apache tribes onto reservations. The Pima and Maricopa reservation apparently became a convenient test case for determining whether this control could be brought about through the licensing of traders operating in "Indian country." Before it was over, three Cabinet departments (Interior, Justice, and War) and individuals from San Francisco to Washington D.C. would be drawn into it.

In January, George Andrews asked for both support and instructions in how to proceed. He received the support from Washington together with some confusing instructions. With the Commissioner's approval, he put the wheels in motion and after March 12 his successor, Herman Bendell, did likewise. Each step was authorized by Washington and coordinated with the U. S. Attorney for Arizona, although the U.S. Marshal would not act. In May, two of the traders that had been approved, George Tyng, and Moore and Carr, received their licenses. Moore and Carr had their business at Maricopa Wells, also called Overland Station at the time, while Tyng did not have a store but proposed to open one at



Sweetwater (Bendell to Grossmann, May 2, 1871; Bendell to Parker, June 9 and June 9, 1871). This would have put Tyng in competition with F. M. Larkin, one of the illegal traders. McFarland and Forback were already on the reservation and duly licensed to trade at Sacaton Station (Grossmann to Bendell, May 5, 1871; Stout to Bendell, September 8, 1871).

On June 18<sup>th</sup>, Grossmann acknowledged the news that a new agent was en route (Grossmann to Bendell, June 18, 1871). With that bit of information in hand, the pieces in a carefully orchestrated scenario were all in place. It was time to act, with Captain Grossmann as the point man and with the full backing of the Department of the Interior. The actual action would be seizure of the merchandise at three unlicensed trading establishments with the intention of shutting them down.

The captain rode up to the house of F. M. Larkin at Sweetwater on June 19<sup>th</sup>, to find the posse promised him by the U. S. Attorney completely absent. Nonetheless he announced his intention to seize the merchandise on behalf of the United States and warned Larkin not to resist. The trader became "very much excited" and said he would not submit unless force was used. To Grossmann this meant enforcing his claims at gunpoint, which he was not authorized to do unless Larkin drew first, nor did he have authority to make an arrest. In the end the storeowner told the agent to get out, which he did, rather than initiate a fight.

Perhaps Grossmann picked Larkin because he knew William Bichard was not one to back down in a confrontation. Back in November 1869, Bichard had been a passenger on a stage westbound from Fort Yuma when four robbers held it up. Bichard gave one of the bandits a shotgun load of buckshot in the stomach, and the passengers then drove all of them away in a blazing gun battle (*The San Diego Union*, November 11, 1869, p. 2 col. 1; November 18, p. 2 col. 3). The agent would have known this and while nothing suggests that he hesitated to act, he was clearly concerned about his legal position.

The next day, June 20<sup>th</sup>, Captain Grossmann returned to the Bichard store at Casa Blanca, this time with four companions. Bichard's salesman was there but not the proprietor, who had gone to Adamsville. After some argument, the agent finally did seize the goods and proceeded to remove them to the agency, later to storerooms at Maricopa Wells. The Indians began demanding that the trader's tickets or checks given them in return for their wheat be redeemed, which Bichard apparently agreed to do (Grossmann to Bendell, June 21, 23, 1871). At some point Henry Morgan, the third illegal trader, evidently made it clear that he would resist any attempt at seizure. Grossmann asked for adequate means to meet force with force, but this was not forthcoming (Grossmann to Bendell, July 3, 1871). As the outgoing agent put it, "Such was the state of affairs when I transferred the agency to my successor, J. H. Stout, Esq., on the 24<sup>th</sup> of July last [1871]" (Ann. Rpt. Comm. Ind. Affs. 1871: 362).

The confiscation proved to be a hollow victory. Within a week, the Bichards had informal legal opinions pronouncing the seizure illegal. In late July, two days before his successor arrived, Grossmann was handed a writ of replevin by the Pima County sheriff and complied by releasing Wm. Bichard's property to the sheriff. The store at Casa Blanca was soon reported to be open for business,

without a license of course (Grossmann to Bendell, July 22, 1871; Stout to Bendell, August 5, 1871). Nicholas Bichard, the second brother in the firm, then addressed the Commissioner of Indian Affairs in a letter that bordered on arrogant, asking that a license be issued to them (Bichard to Comm. of Ind. Affs., August 31, 1871). They were allowed to apply for one and to post a bond, but this evidently led nowhere (Bendell to Bichard and Bendell to Hutchins, both September 29, 1871).

### *John Stout Steps In*

The government in the meantime filed suit to condemn Bichard's merchandise. The case was tried in the territorial district court and appealed to the Arizona Supreme Court. By a two to one majority this court ruled in favor of Bichard and Co. (Arizona Territory, 1884). When agent Stout notified the Bichards for a second time to desist from trading or have their property seized and be ejected forcibly, the company enclosed a copy of the decision with their reply. They offered to resist any such attempts with the aid of both territorial authorities and U.S. forces, though the latter was a hollow threat (Stout to Bichard, December 12, 1871; Bichard to Stout, December 15, 1871). In his next annual report (August 31, 1872), John Stout said that trading was going on quietly as before (Ann. Rpt. Comm. Ind. Affs. 1872: 319). Less than a year later the 32-year-old William Bichard was dead, leaving his brother Nicholas, who lived in San Francisco, to carry on the business. Nicholas continued in Arizona for a few more years (Miller 1989: 170).

If the Bichards had intended to use the Pimas as a cheap source of wheat for supplying their own flour contracts with the army, these plans were soon in disarray. The firm had three good flour contracts with Camp McDowell in 1871-72 but none after that. They had also been awarded contracts to supply four posts in central Arizona, but a competitor undercut their prices in his proposal to the army commissary officer at Tucson and received the contracts instead (Miller 1989: 167-170, 370). The awards to Bichard were cancelled.

Though the government may have lost its legal case, the Pimas had been intrigued, "eager to see the *modus operandi* by which one white man enforces the laws of his country against another" (Grossmann to Bendell, June 21, 1871). They evidently took heart from Grossmann's actions at Casa Blanca. In mid-August they threatened a Mr. Norango, who had charge of the Moore and Carr store at an unstated place on the reservation, forcing him to close the store and driving him away. The Indians threatened to tear down the place and take the goods because the owners would not pay *silver* for their wheat. Moore and Carr's defense was that this had never been done on the reservation, and they asked for whatever protection the agent thought proper to grant (Moore and Carr to Stout, August 14, 1871; Stout to Bendell, August 22, 1871; Ann. Rpt. Comm. Ind. Affs. 1871: 354-355). Stout managed to negotiate an agreement and this incident blew over.

John Stout served as agent to the Pimas and Mariopas from late July 1871 to March 1876 and again from February 1877 to August 1879. He had no strong

religious ties but the Board of Foreign Missions of the Dutch Reformed Church selected him on the recommendation of Vincent Colyer, secretary of the Board of Indian Commissioners. The latter, an offspring of President Grant's Peace Policy, consisted of leading humanitarians appointed to advise the government on Indian matters (Trennert 1986: 46-49, 66-67). As it turned out, neither Colyer nor Stout was a wise choice, though by the 1870's the problems they faced were becoming insoluble, in large part because of government vacillation.

Stout and his interim successor, Charles Hudson, had other concerns, and after 1873 the agents' reports ceased to mention traders. An 1879 map still showed Henry Morgan's trading post at Gila Crossing, Larkin's store at Sweetwater, and a new name, Hayden's, along the Gila River (NA RG75-CMF-659).

In 1878, Charles T. Hayden established a trading post at what is now called Gila Butte; at the time it was referred to as Pima Butte or Twin Buttes. Hayden had been around Arizona since before the Civil War. In 1871 he located a store and ferry at Hayden's Ferry, east of Phoenix, then added a flour mill three years later when he received flour contracts for two army posts. By 1878 he held other flour contracts for supplying army garrisons in Arizona. Charles Cook clerked for two and one-half years at Hayden's store on the reservation, where he sometimes took in 30,000 to 40,000 lbs. of wheat daily that Hayden then milled to meet his contracts (Whittemore 1893: 38-40; Jones 1960: 232; Cook 1976: 130-139; Miller 1989: 168, 370).

### ***John D. Walker and the Pimas***

In the late 19<sup>th</sup> century two individuals, John D. Walker and Charles Cook, gained a greater understanding of the Pimas than any other outsiders, by virtue of their long associations with them. They also sought in their own ways to improve the Indians' quality of life. Earliest in point of time was Walker, veteran of the California Column, captain of the Pima company in the First Arizona Volunteer Infantry, farmer and translator at the Pima agency, informant on Pima traditions to Adolph Bandelier, and successful operator of the Vekol silver mine. For thirty years he lived near their reservation, much of the time in Florence, Arizona, and so far as can be told he bore the best interests of the Pimas in mind.

In 1866 he had offered to open a school among them if the agent could pay his expenses for the first three months (Walker to Lord, June 14, 1866). While nothing came of this, his earlier suggestion about enlarging the reservation arrived at just the right time to gain official endorsement, although it failed of realization (see Chapter 11). In 1868 Levi Ruggles employed him as an interpreter and then as a farmer at the Pima agency. The 1870 Census showed him farming at Adamsville and living with a Pima woman, Juana, whom he married according to Pima customs (Ruggles to Hutchings, May 12, 1868; *The Arizona Republican*, October 1, 1892, p. 2 cols. 5-6; U.S. Senate 1965b: 133).

In the midst of the Bichard affair, agent John Stout appointed a Dr. Walker as physician at the Pima and Maricopa agency. This was the same John D. Walker who had applied previously to Frederick Grossmann for an appointment

as physician, after that agent released him as translator (Bendell to Parker, October 4, 1871). One writer claimed that Walker studied medicine during his younger days (Barney 1999:40), but Captain Grossmann declined his request on the grounds that Walker was not qualified. There was no secret about this lack of credentials; even Vincent Colyer put “physician” in quotation marks in the manuscript draft of his report on a conference at the Gila River Agency (Ann. Rpt. Comm. Ind. Affs. 1871: 58).

John Stout not only hired Walker as the agency physician, but defended his action in the face of the Superintendent’s, and eventually the Commissioner of Indian Affairs,’ disapproval (Bendell to Stout, September 27, 1871; Stout to Bendell, October 2 and 9, 1871; Clum to Bendell, October 26, 1871). Stout had to let Walker go, which he did on November 10<sup>th</sup>. At \$1,500 a year, “Dr.” Walker received pay at the same rate as the agent himself, a very good salary for the time (Stout to Bendell, November 27, 1872). This type of appointment may not have been unusual. A few years later Albert F. Banta, with no previous experience, served as a "doctor" at a sub-agency of the San Carlos Apache agency. According to Banta, he too was a successful practitioner (Reeve 1952: 247-248).

Walker continued this on-and-off involvement with the Pimas and led an interesting life right up to the end, much of it documented by voluminous newspaper transcripts at the Arizona Historical Society. In his later years, Walker’s younger brothers succeeded in having the fifty-year-old John D. institutionalized on grounds of insanity, probably to exclude him from any control of their jointly owned silver mining properties. He escaped from confinement and married a childhood sweetheart who had joined him from Illinois, then was recaptured and committed again until he died in early September 1891.

The brothers then worked to deprive the new Mrs. Walker from any share in the mining interests, in the midst of which who should appear but a new claimant, twenty-one year old Juana Walker, “the Indian maiden,” daughter of John D. and his Pima wife. By now the territorial newspapers were having a field day in chronicling every new development in this unfolding saga. In the end, the brothers’ lawyers succeeded in having the April 18, 1891 marriage to Miss Eleanor Rice annulled. As for Juana, they contested her suit and defeated it on the grounds that a white man could not marry an Indian under the laws of the territory. She too received nothing (Hayden Collection, John D. Walker file; Willson 1964).

During his 41-day medical career, John Walker wrote a report on the sick and wounded at the Pima and Maricopa Reservation that actually tells us more than the statistical filings made by earlier and later doctors. No longer were the natives here models of robust good health. Their most serious problem was ophthalmia or inflammation of the eyes, with thirty-one patients, of whom he discharged twenty-eight as cured. Other maladies included dysentery, constipation, measles, intermittent fever, secondary syphilis, ulcers and gonorrhoea. No one died under Dr. Walker’s care. His report reinforced the impression that the Pimas had a sympathetic friend in John Walker, and that agent Stout’s appointment was not so bizarre as it might seem:

“The measles has (*sic*) prevailed among the Indians for several months. This disease not having visited these people in twenty-four years, a great many are attacked with it. As a sequel, a great many have sore eyes or diarrhea, although scarcely a case has terminated fatally. There having been no overflow from the river, malarious fevers do not prevail as of former years.”

“From scarcity of water, no second crop has been raised; consequently the people are without their usual supply of beans, corn, pumpkins and melons, and are liable to suffer for want of sufficient food, as well as [becoming?] liable to disease from subsisting upon but one kind of food” [mesquite beans?].

“The distance that many live from the agency makes it impossible to treat all that need treatment. I would therefore recommend that arrangements be made to accommodate a few patients at the agency.

Very Respectfully Submitted,  
J. D. Walker, Physician”

(From Walker, Monthly Report of Sick and Wounded, September 30, 1871).

One of Stout’s letters endorsed Walker as having checked the spread of dysentery, which threatened the “total destruction” of the young children in Santan (Stout to Bendell, October 9, 1871).

The Florence newspaper credited John Walker with greater fluency in the Pima language than any other English-speaking person, and with being knowledgeable as to how Pima traditions were passed along (*Arizona Weekly Enterprise*, July 9, 1887, p. 3 col. 1; July 16, 1887, p. 3 col. 2). As we saw in Chapter 1, he shared this knowledge or his understanding of it with the visiting archeologist, Adolph Bandelier, and it became the basis for claims by Bandelier and others that the Pimas are modern descendants of the prehistoric Hohokam.

### *Schools on the Gila River Reservation*

When Walker offered to open a school back in 1866, deputy Indian agent C. H. Lord had very little authority and of course no money. Two years later, Levi Ruggles asked for money to establish a school at the Pima Villages and was given \$250 for everything. With this pittance he told Superintendent Dent that the Indian Bureau must have considered his estimate (\$2350) a joke (Ruggles to Dent, March 31, 1868). Ruggles asked for the money again, as did his successor. Antonio Azul told Arizona’s governor that the Pimas and Maricopas wanted nothing from the government except schools. Governor Anson Safford then queried Captain Grossmann as to why a school had not been established, and the agent replied that he was restricted to \$600 a year for that purpose. No teacher could be obtained for this sum (Ann Rpt. Comm. Ind. Affs. 1870: 138; *The Weekly Arizona Miner*, September 3, 1870, p. 1 col. 3).

Until Congress appropriated \$100,000 for Indian schools on July 15, 1870, the work of Indian education had been virtually in the hands of various religious denominations (Ann. Rpt. Comm. Ind. Affs. 1902: 25). Since these organizations already directed the administration of the reservations under President Grant's Peace Policy, this money subsidized the existing schools or, as with the Pima agency, made funds available to begin new ones.

A thirty-two year old German immigrant and army veteran, Charles H. Cook, heard about the need for a school in Arizona from the Ladies' Missionary Association in New York. Convinced of the need for his services, Cook left his employment as a city missionary with the Methodist Episcopal Church in Chicago to answer this "call" to the Pima agency. He appeared unexpectedly on December 23, 1870, and agent Grossmann promptly hired him as a teacher, effective January 1, 1871, for a term that ran to May 31<sup>st</sup>. The new teacher began studying Grossmann's vocabulary of the Pima language and worked with the agency interpreter, Louis [Morago] (Grossmann to Andrews, December 26, 1870; January 23, 1871). At the same time, Grossmann got the teacher's salary boosted to \$1,000 a year (Clum to Andrews, January 23, 1871). This amounted to a very good salary for the time.

Cook opened school in the agency at Sacaton on February 15<sup>th</sup>, with thirty children in attendance. His schoolroom had a blackboard, two dozen slates, and the Pima dictionary, but he needed more slates as well as primers, first readers, and children's songbooks (Grossmann to Andrews, February 15, 1871; Cook to Grossmann, February 28, 1871). Attendance averaged forty-three in the first month and thirty-eight over the first term. Cook with his "very imperfect knowledge of the Indian language" necessarily had to give instruction in Pima, but his first report was encouraging:

"Lessons taught: The Alphabet & Spelling, English speaking, Figures & primary Arithmetic, Writing and Singing."

"The irregular attendance of the Maricopa children may be accounted for by the great distance they have to come - Slates & books are anxiously looked for and much needed" (Cook, Report of Attendance, March 1871).

This was a day school where the pupils lived at home. In the first term the children learned the English alphabet, words of English, how to write letters and numerals, and to count in English, also to sing several hymns (Ann. Rpt. Comm. Ind. Affs. 1871: 358-359). Louis the interpreter served as a teacher's aid and interpreter in the classroom as well as tutoring Cook in Pima (Cook 1976: 77-79). Captain Grossmann already had his sights on establishing a boarding or industrial school on the reservation. His successor, John Stout, entertained similar ideas (Ann. Rpt. Comm. Ind. Affs. 1871: 356, 358-359, 362).

Rev. Cook was a missionary but not yet an ordained minister. That fall he gained an assistant teacher in the person of Mrs. Stout, whom the Dutch Reformed Church paid a salary of \$600 a year through 1873 (Bendell to Stout, September 27, 1871; Ann. Rpt. Comm. Ind. Affs. 1872: 395; 1873: 343). What

an assistant teacher taught, in addition to sewing, wasn't explained. Since attendance was not compulsory and wide-scale summer crop failures visited the reservation in 1871, the teacher and the agent dug into their own pockets to provide the students with a daily lunch to encourage regular attendance. This policy evidently had some success (Ann. Rpt. Comm. Ind. Affs. 1872: 320). The next year the government paid for the children's rations.

The school reopened in mid-September and initially had very low attendance. Cook attributed this to "much sickness" amongst the children and the great distance they had to come. Dr. Walker may have cured their illnesses, as average daily attendance among the Pima children jumped from twelve in September and ten in October to more than twenty during the last half of November. Four villages - three Pima and one Maricopa - were sending children. Cook gave their locations (but not their names) as a small village distant  $1\frac{3}{4}$  miles; a second village [Santan] distant  $2\frac{1}{2}$  miles; a third village  $3\frac{1}{2}$  miles away; and the Maricopa village [Hol-che-dum] at a distance of four miles (Cook, Report of Attendance, September, October, November 1871).

The annual report of the agent did not mention it but on October 17, 1871, Cook opened a second school, at the Maricopa village. This was simply an Indian hut, built by the people there, and it served for a school, Sunday school and church, except when cold or windy weather made it untenable. Nonetheless an average of thirty-four Maricopa children showed up each school day during November. Cook purchased his own horse and left the agency early in the morning to teach the Maricopa children until noon, then returned and held school at the agency until evening (Cook, Reports of Attendance, October, November, December 1871; Stout to Bendell, December 7, 1871). Although the teacher was still a Methodist Episcopal missionary he met with no success in trying to establish a church, as the Indians would not participate in Christian ceremonies. One contemporary source said that for Cook to get the Pimas to come to his church or services, he had to hire them (Stewart 1878; Trennert 1986: 48).

A proposal to deliver school supplies at Sacaton survives from September 1871 and, although another bidder received the contract, this list shows how the first school on the Gila River Indian Reservation may have been furnished:

4 doz.	Primers, Wilson's
3 doz.	Slates, medium size
6 doz.	Slate Pencils
10 doz.	Chalk Pencils
2 Reams	Letter Paper
5 doz.	Pen Holders
3 Gross	Gillotts Steel Pens
5 doz.	Lead Pencils
3 doz.	Bottles Ink, small
4 doz.	First Readers, Wilson's
2 doz.	Song Books

The most expensive items, not surprisingly, were the schoolbooks, and the estimated total in this proposal came to just under \$60 (extract from Bendell to Parker, September 12, 1871).

When the educational supplies began to trickle in to Sacaton in December, there were some surprises. The slates, agent Stout complained, were of the most inferior kind, *three and a half by six inches*, entirely too small for convenient use. The Song Books were something else:

"Ornamented on the cover by silly and frequently vulgar engravings, and filled with unchaste sentiments and maudlin rhymes, they are suggestive of any thing but morality, and certainly not the volume to place in the hands of any children,.... Judge our surprise, when,.... we find ourselves the recipients of twenty four "ten cent sensationals," composed of such songs as 'Shoo Fly,' 'Tim Finnigan's Wake,' 'The Tilt Skirt,' and 'The Fast Young Man.'"

Agent Stout asked to be allowed to put these in the fire (Stout to Bendell, December 12, 1871). The other school supplies, all furnished by Messrs. Hooper, Whiting and Co., apparently did meet specifications.

The end of the year arrived with the average daily attendance at the two schools up to fifty-three, boys continuing to outnumber girls by a ratio that ranged from 3:2 to 5:3. Most of the school equipment was now in hand and the teacher had mastered the Pima language "to some extent." After the school at Hol-che-dum opened, the number of Maricopa students outnumbered the Pimas most days (Cook, Reports of Attendance, September 1871 - March 1872; also Cook 1976: 84-86). At year's end in 1871, Cook compiled a list by name of the twenty-eight Pima boys and twenty Pima girls with the best attendance records. This showed only eight boys and two girls attending more than half of the 133 school days since March 1<sup>st</sup> (Cook, Report of Monthly Attendance, December 30, 1871). If there was a comparable list for the Maricopa students, it has not been found.

Stout asked for money to build several schoolhouses "at convenient places on the reservation" and in August of 1872 he was surprised to learn that \$5,000 would be available for educational purposes. Plans were drawn up for two schools, but almost half of the money had to go to pay for an addition to the agency. He nonetheless put up two "comfortable and convenient school-houses," one at the Pima village of Santan, 2½ miles from the agency and the other at Hol-che-dum, the Maricopa community some 4½ miles distant. These would meet the needs of those two villages for the present (Stout to Comm. Ind. Affs., February 8, 1872; Stout to Bendell, September 12, 1872; Ann. Rpt. Comm. Ind. Affs. 1873: 282-283).

When school resumed in the fall there were three teachers. Charles Cook had gone East that summer with a delegation of Pimas, Apaches, and one Papago, and on his return he stopped by Chicago to marry Anna Bath, who then returned with him to Sacaton (Ann. Rpt. Comm. Ind. Affs. 1873: 342-343; Cook 1976: 101-103). Stout approved her as an assistant teacher with her salary paid by the



government, which he set at \$900 a year. For several months, until Stout was ordered to cut this back to the authorized amount of \$600, the Cooks managed very well indeed. New school buildings were not ready until the fall of 1873, however (Clum to Bendell, October 19, 1872; Stout to Bendell, March 31, 1873; Smith to Bendell, April 3, 1873; Stout to Bendell, May 17, 1873).

In that era, it was customary for public schools to hold 'exercises' at the end of a school year. Prizes were awarded for attendance and students would give recitations, read essays, sing, and display their new knowledge in other ways. There are no records that Charles Cook's Pima and Maricopa scholars did anything comparable, but on closing the two schools on May 21, 1873 (with an average daily attendance of fifty-four from January through May), he expanded a bit on what he felt had been accomplished. Progress among the older Pima scholars had been more apparent of late, particularly in the study of English, reading, and arithmetic. All liked to write and some were making good progress in geography. The girls in the sewing class had made a total of thirty-nine chemises and twenty-one dresses.

Apart from this, he looked for more regular attendance when the new school opened in the fall at Santan. The missionary societies - probably Cook's own Halsted Street Mission in Chicago as well as the Ladies' Union Missionary Association in New York - helped by sending clothing and some school materials. Cook was skillful in asking his eastern supporters for even more support, and he noted that the government helped to improve attendance with its free lunch program. He was optimistic that their work would result in much good (Cook, Report of Attendance, May 1873; Ann. Rpt. Comm. Ind. Affs. 1873: 283). Agent Stout was similarly vague as to what had been accomplished, but his figures implied that the school in the agency headquarters stayed in operation as well as the new ones. He also claimed that fifty Indians could now read (Ann. Rpt. Comm. Ind. Affs. 1874: 106).

After 1873 there is much less information because the Arizona Superintendency of Indian Affairs was eliminated and the agencies became directly responsible to Washington, effectively making their records less accessible. Cook tried one year of operation with three schools, then closed the one at the Maricopa village because he could not manage all of these alone and neither his wife nor Mrs. Stout was available for more than part of the school year. The Maricopa school remained closed and the agent reported in 1881 that the old Maricopa village was deserted when the Maricopas removed, some four years earlier, to government land on the Salt River about thirty-five miles north of the agency (Ann. Rpt. Comm. Ind. Affs. 1875: 105; 1876: 207; 1877: 289; 1881: 6; Cook 1876: 109-111).

Charles Hudson, who served as the Pima agent for several months in 1876, wrote that Rev. Cook's day school and his wife's sewing and industrial (i.e. domestic industries) school were well attended by the children of two villages in the vicinity of the agency. He himself could not praise the devotion and earnestness of these faithful teachers too highly (Hudson to Smith, May 31, 1876). Cook kept the school at Santan open through the 1877-78 school year, with the average attendance dropping from sixty-five in 1876 to forty-one in

1878. The number of Indians who could read decreased as well, to seventeen in 1877.

Support became less certain and the Indians moved away as their water disappeared. By 1876, 200 families were reported living on the lands at Blackwater. In the Salt River Valley, Mormon settlers encouraged the natives from the Gila River reservation to come and live among them. In 1878, John Stout said that more than half of the Indians had been forced to leave the reservation to earn a living, either by tilling small patches of land where they could find water, or by working for American and Mexican settlers. Almost the entire western half of the reserve had been abandoned because there was not even enough water to drink, in addition to which the mesquite bean crop had failed (Ann. Rpt. Comm. Ind. Affs. 1876: 7; 1877: 32, 289; 1878: 3, 281).

When Charles Hayden opened his trading post in 1878, Charles Cook went to work for him at a better wage. Cook's salary had been reduced to \$900 a year and his wife's to \$360, as a cook, perhaps because they had lost favor with agent John Stout (Stout, Report of Employees, 3d Quarter 1878). Cook was still a missionary in the Methodist Episcopal Church and he preached every Sunday, alternating among the Pima Villages. In 1878-79 no one taught school on the Pima and Maricopa reservation.

Then in May of 1879 a Mr. and Mrs. J. S. Armstrong received appointments as teacher and assistant, initially to resume the day school, with some assurance that a boarding school would soon be established. They arrived in late June, about the same time as the new agent, A. B. Ludlam. Once again the Pima agent could tell the Commissioner that the pupils made great progress in learning English while the girls were being taught to sew and make their own garments, even though the reality was something less. Three of the boys, one of them a son of Anthony Azul, awaited an escort to the Hampton Normal and Agricultural Institute back in Hampton, Virginia; the first Pimas to attend a boarding school remote from the reservation (Hayt to Armstrong, May 21, 1879 (extract); Armstrong to Hayt, August 18, 1879; Ludlam to Comm. Ind. Affs., August 25, 1879; Ann. Rpt. Comm. Ind. Affs. 1879: 6, 229; 1880: 3, 239; Cook 1976: 130-131).

As for the reservation itself, the Dutch Reformed Church transferred its responsibilities to the Home Board of the Presbyterian Church as of August 14, 1880. The Reverend Sheldon Jackson, the most influential Presbyterian of his day and superintendent of mission schools in the western territories for the church's Board of Home Missions, visited Sacaton to arrange for bringing Pima students east to schools. While there, he convinced Charles Cook to study for a ministry in the Presbyterian Church. Cook did so and on April 8, 1881 he was ordained as a minister. Rev. Charles Cook would continue to live on the reservation as a missionary, now supported by a much larger denomination, for another thirty years (McKinney 1945: 109-111; Cook 1976: 138-143).

### *The Question of Removal*

General Howard made the initial proposal to remove the Pimas and Maricopas from the Gila River Valley and relocate them. By this time (1872) the President's Board of Indian Commissioners had been advocating a broad removal policy for three years, since its founding, as a solution to the government's Indian problems. Not incidentally, the resettlement of tribes in Indian Territory would open vast tracts of so-called vacant land elsewhere to white claimants. In Arizona this was complicated by the settlers' need for the protection offered by the Pimas and Maricopas, but by 1875 the latter were at peace with the Apaches (Ann. Rpt. Comm. Ind. Affs. 1874: 293; 1875: 214). These former enemies now had their own reservations in parts of Arizona distant from areas of white settlement or mineralization. From the viewpoint of the settlers, they no longer needed the Pimas and Maricopas to defend them. To the land speculators, the Indians were simply in the way.

The several proposals to remove the Pimas and Maricopas from the middle Gila River Valley have been reviewed elsewhere and need not be examined again (Hudanick 1983: 75-85; Trennert 1986; DeJong 1992). The removal talk was prompted by the Indians' own moving about in search of water and their consequent conflicts with settlers, who believed that the natives had no right to live off their reservation or in any other parts of the Gila and Salt River Valleys. On their part, the reservation's residents resented the increasing upstream diversions of the Gila River's water. Agent John Stout adopted the idea of removal as being in the Indians' own best interests, with the result that Stout, John D. Walker, and five Pima and Maricopa leaders including Antonio Azul visited the Indian Territory in September 1873. Although the latter were reportedly much pleased, opinion on the reservation was against moving there. With an abundance of water in the years 1873-75, conflicts with settlers died away as did talk of removal (Ann. Rpt. Comm. Ind. Affs. 1872: 154, 166-168, 177; 1873: 283; 1874: 60, 293-294; 1875: 79, 214; DeJong 1992: 381-384).

At the same time, the Commissioner of Indian Affairs and Arizona's governor trotted out another 'solution.' They began pushing for removal of the Pimas and Maricopas to the Colorado River Reservation if their rights to land and water along the Gila could not be recognized (Ann. Rpt. Comm. Ind. Affs. 1874: 60; 1875: 79; 1876: 8; DeJong 1992: 383-384). Outside of official circles this idea never received serious consideration.

Many of the Pimas and Maricopas were again living off the reservation, bringing a renewed prospect of conflicts between Indians and settlers, at the time a new Commissioner of Indian Affairs dragged out the removal issue again. Commissioner Ezra Hayt believed that relocation would allow the Indians to remain self-sufficient and reduce the government's costs for leading them to the ways of civilized society (Ann. Rpt. Comm. Ind. Affs. 1878: 4-5; DeJong 1992: 384-389). Stout of course favored this course and so too did Indian Inspector E. C. Watkins, sent to examine conditions on the Gila River reservation. Stout in fact believed that

".... their only hope of salvation from a speedy extinction lies in their early exodus to the Indian Territory and feeling this I cannot

too strongly urge its prompt consummation" (Ann. Rpt. Comm. Ind. Affs. 1878: 5).

Assertions that diminished rainfall prompted the Pimas and Maricopas to move off the reservation in the 1870s are not supported by weather records, nor was this what the Indian agent claimed (Ann. Rpt. Comm. Ind. Affs. 1875: 214; 1878: 3; U.S. House 1891; DeJong 1992: 383-385). The precipitation records for Fort McDowell began in 1866 while those from Maricopa [Siding] and Florence date from 1875. These show no failure of precipitation in 1878, the annual rainfall at Florence, Fort McDowell and Phoenix having been well above average (there was no 1878 record for Maricopa). Nor was there any drought in the sense of a long-term moisture deficiency after exceptionally wet years in 1872-74 (in the Fort McDowell record) (Hudanick 1983: 84-86).

The next year the Board of Indian Commissioners reiterated its recommendation for removal of the Pimas and Maricopas. This too came to nothing, as Congress would not appropriate the money. The Colorado River Reservation proposal was revived, and died again (DeJong 1992: 388, 395). In the end, the President issued an Executive Order for the second enlargement of the 1859 reservation at the same time Congress voted on the annual appropriations act for the Office of Indian Affairs. One amendment in the act prohibited the removal of Arizona and New Mexico tribes to Indian Territory, thus ending the debate on Pima and Maricopa removal. The Interior Department came to realize that this was a poor policy in terms of both human and monetary costs, and soon afterwards abandoned the concept entirely (DeJong 1992: 388-390). Already its replacement - allotments - was waiting in the wings, and this would prove to be an equally bad idea (Chapter 15).

#### *The Reservation Extensions in 1876 and 1879*

Closely related to the proposals for removal were renewed calls for enlarging or extending the existing reservation. Nothing had come of this in 1870-71 because Congress refused to act, even after a survey of the proposed boundaries and a report on the claims and improvements within this extension. After Frederick Grossmann left office, there was no one to push for enlarging the old reservation because the new agent, John Stout, favored removal to Indian Territory. The government took no action with respect to the Indians' claims to land or their prior rights to water.

In 1874 the Indians had plenty of water and even the younger ones stayed home and farmed. The Commissioner suggested that the Pimas and Maricopas be allowed to make homestead entries. The river was dry again in the summer of 1875 and the old problem with the white settlers east of the reservation using more and more of the water reemerged. Stout proposed digging a canal across the Island of the Gila just west of the eastern line of the reserve to bring water from the Gila River itself into the Little Gila, where it could be used for irrigating (Ann. Rpt. Comm. Ind. Affs. 1874: 60, 292-293; 1875: 214). Neither idea attracted any interest by higher officials.

Indian Inspector Edward Kemble visited the reservation in November 1875 and between the water shortage, drunkenness and prostitution among the Indians, a failing school system, loose management of financial affairs and the agent's recurrent illness, the agency was in a shambles. Kemble blamed Stout's incompetence and recommended that he be retired and replaced. On the heels of his inspection came petitions from settlers at Phoenix along with individual requests that the Pimas and Maricopas be confined to their reservation instead of being allowed to roam at will and occupy lands in the county "to the great damage and inconvenience of the people" (Kemble to Smith, January 21, 1876; Parker to Comm. Ind. Affs., January 26, 1876; John Vinyard(?) and others to Comm. Ind. Affs., January 27, 1876; Oury and others to Comm. Ind. Affs., February 4, 1876; Trennert 1986: 65-66).

Commissioner Edward P. Smith relieved Stout in March of 1876 and promptly appointed Charles H. Hudson in his place. The new agent came from New York and entered upon his duties at the Pima agency on May 1<sup>st</sup> (Hudson to Comm. Ind. Affs., March 3, 1876; Ann. Rpt. Comm. Ind. Affs. 1876: 6). Hudson wrote two long reports, both dated May 31, 1876 that covered such a range of subjects, problems and recommendations as to suggest that he was a trouble-shooter. In one report he reviewed the Pimas' water problems and made specific recommendations for extending the reservation to include some 9,200 acres that the Indians already occupied, upstream from the present reservation boundary. The settlers appropriated water "without a thought of the Indians' rights" while their use of it "is often accompanied by great waste." A reservation extension he saw as a temporary measure that would involve no government expense or have any effect on settlers' rights, and at the same time meet the probable wants of the Indians for several years to come. He did not discuss relocation (Hudson to Smith, May 31, May 31, 1876).

Three months later, Hudson wrote in his only annual report that most of the Indians were on the reserve. Others lived near the Salt River and used the return water from the settlers' ditches, and about 200 families had found good land and more water on what were called the Blackwater lands, where they were living quietly. He revised his earlier recommendation slightly, now saying that the addition of the latter to the reserve was the easiest solution to the problem of a water supply for the Indians, until they could form a more intelligent view of their own best interests and consent to removal. That same day President Grant signed an Executive Order that added some 9,000 acres of land to the Gila River Indian Reservation. This brought nearly all of the Little Gila River, Blackwater Slough and Blackwater Village within the reserve (Ann. Rpt. Comm. Ind. Affs. 1876: 7; Nicklason 1976: 631-632; Dobyms 1989: 52).

As one student observed, Grant's order changed nothing (Nicklason 1976: 631-632). The conflicts along the Salt River were not even mentioned. The government conceded to the Indians the lands that they were already cultivating, with the water that they could divert for irrigation. The order added good agricultural lands to the Pimas' holdings but did nothing to improve their access to water since the settlers' ditches all lay farther upstream. Irrigators at Adamsville

and Florence could still draw water from the river without restriction or any requirement for sharing it.

Hudson resigned after six months and Stout was reappointed, first as a temporary agent and then in February 1877 as the regular agent. In his 1877 report, Stout conceded that the Blackwater addition secured to the Indians what they already had, about 9,000 acres of land that was better watered than that farther downstream, "an act of justice and wisdom that came none too soon, as it is a wonder these lands were not already occupied by settlers" (Ann. Rpt. Comm. Ind. Affs. 1877: 32; Trennert 1986: 67).

Stout was able to claim a bit of credit in the second and much larger reservation extension in 1879. This came about when a group of settlers, "perhaps sixteen," decided to file on lands along the Salt River where the Indians had already cleared, fenced and brought irrigation water to lands where they now had flourishing farms. The Indians knew nothing about the white man's land entry systems, but they made serious objections to giving up these lands. The reservation would not support them and they had no other place to go (Stout to Hayt, November 29, 1878).

At the same time, Captain Adna Chaffee at Camp McDowell, acting under orders from the Department Commander, investigated allegations made by a Grand Jury of Maricopa County against Pima Indians located on the Salt River. In addition to charges of trespassing and destruction of property, mostly involving livestock, nine men complained to Chaffee that the Pimas were occupying land north of the Salt River that did not belong to them and asked for immediate removal of the Indians.

Chaffee walked into the situation that Stout had just described. In the captain's opinion, this was "nothing more nor less than a legal steal of about a thousand acres of improved land" from the Indians, the result of nearly seven years of labor (Chaffee to A.A.G., November 24, 1878). Captain Chaffee went into considerable detail with his findings. The Pimas on the Salt River opposite Tempe last season raised more than 300,000 lbs. of wheat and that settlement had about 1,000 Indians; men, women and children. On the south side of the Salt River "in the vicinity of the Mormon settlement" were twenty-eight Maricopa families, cultivating land there. Twelve miles below Phoenix on the Salt, fifty-one families of Maricopas had 300 acres under cultivation. The citizens were not complaining about these other communities. The captain suggested that a reservation be declared on the north side of the Salt River that would include the lands developed by the Indians and, since the valley had already been surveyed into townships, he included an excellent map that showed the proposed reservation extension (Ibid.).

Chaffee's suggested solution went beyond anything that the Indian agent had said or ever dreamed of, although in the end Stout asked that the lands improved by the Indians be added to the reservation, temporarily or otherwise (Stout to Hayt, November 29, 1878). When the captain's report arrived in Prescott, Departmental Commander Orlando Willcox added his own forceful and eloquent endorsement to Chaffee's report - "I fully endorse Capt. Chaffee's recommendation." Willcox correctly identified the root of the problem: the

Indians were deprived of water to which they were fairly and legally entitled (Willcox to A.A.G., December 3, 1878).

In San Francisco, Major General Irvin McDowell had commanded the Department of the Pacific since 1864 and he had not forgotten the Pimas. He wrote not one but *two* endorsements. One urged establishment [i.e. enlargement] of the reservation; the other asked that the government take the necessary steps to reinstate the Indians in their rights "to the water they have heretofore used on their farms on the Gila" (McDowell to Adj. Gen. U.S. Army and McDowell to Sherman, both December 26, 1878). In Washington, General Sherman passed this growing file to the Secretary of War, who handed it to the Secretary of the Interior. He promised to come to "some conclusion" in the next month (Sherman to McDowell, December 26, 1878).

The conclusion was President Hayes' Executive Order of January 10, 1879, that set apart more than twenty-two townships with about 5,000 white settlers, the town of Phoenix, and the settlements along the south side of the Salt River for the use of the Pima and Maricopa Indians. This had some interesting implications since it was clearly intended to address the problem of Indian water rights. It also set off an almighty howl in Arizona, since it clouded land titles and blocked any new land entries in an area two miles wide to either side of the Salt River, extending eastward from its mouth to the White Mountain Apache Reservation (Nicklason 1976: 636-642; Dobyns 1989: 54-57; DeJong 1992: 389).

Perhaps it was a rare instance of the army and the Interior Department working together that led to the swift proclamation and sweeping inclusiveness of this Executive Order. It went far beyond anything that Captain Chaffee, John Stout or the Pimas themselves ever asked for. It was indeed too inclusive, and the weak link in this chain of events was that white settlers voted, while Indians did not. In consequence of the Desert Land Act of 1877 and the impending arrival of the Southern Pacific Railroad at Maricopa Siding, land speculators in the Salt River Valley were awaiting trainloads of new farmers. If the only lands suited for agriculture were part of an Indian reservation, there would be no land rush.

When the protests and political problems ballooned after publication of the January 10, 1879 Executive Order, Indian Inspector J.H. Hammond was dispatched to Arizona to investigate and report the true state of affairs at the Pima agency to the Interior Secretary. In his report of March 8, 1879 and the excellent map that accompanied it (NA RG75-CMF-659), Hammond located the fields and settlements of the off-reservation Pimas and Maricopas. The distribution that he showed was not much different from what Captain Chaffee reported the previous November, but the numbers were higher.

On the north side of the Salt River opposite Tempe, Hammond found 1,000 acres being cultivated by 240 families with some 1,300 persons. On the south side of the Salt near the Mormon settlement (Mesa) there were 375 Pimas in forty-seven families, farming 400 acres. Chaffee had reported the Indians there as Maricopas. Along the Gila River, upstream from its junction with the Salt, some 1,300 Pimas living in 230 families cultivated 1,200 acres on the north side of the river. This was the Gila Crossing District, settled in 1873. On the south side of the Salt just above its debouchment into the Gila lay the Maricopa fields and

settlement: 300 persons and forty-three families in what would come to be called the Maricopa Colony, farming about 400 acres (NA RG75-CMF-659; Russell 1908: 54; Dobyys 1989: 56-57).

President Hayes used the new information to issue another Executive Order on June 14, 1879, canceling the previous one and creating two noncontiguous reservation areas with a greatly reduced acreage. One of the new tracts, known today as the Salt River Reservation, included most of what Captain Chaffee had originally proposed: the Pimas' fields on the north side of the Salt River, south of Camp McDowell. The second parcel expanded the original Gila River Reservation northwestward along the north bank of the Gila River as far as the Salt, then extended four miles up the latter stream. This included both the Pima community at Gila Crossing and the Maricopa Colony on the Salt River (Chaffee's fifty-one families).

Unfortunately for the Pimas, the new order effectively eliminated the requirement for the government to provide the tribe with comparable water rights on the Salt River until settlers returned the water the Indians needed from the *Gila* River (Nicklason 1976: 640-642; Hudanick 1983: 79-81; Dobyys 1989: 54-57). With the 1876 and 1879 additions, the Gila River Indian Reservation increased in size from 64,995 acres in 1876 (the acreage calculated when Theodore White resurveyed the 1859 reservation boundaries) to 155,400 acres after 1879 (Ann. Rpt. Comm. Ind. Affs. 1879: 246; 1880: 258).

John Stout remained at the Pima agency until August 1879, still technically a representative of the Dutch Reformed Church. The Indian Peace Policy was long since dead on the Gila River Reservation and Commissioner Hayt removed Stout as part of an effort to oust church-related people from the Indian agencies.

Other events in the decade between 1869 and 1879 that would have made headlines at the time included the arrival of the military telegraph at Maricopa Wells in 1873 (Rue 1967; Faulk 1973: 166-170), the murder of a man thought to have killed a trader at Sacaton (Roberts 1983), and the Pimas' summary execution of a Mexican who killed Antonio Azul's son (Ann. Rpt. Comm. Ind. Affs. 1873: 281-282; Willson 1958). A feud spun out of hand and became the so-called Blackwater War of 1879 (Russell 1908: 56-57; Cook 1976: 134-136). In the following decades, life on the reservation would slip further towards the lowest denominator of simple survival, and native authority systems would be replaced almost entirely by the Indian agency.

## Chapter XIII

### NEW ERA IN INDIAN AFFAIRS, 1880-1900

#### *From Steamboats to Railroads*

From the days when Arizona south of the Gila was still a part of Mexico, goods had been offloaded from ocean-going vessels into shallow-draft steamboats



at the mouth of the Colorado River, then transported upriver to Fort Yuma and the river ports beyond. Yuma was the port of entry for supplies to southern Arizona, while La Paz and Ehrenberg farther upstream served the same purpose for Wickenburg and the gold camps around Prescott. Great high-wheeled freight wagons carried huge loads eastward as far as Tucson, at rates usually between 22¢ and 40¢ per ton-mile but which could range much higher. In the first decades of Arizona's territorial years, Maricopa Wells served as the transportation hub for a network of wagon roads and as the central point for the military telegraph lines (Barney 1941: 15; 1955: 63-67; Walker and Bufkin 1979: 39; Myrick 1981: 20-21; Miller 1989: 372-373; Sheridan 1995: 62-63, 71).

This system changed when the Southern Pacific Railroad Company of California began to lay tracks eastward from Los Angeles. On the last day of September in 1877, the construction train crossed the Colorado River on a new bridge and rolled into Yuma, Arizona. The advance halted there for almost eleven months, until a separate Southern Pacific Railroad Company was incorporated under Arizona laws. Grading and track-laying resumed in November 1878, generally along the route of present-day US 80 and Interstate 8. By April 1879 the rails had reached Gila Bend, from which point they continued in the path of the old wagon road through the Sierra Estrella at what was called Maricopa Summit.

After exiting the mountains, the line bore towards the southeast and the new townsite of Maricopa about seven miles south of Maricopa Wells. Service to Maricopa began on April 29, 1879 and both this community and Casa Grande, twenty-six miles beyond Maricopa, became transfer points for goods and people. The Maricopa siding served Tempe, Phoenix, and at a later date, Prescott. The maximum freight rates were expensive at 15¢ a ton-mile, but even so came to less than the charges by wagon freighters. Railroads with high volumes of freight traffic could reduce their prices (Myrick 1981: 26-42, 75, 155, 194). Rail building continued to Tucson and beyond, while wagons continued to provide direct service to most of Arizona's communities. Maricopa Wells had been bypassed and its importance faded.

The Southern Pacific skirted the Pima and Maricopa Indian Reservation and so far as known none of the natives there found employment in building this railroad. Steel came from the eastern United States, redwood crossties from California, and the laborers were Chinese, so there was no need for anything from Arizona. The Pimas and Maricopas might have displayed little interest anyway, if the opportunity had been offered to them. The Gileños enjoyed scouting for the army and viewed that as a far better way to earn a living. The army paid them one dollar per day, the same wages as the Chinese workers on the railroad received (Grossmann to Andrews, October 31, 1869; Myrick 1981: 36). Nonetheless, 400 Pimas found jobs for a short time doing grading for a railroad that was never built, the Arizona Central (*The Railroad Gazette*, September 24, 1880, p. 511).

Possibly as a kindness, the Southern Pacific allowed Indians to ride free on its freight trains, a practice that continued into the 20<sup>th</sup> century. The Pima agent opined that this was to place them under obligation to report any washouts

or intentional obstructions along the road. The natives however took to boarding the train at different stations with their wheat, which they carried to Tucson and sold there. With the proceeds they bought liquor, and the summer of 1884 saw six Pimas killed by being knocked off of trains when drunk and run over (Ann. Rpt. Comm. Ind. Affs. 1883: 6; 1884: 6; Russell 1908: 59).

The Thirteenth Legislative Assembly, meeting in 1885, authorized construction of a railroad that would connect the growing city of Phoenix (not yet the capital of Arizona) to the Southern Pacific. This line, the Maricopa and Phoenix Railroad Co., was put together by the financial agent for the Southern Pacific. In a cliffhanger, construction began in October of 1886, on the last day before the deadline for starting work. The route had to cross their reservation, and initially the Pimas and Maricopas refused to grant permission. Arizona's delegate to Congress succeeded in getting a right-of-way bill passed and the railroad brought in bags of silver to pay the Indians, assembled under the cottonwood trees at a railroad camp, for the necessary land. The twelve Indians with cultivated fields received \$707.90 for the value of their lands and crops (Wagoner 1970: 214-215; Myrick 1980: 500).

The Maricopa and Pacific Railroad was completed into Tempe and then reached Phoenix on July 4, 1887. During its life, this line suffered numerous problems, particularly with washouts that halted operations for weeks and even months at a time. The Gila River was reported as twenty-five feet high at the railroad bridge (i.e., Sacate) in the great flood of 1891. February 27<sup>th</sup> saw the river make a horseshoe bend north of the bridge and destroy 2,400 feet of track. Service was restored there over a new bridge on May 9<sup>th</sup> (Myrick 1980: 503-512).

The Maricopa and Pacific did built a railroad siding known as Sacaton Station or Sacaton Siding on the south side of the river crossing, but this line apparently brought little benefit to the reservation. Initially the trains hauled construction materials, foodstuffs and beverages to Tempe and Phoenix, together with other supplies for the mines and ranches. Later (1891) the inbound freight included wagons and farm machinery, emigrants' outfits and carloads of lumber, while traffic in the other direction consisted of grain, hay and cattle from the Salt River Valley (Myrick 1980: 504-513). As recently as 1906, Casa Grande served as the railhead and telegraph station for Sacaton, with a stage that carried mail and passengers connecting the two towns (Ann. Rpt. Comm. Ind. Affs. 1906: 187).

The railroads allowed Arizona produce such as fresh fruit, raisins and cattle to reach a wider market, while also permitting Arizonians to import cheaper hay and grain from southern California. Some of the old-line Arizona mercantile companies could not compete with cheaper goods brought in by rail, and went out of business. West Coast lumber, of superior quality and at a lower price, reduced southern Arizona's sawmills to supplying mines, ranches, and smaller agricultural communities. Local farmers faced stiff competition and declining prices, as reflected in the nearly steady decrease in the value of flour contracts for Camp McDowell. Between 1869 and 1885, the Arizona residents who supplied that post saw the price they received for flour reduced from 9.25¢ to 2.27¢ per pound (Rpt. of Gov. of Ariz. 1888: 7-10; 1889: 7; 1891: 11-15; 1892: 8-9; Miller 1989:

304-305, 370-371; Wilson 1995: 213-214). With the prices prevailing after 1880, the Pimas had been better off back in 1859, when they sold their wheat to the Overland Mail Co. for two cents per pound. Nearly everyone had from fifteen to twenty-five dollars in their pocket then (St. John to Greenwood, September 16, 1859; Ann. Rpt. Comm. Ind. Affs. 1859: 351).

*Agriculture on the Reservation, 1880-1900*

We saw in Chapter 11 that the Annual Reports of the Commissioner of Indian Affairs began to include statistical tables in 1867. The tables emphasized so-called civilizing measures and educational progress, as well as productions in agriculture, and gradually became more elaborate until they ceased in 1905. Economic data can provide a rough estimate of Pima and Maricopa well-being, and agricultural figures for the years 1880 through 1906 are retabulated as Table 6.

There are some problems with relying upon these numbers. Only a few of the entries, those for 1887-88 and 1894, appear to be limited to the Pima and Maricopa Indian Reservation. Most of the figures were for Indians administered by the Pima agency, which included the Salt River, San Xavier and Gila Bend Reservations as well. For more than half of the entries in Table 6, Papago agricultural productions and acreages were combined with those of the Pimas and Maricopas as a single statistic, although population figures were stated separately. The Papagos described as "homeless" lived outside of any reservation while those who received allotments at San Xavier in 1890 and a small number at Gila Bend did have reserves. The extent to which Papago crops may have skewed (i.e., increased) the totals is not measureable, but their harvests appear to have been much smaller than those of the Pimas. In some years the agent reported the numbers of Pimas, Maricopas and Papagos on each reservation, and the estimated numbers off the reservation, but the cultivated acreages and amounts of produce or livestock were never listed by reservation.

Another problem is that nearly all of these figures were estimates, as agent Roswell Wheeler pointed up in his 1882 report:

"The wheat crop this year is estimated at from 30,000 to 35,000 bushels. It is impossible to obtain accurate statistics as to the amount of wheat raised as well as other farm products, for the reason that the Indians have sold so much of it off of the reservation and to others beside the traders and regular dealers"  
(Ann. Rpt. Comm. Ind. Affs. 1882: 9).

Year	Popula- tion	No. acres cultivated	Wheat (bu.)	Corn (bu.)	Beans (bu.)	Barley (bu.)	Cords Wood	Hay (tons)	No. of Horses	No. of Mules	No. of Cattle	No. of Chickens	No. of Melons	No. of Pumpkins
1880 <sup>1</sup>	5,000	7,300 <sup>2</sup>	40,000	50	150?	10,000			2,000	15	1,000			
1881 <sup>1</sup>	5,000	7,990 <sup>2</sup>	50,000	150	200?	5,000		150	3,500	15	2,000			
1882 <sup>1</sup>	4,239	5,200	35,000		800?	1,500	85	25	5,000		500	2,000		
1883	5,374 <sup>3</sup>	12,125	1,263,225	15,696	9,126	10,709		25	14,974	4	1,080	10,800		
1884	5,374	13,250	340,000	16,275	6,500	11,250			15,800	4	1,200	4,000		
1885	5,050	15,200	210,000 <sup>3</sup>	10,250	5,500	10,000	150 <sup>1</sup>	25	3,600		1,300	10,000	460,000	275,000
1886	5,050 <sup>3</sup>	16,200	401,000 <sup>4</sup>	10,250	5,500	12,500	100	50	4,150	75	1,475	11,500	460,000	50,000
1887	3,400 <sup>5</sup>	10,000 <sup>1</sup>	80,000	5,000	6,600?	25,000	200	100	5,500		5,000	20,000	20,000	10,000
1888	3,400	8,400	80,000	2,700	2,625?	30,000		100	2,800		2,250	13,000	25,000	10,000
1889 <sup>1</sup>	4,518 <sup>3</sup>	8,500	108,000	3,600	3,325?	36,000		150	6,700		6,500	15,000		
1890	4,736 <sup>6</sup>	6,000	90,000	3,000	2,480?	24,000		150	2,800		1,700	4,000	21,000 <sup>7</sup>	13,000 <sup>7</sup>
1891 <sup>8</sup>	4,695 <sup>6</sup>	8,600	96,000	5,200	2,780?	25,000	200	200	2,320		1,600	4,000		
1892	4,430	8,000	90,000	5,500	7,025?	20,000	300	150	2,250		2,150	5,000		
1893	4,200 <sup>9</sup>	9,100	56,000	3,000	2,400?	20,000	350	240	3,025		2,100	4,000		
1894	3,500 <sup>10</sup>	3,000	42,000		500?	20,000	1,000		4,100		5,000	4,000		
1895 <sup>1</sup>	3,926	4,890	70,400	500	1,515?	550	4,000	330	4,640		6,000	6,000		
1896 <sup>1</sup>	3,967	3,000	50,000		500?	1,250	1,500	100	7,400		5,000	4,000		
1897 <sup>1</sup>	4,600	3,000	50,000		500?	1,250	1,500	100	7,400		5,000	4,000		

1898 <sup>1</sup>	4,600	3,000	116,667		500?	1,152	1,500	100	7,400	5,000	4,000
1899 <sup>1</sup>	4,600	4,000	33,334	1,072	650?	1,154	5,000	600	7,450	5,000	5,000
1900 <sup>1</sup>	4,695	4,000	12,500	180	208?	480	19,000	150	7,250	4,500	5,500
1901 <sup>1</sup>	4,750	6,000	25,000	36	25?	417	11,000	100	6,300	4,000	5,000
1902 <sup>1</sup>	4,750	4,000	16,667	18	12?	288	14,896	75	5,280	4,000	5,000
1903 <sup>1</sup>	4,810	5,000	41,666	18	504?	385	10,600	100	5,500	4,400	5,500
1904 <sup>1</sup>	4,243	10,270	10,000	500	500?	2,000	5,300	50	5,020	3,900	6,000
1905	4,250		30,000 <sup>3</sup>		"summer crops - corn, beans, melons, etc., are short"						
1906	4,280		150,000		"summer crops - corn, beans, pumpkins, melons, etc. - did not amount to much"						

**Population and Agricultural Productions of the Pima and Maricopa Indian Reservation, 1880-1906**  
(primarily from Annual Reports of the Commissioner of Indian Affairs)

**Table 6**

Notes: <sup>1</sup>Excludes Papago population figures but includes Papago productions

<sup>2</sup>Papagos cultivated 2,500 acres in 1878-79

<sup>3</sup>Estimate

<sup>4</sup>Overestimated, per 1887 Annual Report

<sup>5</sup>Census; on Gila River Indian Reservation only

<sup>6</sup>Census figure

<sup>7</sup>From 1890 U.S. Census

<sup>8</sup>3,000+ living on Gila River Indian Reservation

<sup>9</sup>Almost 3,500 Pimas living on Gila River Indian Reservation

<sup>10</sup>Plus 638 living on Salt River Reservation

Except for the years 1883-86, the produce listed in column six was reported as "Bushels of Vegetables." Only in 1883-86 was this returned as beans.

This is not as serious a problem as it might appear, since reliance upon estimates is still the normal practice in agricultural reporting. No one said how much of the wheat was sold and how much consumed by the natives themselves.

The reliability of these statistics depends also upon the competence of the persons who made them. This we do not know. In 1887, 1890, 1891, 1893, 1894 and some of the later years we are told that the numbers represent actual census figures for the population. Perhaps the agricultural figures for those years were also based upon actual examinations rather than estimations (but 20,000 chickens?). Occasionally something in a later report will say, as for 1886, that the wheat crop was overestimated. The entire block of agricultural figures for 1883 through 1886 appears, from the size of the numbers, to have been exaggerated. The new agent in 1887 wrote a few pithy sentences about his predecessor's practice of inflating the figures for agricultural production year by year. Instead,

"Intelligent men who have lived as neighbors of these Indians for twenty years past inform me that their crop of to-day is no larger and the grade no better than twenty years ago" (Ann. Rpt. Comm. Ind. Affs. 1887: 4).

Finally, the composition and format of the tables changed over the run of thirty-nine years. People probably grew melons and pumpkins every year, but only from 1885 through 1888 were these tabulated. The first listings for chickens dated from 1882, but they may have been raised as far back as the Mexican or even the Spanish period. Similarly, the lack of an entry does not necessarily mean that no corn, beans or hay was harvested on at least one reservation. Textual comments occasionally referred to productions not listed otherwise. In summary, while these figures are far from perfect, they are the best that we have and provide a crude scale for judging how well the Pimas and Maricopas were doing in the last decades of the nineteenth century.

#### *What Happened to the Water in the Gila?*

Another look is needed at assertions that the Pimas and Maricopas suffered forty years of drought, forty years of famine, or a time of desperate conditions from 1871 to around 1910 (Hackenberg 1955: 42-73; Ortiz 1973: 252; Ezell 1983: 158-160; Dobyns 1989: 62). The late Paul Ezell (1994) began this reexamination. One way to continue it is by first reviewing the reasons alleged for the shortage of irrigation water. Next, the reported crop statistics can be compared with contemporary accounts to see what changes, deficiencies or competitive pressures Pima farmers now faced that they hadn't before.

The reduction and occasional absence of Gila River water for irrigation became a matter of continuing complaints on the reservation from the late 1860's. Except in times of flood, the Gila often emerged at *shons* or springs in the riverbed. Water then flowed for variable distances before it sank into the sand again. At Gila Crossing, settled in 1873, the return flows from farmers' fields or drainage ditches upstream supplied the water. An old problem here was that after

a heavy flood, the return flow usually reappeared in entirely new locations (Southworth 1919: 139).

Even when a dry riverbed was reported, crop figures indicated that water was almost always available somewhere. Only in 1871 was there anything approaching a complete crop failure, although in 1878 the river remained dry from May until December and the western end of the reservation lacked even drinking water (Nicklason 1976: 634). These conditions helped lead to a reservation extension in 1879, but even so the crops were short again that year. In 1880 the agent distributed wheat to destitute Indians for the first time (Ann. Rpt. Comm. Ind. Affs. 1880: 4; Southworth 1919: 13; Nicklason 1976: 642).

Unfortunately, evidence on the amount of water available for agriculture during the late 19<sup>th</sup> century is almost entirely anecdotal. For example, in 1873 agent John Stout said "The water question is with us an almost threadbare subject. .... the want of which [water] has been more severely felt this year than ever before". On the western part of the reservation the river had been entirely dry for almost three months and in many fields the wheat and barley were virtually a failure from the want of water (Ann. Rpt. Comm. Ind. Affs. 1873: 281). While corn and beans (the fall crops) failed almost completely that year, the natives did manage a low-average harvest of wheat (40,000 bushels) and barley (4,000 bushels) (Table 6).

In 1896, agent J. Roe Young stated that "Nothing new can be said on this important subject [irrigation]. .... enough has been written about the need of water for the starving Indians to fill a volume" (Ann. Rpt. Comm. Ind. Affs. 1896: 115). Rev. Charles Cook said that some villages could not raise any grain (*The Church at Home and Abroad*, June 1896, p. 481). The wheat harvest had amounted to 50,000 bushels (including the Papago crops) and there were 1,250 bushels of barley together with 500 bushels of vegetables (probably beans) but no corn. This was a decline from former years, but with the population roughly the same, it was probably an exaggeration to allege that people were starving.

In 1897, reporting identical figures, the agent wrote that the wheat crop was about four times as great as in former years and sufficient to feed everyone (Ann. Rpt. Comm. Ind. Affs. 1897: 108). While not quite contradictory, these differences between claims of famine or destitution and the reported size of crops the same year indicate that something may be lacking in the argument that Indians were no longer able to provide their own subsistence because they lacked water.

Many writers have attributed the problem of the Pimas and Maricopas to the settlers upstream improperly diverting water from the Gila River; water that the Indians could have used beneficially and which had formerly flowed to their ditches and fields (Ann. Rpt. Comm. Ind. Affs. 1885: 3-4; 1888: 6-7; 1890: 5, 7; 1894: 104; 1896: 115; Ortiz 1973; Nicklason 1976; Hudanick 1983; Dobyns 1989; Thomsen and Eychaner 1991: 6-7; Ezell 1994). If this was the cause of the Indians' water shortage, then laws and precedents existed that might have been used to reduce or stop the diversions. Because Indians were wards of the government and had no legal standing in the courts, they could not take action on their own behalf (although an Indian who was a citizen probably could have). Nor was there anyone other than the Indian agents to advise them. Some of these

agents spoke up, but the government still declined to enforce the Indians' priority rights to water; white laws were not applied when it appeared that Indians might benefit from them (Nicklason 1976: 621-622, 627-628, 634, 645-646; Dobyns 1989: 57). This was a situation that would neither resolve itself nor go away.

The U.S. Geological Survey entered this picture as early as 1886, in response to an Indian Inspector's skepticism that the Florence Canal, a huge diversion planned to take the water from the Gila River above the town of Florence, would benefit the Indians. The Geological Survey found that "If the agriculture of the Indians now on the Reservation is to have normal growth, .... the greater part, and perhaps the whole of the waters of the Gila will be necessary therefor" (Nicklason 1976: 646-647). This might have ended the debate, but the USGS was a new agency only six years old and the answer was not one that anyone except the Commissioner of Indian Affairs and the Indians themselves wanted to hear.

The Florence Canal Company offered to stipulate that it would not diminish the amount of water that the Indians currently used. The USGS had already determined that the Pimas and Maricopas could use more water, and this could only be obtained by constructing a dam and reservoir higher up on the Gila, with canals to bring the water to the reservation (Nicklason 1976: 647-649). The demand for water already exceeded the supply. The U.S. Attorney recommended acceptance of the company's resolution and suggested an immediate determination of how much water the Indians were *then* using. Nothing happened, and in 1891 his successor urged an investigation to ascertain how many acres the Indians cultivated and the amount of water they used. With respect to the normal flow of the river, the USGS already had an answer on this matter:

"The water which perennially flows in this stream [the Gila River] is all appropriated now by the white settlers above the reservation (Nicklason 1976: 657-659).

No one tried to contradict this, but the Commissioner of Indian Affairs was looking to avoid litigation. He embraced the idea that to guard the Indians' rights or determine if these had been violated, he had to quantify them. The point had finally sunk in that in order to have a water shortage regarded seriously, one had to identify the source of the problem *and* measure the amount of the supply. The Commissioner therefore directed the Pima and Maricopa agent to hire a civil engineer, Lewis Hicks, who would measure the number of acres the Indians irrigated and deduce the amount of water they were entitled to by prior appropriation. Because Hicks' services were not authorized in a timely manner, this remained undone (Nicklason 1976: 659-660).

The usual means of measuring the amount of water available was to gauge the flow of a stream in miner's inches or second-feet. Water stored in a reservoir or needed by farmers was calculated in acre-feet. Not until 1888 was the flow in the Salt River gauged for the first time. The quantity of water in the Gila was first measured in 1889-90 and then in 1895-99, at a site twelve miles above Florence



known as the Buttes (U.S. Census 1894a: 27-30; Palmer 1919: 245; Thomsen and Eychaner 1991). These data provide our only early information on stream flow in the Gila River, but they were not used to quantify the Indians' water rights or determine whether upstream diversions had deprived them of these rights.

Through the 1880s and 1890s the Indians, the Indian agents, the USGS and some engineers laid the problems of the Pimas and Maricopas to whites usurping their water rights. Three other engineers in the early 20<sup>th</sup> century agreed (Olberg and Reed 1919: 23; Palmer 1919: 242-243). Some of this diversion occurred well above the Florence area, at Pueblo Viejo in the present Safford Valley, where five canals had been dug at various times in 1873. An estimated 70 percent of this water was returned to the river through seepage and return flows (Olberg and Reed 1919: 40; Palmer 1919: 241-243; Southworth 1919: 163-166).

The government continued to back off from filing suit against white appropriators, even when the Commissioner wrote that allowing the whites to turn aside and employ the water supply for their own use was "pauperizing" the hitherto self-supporting Pimas (Ann. Rpt. Comm. Ind. Affs. 1890: 248). In his 1904 Annual Report, the Commissioner documented the deteriorating condition of the Pimas since 1886 due to the increasing scarcity of water, with the government's inadequate responses (Ann. Rpt. Comm. Ind. Affs. 1904: 7-21). Nicklason (1976: 642-679) used many other archival sources to trace the controversy, unfortunately giving no endnotes. Hudanick (1983: 230-250) looked at the 1880-1900 period from a legalistic perspective, while Smith (1981) focused upon efforts to obtain a Federal reclamation project.

For two decades, one government study followed another, and through them all no one questioned that the Pimas suffered from the lack of a reliable water supply. Complaints and studies alike focused upon this single point. There was however a second opinion on the *cause* of this water shortage, argued by Representative and later U.S. Senator from Arizona, Carl Hayden. Hayden (in U.S. House 1924, reprinted as U.S. Senate 1965a) used historical sources as 'witnesses' as he sought to explain that overgrazing by livestock had removed the grass cover in the Gila watershed. This allowed precipitation to run off rapidly, eroding the landscape and converting the Gila into a floodwater channel. The Gila River, he said, had been so changed by overgrazing that without reservoirs to store its floodwaters, the stream was no longer dependable for irrigation (U.S. Senate 1965a: 58-59).

Hayden claimed that he used this argument initially to halt a lawsuit, on behalf of the Pimas, against all appropriators of water on the Gila above their reservation. He said that this was in their best interests; as a native Arizonian born in 1877 he knew the futility of lawsuits over water rights and sought to avoid another one that would enrich the lawyers while bringing no practical benefit to the Indians (U.S. Senate 1965a: 58). Clearly, he did not want the rights to the waters of the Gila adjudicated. His view was also self-serving in that it absolved the non-Indian irrigators who elected him to office from any blame for water shortages on the reservation. The Pimas could not vote before 1948.

Hayden's role in the events that led up to creation of the San Carlos Irrigation Project is not clear and probably deserves a dissertation (Hudanick

1983: 448). He did help to keep the Pima issue before Congress through hearings and investigations, one of his first committee assignments (in 1912) being to the House Committee on Indian Affairs (U.S. Senate 1965a: 58; Hudanick 1983: 449). Some give him most of the credit for the Coolidge (originally San Carlos) Dam and reservoir (Introcaso 1986: 53-54; Pfaff 1994: 15-16). Others give the credit to effective and intensive lobbying by the Presbyterian Church, General Federation of Women's Clubs, Indian Rights Association, and the Reverend Dirk Lay of Sacaton (Robinson n.d.; Hackenberg 1955: 63-66; Dobyns 1989: 79-80; 1994a: 104).

In his 1964 epilogue, Hayden recognized that the original project had its shortcomings, but his argument as to the cause of the Pimas' water shortage was badly flawed. When the San Carlos Irrigation Project was finally built, it delivered much less water than expected, with half or more of it going to white farmers (see Chapter 15). The average annual runoff of 215,000 - 217,000 acre-feet into the San Carlos Reservoir could not begin to match the engineers' estimated runoff figure of 460,000 acre-feet per year, recorded between 1899-1928, or the even higher estimate of the river flow upstream from the reservation in predevelopment times (Hackenberg 1983: 175; U.S. Senate 1965a: 93-94; USGS 1969: 494-496; Thomsen and Eychaner 1991: 1, 16). Hayden's explanation was so much wishful thinking. The reality was that storage of occasional floodwaters in a reservoir could never compensate for the real causes of the Pimas' water shortage: upstream diversions of the normal river flow.

All of the irrigators including the Pimas might have been better off if the waters of the Gila had been adjudicated and Coolidge Dam had never been built. Will Rogers, the leading social satirist of his time, assessed the political nature of the enabling legislation when he quipped, at the time Coolidge Dam was dedicated in 1930, that: "You folks got this dam built by using the Indians as an alibi" (Introcaso 1986: 55). As for the San Carlos Reservoir behind the dam, "If this was my lake, I'd mow it" (Tellman et. al. 1997: 102).

### *The Pima Food Supply Under Pressure*

With our knowledge that Pima and Maricopa farmers were now in a deteriorating situation from the standpoint of water, we can compare the reported crop statistics with contemporary statements to better understand the kinds of pressures these farmers faced that they hadn't had to deal with before. The first serious loss was their principal summer crop - corn. After 1871 no significant amount of corn was grown until the brief renewal of prosperity from 1883-1886. Thereafter corn dropped to the status of their third or fourth-ranked crop, roughly equivalent to vegetables/beans and much less important than either wheat or barley. After 1893 the corn crop totaled no more than 500 bushels, one-half peck or about four quarts per person, each year except in 1899. Beans, melons and pumpkins were also in light supply and for the same reason; the reduction or absence of water in the Gila during the summer irrigating season.

Between 1890 and 1915 the gauged flow of the Gila at the San Carlos dam site showed remarkably consistent mean figures for stream flow during all months

except the two driest ones of May and June. Very little of this water made it beyond Florence and Adamsville (later Sanford). With less water, one expects a poorer harvest or even none at all. Looking further, one sees that the number of acres cultivated and the reported size of grain harvests apparently showed no correlation with one another (Table 6). One reason for this is that a field that looked fair in January could become an entire failure by June if not watered (Ann. Rpt. Comm. Ind. Affs. 1899: 161). Yet we see that in 1890 when the agent said water was scarce and the Pimas would produce about half of the previous year's wheat crop (6 million pounds), he actually reported 90,000 bushels (5.4 million pounds), grown on 30 percent less acreage. The crop figure was confirmed by the 1890 Census (Ann. Rpt. Comm. Ind. Affs. 1890: 5; U.S. Census 1894b: 138). Cotton, which demanded the least amount of water per pound of crop, was no longer cultivated on the reservation (Jacob 1919: 240).

This left wheat and barley, grown during the winter and spring months, as the principal crops of the Pimas and Maricopas in the 1880s and 1890s. If one assumes that the Pimas ate two pounds of wheat per day as pinole or tortillas, and an average reservation population of 4,000, then a minimum of 50,000 bushels of wheat per year was needed just for subsistence. This is the same figure as an unidentified source told a California newspaper that the Pimas needed for seed and for their own bread (*San Francisco Chronicle*, August 28, 1892). This type of calculation is only an approximation. The reported harvest of 33,334 bushels (2 million pounds) of wheat in 1899 amounted to not more than half a crop and prompted the Pima agent to claim that "many a poor Indian will go hungry if the Government does not open its crib doors" (Ann. Rpt. Comm. Ind. Affs. 1899: 161-162).

### *Barley*

Since 1859, Indian agents had encouraged the Indians to raise barley as a feed grain and a cash crop. It was of course grown for forage and not for human consumption; in later years it would be raised as pasturage. In 1880 it finally became a major crop and the timing could hardly have been worse. Civilian contractors who supplied the army posts at Forts Lowell, Bowie and McDowell all received the lowest prices of the decade in 1879, as little as \$2.14 and even \$1.75 for a hundred pounds of barley (Miller 1989: 84).

Seventy-five years later, some Pimas who grew barley still received 2¢ a pound for their grain. In addition to the cost of the seed, they now had to pay for custom work, irrigation, combining, hauling, and for leasing the land they didn't already own; expenses that would have astonished their great-grandfathers. At best this provided a subsistence income, in either 1879 or 1954 (Hackenberg 1955: 132-136).

The statistics of agriculture for Arizona in the 1870, 1880, and 1890 U.S. Census volumes did not include the Pimas and Maricopas. Because they did not, these figures show us why the Pimas were no longer a significant factor in the economy of the territory. In 1870, Pima County (approximately equal to Pima + Pinal counties in 1880 and 1890) produced twice as much barley (54,997 bushels)

as wheat, and about 5,000 more bushels of corn than wheat (U.S. Census 1872b: 98-99). The failure of the census to list any farms in Yavapai County was an obvious error since the Salt River Valley above the Gila junction (i.e. the Phoenix area) then lay in Yavapai County (Walker and Bufkin 1979: 30-33). Newspaper accounts indicate that barley was a major crop in that area as well.

The Pimas on the other hand harvested more than thirty times as much wheat as they did barley in 1870 (Table 4). Although the Indians had been introduced to a cash economy more than twenty years before, they remained subsistence farmers, exchanging any surplus with traders on the reservation. They had a respectable corn harvest in 1870, 6,300 bushels, but because of the increasing upstream diversions of water during the summer, 1870 was the last time they raised any significant amount of corn for more than a decade.

### *Hay and Markets on the Middle Gila*

In 1880 barley was still the king of cereals in most of Arizona, with the barley acreage exceeding that of wheat by ratios of 1.3:1 to 1.4:1 in Maricopa County and in Pima + Pinal counties. Corn had slipped badly, but there was an important new crop - "Hay" - that now claimed 28 to 30 percent of the acreage devoted to barley in these counties (U.S. Census 1883: 212, 288). Hay was undefined; it could have meant alfalfa (also called Chilean clover, lucern, and other names in the mid-to-late 19<sup>th</sup> century), clover, timothy, barley grown for hay, sorghums, and even native grasses.

Hay in most cases probably meant alfalfa, and this increased rapidly in importance during the 1880s. Alfalfa was cut as forage and also used for pasturage, the demand for it measured by market prices. By 1890 the acreages of barley and wheat had decreased in the three agricultural counties while "Hay (all kinds)" had more than doubled the 1880 barley acreage in Maricopa County and exceeded the 1880 figure for barley in Pima + Pinal counties as well. Hay had become the principal cash crop. In the entire territory the amount of wheat raised now exceeded the total reported for the Pima and Maricopa Reservation by only 10,328 bushels (U.S. Census 1895: 356, 422).

The Pimas remained oblivious to these changing emphases. As we see from Table 6, they kept right on growing wheat as their principal crop, and from 1883 through 1894 they would have been about the fourth-highest producer of barley in Arizona as well, after Maricopa, Graham and Pinal counties (as shown in the 1890 Census). The value of wheat declined in company with that of barley. The Pimas had missed out on the shift to barley in the late 1860s, and on the move to alfalfa a decade later. Instead, they continued producing subsistence crops.

The reservation's farmers lagged to where they now stood at the margin of Arizona's economy. From the standpoint of the territory and the rest of the country, it no longer mattered what they grew or the size of their crops. The railroads brought in inexpensive flour of better quality than Arizona's mills could grind, and allowed growers at Florence, Casa Grande, and in the Salt River Valley to ship higher-value perishable crops such as grapes and semitropical fruits. The

Pimas and Maricopas lost out on this opportunity as well. Local newspapers documented these agricultural shifts.

To keep pace with the white man, the Pimas and Maricopas would have had to follow all of these changes, and because they did not, their economic role slipped badly. In all fairness, the Indians would never have been able to effect a major shift to alfalfa, in part because they still needed c. 50,000 bushels of wheat each year just to feed themselves, and also because alfalfa makes very high water demands. By the 1890s the reservation's farmers no longer had the water. When growers outside the reservation shifted to alfalfa they increased their water requirements several times, without expanding their cultivated acreage. This goes far to explain the increasing diversions and accelerated decline of Pima agriculture after 1893.

The Pimas did experiment with alfalfa, which had been grown in that area as early as 1872. The annual reports of the Pima agency for 1886 and 1887 mentioned that some fields had been sown, while in 1890 (a year of scarce water) about thirty farmers began sowing alfalfa seed. After that, alfalfa was noted as one of the crops on the seventy-acre farm at the Pima Boarding School, which raised some 500 tons of alfalfa hay in 1905 (*The San Diego Union*, November 21, 1872, p. 3 col. 5; Ann. Rpt. Comm. Ind. Affs. 1886: 38; 1887: 4; 1890: 8; 1892: 216; 1894: 106; 1896: 118; 1905: 175). Lack of a hay press (predecessor of the hay bailer) would have made it difficult to market the loose alfalfa in any case. Some thirty years later alfalfa would become the major crop on the reservation, thanks to water from the San Carlos Irrigation Project.

### *Wheat*

Farmers in wheat-growing areas normally sow a number of varieties. Through time, new varieties are developed or imported and old ones are neglected. In a discussion on the nature of wheat varieties, the 1880 Census noted that one such might be returned under several names and several under a single name, which made nomenclature undependable (Brewer 1883: 445-447). With the Pimas and Maricopas, our information about the nature of their principal crop is vague and even contradictory.

None of the early visitors or Indian agents described the Pimas' wheat in any way. In 1870 Captain Grossmann said that the Indians' main produce "consisted of wheat of a very inferior quality," almost the same language he used to characterize their cotton (Ann. Rpt. Comm. Ind. Affs. 1870: 119-120; Grossmann 1873: 419). Earlier he had called it "poor and flinty," and he gave the trader Wm. Bichard permission to supply the Indians with good seed wheat (Grossmann to Andrews, November 30, 1869). A later agent, Roswell Wheeler, also was not impressed;

"The variety of wheat which is cultivated is the same that has been grown by the Pimas so long that the oldest among them are unable to state where or when the seed was procured. The grain is white in color and rather small, and very dry and brittle. Mills object to

it on account of the latter quality, and are anxious to have the seed changed and the California wheat introduced, and give assurance that the new wheat would produce larger crops and bring higher prices" (Ann. Rpt. Comm. Ind. Affs. 1886: 38).

Wheeler had anticipated introducing a variety of wheat from California, "which is said to produce a larger yield and for which there is a demand at an increase of price over the variety which they have been raising." The flour millers in Arizona had been compelled "to procure it from that State [California] to mix with the wheat raised here, which is too dry to grind well alone" (Ann. Rpt. Comm. Ind. Affs. 1882: 8-9). Apparently the agent's plans were never realized.

In contrast, occasional references labeled their wheat as of excellent quality but gave no basis for comparison (Ann. Rpt. Comm. Ind. Affs. 1876: 7; 1883: 6). Dr. Edward Palmer, the army physician who almost became the Pima agent in 1871, praised their grain in this note from 1885:

"Pimo & Maricopa wheat are average (*sic*) about 2,000,000 lbs. a year. It is superior to that of their white neighbors on the Salt River, both in cleanliness and quality, and makes a better article of flour and commands a higher price" (Palmer "The Pima Indians..." p. 67).

Palmer also had some interesting observations on trade practices:

"When wheat is plenty in summer they buy black pants, white shirts, crackers, sardines, and coffee" (Ibid. p. 57).

The trader at Sweetwater allowed \$1.25 per 100 lbs., in trade, and \$1.00 per 100 lbs. in the winter, for wheat. The Maricopa Railroad Station [probably the Southern Pacific siding at Maricopa, Arizona] bought 80,000 lbs. for cash at 80¢ per 100 lbs. (Ibid).

Wheeler and Palmer wrote at almost the same time. The contrast in their accounts suggests that they may not have been writing about the same wheat varieties.

At the turn of the century, ethnologist Frank Russell said that four varieties of wheat were known to the Pimas, of which he named two: "Sonora" and "Australian" (Russell 1908: 76, 90). Castetter and Bell added that twenty years ago (i.e., c. 1922) the leading varieties among the Pimas were Early Baart, Sonora and Little Club, while in 1942 Early Baart, Sonora and Club comprised the bulk of the wheat grown by the Pimas. The Maricopas raised mostly the Early Baart variety, with Sonora ranking second and Australian wheat third (Castetter and Bell 1942: 116; 1951: 126). At about this time, agronomist George Hendry (1931: 111-112) undertook an intriguing and evidently still unique analysis of adobe bricks as a historical source. He discovered the remains of Propo and Little

Club wheat in the walls of Tumacacori mission in southern Arizona, as well as in the adobes from California missions.

Since Australian could pertain to a number of wheat varieties, all presumably introduced from that country, and the Baart wheats were developed in the late 19<sup>th</sup> century, these have little or no bearing on the wheat varieties grown by the Pimas in the 19<sup>th</sup> century and before. The other names are recognizable as soft, white wheats with spring growth habits, the Sonora scoring low in both gluten and protein content. They would be suitable for making tortillas and pinole but would yield inferior bread flour. The Propo variety, although common into the early 20<sup>th</sup> century, is no longer recognized (Clark and Quisenberry 1933; Castetter and Bell 1942: 116; 1951: 126).

None of these match the wheat that Roswell Wheeler said was too dry and brittle to grind well alone. This suggests that in addition to Sonora and possibly other varieties of soft, white wheat, the Pimas grew something that resembled a hard, winter wheat but lacked the qualities of a bread wheat. The soft, white wheats might have been responsible for the comments about the need to mix in California wheat. Milling apparatus was changing too, from the older gristmills that used pairs of grinding stones to more modern, mechanized mills that employed steel rollers. With the new equipment came a shift in preferences for the varieties of wheat (Brewer 1883: 447). The Pimas and Maricopas continued to grow the varieties suited for the foods they wanted to eat, but the sale of these brought only low prices because they were no longer in commercial demand.

The Pimas' ways of handling grain were also outmoded. The annual report for 1888 mentioned that they still threshed their grain by driving horses over it. There were no threshers or grain-fans on any of the reservations (Ann. Rpt. Comm. Ind. Affs. 1885: 5). By contemporary standards, this left their grain dirty. As late as 1903 the Superintendent of the Pima Training School said the Indian wheat was not bringing the prices it should because they had no fanning mills to clean it properly. Threshing it on the ground and cleaning it by throwing it into the air, so that the chaff would blow away, were very unsatisfactory. This placed the Indians at a great disadvantage in competing with white farmers and resulted in the Pimas' wheat being "docked" from 15 to 20 percent at the mills (Ann. Rpt. Comm. Ind. Affs. 1903: 133). As of 1936, with only two combines in use, the Pimas had resumed cutting their wheat with a scythe and threshing it out with horses (Stanton 1936: 104; Kneale 1950: 418-419).

There is a question too as to whether any of the varieties of wheat identified in the 20<sup>th</sup> century had an association with the Pima and Maricopa Reservation in earlier times. What became of Capt. Grossmann's arrangement in 1869 to have Wm. Bichard supply "good seed wheat" (probably from California) is not known. In 1900, after two years in which the Indian harvests went from bad to disastrous, agent Elwood Hadley purchased 220,000 lbs. of seed wheat and 16,000 lbs. of barley that were used to seed about 4,000 acres. By his estimation the natives managed to harvest some 1 million lbs. (16,667 bushels) of wheat in 1901 (Ann. Rpt. Comm. Ind. Affs. 1901: 183). Hadley's purchase may well have been the entire amount of seed wheat planted in 1900-1901, and nothing is known about its source(s) or the varieties represented. In this report, Hadley used the

terms "starving and helpless condition" for the first time, which suggests that the Indians' food stocks had been consumed.

For so long as the Pimas continued to grow their traditional wheat varieties, whatever these were, any surplus served to worsen rather than to alleviate their own problems. Like farmers elsewhere who grew a crop for which the demand had shrunk, about all they could do with a surplus was to sell it for whatever it would bring in the market or eat it themselves. Cornelius Crouse, the Pima agent in 1893, described the foods in use on the reservation:

"The food of these Indians consists of a very thin cake, which they and the Mexicans call a tortilla, and a coarse brown meal called by them panola [pinole], both of which are made of wheat; also beef, beans, melons, pumpkins, coffee, and sugar. Of course they can not have all of these at each meal,...." (Ann. Rpt. Comm. Ind. Affs. 1893: 115).

There were still six or seven post traders, who dealt with the Indians principally by exchanging their wheat and barley for merchandise. Agent Crouse explained that the trader probably paid all that he could afford because the trader himself was at the mercy of the wheat purchaser, who was a miller and the one who dictated the price (Ann. Rpt. Comm. Ind. Affs. 1890: 7; 1892: 215). By 1897 seven "Indian boys," presumably Pimas, were running trading posts on the reservation (Ann. Rpt. Comm. Ind. Affs. 1897: 108). Whether the traders had succeeded in introducing any new wheat varieties is uncertain. Russell (1908: 90) indicated that they did, but he made no mention of agent Hadley's issue of seed wheat a few months before his arrival.

As far back as 1875, agent John Stout had asked for a small gristmill for the reservation. Apparently he received it because two years later he asked that power be furnished for the grist mill now at the agency, that it be put in running condition and a small building be erected for its accommodation (Ann. Rpt. Comm. Ind. Affs. 1875: 214; 1877: 34). After this nothing more was said. Whether it ever went into operation and what became of it are not known.

A mill was requested (again?) in 1890, the justification being to reduce the price discrepancy between wheat and flour. The Arizona mill operators had been allowing the Indians 4/5 of a cent per pound for their wheat and then charging them 3¢ a pound for the flour made from it. Since the sale of wheat still provided their principal income, the natives could ill afford these prices. High freight rates prohibited wheat from being shipped to where it would bring a better price (Ann. Rpt. Comm. Ind. Affs. 1890: 9; 1897: 110).

In any event, the mill finally arrived, evidently without bolting apparatus, and was installed at the agency. In August 1892 it was said that a 30-barrel flourmill was "running regularly" and doing good work. By the summer of 1893 the mill had ground out 512,049 pounds of wheat, valued at one cent a pound when it entered and two cents per pound as flour. This was one of the success stories on the Pima reservation during the 1890s. Russell noted its operation in 1902, though a great deal of wheat was still being parched and ground on metates



(Ann. Rpt. Comm. Ind. Affs. 1890: 9; 1892: 218; 1893: 116; 1894: 105; 1895: 122; 1897: 109; Russell 1908: 90). Eventually this mill fell out of use, as we know by the Pima agent between 1929-1935 saying that he put the agency gristmill *back* into operation (Kneale 1950: 419).

*A Downhill Trend; Raise the Same Crops and Earn Less Money*

Having their own mill on the reservation was an expedient and partial answer to the Pimas' problems. It allowed them to continue the old pattern of subsistence agriculture while doing little to improve their economic situation and nothing to resolve the diversion of irrigation water. The Indians also faced potential health problems from nutritional deficiencies, in that they lacked the varied diet of earlier years. In 1900, the last time a report by an agency physician was published, Dr. George Fanning mentioned that "a state of semistarvation and scurvy" had arisen (Ann. Rpt. Comm. Ind. Affs. 1900: 197). The contrast between such conditions and the agency having opened two day schools that same year seems to have escaped everyone's notice.

In the earlier years when their wheat was sold as feed for horses and mules, the Pimas were as competitive as anyone. Later, when matched against flour shipped to Arizona from California or the eastern states, the Pimas found their grain downgraded or "docked" because the buyers and millers no longer wanted the varieties the Pimas grew, or because it was dirty or of poor quality. The Pimas' wheat had had a long run and it was still used for their own subsistence, but for outside buyers it held limited appeal. The irony of their water shortage was that if the people on the Middle Gila had had ample irrigation water, they would simply have raised more of what they were already growing. With a weak commercial market already in existence, the demand would have changed very little and the price would probably have dropped, leaving them worse off than before. As it was, 100 lbs. of No. 1 wheat sold for \$1.25 in 1936, a small advance over the price in the 1890s and less than the great-grandfathers of farmers in the 20<sup>th</sup> century received (Stanton 1936: 104).

Despite their water shortage, the Pimas and Maricopas raised good crops more years than not, until the very end of the 19<sup>th</sup> century. There were positive aspects too in that the native agriculture was highly productive and similar to the farming practices of the settlers, and their adoption of barley and trials with alfalfa showed that they were not unwilling to change. By 1900 the growing of barley as *hay* had proven to be very profitable at San Xavier and this was tried on the Gila River Reservation, using pumped groundwater (Ann. Rpt. Comm. Ind. Affs. 1898: 128; 1899: 165; 1900: 199; 1901: 188; 1904: 147-149). Economically however the Pimas and Maricopas were being marginalized; forced to the sidelines because buyers were dwindling for the kinds of crops they could still grow. At this point they needed help from an agronomist at least as much as they needed additional water, but in the end they received neither.

*Rations for the Pimas*

For many years the Pimas and their agents made a proud claim that they were self-sufficient; that they needed nothing from the government but schools and agricultural implements. This was mainly true but not always so. In 1880 agent A.B. Ludlam distributed agricultural tools and a small issue of barley for seed, "as well as an issue of wheat for food to destitute Indians, caused by a short crop of the preceding year" (Ann. Rpt. Comm. Ind. Affs. 1880: 3-4).

For some years after this the harvests were good or better than good, but in May of 1893 agent Cornelius Crouse told the Commissioner of Indian Affairs that 1,000 Indians out of 3,400 would not raise a grain of wheat that year. He asked for authority to issue 300,000 lbs. of wheat for their subsistence and for seed (Nicklason 1976: 661). It turned out to be a bad crop year even on the San Xavier reserve, where the farmer-in-charge also faced the ravages of grasshoppers (Ann. Rpt. Comm. Ind. Affs. 1893: 118-119; 1894: 104; Nicklason 1976: 662).

The crop failures and destitution of the Indians were repeated in 1894. Then in 1894-95 the opening of new farming lands on the Upper Gila River diminished the flow of water again. Agent J. Roe Young had to ask for authority to purchase and issue 225,000 lbs. of wheat to prevent starvation among the Pimas (Ann. Rpt. Comm. Ind. Affs. 1894: 104; 1895: 121; Nicklason 1976: 663). For four years between 1894 and 1901 the government distributed food (Ortiz 1973: 251).

In 1901, after agent Elwood Hadley bought and issued the seed wheat and barley mentioned earlier, conditions on the reservation really began to fall apart. Although Hadley required most of the Indians to work in exchange for the rations they received, he used part of a \$30,000 appropriation to buy some 675,000 lbs. of wheat, 60,000 lbs. of beans, and 7,675 lbs. of bacon. With these rations and \$13,000 from the appropriation paid in money to the Indians for their labor, no one starved. The natives even managed to harvest 1 million pounds of wheat (Ann. Rpt. Comm. Ind. Affs. 1901: 183-184). The following year saw no new appropriation, but in 1903 more than \$25,000 was paid out to the Indians for wood and labor and an additional \$8653 expended for subsistence, much of this to provide wheat for destitute Indians (Comm. Ind. Affs. to Sec. of Int., October 21, 1903). No one repeated the old claims about self-sufficiency.

### *Government Farmers: A Lost Opportunity?*

The analysis of agriculture on the Gila River Indian Reservation c. 1880-1900 has shown that loss of water due to upstream diversions was a serious aggravating factor in economic deterioration of the Indians, but it was not the sole or even the primary problem. The major difficulty was that they were still attempting to practice subsistence agriculture, but they no longer had an agricultural system that worked. The Middle Gila natives had missed out several times at shifting to crops that would have benefited them economically, and they had lost any ability to compete with white farmers.

The Pimas had always been good farmers but after feeding themselves, their crop surpluses found a diminishing market. They were growing crops that no one else wanted, rather like making buggy whips in the automobile era, as one

colleague has commented. They were in no danger of losing their land base, but without capital, improved seeds, or the means for bringing their crops to market, they competed in an increasingly hostile setting. Because of a lack of resources, including water, they were eventually not able to feed themselves.

If there had been a single opportunity that might have turned things around for the Pimas and Maricopas, it was the program of government farmers. As far back as 1859-60, Silas St. John recommended

"... the employment of two farmers to instruct them [the Indians] in the planting and raising of these seed, and who could at the same time learn them the most effective use of their tools; and improve upon their present primitive mode of working."

It was necessary to furnish the Indians with new seed for their staple crops, he said, as the seed in present use was much deteriorated "in quality and productiveness from being cropped for a long period of time from the same soil" (St. John to Greenwood, September 16, 1859). St. John may have tried to fill the role of a farmer himself and he later repeated this plea, which Sylvester Mowry and Ammi White both echoed (Ann. Rpt. Comm. Ind. Affs. 1859: 861; St. John to Greenwood, January 18, 1860; White to Sec. of Int., February 22, 1861).

No provision was made for employing government farmers at that time, but after the Civil War, agent Levi Ruggles and superintendents George Dent and George Andrews all asked for money and authority to employ one or two "practical farmers." They justified this by a need to teach the Indians how to use the new agricultural tools the government had been providing (Ruggles to Dent, March 9, 1867; Ann. Rpt. Comm. Ind. Affs. 1867: 159, 162; Andrews estimate, September 9, 1869). More often than not they coupled this request with a proposal to establish a school, a goal finally achieved in 1871. As we saw in the last chapter, Levi Ruggles employed John D. Walker as a farmer for several months in 1868 (Ruggles to Hutchings, May 12, 1868; Ruggles to Dent, July 7, 1868).

Captain Frederick Grossmann, writing on September 1, 1870, said that he had recently hired a farmer whom he thought might teach the Indians "a mode of agriculture superior to their own" during the next planting season (Ann. Rpt. Comm. Ind. Affs. 1870: 122-123). Grossmann was the first agent to actually have a staff at the Pima agency (a blacksmith, carpenter, farmer, physician, teacher and interpreter), but he was an army officer himself and concerned mostly with matters other than agriculture. His successor, John Stout, and agent A.H. Jackson a dozen years later both made casual mention of a farmer (Ann. Rpt. Comm. Ind. Affs. 1871: 357; 1883: 7). What the farmer did and whether this position was even filled through most of the 1870s and 1880s are not known, though agriculture and water shortages were mentioned in nearly every annual report. Indian school employees were first listed in 1884 but other agency employees only from 1892 on.

Pima agent Claude Johnson, writing in 1889, paid the customary compliment to Pima and Maricopa grain-growing expertise. He added that a farmer who would start them in the fruit-growing business, encourage them to be

more careful with their farming implements, and urge them to increase their cultivated acreage would be a valuable employee "whose work would affect the general prosperity of the Indians in this reservation more directly than any other employees allowed" (Ann. Rpt. Comm. Ind. Affs. 1889: 120). Perhaps Johnson even had in mind something that his predecessor, Roswell G. Wheeler, had written three years earlier. Namely, that people were naturally conservative and opposed to change, but if pressure or compulsion was brought to bear in order to change or 'better' their manner of living and working, they would do this and even express appreciation afterwards (Ann. Rpt. Comm. Ind. Affs. 1886: 38).

Johnson's assessment was absolutely on the mark. The equivalent of an agricultural extension agent to show the Pimas how to use the implements being provided, how to clean and market their grain, and to introduce new varieties and new crops for waiting markets could have made a great difference in their welfare. The staff of the Pima Boarding School expanded from three to ten persons in the fall of 1890 and one of the new staff persons was a farmer. An Assistant Farmer named J.M. Berger arrived at the San Xavier reservation at the same time.

A 160-acre farm purchased for the boarding school in 1891 apparently enjoyed little success in its earlier years because of water shortages. At San Xavier on the other hand, Berger built what amounted to a model farm, introduced new varieties of wheat, encouraged the cultivation of barley hay, and except when heavy rains destroyed their crops, appears to have improved the situation there from year to year. That reservation was allotted in 1890, which may or may not have made a difference, and farmer-in-charge Berger was effectively a sub-agent. According to Pima agent Cornelius Crouse, Berger did a great deal of repairing for the Indians and provided his own blacksmithing and carpentry tools at no charge. Agent J. Roe Young also paid him a back-handed compliment in 1895 by suggesting that Berger's forty-acre place in the center of the farming district be purchased for use of the Indians as an agency farm (Ann. Rpt. Comm. Ind. Affs. 1891: 28, 214; 1892: 213; 1894: 108-109; 1895: 122; 1897: 109; 1901: 188-189). In 1902 the San Xavier reservation was separated from the Pima agency and J. M. Berger became the agent for San Xavier and all the nomadic Papagos.

The Indian Office's Superintendent of Indian Schools recognized the usefulness of government farmers when he recommended that they be retained at all reservations. The problem he saw was that the farmers became bogged down as issue clerks, shop foremen and even boarding-house keepers, to where they seldom saw an Indian on his farm. The superintendent not unreasonably recommended that the farmer as well as the physician, carpenter and blacksmith be transferred from the agency staff to the industrial [boarding] school, where such schools existed (Ann. Rpt. Comm. Ind. Affs. 1892: 598-599). On the Pima and Maricopa reservation at least this appears to have been done, but it was a case of too little, too late.

The times when an agent himself might have been a farmer lay in the past. By the 1890s though much expertise was available with respect to irrigation and improved crops. The University of Arizona had had an Agricultural Experiment

Station since 1891 and some of its early bulletins concerned irrigation and agricultural practices along the Gila and Salt rivers (Stolbrand 1891; Forbes 1902, 1911). This knowledge went unused as did the resources of the U.S. Department of Agriculture, which Charles Poston and Lieutenant Colonel Clarence Bennett had called upon much earlier to benefit the Pimas and Maricopas (Poston to Dole, May 25, 1863; Bennett to Green, November 20, 1865).

The Pima Boarding School at Sacaton might have been the best hope, after pumped water became available to support its flourishing farm. But the students were young children, who continued their education elsewhere following promotion to Grade 7 (Supt. Ann. Narr. Rpt. 1930, Schools, p. 3). In 1900 some returned students did attempt to farm after the manner of the whites, at the newly established Cooperative Colony. Initially they met with good success, but the water shortage at 'Coop' eventually doomed their efforts (Southworth 1919: 141-142; Hackenberg 1955: 56-57).

Lucy Wilcox Adams' 1936 paper "A Program for Pima Schools" noted that the Pima economy was currently undergoing rapid change from a largely subsistence type of agriculture. Although she was not aware of it, her assessment echoed conditions in the 1890s. If her program for an agricultural school on the reservation (the boarding school there became a day school in 1932) could have been implemented in the 1890s, it might have made a real difference. Without the massive government support of the New Deal era, however, this would not have been possible.

The Pimas and Maricopas continued to farm in the old ways and eventually became impoverished, partly because of the water shortages and partly because they were growing the wrong crops. Apart from some uncertain efforts by agent Elwood Hadley and the post traders, no one attempted to show them other ways, and without support or encouragement they had no hope of competing with the commercialized agriculture going on around them. In 1903 and 1904 more additional farmers were appointed to the Gila River reservation, as part of the government's effort to restore a system that had been failing for years.

The agent dutifully reported that these additional farmers were of great help, compelling the Indians to use every drop of irrigation water, to plow properly and keep their farms in good condition. With pumped water, the agency farm at Sacaton grew alfalfa, sorghum, wheat, young fruit trees, vegetables, melons and other crops - twenty to thirty years after farmers outside the reservation began planting these. With the advice and assistance that government farmers could have provided, Pima and Maricopa farmers might have led a much better life (Ann. Rpt. Comm. Ind. Affs. 1903: 132; 1904: 147-148, 643).

### *Tracing Village Movements in the Late 19<sup>th</sup> Century*

One historian asserted that by using C. H. Southworth's 1914 data on the Gila River Indian Reservation irrigation system, it was possible to reconstruct the technical details of the Pima-Maricopa land use pattern at mid-19<sup>th</sup> century. He went on to enumerate the number of cultivated acres watered by six canals on the south side of the Gila River and three ditches on the north bank (Hackenberg

1964: 11-12). It is pure fantasy to think that reconstructions of field and ditch systems can be made from information collected more than sixty years later, when the Indians moved frequently to counter their loss of control over irrigation water, and floods periodically erased large chunks of farmland.

There are in fact no known maps that show village or canal locations on the reservation between 1880 and 1900, or virtually any other information that would allow reconstruction of land use patterns in this period. Nor do we even have names for the villages. The wide differences between what the maps and narrative report from the 1914 Gila River Survey show and the findings from a similar survey ten years earlier, mean that neither of these can tell us much about the reservation in the 19<sup>th</sup> century.

Agent John Stout claimed in 1878 that a combination of drought and stream diversions led to almost the entire western half of the reservation becoming a dry, barren waste and being abandoned. Stout had in mind the country between Sacaton and what would soon be the Maricopa and Pacific Railroad. In addition, the mesquite bean crop in the vicinity of the reserve was almost an entire failure. Neither weather records nor Charles T. Hayden's establishment of a trading post in the same area that year support this picture.

Perhaps Stout exaggerated, but as a matter of self-preservation more than one-half of the Indians had been forced to leave the reserve and cultivate patches here and there; either that or work for the settlers, pilfer, or just hang around (Ann. Rpt. Comm. Ind. Affs. 1878: 3). Most went to the Salt River Valley and by the summer of 1879 one new reservation and an extension of the old one encompassed these new settlements. Some of these were soon abandoned as many people returned to the old reservation to establish still newer communities or moved to other, unrecorded locations in the Salt River Valley.

The Maricopas illustrate this instability. The 1879 map (NA RG75-CMF-659) showed all or part of them at what was later called Maricopa Village on the Salt River. They were said to have moved there about 1877 after abandoning their village [Hol-che-dum] some 4.5 miles below Sacaton on the south side of the Gila River (Ann. Rpt. Comm. Ind. Affs. 1881: 6). In 1883 all 574 Maricopas reportedly were living off the reservation, which must mean they had moved again. A census in 1887 found that more than two-thirds of the 310 Maricopas counted still lived off the reservation. A year later they had apparently come together once more and occupied a tract of land near Tempe, Arizona (Ann. Rpt. Comm. Ind. Affs. 1883: 5; 1887: 6; 1888: 4). In 1890 some but probably not all of the Maricopas, now numbering 315, lived on the Salt River Reservation (Ann. Rpt. Comm. Ind. Affs. 1890: 248, 545; U.S. Census 1894b: 137).

In 1892-93 their agent made a flat statement that "No Maricopas are living on the [Gila River] reservation at present." This had been the case since some time between 1879 and 1883. A few Pimas and 103 Maricopas living on the south side of the Salt River got their water from the Utah Ditch, which they had helped to make. The balance of the estimated 278 Maricopas evidently resided on the Salt River Reservation (Ann. Rpt. Comm. Ind. Affs. 1892: 213, 784; 1893: 120). In an evident allusion to the Maricopa colony near Mesa,

Arizona, Rev. Charles Cook wrote that most of the Maricopas had joined the Mormons years ago (Ann. Rpt. Comm. Ind. Affs. 1897: 111).

Then in 1894 we are told that the Maricopas had not been living on the Gila River and Salt River reserves but on land lying on the Salt River about three miles southwest of Phoenix. Within the past year they had relocated, with ninety-four going to the Salt River Reservation and 203 to the Gila River reserve. The latter group returned to the Maricopa Village location, eight miles below the Gila Crossing villages of the Pimas, where in 1899 the Rev. Charles Cook was helping the Maricopas to build a good Presbyterian chapel. The agent now counted 345 Maricopas on the reservation, though a few apparently still lived on the Salt River some five miles above Mesa, Arizona (Ann. Rpt. Comm. Ind. Affs. 1894: 105; 1897: 111; 1899: 167; 1900: 197).

If the frequent movements of the Maricopas seem a little bewildering, we can at least document these because the Maricopas largely kept together as a coherent group. The Pimas seem to have moved as families and very few contemporary references were made as to where they lived at any given time after 1879. Many of those who left the reservation in 1878 evidently returned to it by 1882 or 1883. Agent A. H. Jackson wrote then that the Pimas were located on either side of the Gila River the entire length of the reservation, cultivating small patches of ground "from a decare to a hectare." They lived in villages during the winter months and moved to their fields in the summer (Ann. Rpt. Comm. Ind. Affs. 1883: 6). The names, sizes and locations of these villages are shadowy, but there is no reason to think that any of them coincided with the Pima villages in Frederick Grossmann's or John Stout's time.

#### *Reservation Additions in 1882 and 1883*

About the time when many of the Pimas should have been returning, the Pima and Maricopa Indian Reservation received two more additions. Roswell G. Wheeler took office as Indian agent around the end of June 1881, in the first of what would be two terms. He was energetic and perhaps the last appointee who tried seriously to improve their success with agriculture. In April and May of 1882 he evidently recommended adding an area adjacent to the reserve near Maricopa Wells, upon which 400 Pimas already lived. This must have included the lands of the Santa Cruz community, as well as those of the 900-odd Pimas living downstream from there in the Gila Crossing villages. This 25,680 acre addition adjoined the tract added in 1879. The reservation now extended upstream along both sides of the Gila, from the Gila-Salt junction to the western end of the 1859 reservation (Ann. Rpt. Comm. Ind. Affs. 1881: 5; 1882: 8-9, 348; Hackenberg 1974a II: 34-35, 60; Nicklason 1976: 642-643; Dobyms 1989: 58).

Wheeler wrote in his 1882 report that

"In procuring the extension of this reservation over a body of fine farming land, covered with farms, and for Indians under a high state of cultivation, a great good was accomplished, and I naturally

feel some pride and gratification at having succeeded in doing this much for the Indians" (Ann. Rpt. Comm. Ind. Affs. 1882: 6).

President Chester A. Arthur issued the Executive Order for the new addition on May 5, 1882. As with many other lands on the western part of the reservation, floods later washed away much of the area irrigated under the Santa Cruz canal (Southworth 1919: 128-129; Hackenberg 1974a II: 34-35).

President Arthur issued another executive order on November 15, 1883, this time practically doubling the size of the Gila River reserve to 357,120 acres from 181,120 acres. The reasons for this large increase are presently obscure; Dobyms (1989: 58) indicates that it was to provide pasturage for the Indians' 13,000 ponies. This addition lay to the north and south of the reservation as it existed in 1882, which meant that desert scrub and grasslands rather than new areas suitable for farming were incorporated. The reported figures for horses on the reservation did show an incredible increase to about 15,000 animals and more in 1883-84, followed by an unexplained decrease to 3,600 horses in 1885 that makes the earlier numbers (from agent A. H. Jackson's administration) highly suspect (Table 6). Another possible reason for the 1883 expansion would have been to provide a buffer zone for controlling sales of whiskey to the Indians by illicit traders, a situation that apparently threatened to go out of control (Ann. Rpt. Comm. Ind. Affs. 1883: 6; 1884: 6). The agent's annual reports said nothing about this latest addition and as usual the wording of the Executive Order provided no clues.

#### *Villages and Canals, 1880-1900*

Dr. Edward Palmer found the Pimas inhabiting ten villages along both banks of the Gila River as of 1885. He offered no names or descriptions, nor did anyone else. Roswell Wheeler ran the agency with his relatives, and they focused upon education as well as improving the Pimas' agriculture and encouraging them to live in adobe houses (Ann. Rpt. Comm. Ind. Affs. 1885: 2-4; Palmer "The Pima Indians..." pp. 38, 67).

The year 1890 saw a relative wealth of information published about the Pimas and on irrigation activities in the Gila-Salt valleys. Regarding Pima settlements, the only comments were that the agent had appointed two subchiefs in each of ten of the larger villages. These locations ranged from eleven miles east of Sacaton (i.e. at Blackwater) to thirty miles west (the Gila Crossing district). Administration on the reservation had passed almost entirely to the Indian agent by this time. The structure of ten chief villages, each with two subchiefs and sometimes with a policeman to manage community affairs, continued to at least 1894-95, when Rev. Charles Cook penned more explicit descriptions in several letters to missionary magazines (Ann. Rpt. Comm. Ind. Affs. 1890: 8; 1893: 116; *The Church at Home and Abroad*, May 1890, p. 394).

Cook's missionary activities by this time were yielding fruit at an increased rate, and he described the Gila Crossing district as consisting of five larger and some smaller villages, where about 900 Indians resided. The water



privileges for irrigation were the best on the reservation. This district lay thirty to forty miles west-northwest from Sacaton, with the five villages arranged within four miles of the newly established Presbyterian church at Gila Crossing. The Sacaton "field" (Cook's term) included four larger and five smaller Indian villages, situated one to twenty miles distant from the church there (*The Church at Home and Abroad*, January 1894, p. 60; March 1895, pp. 207-208). The following year, he told readers that about 3,500 Pima Indians lived in eighteen villages along the banks of the Gila River, with another 650 Pimas and Maricopas in the Salt River Valley. He may have underestimated the population at the Salt River reserve, where the Presbyterians did not yet have a mission, but his other figures agreed well with the agency's statistical report and with Cook's own previous claims (*Home Mission Monthly*, February 1896, p. 87).

If the lack of specifics about village locations for two decades seems a conspicuous gap, no less so is the absence of information regarding the locations and construction of irrigation canals. Robert Hackenberg (1974a II: 18-64) combined informant statements gathered by the 1914 Gila River Survey with other sources to compile the least confusing and currently most reliable reconstruction of the canals in use and abandoned and Pima village locations in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries. The associated dates depended almost entirely upon informant's memories, and these dates may need to be refined.

In 1890, no less than three major government studies reported on the Pimas and on irrigation in the Salt and Gila River valleys. Two of these listed the irrigation ditches by name and even gave their lengths and the amount of land served, but only for ditches outside of the Pima and Maricopa reserve (Glassford 1891: 308-313; U.S. Census 1894a: 26-31; U.S. Census 1894b: 137-140). It was as if irrigation on the reservation did not exist, a condition that water-users upstream seemed willing to bring about.

The best-documented ditch constructed on the reservation in the 1880-1900 period was the one later known as the Louis Morago ditch. According to the agent, A. H. Jackson, the Indians cleared some seventy-five acres for an agency farm in 1882-83 while they constructed an irrigation canal about eight miles in length and a substantial dam across the north fork (i.e. the main channel) of the Gila River. People were paid for their labor with clothing, agricultural implements, wagons or whatever was at hand. A flume carried the water across the Little Gila River. The year 1884 was a fine one for crops and the agency farm did well, but the dam washed out in the spring and the flume was lost, with the canal filling up for 1.5 miles. The dam was rebuilt and the canal dug out, but another rise washed the dam out and filled the ditch again (Ann. Rpt. Comm. Ind. Affs. 1883: 6; 1884: 6).

By comparison, the traditional history given by Southworth (1919: 136) and Hackenberg (1974a II: 43-44) would see this as two ditches. One, called the Louis Morago and built in 1882, headed in the Little Gila. The second ditch (unnamed) took its heading in the Big Gila and crossed The Island to discharge into the Little Gila, while it also supplied water to the Morago ditch. As the comparison shows, the traditional account had collected substantial errors in only

thirty years. The Office of Indian Affairs put part of the ditch back into service in 1915 with its Sacaton Flats Project (Pfaff 1994: 38) [see Chapter 14].

Agent Roswell Wheeler said in his 1886 report that the Pimas were clearing new lands, enlarging their fields and improving irrigation ditches (Ann. Rpt. Comm. Ind. Affs. 1886: 38). Southworth (1919: 140-141) claimed that the Joseph Head Canal in the Gila Crossing district was built that year. The Hollen (Simon Webb), Hoover, and John Thomas canals there were reportedly constructed in 1877, 1873, and 1876 or 1877 respectively. We saw earlier that settlement of the Gila Crossing district commenced in 1873, so these dates for the ditches are plausible. Whether they were also improved in 1886 is not known. A few miles upstream, the Old Santa Cruz Canal probably continued in use when the Pimas returned to the reservation c. 1882-83 rather than going out of service about 1875 as Southworth (1919: 128) indicated. In that area, between Sacate and Maricopa Wells, the Pimas may have reopened an older ditch.

C. H. Southworth (1919: 123) dated construction of the present Santan Canal to 1879. Testimonies collected by him placed its beginnings with a survey by Charles Cook in 1877 and its completion in 1880 (Southworth "Supplementary Exhibits"). One informant, Cos Chin, claimed that he moved from The Island or old Santan to the new Santan district in 1880 or 1881 (Hackenberg 1974a II: 42). Cook's day school at the earlier location of Santan, on the south side of the Gila River, had closed after the spring term in 1878. The second site of Santan village, on the north side of the Gila, perhaps coincided with people coming back to the reservation after a year or two along the Salt River. Prior to 1883 the agent's annual reports said nothing about such a movement or about canals, however.

Rev. Cook wrote in 1891 that the Indians had dug new irrigating ditches, "surveyed by your minister," and the large amount of land watered by these added greatly to their prosperity. He had done similar surveys in the past, including the Cottonwood ditch and the Santan Indian Canal (*The Church at Home and Abroad*, June 1891, p. 543; Whittemore 1893: 91; Newell 1901: 358; Southworth 1919: 133). One of the new ditches would have been the Yaqui Canal, which agent Cornelius Crouse reported as just finished in August 1892, after the Indian farmers at Blackwater had worked on it for three years. Crouse and Rev. Cook had spent four days surveying this canal. Southworth said it received that name from the Yaqui Indians who labored on it and into whose possession it eventually came. Yaqui Indians on the reservation were mentioned by several of Southworth's informants in 1914 (Ann. Rpt. Comm. Ind. Affs. 1892: 218; Southworth "Supplementary Exhibits;" Southworth 1919: 122, 132).

That same year (1892) the farmer attached to the Pima Boarding School and some of the boys there fenced in a 70-acre farm and planted half of it in wheat and alfalfa, sown together and harvested for hay. At this time a new canal six miles in length was made "for the school farm and Indian farmers." The first four miles of this ditch averaged eight feet in width on the bottom and about six feet deep, the mile of ditch nearest the river being ten feet deep. No name was given and nothing was said about where it took its heading; Southworth (1919) apparently did not include this in his inventory. The water gave out a little earlier each year, and four years later it failed entirely just as the garden was planted

(Ann. Rpt. Comm. Ind. Affs. 1892: 218; 1896: 118). It had failed the year before as well, and at that time the school superintendent asked for a pumping plant for irrigation purposes (Ann. Rpt. Comm. Ind. Affs. 1895: 124). Nine years later a pumping plant was completed with five drilled wells, and the school farm flourished once more (Ann. Rpt. Comm. Ind. Affs. 1904: 16-17, 146-147). The ditch presumably was no longer needed.

Rev. Cook submitted the only known contemporary map and list of canals on the Gila River Indian Reservation dating from the 19<sup>th</sup> century (actually 1900) as part of a U.S. Geological Survey investigation (Newell 1901: 356-358). Cook made the point elsewhere that each village had its own ditch (although the Santan Canal apparently served four villages) along with the responsibility for maintaining this ditch and at times the dam across the river (Cook to Southworth, June 1, 1914, in Southworth "Supplementary Exhibits" pp. 86-87). Cook's map was a sketch, and the numbered list of canals stopped short of the Gila Crossing district. Cook had his own system of rendering Pima names and it is uncertain how some of the ones on his list correspond to canals shown on the Meskimons map of 1904 and the 1914 Gila River Survey sheets. Cook's tabulation was as follows (Newell 1901: 357):

*Canals on Gila River Indian Reservation diverting water from Gila River.*

No.	Village supplied	Families	Males	Females	Total
1	Blackwater <sup>a</sup>	91	251	260	511
2	Sacaton Flats, or Hassañkoek	70	183	183	366
3	Cottonwoods, or S'oufpack	47	135	131	266
4	Santan	98	222	221	443
4	Lower Santan, or Hirlchirlechirk	52	119	110	229
4	S'totonñick	39	114	96	210
5	Wakey	61	129	131	260
6	Babechirl	43	95	102	197
7	South Sho-otk	17	53	46	99
8	North Sho-otk	25	48	55	103
9	Railroad Crossing or South Shonnick	20	38	44	82
10	Highland, or North Shonnick	23	41	46	87
	<i>Total</i>	<i>586</i>	<i>1,427</i>	<i>1,425</i>	<i>2,853</i>

<sup>a</sup>Three villages supplied by canals 1a, 1b, and 1c.

In addition to the canals and villages he named, Cook volunteered that the subsurface flow of the valley came to the surface at Gila Crossing and partially supplied four small canals (his map showed three, numbered 11a, 11b and 11c). These must correspond with three of the four canals named earlier (Southworth 1919: 140-141). The ditches farther upstream from Gila Crossing, numbered one through ten, were practically without water in 1900. Cook's number 12, his Salt River Canal (= Maricopa Canal; Southworth 1919: 142-143), received a small

amount of water from seepage and served a community of about 200 Maricopas (Newell 1901: 357).

The Rev. Cook's villages of Blackwater, Sacaton Flats, Santan, S'totonñick (Sweetwater), Wakey (Casa Blanca) and Babechirl (Bapchil) can be identified and located by reference to maps from the 1904-1914 period. Lower Santan and Cottonwoods, shown as districts on other maps, had settlements as well. The canals and villages numbered 7 through 10 lay between Bapchil and Casa Blanca on the east, and the Maricopa and Phoenix railroad crossing on the west. Of these, South Sho-otk and Railroad Crossing (South Shonnick) were on the south side of the Gila River while North Sho-otk and Highland (North Shonnick) lay north of the Gila. According to Meskimons (1904: 2), the various villages at Gila Crossing were known by the names of their chiefs, as Simon Webb, John Thomas, and Joseph Head. The fourth band (village/canal) at Gila Crossing must have been John Hoover's.

We saw earlier that the Gila River Survey's naming and dating of the canals no longer in use, based entirely upon oral traditions, was not completely reliable. It amounted to a very worthy effort, but the text of Southworth's *History* does not match his thirteen "Gila River Survey" atlas sheets very well. Other problems appear when Reed and Olberg's "Proposed [Diversion] Dam and Bridge Site" map from November 1914 and Meskimons' "Map of Pima and Maricopa Indian Reservation" made in 1904 are compared to one another. None show a continuity of named features, and while different canals may have been represented with the same name, a single canal might be identified by different names on the various maps. With sections of canals going out of use, being converted to drains, or finding themselves incorporated into newer ditches as a result of every flood and loss of farmlands, this kind of confusion is probably inevitable. The clearing of new lands may also have resulted in new ditches or, as with the Old Santa Cruz Canal, the rehabilitation of old ones.

To sort it all out and make a tentative reconstruction of the canal system on the Pima and Maricopa reservation as it was c. 1900-1910, it would be necessary to overlay the maps noted in the paragraph above with one another and with Cook's sketch from 1900. Since the three later maps and atlas sheets all have township, range, and section lines indicated, it should be no particular problem to reduce or enlarge these to a single scale, either as transparencies or by digitizing them in order to do a computerized overlay. Cook's map, which was not to scale and did not include surveying lines, would be more difficult but should be included because of its inclusion of canals with their associated villages.

### *The Techniques of Irrigation*

Several unusual observations are potentially useful for understanding why the Pimas achieved such success as irrigation farmers. There are few observational accounts as to how the Pimas actually dug their irrigation ditches, other than Russell's too-brief statement that the canals were dug with the digging stick and shovel (Russell 1908: 88, 97; Ezell 1961: 61). Southworth (1919: 116) said they were excavated by hand with the aid of stone or wood implements, with

the material carried away in baskets or earthen jars. Such a use of pottery jars is highly unlikely, however. He continued that the grades of their canals were determined by trial. The Pimas apparently encountered problems with this, since they asked Charles Cook to survey ditches for them. This was almost certainly done to ensure that their canals would maintain a continuous grade and Cook probably did it with a spirit level. The Hohokam had had this problem as well: engineers found in 1930 that the prehistoric canals were inefficient in that they did not take full advantage of the topography (Mott 1930).

Nearly all of the Pima canals could convey more water than what the land under irrigation required. Why this was so, no one said. They used the 'check' or border method of irrigation exclusively, and as of 1914 the old borders and some of the ditches were still visible (Southworth 1919: 116). Wilson (1988) described this technique, which the land subjugation program of the 1930s revived and modernized on the Gila River Indian Reservation (see Chapter 15).

Villages normally consisted of groups of relatives, each family having its own plot of ground, the size of which depended upon the position held by the family head at the time of ditch construction. The lands under a ditch were allotted by the village headman or by a committee of men, the Indians' fields varying in size from five to fifteen acres, not always in contiguous tracts. The headmen always chose the best and largest tracts for themselves (Southworth 1919: 116-117). All of this matches the account of Pima government that Ruth Underhill (1936a) gave in somewhat greater detail more than twenty years later.

Charles Cook testified as follows, from his forty years of observations, before a U.S. House subcommittee:

"They knew how to dig ditches. They had baskets, but no shovels; and would scoop out the ditches in a very primitive way that took a long time to do. But, even with those rude implements they had better wheat crops than any white people among the early settlers" (U.S. House 1913: 6).

Several allusions have been made to instances where it took the Pimas three years to dig a new canal, and similar references may be found in the Southworth "Supplementary Exhibits." Clearly they worked at this less than full time.

In a letter in response to inquiries from Southworth, Rev. Cook wrote in 1914 that when he first came to the Pima Villages, the Pimas had a head chief and each village at least one sub-chief and generally one or more ditch captains. Also,

"In digging their ditches or fence-post holes without any iron or steel implements, as straight as an arrow, and quicker than we could have any idea of, would appear as something new to us palefaces" (Southworth "Supplementary Exhibits" pp. 86-87).

In this incomplete sentence, Cook seemed to contradict himself and say that the Pimas were able to dig irrigation ditches much more rapidly than we would have thought possible, without metal tools or mechanical equipment. Since no one

described how they actually went about it, we are left to speculate that this was labor-intensive but not necessarily backbreaking labor, and they perhaps had techniques that no one thought to mention.

In a paper about irrigation along the Gila River, Dr. Robert Forbes noted that the load of sediment deposited on irrigated fields required special attention:

"If allowed to accumulate upon alfalfa or other uncultivated crops they (*sic*) will blanket the soil gradually with a more or less impervious layer, which hinders access of water and air to the roots of the plants. Thorough cultivation of soils irrigated with muddy waters is therefore an especially important item of farm management in the region" (Forbes 1911: 75).

White farmers used what were called "renovators" to break up the silt accumulations and allow the irrigation water to soak in, but the Pimas had another technique according to Dr. Cook. The "flooding" system that Forbes had reference to, and which agent Albert Kneale described in considerable detail, normally involved flooding a field every ten to fourteen days if the water was available (Clark to Wilson, June 25, 1868; Kneale 1950: 402-412). This system left the impervious layer that Forbes mentioned. However, when Cook asked the Pimas about irrigation,

".... they said they did not irrigate too much because it would bake the land; and if they irrigated a little at a time they would have a good crop" (U.S. House 1913: 6).

The Pimas apparently avoided flooding their fields, preferring instead to use lesser amounts of water and irrigate more frequently, delaying or eliminating the formation of a crust and the need to cultivate after each flooding. No one else seems to have mentioned this. This technique might well have led to their superior crops that Cook and others spoke of, but it would have left them even more vulnerable to crop losses than their white neighbors when water was short.

One aspect of agriculture first mentioned in 1891 was that the Indians on the Gila River reservation had no head gates in their irrigation canals. Agent Cornelius Crouse said that was because they were too poor to buy the necessary lumber or too ignorant to make them (Ann. Rpt. Comm. Ind. Affs. 1891: 217; also Underhill 1936a: 4). In the Salt River Valley, however, early settlers found examples of prehistoric head gates (Halseth 1930, 1932: 166). When the Pimas did not want water to flow into their canals, they made a dam of brush to block the flow. These often washed out and left the ditches almost filled with mud and sand, which then had to be cleaned out so that the fields could be watered again.

Crouse proposed to encourage the Indian farmers to widen and deepen their ditches, and to assist them in making head gates to shut off the water when it was not needed (Annual Rpt. Comm. Ind. Affs. 1891: 217). The number, names and locations of the canals he had in mind are uncertain, but next year the agent wrote that he was then engaged in making head gates in the canals of most

importance. These would prevent the ditches from filling with mud during times of flooding and shut out the water when the ditches needed cleaning (Ann. Rpt. Comm. Ind. Affs. 1892: 218).

Perhaps Indian Inspector Walter Graves noted this lack of head gates when he visited the Pima and Maricopa reservation in 1900, charged with determining the feasibility of a limited system of irrigation by constructing ditches to take the water from a proposed reservoir upstream. What Graves proposed was a quite original idea; to construct a continuous wooden box or pipe buried eight or ten feet deep, into the water table and thus able to tap the "underflow." The pipe would convey the water with less fall than the river and eventually allow it to flow at the surface. Graves hinted that at a number of places on the reservation the Indians may have been doing this already, with open ditches (Graves 1901).

The Interior Department was evidently intrigued by this approach and prepared to fund a pilot project to test Graves' proposal. Graves' successor, W. H. Code, favored pumping plants throughout the reservation instead and Graves' idea was not tested (Ann. Rpt. Comm. Ind. Affs. 1904: 12-16). If the Pimas were already tapping the underflow, they had found a way to create irrigation ditches without head gates, which would have reduced the need for brush dams and much of the damage to head gates and canals that the river caused during flooding. Unfortunately, no one but Inspector Graves seems to have commented on the Pimas irrigating in this manner.

### *Land Steals and Indian Rights*

As recently as 1900 the Pimas still living off the reservation had problems with unscrupulous white neighbors. About thirty families of Indians living at Lehi were being robbed of their share of water from the Utah Canal, a ditch that they reportedly had helped to build. The government entered a suit on their behalf and the courts restored their water. President Taft's Executive Order of September 28, 1911 set these lands at Lehi aside for use of the Pima and Maricopa Indians (Ann. Rpt. Comm. Ind. Affs. 1892: 213; 1900: 196; 1902: 160; Kappler 1913: 671).

At the same time, there was an ugly replay of the attempted land grab that so excised the army back in 1878 and led to the presidential Executive Order of January 10, 1879. In the summer of 1900, some white men succeeded in making entries upon lands adjacent to the west side of the Salt River Reservation, where about 100 Pimas had been living and improving their holdings for some twenty-eight years. The Indian agent allegedly advised the Indians to give up their homes and move to the reservation - at the same time he was writing about the starving and helpless condition of the Indians under his charge. This time the Indian Rights Association stepped in and appealed to the General Land Office, which cancelled the white entries. This land too was eventually added to the Salt River reserve, by the Executive Order of October 20, 1910 (Ann. Rpt. Comm. Ind. Affs. 1900: 726-727; 1901: 114, 183-184; 1902: 118, 195-196; Indian Rights Association 1901: 45-47; Kappler 1913: 670-671).

*The Pima Boarding School and Other Schools for the Pimas*

The principal effort that the Office of Indian Affairs put into improving the condition of the Pimas and Maricopas after 1880 was not in agriculture or expanding health services, but on education. After the initial rush of enthusiasm for a school on the reservation, the Pima agents reported only limited progress. By 1877 they began to push for a boarding school (Ann. Rpt. Comm. Ind. Affs. 1876: 7; 1877: 32; 1878: 4; 1879: 6). The day school had closed in 1878.

Indian boarding schools already existed elsewhere and in the summer of 1881 an interim Special Agent, E. B. Townsend, escorted a 17-year old Pima student, Juan Garfield, to Hampton Institute at Hampton, Virginia. Juan consented to having his long hair cut at Tucson while en route. At Hampton he joined Antonito Azul, who had arrived there in February. Antonito was already a grown man and married, and he had brought a son and two nephews with him. Another Gila River native at Hampton was Kistoe, son of Louis the Pima (or Papago), also called Louis the Interpreter, who helped Charles Cook during his first year of teaching and evidently became a convert to the value of education. Kistoe was evidently Kistoe Jackson, who later became captain of the Indian police force (Ann. Rpt. Comm. Ind. Affs. 1870: 123; 1880: 3; 1881: 194; 1894: 105; *The Council Fire*, October 1881, p. 160; Cook 1976: 69, 71, 78, 139).

The government had operated reservation boarding schools since the 1860s and continued to expand this program until there were ninety-three such schools across the country by 1905. The Pima Boarding School opened in September 1881 at the agency in Sacaton, with a capacity initially for seventy-five scholars plus some day students. No description of the school has been found, but there is an excellent elevation of the proposed building. In 1883 a second story was added, while enrollment increased until by 1887 the school had a capacity of 125 with as many as 170 crowded in at times (Ann. Rpt. Comm. Ind. Affs. 1881: 5-6; 1883: 5; 1887: 5; 1898: 11; 1905: 41-43).

The agents' annual reports said very little about the school's operations. Teaching the students to speak, read and write English was a substantial part of the curriculum. Girls received instruction in sewing and housework while the boys were instructed in farming. The agents themselves were divided on the success of the Pima Boarding School; A. H. Jackson and Claude M. Johnson thought it was not what it should be, while Roswell Wheeler and Elmer A. Howard praised the progress the students made in learning. Jackson favored a return to day schools, but once started, the boarding school was obviously going to continue. The ability of the children themselves was not called into question (Ann. Rpt. Comm. Ind. Affs. 1882: 8, 317; 1883: 5; 1884: 6-7; 1885: 3; 1887: 5; 1888: 5).

Dr. Edward Palmer had said that the Pima children learned as quickly as any children under the same conditions; they were quiet, obedient and did not quarrel among themselves. When at play they would sing freely, whistle and laugh. By 1885 the three Pimas at Hampton Institute had returned, and Palmer was impressed by their appearance - they had their hair cut short, did not paint,



were cleaner and had better social skills. On the other hand, they were not encouraged to keep up their reading and seemed to have little influence among the other Indians (Palmer "The Pima Indians..." p. 39). This lapse in skills after students left school and returned to the reservation would be a problem for generations to come.

The teachers at this time were all white and predominantly female, with equal or larger numbers of support staff (matrons, seamstresses, cooks). None were overpaid; it was 1886 before the school superintendent finally received a salary larger than what Charles Cook was paid in 1871. One agent complained about a short sighted government policy of hiring cheap teachers, and in 1885 resignations followed when the principal teachers' salaries were reduced to \$800 a year. Teachers and staff were listed by name beginning in 1884, and for the balance of the 1880s the Pima school had six to seven instructors and an annual budget of \$6,000 to \$9,000 (Ann. Rpt. Comm. Ind. Affs. 1880: 3; 1883: 3; 1885: cliv-clv, 3; 1886: lxxxviii-lxxxix, cxxx; 1887: 313, 338; 1888: 373, 400).

With the size of the school age population on the reservation estimated at around 950, the Pima Boarding School fell far short of affording an education to everyone. When the Presbyterian Church's Board of Home Missions accepted responsibility for the reservation in 1880, the Commissioner of Indian Affairs authorized the Presbyterians to collect Indian children and send them east to schools such as Hampton Institute and Carlisle Indian School. In 1881, sixteen of the ninety Indian students at Hampton were from Arizona tribes and in 1883 there were five Pimas there. As off-reservation boarding schools opened in the Southwest, Arizona students chose to attend these instead (Ann. Rpt. Comm. Ind. Affs. 1881: 194-195; 1883: 166; Cook 1976: 138-139).

The Albuquerque Indian Industrial School opened as a government school in 1886, after two years of operation by the Presbyterian Board of Home Missions. Thirty students were sent there from the Pima and Maricopa Reservations. Two years later the number of Pima students had increased to fifty-eight, almost one-third of the enrollment. The Board of Home Missions opened an Indian boarding school at Tucson in January 1888, primarily for Pima and Papago children, with an initial enrollment of twenty Pimas and ten Papagos. This jumped to seventy-two later that year and to 145 by 1894 (Ann. Rpt. Comm. Ind. Affs. 1887: 248-252; 1888: 5, 361-362, 372-373; *Home Mission Monthly*, August 1888 p. 233; February 1889 p. 83; October 1889 p. 277; February 1895 p. 88). As the new school terms were about to start in 1890, the Pima agent said that about 250 children from that agency had been in attendance at "foreign" (i.e. off-reservation) boarding schools, for the most part apparently at Albuquerque and Tucson (Ann. Rpt. Comm. Ind. Affs. 1890: 4-5, 263).

The main school building at Sacaton burned in November 1888. For the remainder of that school year and the next one, Rev. Charles Cook's church housed the agency school. This had an average enrollment in 1888-89 of about thirty-five students and half of the normal staff (Ann. Rpt. Comm. Ind. Affs. 1889: 120, 380-381, 396; 1890: 324-325, 340; 1891: 215; Cook 1976: 164). In 1890 there were even fewer students and the school staff dropped to a single teacher, Hugh Patton, who had joined in 1888, with two staff members. The

school at Sacaton was rebuilt and enlarged in 1890 to accommodate 125 scholars. The two-story dormitory, 150 feet in length, had an additional wing and rooms for the superintendent's office, dining hall, kitchen, laundry, and two bathrooms, with a sewing room, two employees' rooms, and three large dormitory rooms on the second floor. The school building, about 400 feet distant from the dormitory, featured three rooms with a seating capacity of 125 pupils. Classes were organized in six grades, with the majority of students in the first two.

Beginning in 1891 the Annual Reports of the Commissioner of Indian Affairs included a report by the Pima Boarding School superintendent. Attendance increased to 153, then 187, until by 1900 there were 194 pupils enrolled. The superintendent said that about 75 percent of the school age population attended either at Sacaton or at one of the other industrial training schools in the 1891-92 school year. This number sounds unrealistically high, when compared with an estimate the year before that accommodations existed for not more than one-quarter of the school age children (Ann. Rpt. Comm. Ind. Affs. 1890: 263; 1891: 215-217). The curriculum followed the course of study outlined by the Office of Indian Affairs with an emphasis upon speaking, reading and writing English; spelling, penmanship, arithmetic, hygiene, geography, 'moral training,' drawing and music.

Industrial training for the girls consisted of sewing, sweeping, washing clothes, and all care of dishes during and after meals. The boys made adobes and waited upon the adobe-layers, learned carpentry, painting, leather-working and farm work, chopped firewood, irrigated, policed the buildings and school grounds, and practiced military drill. A kindergarten was added in 1897-98. Students aged six to ten made the best academic progress while those over fifteen learned slowly. Until pumps were installed, the school farm was usually a failure from lack of water (Ann. Rpt. Comm. Ind. Affs. 1891: 216-217; 1892: 215-217; 1893: 119-120; 1894: 106; 1896: 118-119; 1898: 127; 1900: 198-199; Wilkins 1897).

Still another opportunity appeared with the opening of the Phoenix Indian School in September 1891. The first year only forty-two boys enrolled, but by the fall of 1892 a large frame school building with accommodations for 125 pupils had been completed. The first teacher, Hugh Patton, was himself a Pima Indian, and he continued there at least through 1894. By this date, enrollment had risen to 170 with an average attendance of 132, all Pimas, Maricopas and Papagos. It expanded rapidly to about 700 scholars by 1899 and stabilized there, while the annual report for 1900 said that the school plant consisted of about thirty buildings. In 1898, the last year that pupils were tabulated by their tribal membership, 355 of the 479 enrollees were Pimas and Maricopas. Most of the rest (72) were Papagos.

The Phoenix school taught a considerably wider range of trades and also practiced an 'outing' system, whereby students were hired out to gain practical experience, the boys mostly to local farms and the girls as domestic help. Their wages ranged from \$6 to \$20 per month although it was implicitly recognized that a primary goal was instilling good work habits in the students. With its enrollment growth and opportunities, the Phoenix Indian School soon became the

premier institution among the Southwestern Indian boarding schools (Ann. Rpt. Comm. Ind. Affs. 1892: 654-656, 766-767; 1894: 369-371, 534; 1896: 364-366; 1898: 352-354; 1900: 477-478).

As the year 1900 rolled around, the educational system witnessed one more change when day schools opened at Gila Crossing and on the Salt River Reservation. At Sacaton that year, a new brick building superseded the old adobe school, which then became a dormitory (Ann. Rpt. Comm. Ind. Affs. 1900: 19, 197, 622-623). Other day schools soon appeared at the Maricopa Village, Lehi, Casa Blanca and Blackwater, until by 1903 the schools on the reservation and the Phoenix Training School together enrolled more than 1,500 Indian youth. The day schools taught children through Grade 3 and the boarding school through Grade 6 or 7, so that any Pima or Maricopa child would have been able to receive at least an elementary education (Ann. Rpt. Comm. Ind. Affs. 1903: 492-493). Roscoe Wheeler, who had suggested a day school at every village and an agency boarding school for the most advanced scholars, would have felt vindicated (Ann. Rpt. Comm. Ind. Affs. 1881: 5-6).

*New Ways Appear, Old Ways Disappear, 1880-1900*

There were other changes in Pima and Maricopa life-ways, some well known and others less so, some relatively abrupt and others more gradual. For example, boys who expected to attend boarding school all had to have their hair cut, and although many objected, the rule was insisted upon (Ann. Rpt. Comm. Ind. Affs. 1882: 8). When Roscoe Wheeler arrived back for his second tour as Pima agent in 1885, he brought the Commissioner's permission to offer a wagon and harness to each Indian who would build an adobe house and occupy it as a family residence. Wheeled transport was notoriously lacking on the reservation although the government had issued carts, usually one to a village, as far back as the 1860s. A wagon was a substantial investment and a genuine incentive.

In the first year, the twenty wagons sent out were taken, some by Blackwater people, and twenty adobe houses more or less completed. The wagons estimated to arrive in the fall of 1885 were already spoken for and "quite a number" of additional adobe houses were under construction. At Gila Crossing the first adobe houses were built in 1886-87 (Ann. Rpt. Comm. Ind. Affs. 1885: 203; Russell 1908: 59). Perhaps encouraged by these results, Wheeler added some new conditions, requiring that his charges also cut their hair, wear civilized dress, drink no liquor and not gamble in order to keep their wagon and harness. He also made the Indians cut their hair before he would issue goods that had been sent for their use (Ann. Rpt. Comm. Ind. Affs. 1886: 39; Russell 1908: 59).

All of this created problems for Wheeler's successors, as the number of adobe houses built outstripped the appropriation that allowed for buying only twenty-five wagons and sets of harness each year. Fifty adobes were built in 1887, thirty in 1888, and another thirty in 1890 (Ann. Rpt. Comm. Ind. Affs. 1887: 4; 1888: 5; 1890: 8). The policy evidently continued for some years since Russell (1908: 153) mentioned it. By Russell's time (1901-02) villages such as Blackwater contained few dwellings that were not of adobe, but Many

Rattlesnakes Village (Snaketown) retained the old *kiiik*. Agent J. B. Alexander, not an ideal agent and sometimes given to idyllic imagery, exaggerated when he claimed that the dugout (*ki*) had entirely passed away and everywhere were seen good adobe houses with brick chimneys (Ann. Rpt. Comm. Ind. Affs. 1903: 132; 1905: 188).

Since Captain Grossmann first employed Dr. J. T. Harrison in November 1869, the Pima and Maricopa Reservation had had a resident physician most of the time. In 1880 the Commissioner of Indian Affairs first included a page of medical statistics for all of the Indian agencies in his Annual Report. This expanded into a much more detailed, multiple-page listing in 1882 and continued through 1894 before ceasing. While each resident physician submitted his statistical report along with an annual narrative, the only narrative accounts published from the Pima agency doctors appeared in the Annual Reports for 1893, 1894 and 1898.

These doctors derided the efforts of native medicine men who, according to Russell (1908: 256-258), fell into three classes. The native doctors had the incentive that if they failed they could be called to account violently. Both Russell and Dr. A. P. Meriwether, the agency physician, reported that by 1898 the influence of medicine men was weakening. Instead of opposing Rev. Cook as they had for years, several native practitioners had become Christians (Ann. Rpt. Comm. Ind. Affs. 1893: 120; 1894: 107; 1898: 127; Russell 1908: 256).

The reports by the Indian agency doctors showed that the Pimas were still basically a healthy group of people. The most widespread malady was the same as in "Doctor" John D. Walker's day: conjunctivitis or inflammation of the eyes. This was true also with nearly every other Indian group in the country. Two other common illnesses at the Pima agency, bronchitis and diarrhea, likewise were frequent visitors at most other agencies. Tubercular infections (consumption) were present in half or more of the Pima families and resulted in many of the deaths. Parasitic conditions on the other hand were virtually absent. Venereal diseases (syphilis, gonorrhea) had been a cause for much concern in the 1870s but by the 1890s were practically gone. There were no reported instances of scurvy, a deficiency disease, or of diabetes. Eighty cases of influenza in 1894 suggested that the flu epidemic that year was relatively benign (Ann. Rpt. Comm. Ind. Affs. 1880: 275; 1881: 309; 1882: facing p. 366; 1890: 482-489; 1893: 120-121; 1894: 107, 636-647; 1898: 127-128).

At the time of his visits c. 1898-1905 the medical anthropologist, Dr. Aleš Hrdlička, subjected the Pimas and Maricopas to the first thorough medical examination they had ever received. His findings generally concurred with what was outlined above. Hrdlička also reported, from the disease list of the doctor at Sacaton in January 1902, the earliest known reference to an individual with diabetes among the Pimas (Hrdlička 1908: 182). Nowhere else did he report a case of diabetes. The history of health care on the reservation is continued in Chapter 16.

In the early years of the reservation the agent could usually call upon the military to intervene in situations of potential violence, most often involving Pimas and settlers. Disputes among the Pimas, as with the Blackwater War in 1879, were settled among themselves (Russell 1908: 56-57). This era was now passing and as early as 1877 agent John Stout strongly urged

".... that a police force, to be composed either in part or wholly of Indians, with perhaps a white leader, be provided for the suppression of the whiskey traffic, and to enable the agent to enforce proper respect and discipline, regulate the sale and transfer of stock between the Indians and others &c." (Ann. Rpt. Comm. Ind. Affs. 1877: 34).

A Special Agent of the Indian Department, E. B. Townsend, served as an interim Indian agent at the Pima agency in the first half of 1881, following agent A. B. Ludlam's departure until the arrival of Roswell G. Wheeler in late June. It was Townsend who organized the police force on the reservation in January 1881. Later that year, Wheeler wrote glowingly of this "excellent body of men" who had proven to be a power for good, causing drunken carousals and petty thefts to be a thing of the past. Nowhere were the rights of property better respected than among the Indians on this reservation (Ann. Rpt. Comm. Ind. Affs. 1881: 5).

Wheeler could usually put a positive spin on almost anything, but here he let his enthusiasm run away with him. His Indian police force consisted of fifteen men besides Captain Maichu, described as a remarkable man in readily adapting himself to civilization and the discipline necessary for his position, with a great desire to maintain order in a just way. All too soon, however, the chief and the agent found themselves facing an unexpected challenge:

"When the police force was first organized, and rigged out in its new, white man's uniform, of blue with lighter stripes and shoulder straps - the souls of the stern defenders of the public peace were sadly tried. The young girls laughed at them. Human nature is the same everywhere. When theirs could stand it no longer, they complained to the agent. Discipline must be maintained. 'Arrest the next girls that laugh at you and bring them to me for punishment,' was the stern order. It was supposed that the warning would be sufficient. But when would threats stop girls from teasing?"

"In short order two frightened maidens were brought up by Captain Maichu. For some minutes the agent was puzzled to think how to fulfill his threat. At last he commanded 'Bring the white wash.' 'To white wash the girls?' 'No, but to make some work for them.' And for ten days they were kept at it steadily, with a policeman standing over them. The laugh was on his side, and there has been no more ridiculing of the blue coats" (*The Council Fire*, October 1881, p. 160).

Louis the Interpreter was also the lieutenant on the police force. In June of 1882 the police were on their way up the Gila to assist the county sheriff when a settler gave Louis some whiskey. Soon the whole force turned into a drunken mob and they came back to the reservation disgraced, ending their usefulness. The agent hoped to immediately organize a new police force, but the Indians, never having been compelled to observe laws or be punished for violating them, resisted any type of restraint. This made it very difficult to find men suitable for policemen (Ann. Rpt. Comm. Ind. Affs. 1882: 7).

Apparently it fell to Wheeler's successor, A. H. Jackson, to organize a new police force with one captain, two sergeants and seven privates. During the first year they had some success in apprehending whiskey-sellers, but Jackson then had to complain about the abysmal salary - \$5 a month - that made it impossible to retain good men when a Pima could command a dollar a day for his labor. According to Roswell Wheeler, the new force fell apart at the first show of resistance (Ann. Rpt. Comm. Ind. Affs. 1883: 7; 1884: 6; 1885: 3). No mention of a police force was made in the agent's reports for 1886-87, although such a force was organized again in this interval.

After a couple of passing references, the Indian police rated a few lines in the agent's report for most years in the 1890s. When all employees of the Indian service were first listed by name, in 1892, the Pima agency showed Captain Maichu and ten police privates. In time Kistoe Jackson replaced Maichu, and Coover later took Jackson's place. The number of privates grew from ten to fifteen and some of them, such as Chester Arthur, Conner, Joe Howard, Cheroquis, and José Enos served for years, seemingly in spite of their \$10 a month salaries (the captain received \$15).

While nothing was said about their operations, it is probable that the policemen were simply on-call and supported themselves and their families by farming or woodcutting otherwise. The announced purpose of the force was to maintain order in the camps and villages, return runaway children to the schools, protect the reservation from trespassers, and assist the Court of Indian Offenses. By 1896, agent J. Roe Young could write that the Indian police had proven to be of the greatest assistance, honest and entirely worthy of the trust placed in them (Ann. Rpt. Comm. Ind. Affs. 1891: 217; 1892: 215, 827; 1896: 115; 1899: 162, 608).

Agent Elmer Howard established a Court of Indian Offenses soon after taking office, and in the first years little was said about the court except that it protected rights to property and punished evil-doers. There were three Indian judges on the court, appointed by the Secretary of the Interior and paid for their services. In most annual reports the court rated a short paragraph, the only substantial account of its activities being in the 1890 report, which also listed the twenty-five cases heard during the past fiscal year. At this time the judges were three middle-aged men: Cavistoch, Aldebah, and Pablo. In 1896-1900 Pablo, Francisco, and Judge Lewis served on the court.

Typical cases involved drinking and drunkenness, abandonment and adultery, attempted rape, controversies over ownership of real and personal

property, and occasional witchcraft murders. The parties reportedly submitted to the court's decision without complaint. Either Antonio Azul or the agent saw to a reprimand or "special advice," whenever this was necessary (Ann. Rpt. Comm. Ind. Affs. 1887: 5; 1888: 6; 1890: 8-9; 1891: 217; 1893: 116, 553; 1899: 162, 608; 1900: 197, 689).

All of these programs - education, health care, police, the court system, and the agency itself - had a goal of aiding the Indians in their progress towards Christian civilization, in the language of the period. Accompanying these official efforts were those of the Presbyterian Board of Home Missions, which continued to play a supporting role, and those of its resident missionary, Rev. Charles Cook. He would eventually retire in 1914, after more than forty years on the reservation, first as teacher and then as missionary. Cook enjoyed almost official status and in the 1890s a short report by him or a paragraph in the agent's own annual report summarized the work of the Presbyterian Church among the Pimas and Maricopas.

### *Charles Cook and the Presbyterian Church*

We saw in Chapter 12 that Rev. Cook was ordained as a minister in the Presbyterian Church on April 8, 1881, after ten years on the reservation representing the Methodist Episcopal Church as a missionary. In addition to their status as successors to the Dutch Reformed Church, the Presbyterians had substantially greater financial means and could contribute \$1,000 a year for Cook's support (Ann. Rpt. Comm. Ind. Affs. 1882: 8, 329; 1883: 241). Cook moved his family from Pima Buttes (i.e. Gila Butte) to Sacaton and with the help of church resources built an adobe parish house. As yet there was no organized church on the reservation nor were there any native converts.

The summer of 1881 also saw the arrival of a new Indian agent, Roswell Wheeler. Although Cook had gotten along well with Special Agent E. B. Townsend, his relations with Wheeler were antagonistic from the start. The record is entirely one-sided: Wheeler's annual reports made no mention of Cook, while other sources indicate that Wheeler was prone to communicating with "spirits" and considered Cook an interloper. Wheeler finally ordered Cook and his family off of the reservation on January 6, 1886. The Cooks moved to nearby Casa Grande but did not have to remain long, since Wheeler submitted his resignation on April 28, 1886 (Ann. Rpt. Comm. Ind. Affs. 1886: 39; Cook to Palmer, January 14, 1886; Walker to Palmer, March 13, 1886; Cook 1976: 144-147, 149, 153-163).

Cook had built a chapel at Sacaton in 1884, next to his parsonage, and when the boarding school burned this chapel served as the agency's school building for a year (Ann. Rpt. Comm. Ind. Affs. 1890: 263; 1891: 215; Cook 1976: 156, 164). For a number of years Rev. Cook preached without making any converts. When he finally did so, the first ones were in Blackwater Village. In 1888 he supervised construction of a chapel for the small congregation there. Meanwhile, at Sacaton he organized the First Pima Presbyterian Church with sixteen members on April 3, 1889. Membership grew very slowly, to twenty-five

by 1891, while the chapel at Sacaton was enlarged between 1889 and 1891 so as to seat up to 300 worshipers (*The Church at Home and Abroad*, September 1889, p. 258; May 1890, p. 394; June 1891, p. 543; Ann. Rpt. Comm. Ind. Affs. 1890: 5; Cook 1976: 156, 164-166).

Cook appealed for money in *The Church at Home and Abroad*, a monthly magazine published by the General Assembly of the Presbyterian Church, and he enjoyed success as a fund-raiser. Church membership doubled and doubled again, to 104 by 1894. Antonio Azul was baptized as a Presbyterian on November 19, 1893. Now there were eight members at the Gila Crossing villages as well, and on December 9, 1894 a new church that would seat 300 was dedicated there. Cook also gained two helpers, Carl Schurz and Edward Jackson, both Pimas and graduates of the Presbyterian boarding school at Tucson (*The Church at Home and Abroad*, January 1894, pp. 60-61; August 1894, p. 128; October 1894, p. 274; March 1895, pp. 207-208; Ann. Rpt. Comm. Ind. Affs. 1894: 107; 1895: 124; *Home Mission Monthly*, February 1896, pp. 87-88; Cook 1976: 184-187).

Membership in the Presbyterian church on the reservation expanded to 384 in 1897 and 780 (adult Indians) in 1899 (Ann. Rpt. Comm. Ind. Affs. 1897: 111; 1899: 167). Russell offered some insights into possible reasons for this increase, other than an upsurge in religious fervor. One was that the combined strength of the medicine men on the reservation had opposed the missionary for years, but their influence was fast waning. Also, referring back to the seven years when Cook taught at Santan village in the 1870s,

".... much of the present beneficial influence of the missionary may be ascribed to the command over the children which he obtained during the seven years that he occupied the position of teacher" (Russell 1908: 34, 256).

In other words, the young children who were Cook's students in the 1870s became his converts in the 1890s. At Gila Crossing the death of the chief, who had clung to the old ways, eased the missionary's work there.

Cook continued building new churches and adding members. At the Salt River Reservation (still administered by the Pima agency) the Indians built a church in 1896 and organized a congregation in 1900, while at Vahki (Wakey; Casa Blanca) the church was erected in 1897 and worshipers there organized in 1902. Foundations were laid for a church at the Maricopa Village in the spring of 1899 and a building dedicated on September 27, 1900. Two more of Cook's former students were assigned as assistants, Thomas Lewis at the Blackwater church and Horace Williams at Vahki. Membership finally exceeded 1,000 by the summer of 1901. Cook received more help when the Board of Home Missions sent Mr. and Mrs. David Wynkoop to Gila Crossing. Dr. Augustus Marden, the agency physician from 1892 to 1895, returned as a medical missionary in 1900 (Ann. Rpt. Comm. Ind. Affs. 1901: 186; Russell 1908: 267; Cook 1976: 182-194).



Cook's impact on community life was direct and pervasive. Between 1889 and 1911, some 1,800 Indians were baptized into the Presbyterian Church. Traditional leadership roles had largely disintegrated, as shown by one agent's claim that "At present there is no established system and quarrels and fights frequently occur [about distribution of the water supply]" (Ann. Rpt. Comm. Ind. Affs. 1885: 3). Establishment of the police and a court system did not fill this gap. Instead, religion seems to have provided the Pimas with two fundamentals that were lacking in their community: a pattern of social organization and an acceptable value and belief system.

Organization was established through the role of the village elder, who eclipsed the traditional village chief as an authority figure and leader of community affairs. These elders, in most cases the same persons as those whom the agent designated sub-chiefs, were elected to serve as the leaders and guardians of public morality in the congregations that Cook had helped to establish. An Indian elder, assisted by deacons, was assigned to watch over the church families in his district, as at Sacaton, Gila Crossing, Blackwater, and Casa Blanca. As informants recalled later, "The big men in the tribe were the elders in the church. They were the community leaders" (Hackenberg 1955: 49-53).

As for beliefs, the Pimas reinterpreted Presbyterian teachings to some extent in accepting them. The annual saguaro wine festival, banned by the Indian agent in 1890, was replaced by an annual religious revival, initially in individual villages and subsequently on a tribal scale. Sermons by the church leaders urged the Pima Presbyterians to lead a good life and to go about their daily tasks, much as exhortations of the traditional chiefs had encouraged them in the past. More than one Indian agent commented on the need for some pressure or compulsion, a need to "stimulate them to industry" even in matters of daily life, a need that the church leadership now filled (Ann. Rpt. Comm. Ind. Affs. 1886: 38; 1899: 163; Hackenberg 1955: 52-53).

Even as church membership increased, the flow of the Gila diminished, until by 1898-99 the calendar stick at Blackwater was marked "There was no crop this year." The irony was not lost on Rev. Cook. When his successor finally arrived at Sacaton in early September of 1910, Cook reportedly told him that "I want your promise that you will not leave my people until their irrigation water has been restored to them" (Cook 1976: 195, 212, 219). Charles Cook died at his daughter's house in Nodaway, Iowa on May 4, 1917.

By 1900 the Pima and Maricopa Indian Reservation was probably at an all-time low in every respect except for population, which remained stable at around 4,000, exclusive of the Salt River community. Church membership and school enrollments continued to increase. Economically there was little remaining when the irrigation engineers and additional government farmers began to flood in, and despite the agents' claims to the contrary, there is evidence that people on the reservation starved to death (Cook 1976: 202-204). The Pimas had finally lost their self-sufficiency and it would be years before this was even marginally restored. After 1900, government water development projects and other programs tumbled over one another, inspired variously by agency

administrators, technocrats, and politicians. The Pimas would receive little or no benefit from these for a long time to come.

## Chapter XIV

### LAND AND WATER IN THE EARLY TWENTIETH CENTURY

The Pimas enlarged their fields and increased their harvests each year up through 1886, when construction of the Florence Canal began. With this new development, the Pimas' future prospects dimmed considerably. In February, Pima agent Roswell Wheeler warned the Commissioner of Indian Affairs that serious consideration was being given to building a canal above the town of Florence. This, in his opinion, would divert so much water as to greatly damage or destroy the Pimas' farms, and render the Indians helpless and destitute (Nicklason 1976: 643-644; Hudanick 1983: 97-98).

Wheeler's report put into motion a series of referrals, requests and orders that flowed back and forth between agencies and their offices in Arizona. Intermixed with these were studies and proposals for increasing the amount of water available for the Pimas as well as for other parties. The common thread was a proposed enhancement of the Pimas' water supply. A number of writers have chronicled the fifteen-year history of these activities (Davis 1897a: 7-10; Lippincott 1900: 10-17; Ann. Rpt. Comm. of Ind. Affs. 1904: 7-21; Wetzler 1949: 276-342; Nicklason 1976; Smith 1981; Hudanick 1983). By 1900 three proposals still remained on the table.

#### *The Florence Canal Project*

Before we review these proposals, something needs to be said about the project that launched them - the Florence Canal. Engineer Arthur P. Davis (1897b) wrote the single best description of that venture, when it had already gone into decline. Olberg and Reed (1919: 49-54) and Southworth (1919: 147-152) outlined the corporate and administrative history of the Florence Canal Co. The head of this canal lay about eight miles above Florence, on the Gila River.

What probably scared people and especially those living downstream was the sheer size of this ditch and the intention to irrigate 60,000 to 65,000 acres of desert land. The 100,000 inches of claimed water rights all represented water diverted from the normal flow of the Gila (Glassford 1891: 311-312; Gov. of Ariz. 1890: 18-19; Southworth 1919: 147; Hudanick 1983: 100-102). The Commissioner of Indian Affairs asked the U. S. Geological Survey to investigate, and they quickly established that the proposed canal and dam would result disastrously to the Pimas and Maricopas. The existing water supply only sufficed for the wants of the Indians (Lippincott 1900: 10-11; Ann. Rpt. Comm. Ind. Affs. 1904: 7-8). These findings reinforced agent Wheeler's original warning.

Fortunately, the actual diversions by the Florence Canal never approached the intended amount. The 1890 Census recorded only 8,402 acres of improved

(i.e., irrigated) land in 124 Pinal County farms (U.S. Census 1895: 199). Then in 1893 the privately owned company that had commenced construction of the canal was sold in bankruptcy proceedings. Davis (1897a: 42; 1897b: 94) portrayed the situation in 1896, when 6,472 acres were being irrigated in small, isolated tracts. This canal was the only ditch still diverting water from the south side of the Gila River in the Florence area (Davis 1897b: 44). The use of water was exceedingly wasteful, with nearly ten acre-feet flowing through the canal for each acre of land irrigated. Only one-third to one-quarter of this amount would be needed to mature crops if the water was economically distributed. Most of it simply ran to waste, although some probably entered the underflow and surfaced at places on the Gila River Indian Reservation.

As of 1914, the Florence Canal irrigated 3,531.5 acres. The survey that year showed 10,998 acres of previously irrigated land under this canal and the maximum area irrigated at one time as approximately 7,000 acres. The canal failed largely because of high maintenance costs, a consequence of the silt-laden river waters and an insufficient gradient, which allowed the ditch to clog (Southworth 1919: 150-152). The only dam was a diversion structure.

In the late 1880's, persons who diverted the normal flow of the Gila upstream from the Pimas were not necessarily intent upon depriving the Indians of water. They simply never thought that there wouldn't always be sufficient water for irrigation. The entire normal flow of the river probably amounted to not much more than what the Pima farmers needed for their own fields, although no one calculated the duty of water (the amount of water needed per acre of farm land) for the Pima and Maricopa reservation until the 1940s. The University of Arizona's Agricultural Experiment Station encouraged excessive use, with its wondrous calculations that the critical flow of the Gila might irrigate as much as two to four times the acreage originally envisioned by the Florence Canal Co. (Stolbrand 1891: 3). Instead, the history of the Florence Canal project confirmed what the USGS had said in 1886; that *any* diversions of water above the Pima and Maricopa reservation affected the Indians adversely.

Arthur P. Davis was a hydrographic engineer and a good one. It was his conclusion that

"Further development of irrigation in Arizona by the simple diversion of water from the Gila River and its tributaries is impossible. As already indicated, the dry-weather flow of these streams is over-appropriated" (Davis 1897b: 77).

This was not what anyone wanted to hear, and by 1900 the problem was how to increase the Pimas' water supply without anyone losing what they already claimed, even the owners of the failing Florence Canal. The only acceptable answer was - more water! This leads us to the three proposals mentioned earlier.

*The Original San Carlos Dam Proposal, c. 1900*

By the end of 1899, the original Florence Canal Co. proposal to build a dam on the Gila as well as a huge canal had evolved into what was already being called the San Carlos Dam. A dam 200 feet in height would capture the floodwaters of the Gila River at the San Carlos site, and store them in a reservoir with a capacity of 550,000 acre feet (Lippincott 1900: 7-8; Wetzler 1949: 298-302). This project was too big for private enterprise, but by 1900 territorial and Federal officials were looking to the government to build a San Carlos Dam and reservoir. The Pimas had reason to hope that Congress would approve this (Hudanick 1983: 202-203).

Then in June of 1902, Congress passed a National Reclamation Act that established the predecessor of the Bureau of Reclamation. This launched the Federal government into the business of dam building. Residents of the Salt River Valley had been hoping for their own storage reservoir at what they called the Tonto Basin site on the Salt River. With skillful lobbying, aided by apathetic leadership from the San Carlos Dam proponents, the "Tonto bandwagon" began to roll. On October 12, 1903 the Secretary of the Interior announced that the Salt River Valley would be the location for one of the first government reclamation projects. Roosevelt Dam, completed in 1911, became the keystone of the Salt River Project, the first multipurpose project organized under the 1902 Reclamation Act. This legislation however did not contemplate the construction of irrigation projects for Indian reservations (Wetzler 1949: 308-315; USGS 1969: 589; Smith 1981; Hudanick 1983: 198-204, 214-217, 250-251, 310-400).

#### *Walter Graves' Buried Ditches*

In the meantime, on July 16, 1900 the Secretary of the Interior sent Indian Inspector Walter Graves to the Pima and Maricopa Reservation. Graves had orders "to ascertain the feasibility of a limited system of irrigation by the construction of necessary ditches to take the water for the use of the Pima Indians from the reservoir proposed by the Geological Survey" at the San Carlos site or elsewhere on the Gila River, and to prepare plans for such ditches as could be built for not more than \$30,000. Faced with these impossible specifications, Graves proposed instead a series of buried and open-channel seepage ditches, excavated adjacent to the channel of the Gila River. These would be designed to lead the underground water to the surface and then convey it through conventional irrigation ditches (Graves 1901; Ann. Rpt. Comm. Ind. Affs. 1904: 12-14; Wetzler 1949: 304-310). The wording of his report implied that he might have found something like this already in use:

"At a number of places on the reservation the Indians have, in a crude way, dug into this water-bearing stratum and tapped it, by drawing the water into the open ditches, which, following the slope of the valley with less fall, convey the water to the surface, whence it is conducted to their farms for irrigation" (Graves 1901: 5).

Graves was an engineer as well as an Indian Inspector, and his novel proposal was probably not unique. Yet it did seem to offer some hope of resolving the irresolvable by tapping into the underflow of the Gila River and leading it to the surface. This idea also intrigued the Indian Office, which recommended that Graves' plan be tested on a small scale. However, Inspector W. H. Code succeeded Graves in 1902, and Code expressed his opinion that open channel seepage ditches on a large scale had not proved a success anywhere in America, and many failures could be chronicled (Jones to Sec. of the Int., October 21, 1903, p. 6; Ann. Rpt. Comm. Ind. Affs. 1904: 12-13, 16; Wetzler 1949: 308-313). Code had other ideas; namely, to pump the underflow or ground water with drilled wells sufficient to irrigate 600 acres of land (Jones to Sec. of the Int., October 21, 1903, pp. 8-12; Hudanick 1983: 400-401). Walter Graves' proposal went on the shelf.

### *W. H. Code and Irrigation Wells*

Code was a government engineer destined to have a long tenure on the reservation. In November of 1902 he recommended that five wells be drilled at the agency in Sacaton as a pilot project for irrigating the farm at the Pima Boarding School with pumped ground water. The Indian Office approved a contract for constructing the wells in May of 1903, and in January 1904 the pumping plant was completed. These wells all measured twelve inches in diameter and 200 feet in depth. With the water raised by a single, steam-powered centrifugal pump, the wells discharged some 2,000 gallons a minute. The agent reported in July that the plant furnished water to irrigate some 300 acres of land and another 200 acres would be brought under it. Land that had not been wet for years except for occasional showers was now growing fields of alfalfa, sorghum, wheat, young fruit trees, vegetables and melons (Ann. Rpt. Comm. Ind. Affs. 1904: 15-17, 147; Lee 1904: 14-15; Wetzler 1949: 315).

By May of 1904, Inspector Code's first five wells had been judged a success. He thought the underground water supply could irrigate 10,000 acres using steam-powered pumps. The following month the director of the U.S. Geological Survey reported that by using electrical power generated at the Salt River dam, more than double the area estimated as necessary for the Indians (10,000 acres?) could be irrigated on the Gila River reservation. Code liked this idea, which would see the U. S. Reclamation Service construct a generating plant and transmission line, with the cost paid by selling off 180,000 acres of unallotted reservation lands that would then be thrown open to settlement. Power would be purchased from the Reclamation Service and transmitted to the Gila reservation. By July, the agencies were in agreement and the Geological Survey began drafting the necessary legislation (Ann. Rpt. Comm. Ind. Affs. 1904: 16-21).

The people who were not happy were the Pimas, still led by Head Chief Antonio Azul, who believed firmly that the pumped water would ruin their land (U.S. Senate 1912: 5-11; Hudanick 1983: 414). They would pay for this experimental enterprise, with no guarantee that it would work, by surrendering

the western half of their reservation to land speculators and promoters (Ann. Rpt. Comm. Ind. Affs. 1904: 18-20; Hudanick 1983: 406-409).

### *The Meskimons Survey*

At the same time these developments were taking shape, Superintendent of Irrigation J. R. Meskimons submitted plans and estimates he believed would allow about half of the Indians dependent upon the Gila River to become self-supporting again, through development of seepage water and a diversion dam at Gila Crossing (Ann. Rpt. Comm. Ind. Affs. 1904: 16). Meskimons' plans and estimates dated February 8, 1904 [not seen] were followed on August 15<sup>th</sup> by a report. His 1904 "Map of Pima and Maricopa Indian Reservation" showed the exact size and placement of all lands presently irrigated and previously cultivated on the reservation, including some areas of prehistoric cultivation. By combining the information from Meskimons' map and report with a June 7, 1904 letter by the Superintendent of the Pima Training [Boarding] School, a 1904 water-supply paper by hydrologist Willis Lee, the Southworth (1919) report, and a body of testimony taken in November 1904, it's possible to form a much better rounded view of conditions on the reservation at this period.

Meskimons, with his engineering background, produced a large-scale map upon which he plotted the size and location of some thirty tracts of presently irrigated and formerly cultivated lands within the bounds of the Pima and Maricopa Indian Reservation. His map showed canals and the approximate locations of many settlements. There had been nothing like this until now. For the first time, an accurate, surveyed map showed where the Pimas' and Maricopas' cultivated lands lay, accurate to 0.1 acre, and also the acreages formerly cultivated and abandoned for lack of water within the past fifteen or twenty years (or more). His tabulation included the names of known canals that served the various parcels as well (Map of Pima and Maricopa Indian Reservation, Arizona [1904]; Meskimons to Comm. Ind. Affs., August 15, 1904).

Careful examination of all of the sources mentioned in the second paragraph above resulted in Table 7. Meskimons designated the tracts in the Gila Crossing District and the Maricopa Village by name. He assigned numbers 10 through 32 to the remaining parcels, apparently duplicating one number (31) while skipping four others (17, 23-25). He also used names where these were known. A coding system indicated which tracts were presently irrigated and which ones had formerly been in cultivation. The combined total came to 27,014.2 acres, with an almost even division between the two categories (Table 7). A major surprise was that after almost fifty years of crop and acreage forecasts, and a stated average of just under 4,000 acres per year under cultivation for the most recent decade, Meskimons' survey revealed that the Pimas and Maricopas were attempting to farm more than *three times* this estimated average - 13,365.4 acres. This did not mean that the Indians had abruptly increased their efforts in 1904; instead it showed that previous estimates had drastically understated the scope of their labors, perhaps for years. The amount of land

formerly in cultivation (13,648.8 acres) demonstrated that when farming was unsuccessful at one location, the Indians had moved and tried to farm elsewhere.

There is no way to know how long these efforts to cultivate on such an extensive scale had been going on. It may have been for decades. The Pima and Maricopa settlements at Blackwater and along the Salt River drew widespread attention because of conflicts with settlers, but there were other areas on and near the reservation with which the agents probably had less familiarity. The Gila

Table 7

**Profile of the Gila River Indian Reservation in 1904 from Meskimons and Other Data, and in 1914 from the Southworth Survey.**

District	Canal/ Community	Population (1904)	Presently Irri- gated (1904)	Formerly Cultivated (1904)	Irrigated in 1914 (acres)	Formerly Cultivated (1914)
<b>Maricopa</b> 219 acres	Maricopa	350	1322.9 acres	-	-	1,271
	Oscar Walker (1903)		28.5 " (3 tracts)	-	13.1	45.4 "
	Cooperative (Coop) Company (1900)		314.7 " (2 tracts)	-	594	390 "
<b>Gila</b>	John Thomas (1876/77) & Joseph Head (1886)	1195	786.4 "	-	726 (2 tracts)	138.3 "
<b>Crossing</b>	John Hoover (1873)		827.1 "	-	954	
	Simon Webb (1877)		588.8 "	-	660	
	Branch of Simon Webb Canal		311.6 "	-		
<b>Mass- Acumult</b>	Tract #32	?	-	168.7 acres	-	
<b>Sranuka - Alkali Camp</b>	Tracts #11, 13, 14	?	-	1052.0 " (3 tracts)	-	500 "
<b>Stotonic*</b>	Tracts #10, 12, 16	?	-	3499.1 " (3 tracts)	354	750 "
<b>Casa Blanca &amp; Sweetwater</b>	Tract #15	918	-	7711.0 "	3694.3 (3 tracts)	3790.5 "
<b>Lower Santan</b>	Santan (1879)	322	266.6 " (Tracts #19,20)	299.8 " (Tract #18)	3319.3	2617 "
<b>Santan</b>	Santan Tract #21		4178.8 "	-		
<b>Sacaton</b>	Old Santan(c.1870) Tract #22 Old Maricopa(1850s)	275	114 " (school farm)	918.2** "	168 (agency farm)	1510.5 "
<b>Cottonwood</b>	Cottonwood(1872)	?	439.6 "	-	819	152.9 "



Tract #26

**Table 7 (continued)**

District	Canal/ Community	Population (1904)	Presently Irrig- ated (1904)	Formerly Cultivated (1904)	Irrigated in 1914 (acres)	Formerly Cultivated (1914)
<b>Sacaton Flats</b>	Sacaton Flat (1872) Yaqui (1891)	312	1105.2 + 48.8 acres (Tracts #27, 28)	-	943	674 acres
	North Black- water (c.1866) Tract #30		1456.1 acres	-	941	544 "
<b>Blackwater</b>	Blackwater or Island Ditch(1862) Tracts #29, 31	490	1576.3 "	-	1029	30 "
<b>Not listed by Meskimons</b>	Brecken- ridge				5	30.8 "
<b><i>Sub-totals:</i></b>			<i>13,365.4 acres</i>	<i>13,648.8 acres</i>	<i>15,490.7 ac .</i>	<i>11,361.6 ac.</i>
<b>Totals:</b>		<b>3862</b>	<b>27,014.2 acres</b>		<b>26,852.3 acres</b>	

Notes: \*Between 1904 and 1914, the people of Stotonic moved to the south side of the Gila River and the district on the north side became known as Snaketown or Skakaik.

\*\*Includes lands cultivated by the Maricopas at Sacaton, 1850s - 1870s.  
(1903) Beginning or founding date.

Crossing District for example was settled in 1873, but only after Rev. Charles Cook established a mission there late in 1894 was any mention made of activities in that district. Perhaps the large reported increases in the acres under cultivation in 1883-1886 were not so unrealistic after all, although the new agent in 1887 thought that his predecessor's reports gave inflated figures (Table 6; Ann. Rpt. Comm. Ind. Affs. 1887: 4).

Agent Elmer Howard and most of his successors failed to realize that after the first widespread crop failure in 1871 and the frequent loss of the Indians' summer crops, any correlation between the amount of land tilled and the size of the harvest ceased. Reward no longer followed effort, or at least it didn't necessarily follow. This is clear from the statistics in Table 6 and from passing remarks about the failure of crops due to a lack of water, or the grain crop last year being a failure, or not more than half a crop harvested this year (Ann. Rpt. Comm. Ind. Affs. 1885: 3; 1894: 104; 1899: 162).

The Indian agents continued to report that the Pimas were increasing their plantings, but did not recognize that the Indians had either planted at more locations or enlarged their fields at the few farming areas that still worked. In either case they generally lost their crops, in a failing effort to support themselves. Fields that received no water produced no harvest. A more typical situation was that some districts received water and in others the lands dried up, or that water came at the wrong times and farmers were not able to use it. This left them with stunted or partial crops. If the 13,365.4 acres cultivated in 1904 had received adequate irrigation, the Pimas and Maricopas would have been able to feed themselves for years. As it was, the 10,000 bushels of wheat reported for 1904 was the poorest harvest since 1871 (Tables 5, 6).

#### *An Overview of the Districts in 1904*

Superintendent J. B. Alexander provided population figures by district for 1904 and noted that the Indians at Maricopa and Gila Crossing were still self-supporting, except for the issue of a few agricultural implements (Alexander to Comm. Ind. Affs., June 7, 1904). The Maricopas were perhaps in better shape than anyone because of the so-called Haggard Decree, issued by an Arizona district court in 1903, that said some 402 individual Maricopas were entitled to surface water from the Salt River to use in irrigating a specific 1,080-acre tract of land. What they received, however, was evidently sewage water. Superintendent Alexander had placed the Maricopa population at 350 and their superintendent of irrigation said they numbered about 275, in sixty-seven families, with 1,069 acres of cultivated land divided into 133 tracts or farms. Some of the Indians owned as many as five farms, in different parts of the village.

With a relatively assured water supply, the Maricopas could still grow corn and other summer crops after gathering their wheat in May to early June. In 1903 they planted about 1,000 acres of wheat and 450 acres of corn and other crops, harvesting some 16,000 bushels of wheat. Their fields were well tended, enclosed by wire fences, and the irrigation ditches kept clean. While on the

whole they were industrious and moderately prosperous, the irrigation superintendent echoed some of the Pima agents in saying that the Maricopas needed someone to tell them what to do and when to do it. Many of them had money laid away, reportedly amounting to \$3,000 or more (Ann. Rpt. Comm. Ind. Affs. 1903: 131-133; Lee 1904: 63-64; U.S. House 1945: 948-949; Nicklason 1976: 677).

At Gila Crossing the attraction was seepage or return water, meaning the ground-water flow of the Gila River where it returned to the surface. Within a distance of about twenty miles the Indians had built six irrigation ditches, each of which diverted all of the water in the river except in times of flood. Bogs and sloughs were frequently met with, and large springs boiled up from the underlying sands near the principal village at Gila Crossing. A small body of water known as "The Lake," some 4,000 feet in length, discharged water through a swampy slough to the river channel. The springs, sloughs and lake near Gila Crossing afforded a perpetual water supply, supplied entirely by the underflow percolating through the valley fill (Lee 1904: 24-25).

According to M.M. Murphy, superintendent of irrigation for the Maricopas, the 1,200 Pimas at Gila Crossing lived in six villages, each with its own dam and ditch. They had an ample water supply for irrigating 4,000 to 6,000 acres but the superintendent estimated that only 1,500 acres were in cultivation (Meskimons' survey totaled 2,857 acres presently irrigated at Gila Crossing). Although the Indians owned and maintained the ditches, they allowed a large proportion of water to run waste for want of repairs to the ditches and dams. In 1904, flooding by the river carried the diversion dams away five times and much of the ordinary flow was wasted before the dams could be repaired. Nor was there much system in the water distribution, each man taking whatever he could get whenever he wanted it. In consequence, certain farms failed, when there was water enough for all. The various villages and their lands were known by the names of the chiefs, so that "Simon Webb" referred to the band of which he was the chief. The John Thomas and Joseph Head bands owned contiguous tracts and at times took water through the same canal.

The result was that some Indians at Gila Crossing became moderately prosperous while many remained poor. As with the Maricopas, the consensus of observers was that the Pimas needed an overseer, a man with experience and patience, who would assign tasks to individuals every day and see that these were carried out. "Lack of executive ability" it was called, and apparently the natives did not resent such direction. From what the engineers said, the substitution of a Presbyterian social structure for non-existent native institutions at Gila Crossing still left the farmers with no organization to manage their irrigation and water distribution system (Lee 1904: 24-25, 64-65; Meskimons 1904: 2).

The Cooperative Company or 'Coop,' a separate band within the Gila Crossing District, originally consisted of about seventy-two heads of families, nearly all of whom were returned students. The problem of returning students, who were essentially left to drift when it came to earning a living, had been raised a few years earlier. Charles Cook urged them to cooperate in digging a canal,

then to fence and clear a large tract of land, plant and harvest a crop, working in common until the land had been cleared and planted, dividing the crop equitably.

Dissention arose before the canal was completed, but after farming the land the first year, the people at Coop divided and allotted the tract, each allotment amounting to about twenty acres. The most intelligent members "by skillful machinations" got hold of the cleared land and left the balance to the less fortunate. Over the next decade however they evidently settled down, developed the water and increased the extent of their fields, building comfortable houses for themselves (Ann. Rpt. Comm. Ind. Affs. 1899: 164; 1903: 131; Meskimons 1904: 2-3; Southworth 1919: 141-142).

The 2,317 Indians living east of the Phoenix and Maricopa Railroad had much worse conditions to contend with. Water no longer ran in the bed of the Gila as it did at the great rancheria of Sutaquison 130 years earlier. According to Rev. Cook, the Pimas east of the railroad had had little water since 1890 and many of their farms had lain idle since then. These lands were gradually vacated and the amount of cultivated acreage decreased after the diversions began at Gila Crossing. The prospects of water were so uncertain that many people had long since ceased to prepare their fields.

Many families moved to Gila Crossing from the Sranuka District. In 1904 the water stood in a long pool far into the summer season, and when it dried up, the Indians dug into the riverbed to water their livestock. The land here was extremely rich, but the people lived by hauling wood and grazing their cattle on mesquite brush. Meskimons suggested Sranuka or Alkali Camp and old Stotonic (his tracts #10-12 and 14) as an ideal place for a pumping plant (Alexander to Comm. Ind. Affs., June 7, 1904; Lee 1904: 65-66; Meskimons 1904: 3, 5; Southworth 1919: 126-137).

Elsewhere on the reservation the story was a checkered one. The Pimas at Sacaton Flats produced 100,000 pounds of wheat in 1904 but those at Sacaton and Casa Blanca grew nothing. A small amount of seepage was ordinarily available near Sacaton and a few Indians used this to raise wheat and corn. The trader there bought 400,000 pounds of wheat in 1903 and the agency purchased another 325,000 pounds. The Santan Indians had seepage water running until the time the summer rains were due and they raised 50,000 pounds of wheat in 1904. According to engineer Willis Lee, the great majority of the Indians did not have enough water to raise sufficient grain for their own needs. Superintendent Meskimons on the other hand thought that there was no reason why the Santan, Sacaton Flats, and Cottonwood District Indians should not raise a good wheat crop every year if compelled to plant at the proper time. They waited instead until the last moment to sow their wheat and then water was scarce when they needed it most (Alexander to Comm. Ind. Affs., June 7, 1904; Lee 1904: 66; Meskimons 1904: 4).

At Casa Blanca and Sweetwater the soil was excellent, but owing to dry weather the people there had not raised enough for several years to support themselves. Consequently they depended upon work furnished by the agency. The same was true at lower Santan on the north side of the Gila. A small band

located on the tracts Meskimons numbered 13 and 14, the area known later as Sranuka or Alkali Camp, kept their canals open and cleaned, waiting for the flood waters of the Gila. They seldom if ever raised any wheat, but sometimes got summer crops. They lived principally by hauling wood (Meskimons 1904: 3-4).

A small, isolated band living at Stotonic were also practically independent of the agency and made their living mainly from cutting and hauling wood. Agent Elwood Hadley had mentioned the importance of wood hauling and cordwood sales in his reports for 1900 and 1901. Statistical tables published by the Commissioner of Indian Affairs showed that cordwood collection continued very high through 1904 (Table 6; Ann. Rpt. Comm. Ind. Affs. 1900: 196; 1901: 184; 1903: 131; 1904: 148, 617, 643-644; Meskimons 1904: 3-4). At Blackwater the natives depended entirely upon the floodwaters of the Gila and did not make a crop in 1904; actually they didn't even plant wheat, though Superintendent Meskimons presumed that they planted summer crops after the rains came (Alexander to Comm. Ind. Affs., June 7, 1904; Meskimons 1904: 4).

Curiously, in his annual report for 1904 the agent mentioned for the first time that he included a fairly accurate estimate of the Pimas' earnings, in statistical form. This data was evidently published only in part, perhaps because the statistics had to conform to established formats. As yet, there was no form for reporting Indian incomes.

The narrative accounts by inspector Meskimons, engineer Willis Lee, and superintendent J. B. Alexander complemented Meskimons' list of the lands presently irrigated (Table 7). Too often people cultivated their fields but the dry earth produced no crops. By 1904 only the districts in the eastern and western parts of the reservation sometimes counted a harvest, with a secondary center at Santan. Since 1879 Santan had been on the north side of the Gila. Elsewhere partial or complete crop failures were the rule and this in spite of more than 13,000 acres reported as irrigated in 1904. It would have been more accurate if observers had written that the Pimas' lands were cultivated and waiting for irrigation water:

"These people are industrious; they have planted their seed, and cleaned their irrigating canals and ditches year after year and put everything in order for the best handling of the water. No water came however, and no crops were raised.... It is not probable that they will raise a crop this season as there has been no irrigating water since September last,.... All or nearly all of the dry mesquite wood on the reservation has been cut and sold by the Indians which has been a means of support to them during the past ten years" (Alexander to Comm. Ind. Affs., February 12, 1904).

While the first engineers on the reservation did not quite match C. H. Southworth's interest a decade later in collecting oral histories, they were not insensitive either. Willis Lee asked what would the Indians do if supplied with water? In his opinion, much land then idle would be made productive and

something like the former prosperity restored. He regretted the reluctance of the people to adapt to new conditions - they still cut wheat with a sickle, threshed it with their horses, and winnowed out the chaff by throwing the wheat into the air - but he thought the case was not hopeless. At Gila Crossing the most imperative need was for adequate supervision; elsewhere it was a water supply and then supervision (Lee 1904: 66-68). J. R. Meskimons' report was brief (5 pages); his map told most of the story. The consensus from all of the reports was of a reservation badly fragmented economically and socially.

*The Board of Indian Commissioners and the Committee on Investigation*

By 1904 the Board of Indian Commissioners (BIC) had been in existence for thirty-five years as a body of prominent citizens appointed by the President to assist the government in formulating policies on Indian affairs. The board had lobbied for passage of the Dawes Severalty Act of 1887, which established the policy of allotting reservation lands to individual Indians. It had never shown much interest in the problems of the Pimas until 1897, when it supported a large increase in the appropriation for irrigation works and creation of a reservoir at The Buttes. This location, some twenty-five miles above the reservation, was favored at the time (Board of Indian Commissioners 1898: 11). In 1900 their annual reports began urging restoration of the Pimas' water rights and construction of a storage reservoir at San Carlos to relieve the Indians' suffering. Later the board favored Code's irrigation wells for a couple of years (Board of Indian Commissioners 1901: 13, 95-96; 1902: 15-16; 1903: 15; 1904: 16-17; 1905: 15-17; 1906: 9; 1907: 13-14; 1913: 9).

With its official status, the Board of Indian Commissioners could not be ignored as easily as the much more vocal Indian Rights Association, which was concerned with civil rights issues more than with policy matters. In the late fall of 1904 the BIC sponsored what would now be called a fact-finding trip by a committee on investigation appointed by the Board of Home Missions of the Presbyterian Church. Even the Commissioner of Indian Affairs "was personally engaged in the investigation in Arizona" (Board of Indian Commissioners 1905: 15-16).

Neither the board's report nor the record of testimony before the committee was published, though the findings and recommendations were not much different from what Indian agents and hydrologists had been saying for years (Board of Indian Commissioners 1904a). The testimony was another matter, and while some might call it poignant (Dobyns 1989: 64, 73), it was at least as stark as the revelations about the meat packing industry, medical frauds and sweatshop conditions that other investigations around the country uncovered during the Progressive Era.

The committee drove to Blackwater on November 2<sup>nd</sup> and took testimony from a dozen witnesses among the seventy or eighty Pima men gathered there, then continued to the extreme eastern end of the reservation to hold a second hearing. They visited Casa Blanca on November 3<sup>rd</sup> and 4<sup>th</sup>, where they listened

to people from Vakey (*sic*), Highland, Squakey (Snaketown) and Wet Camp. The following day the committee drove to Babechirl, about eleven miles northwest of Sacaton, and heard testimony from persons there and from Stotonic. Since much of the testimony was quite damaging to the superintendent at Sacaton, he was also asked to respond to questions (Board of Indian Commissioners 1904b).

The consensus was that the last crop had been raised six years ago (i.e., in 1898). Some Indians drew rations - twenty pounds of wheat issued only at the agency - while others had been refused rations and a few had not asked. The principal livelihood was woodcutting, for which the sellers received 75¢ to \$1.25 a load (half a cord) in Tempe or Florence. By now the woodcutters had cut out much of the mesquite forest (Table 6). A few women made baskets, which required much time and might bring \$2 or \$3 in Phoenix. Livestock owners had sold off their cattle until some of them had nothing left. Everyone was hungry, and witnesses from Vakey, Snaketown, Wet Camp, Stotonic and Babechirl named individuals who had died of hunger. Philip Gibson from Vakey was the only one who mentioned mesquite beans, a staple in years past when the crops failed or were short. He said that when mesquite beans could be gathered they ate them; there was nothing else. A surprising number of people were totally or partially blind, victims no doubt of conjunctivitis.

Some of the men had performed roadwork, evidently in connection with construction of the Roosevelt Dam, but they told of receiving only partial wages and sometimes having to wait months for payment. Sometimes their children would cry for food. Amazingly enough, most of the children were in school, some in day schools but others at boarding schools in Phoenix, Tucson, Riverside and Carlyle. "All of the people are in the same fix," said Hohoa from Snaketown Village. When he could not get to the agency to receive rations or his team got so thin that it could not haul wood, he went hungry. Horace Williams, the interpreter, received \$12 a month and was much better off than most, but his wife had died last year and he raised nothing in the present year. All of his cattle had been sold. He used his salary to help out other people. Oscar Howe had had five horses, until they starved. At Blackwater the committee asked several questions of all present (seventy to eighty men):

How many have not enough food, or are hungry? Forty-two rose.  
 How many formerly had farms and water, and were self-supporting? All rose.  
 How many used to ship off wheat, having raised more than needed for their own use? Nearly all rose.  
 How many have raised enough wheat to support their families this year? No one rose.  
 How many would rather have water for irrigating than to receive rations? All rose.

The consistent responses from person to person and from village to village must have left an impression. The delivery of their testimonies, although filtered

through an interpreter, appeared to be matter-of-fact and uncomplaining. The committee found a universal willingness to work and a strong desire by the Indians to be self-supporting. Even in their poverty they retained their self-respect and sought to scratch out a living, without rations. Only about 200 families or individuals were rationed.

Superintendent J. B. Alexander did not necessarily deny the problems, although he never saw anyone whom he considered to be starving. The committee did find fault with the rationing system and this was immediately corrected. To resolve the other difficulties, the answer was provision of more water, and if pumped groundwater was not sufficient, then a reservoir was needed (Board of Indian Commissioners 1904a).

### *The First Government Irrigation Systems on the Reservation*

Number one on the committee's list of recommendations was that the plans for irrigation by a system of pumping plants be pushed forward with all possible speed. Five engineers of the U.S. Reclamation Service who were in Sacaton at the time of the committee's visit said that a pumping plant to irrigate 10,000 acres of land could be installed within two years (Board of Indian Commissioners 1904a). While this schedule was wildly optimistic, the BIC indicated its belief in the need for immediate action. The Commissioner of Indian Affairs devoted fourteen pages in his annual report to reviewing step by step what he called the unfortunate condition of the Pima Indians since 1886. This led up to his plea that legislation be enacted along the lines suggested by the U. S. Geological Survey and Inspector Code (Ann. Rpt. Comm. Ind. Affs. 1904: 7-21).

Congress finally acted. The Indian Appropriation Act approved March 5, 1905 included authorization of \$540,000 for the construction and installation of an irrigation system on the lands of the Pima Indians, and a \$50,000 appropriation to initiate the well-drilling and canal-building program that became known as the Sacaton Contract. Plans for drilling ten wells to irrigate 10,000 acres on the reservation were completed in 1906 and Congress approved another \$250,000 for continuing the work (Ann. Rpt. Comm. Ind. Affs. 1904: 17-19; 1905: 74-75; 1906: 87; Introcaso 1986: 37-39).

### *The Sacaton Contract*

Andrew Hudanick (1983: 427) wrote, with considerable justice, that by the end of 1907 the Pimas were worse off than at any time in their history. Some hope lay in the negotiations between the Secretary of the Interior, the U. S. Reclamation Service and the Salt River Valley Water Users Association (SRVWUA), which resulted in what is known as the Sacaton Contract, signed on June 3, 1907. This allowed for the sale of 1,000 horsepower (= 746 kilowatts) of electricity to the Pimas for operation of the new wells. One-third of the \$300,000 appropriated to date was to be transferred to the reclamation fund immediately, in payment for the electricity. The power, however, would be provided only after



the needs of the SRVWUA were met. The Reclamation Service would also begin construction on the irrigation wells, canals and other facilities needed on the reservation. The project lands lay alongside and upslope from an existing Indian canal known as the Santan Indian Canal, on the north side of the Gila (Ann. Rpt. Comm. Ind. Affs. 1906: 13-14; 1907: 57-58; Introcaso 1986: 39-40; Pfaff 1994: 12). The Indians, as wards of the government, had no voice in this contract.

In addition to the project cost, originally estimated at \$540,000, there was an annual maintenance fee of \$30,000. W. H. Code, who was still very much in evidence, proposed to recover the costs by selling to the public some 180,000 acres of so-called surplus reservation lands on the western part of the reservation. Initially these would have excluded 5,000 acres of farmlands at Gila Crossing, another 12,000 acres at Casa Blanca, and 1,500 acres at Maricopa. Not coincidentally, 180,000 acres valued at \$3 per acre would total \$540,000.

The Act of April 30, 1908 allowed the Reclamation Service to start construction on the irrigation works, under direction of the Office of Indian Affairs. By January 1909 nine wells had been drilled. These formed a line about one-half to one mile north of the existing Santan Indian Canal and below the Santan Flood Canal. The latter was one of the new works, a huge affair intended to convey floodwaters northwesterly from the Gila River from a point 3.5 miles east of Sacaton. Work on this canal began in October 1909. The second of three canals in the project linked all of the wells and conveyed the pumped groundwater (Southworth 1919: 135; Introcaso 1986: 38, 40-41, 116; Pfaff 1994: 12). A 1913 map of the Sacaton Project and Map 2 in a 1914 congressional report showed these two canals and the well locations (Sacaton Project, GRIR, Az. (1913); U.S. House 1914). Another map indicated the proposed location of the third canal, south of the Gila near Casa Blanca (U.S. House 1913, map opp. p. 183).

The 1908 Annual Report of the Indian Rights Association remarked that "During the past few years there has been more than usual interest in the welfare of the Pima Indians, in southwest (*sic*) Arizona" (Indian Rights Association 1909: 66). As events were to show, the usual interest included a large measure of self-interest, a concept dimly if at all perceived in that era. The federally sponsored reclamation projects that were now becoming a reality drew attention, and opportunists, from many quarters. One beneficiary was A. J. Chandler, who sold his Consolidated Canal system to the federal government in 1909 for \$187,000 (U.S. House 1913: 13; Hudanick 1983: 443-448; Dudley 1998: 9, 15).

By 1911 nine miles of the Santan Flood Canal, including head gates in the Gila River, had been finished. At this point, representatives of the Pimas themselves, the Indian Rights Association and the Board of Indian Commissioners all began to raise objections. They based these in part on the proposed alienation of half of the reservation, the high cost of the project for the benefits received, and the detrimental alkali levels in the pumped groundwater. Both the House Committee on Indian Affairs and the House Committee on Expenditures in the Interior Department held hearings and investigated the Reclamation Service's activities.

The two congressional committees found much to be unhappy about, including Inspector Code serving as vice-president of the Mesa (Ariz.) City Bank. The bank's president, A. J. Chandler, operated an 18,000-acre ranch that bordered the reservation on the north, adjacent to the 180,000 acres of 'surplus' reservation lands that had been proposed for sale. One of the bank president's ventures, the Mesa Improvement Company, currently advertised tracts on the Chandler Ranch for sale to prospective settlers at the lofty price of \$100 per acre (Indian Rights Assoc. 1909: 66-69; Board of Indian Commissioners 1910: 9-11; U.S. Senate 1912; U.S. House 1912, 1913; Introcaso 1986: 41-44). According to the Indian Rights Association, speculators were only waiting their chance to rush in and claim the reservation land. No one had consulted the Pimas about these moves, and they objected when they learned about them (U.S. House 1912).

Inspector Code resigned as Chief Irrigation Inspector for the Indian Service, though he went on to become Chief Engineer of the Reclamation Service. The Pima agent, J. B. Alexander, was dismissed from the Indian Service in 1911 following investigation of charges that he had falsified vouchers and forged checks (Indian Rights Association 1912a: 12-17; 1912b: 21-23; U.S. House 1913: 463-478; Wetzler 1949: 330-341). Work on the project was suspended, then resumed in 1913 by the Interior Department's Indian Irrigation Service. No reservation lands were sold. For lack of diversion works, the Santan Flood Canal had limited usefulness. The Indians found it much easier to divert from the Gila directly into the old Santan Indian Canal. The land under cultivation at the time of the Gila River Survey in 1914 totaled 3,319.3 acres, the same as had been irrigated under the Santan Indian Ditch (Southworth 1919: 135; Pfaff 1994: 34-35, map 2 in pocket).

According to historian David Introcaso, most of the financial charges and maintenance costs listed in the Sacaton Contract were never levied against the Pimas. The Reclamation Service constructed a nineteen-mile power line to their reservation as well as canals, ditches, wells, transmission lines and other facilities. Construction charges made against the Office of Indian Affairs amounted to \$360,681.13 by March 31, 1912. These as well as the \$100,000 transferred earlier to the reclamation fund absorbed most of the \$500,000 in reimbursable appropriations for this project made between 1905 and 1911. Neither did the Pimas have to pay any of the construction costs or maintenance expenses for the Salt River Project (U.S. House 1913: 9-10, 162-170, 569-577).

The Pimas apparently came out of the Sacaton Contract having neither lost nor gained anything and with the same number of acres under cultivation, only with their irrigation water (at least in part) coming from another source. If the Sacaton Contract had seriously been intended to provide irrigation water, then a far cheaper and simpler solution would have been to extend Dr. Chandler's Consolidated Canal south by several miles to the Santan district and convey water from the Salt River.

Chandler himself admitted that this would have taken very little expense or effort, and water from the Consolidated Canal had already run over onto the reservation on one occasion (U.S. House 1912: 50, 1913: 183, 305). The Pimas

would have needed a water right on the Salt River similar to the one the Haggard Decree had already confirmed to the Maricopas, or they could have arranged to buy water from someone with an existing right (Ann. Rpt. Comm. Ind. Affs. 1903: 131; Nicklason 1976: 677). At one time the Pimas did argue for an apportionment of stored Salt River water, to be carried via canal to Pima lands north of the Gila, but the Sacaton Contract blocked this approach (Hudanick 1983: 419, 421; Introcaso 1986: 39).

### *The Gila River Survey*

Ten years after the Meskimons survey, another irrigation engineer, C. H. Southworth, did a similar one and produced a series of elegant, detailed maps. Southworth also wrote a report, published in the U. S. House of Representatives Hearings before the Committee on Indian Affairs (Southworth 1919). Both engineers sought to answer the long-standing questions of how much water the Pimas and Maricopas had actually appropriated and how many acres of land they could be shown to have cultivated (Ann. Rpt. Comm. Ind. Affs. 1904: 8-9, 16).

Much of Southworth's 1914 report was devoted to a historical analysis of irrigation canals along the Gila River. Olberg and Reed's (1919: 58) companion report on the San Carlos Irrigation Project included a tabular comparison of the age and utility of canals on the Gila River Indian Reservation, using figures arrived at by Southworth's survey as well as those reported by Meskimons, similar to Table 7 above. Southworth also made charges that reflected unfairly upon Meskimons' work, and close reading has revealed some major editorial errors in Southworth's own report (Southworth 1919: 143). Nor has it been possible to determine all of the source(s) used in constructing Olberg and Reed's "Analysis of Irrigation" table, which contains at least a few wild inaccuracies (Olberg and Reed 1919: 58). Their companion tabulation of areas irrigated on the reservation by canal, at five-year increments from 1850 through 1914, was simply speculation that offered no means for comparing or confirming the acreages shown (Olberg and Reed 1919: 59).

A 1955 redrafting of Meskimons' map by the Bureau of Indian Affairs, Phoenix Area Office, included acreage figures for present (i.e. in 1904) and previous areas of cultivation, totaled separately. Those numbers matched the ones in Meskimons's 1904 report, as well as the totals for columns four and five in Table 7. It has not been possible, however, to confirm the numbers shown for the 1914 survey in the "Analysis of Irrigation" table by comparison with Southworth's text, although the overall difference was only ninety acres or about 0.34 percent. The actual totals of acreages from the 1914 survey are in columns six and seven of Table 7. These numbers were carefully extracted from Southworth's text.

The most amazing agreement was evident between the overall totals of irrigated and formerly cultivated acreages from Meskimons' survey, and from the 1914 Gila River Survey. The totals, from work apparently done independently and ten years apart, differed by only 162 acres or 0.60 percent. The differences in

the present and previously cultivated figures in the 1914 data, between the published and the revised numbers, were likewise very small (Olberg and Reed 1919: 58; Table 7). One might ask if it was worth the effort to recalculate these numbers and the answer is probably no, for the 1914 Survey,. Textual and tabulation errors in the printed report had seriously misrepresented the 1904 work, however. The close agreement in the overall totals confirms that each survey was an honest effort and the figure of 27,000 acres cultivated past and present on the reservation, prior to the changes brought about by 20<sup>th</sup> century water-supply efforts, was an accurate one.

By the time of the 1914 Gila River Survey, the only reclamation work that had developed water for irrigation and supposedly improved its distribution on the reservation was the Sacaton Contract. This affected only the Santan District, and by reference to Table 7 there was less land irrigated at Santan in 1914 than there had been in 1904. What the actual crop production amounted to in 1914 we do not know, as the commissioner's annual reports no longer published crop figures. With a per-capita income of only \$35.35 across the reservation that year, the harvest must have been a small one.

We saw in 1904 that the only districts producing crops were Maricopa, Gila Crossing, Santan and Sacaton Flats. Blackwater, with more than 3,000 acres reported as presently irrigated, the second highest of all the districts, did not make a crop that year. Between 1904 and 1914 there were shifts within districts as to the number of acres shown as presently and formerly cultivated, but there is no reason to think that crop forecasts were any more realistic in 1914 than in 1904. The people planted their seeds, cleaned their ditches, and put everything in order, but no water came. The fields stayed dry and no crops were raised, year after year. Southworth's figures meant no more than Meskimons' had, and the Sacaton Contract had probably made little difference in the Pimas' welfare.

*The Small-Scale Irrigation Projects - Little Gila, Blackwater, Agency, etc.*

The Indian Irrigation Service also initiated several small-scale irrigation projects on the reservation during this period. A disastrous flood in 1905 had washed out the old heading and filled a mile or more of the upper portion of the Little Gila River channel with silt. This stopped the flow of water in the Little Gila, which had supplied most or all of the Indian ditches on the south side of the Gila. Lewis D. Nelson, an educated Pima living in Casa Blanca, testified that the Little Gila was easier to handle and people could get their water without any trouble. The "Big Gila" or main river on the other hand was a mile wide in some places and "sometimes you can't hardly get your water."

Although it seems unlikely, Nelson and some others thought that the stoppage had probably been deliberate. The effect in any case was to dry up the old Indian fields and make people think that the Indians were really without water, and that pumps would have to be used (Indian Rights Association 1911: 27, 29; 1914: 20; U.S. House 1913: 19; Southworth 1919: 131). Herbert Martin, financial clerk for the U. S. Indian Service's Pima Agency at Sacaton, said at one

point that he didn't know who was responsible for shutting up the stream because the Pima agent J. B. Alexander accused Inspector Code, and Code blamed Alexander (Indian Rights Association 1911: 22).

Nothing happened until February 1913 when the Indian Irrigation Service decided to reopen the Little Gila and called this their Little Gila Project. The primary object was to reopen the channel and install a suitable heading for diversion from the Gila River. Bank protection was installed above and below the head gate, but another flood in December 1914 overflowed the riverbanks and did considerable damage to both the bank protection and the head works. The channel of the Little Gila had to be cleaned out again for almost half a mile.

It was necessary to reconstruct part of the Blackwater Island ditch as well to flume it across the Little Gila. Another *acequia* known as the Indian Island ditch, which closely followed the river bank at the Little Gila heading, had to be reconstructed to replace the washed-out portion, and a flume repaired in order to carry this ditch across the Little Gila. The Little Gila Project was completed in 1915 at a cost of some \$16,516.08 and it brought 1,029 acres back under irrigation. One group of young Indians began farming on the lands of the old (pre-1879) Santan Village, utilizing water in the Little Gila River. They called their community the Progressive Colony (Indian Rights Association 1914: 20; Southworth 1919: 130-132; Introcaso 1986: 49; Pfaff 1994: 36-37).

Also in 1914-15 a ditch known as the Blackwater project ditch (B line) was constructed by the Service at a cost of \$7,769.75. This ditch had its heading one mile east of the reservation boundary and was intended to irrigate 2,500 acres in the Blackwater District. This acreage included all of the land under the Old Woman's Mouth canal as well as land intended to be irrigated by the Upper Blackwater ditch. The latter had been built but never used, while the 1905 flood filled the Old Woman's Mouth ditch with silt and placed it out of service (Southworth 1919: 121, 132; Introcaso 1986: 49; Pfaff 1994: map 2 in pocket).

The Agency Project at Sacaton had for its purpose the irrigation of lands on The Island, that fertile strip of land between the Little Gila and the Gila River, just north of the Sacaton Agency. As early as 1912, Superintendent Frank Thackery established what younger Pimas called "The Progressive Colony" on the western part of The Island (*The Native American*, June 1, 1918, p. 172). Surveys for the Agency Project commenced in November 1913 and the actual construction work was carried out between March and June, 1914. Disbursements amounted to \$26,754.28 for building one main canal and a number of laterals, with water obtained by a diversion dam or weir on the Little Gila. The lands irrigated embraced what had been the Old Santan District west of Sacaton as well as a considerable area that formerly belonged to the Cottonwood Canal District, all on the western half of The Island. It was intended to irrigate 2,000 acres (Southworth 1919: 136; 1914 "Topographic Map showing Proposed [Diversion] Dam and Bridge Site;" Pfaff 1994: 38 and map 2 in pocket).

Introcaso (1986: 49) referred to the Sacaton Flats Project, which sought to reconstruct or repair the embankments of the Sacaton Flats Canal that had been flood-damaged. This canal served lands above the agency headquarters and had

its heading at a brush diversion dam in the Little Gila River. This was probably the segment of the original Agency Ditch known later as the Louis Morago Ditch (see Chapter 13). The Office of Indian Affairs initiated the Sacaton Flats Project in 1915. Later the canal was modified to receive water from the Pima Lateral and renamed the Sacaton Flats Lateral (Pfaff 1994: 38).

Finally, there was the Casa Blanca Canal Project, situated south of the Little Gila and west of the agency, with a heading on the Little Gila about three miles west of Sacaton. With this canal it was proposed to irrigate some 35,000 acres of land, which included nearly 3,700 acres currently irrigated at Casa Blanca and Sweetwater as well as previously irrigated districts at Old Maricopa, Ancient Sweetwater, Mount Top and Sranuka. The Casa Blanca Canal lay a mile or so upslope from any of the canals that had watered these earlier districts. Work began in May 1914 and by 1916 eight miles of the main canal had been constructed, as well as several concrete structures and more than 22,000 feet of laterals for the distribution system. While physically smaller than the Santan Flood Canal, the Casa Blanca Canal had an even larger capacity - 350 second-feet. Through fiscal 1915 the expenditures on this project totaled \$25,300.34 (Southworth 1919: 136-137; 1914 "Topographic Map showing Proposed [Diversion] Dam and Bridge Site").

The floods that destroyed the head works and upper end of the Little Gila River in 1914-15 also damaged the head gates of the Casa Blanca Canal. Some repairs were done to the Little Gila but it was never fully restored to use. With completion of the delivery system to Indian lands years later, under the San Carlos Irrigation Project, the only portion of the Little Gila remaining in use appeared to be the initial segment of the Casa Blanca Canal. Work stopped on the damaged Casa Blanca Canal after the 1914-15 floods and the system continued in disuse until completion of the Pima Lateral in 1928 (Pfaff 1994: 33, 36-37, map 2 in pocket).

The Casa Blanca Canal and other small projects developed by the Indian Irrigation Service in the 1912-1915 period were primarily distribution systems that still awaited a reliable source of water. These projects rehabilitated old Pima or Hohokam ditch systems but provided no new water. Most of the irrigation features built in conjunction with them were later incorporated into the San Carlos Irrigation Project, and these features in turn have been expanded and rehabilitated (Pfaff 1994: 12-13, 34-38).

### *First Steps Towards a San Carlos Project*

With approval of a major dam at the Roosevelt site on the Salt River in 1903, any serious consideration of building a storage reservoir on the Gila River was shelved for a decade. By 1912, opposition had grown to the use of pumped water or to sinking more wells on the Pima reservation, while schemes to exploit the Indians' lands and water kept surfacing (U. S. House 1912; Indian Rights Association 1911; U.S. Senate 1912). Nor was there any solution to the ultimate problem of furnishing irrigation water for the Pimas.

Finally, with \$15,000 from the Indian Appropriations Act, the Secretary of War convened a board of engineer officers in August of 1912. They were to investigate and make recommendations as to the practicability of constructing a dam and reservoir on the San Carlos Indian Reservation, and necessary irrigation works in connection with these. The board held a series of public hearings and did detailed inspections that included diamond-drill borings. After a thorough investigation, the Secretary of War released its report to the U.S. House in February 1914 (U.S. House 1914).

In brief, the board recommended building a 180-foot high masonry dam at San Carlos, at the upper end of a box canyon on the Gila. The dam would impound 770,000 acre-feet of water and have an expected life of seventy-seven years due to silt accumulations. The project should include 40,000 acres of lands on the Gila River Indian Reservation and 55,000 acres of private lands near Florence, Arizona. Cost of the project would not exceed \$6.3 million or \$70 per acre of developed land. The expenses would include erection of the impounding dam, a diversion dam near Florence, lining of the canals, and rerouting of the Arizona Eastern Railroad to where it would not be inundated by the reservoir. The San Carlos Irrigation Project, as the board called it, should be built by the United States. In addition, the officers recommended that a suit for the adjudication of water rights along the Gila River be brought immediately in the U. S. District Court and every step be taken to hasten an early adjudication. They asked that no more water rights be vested in addition to those already existing; and that in case of delay, a diversion dam be constructed on the reservation to improve irrigation conditions for the Pimas (U.S. House 1914: 63-65; Introcaso 1986: 49-50).

Federal legislation to authorize a dam at San Carlos was not approved, but the Indian Appropriation Act of August 1, 1914 did make available \$50,000 to investigate further the recommendations made by the army board. Specifically, this was to compile data on existing water rights along the Gila that would allow a determination of the water available for an irrigation project, and to estimate the costs of a San Carlos Irrigation Project (U.S. House 1914: 65; Introcaso 1986: 50-51; Pfaff 1994: 13). A new Arizona congressman, Carl Hayden, opposed adjudication of the Gila River's waters for reasons that now appear to be specious, but which made very good sense to non-Indian water users in Pinal County (U.S. Senate 1965a: 58; August 1992: 400). They could see a potential threat in the adjudication recommendation.

When the army issued its report early in 1914, Hayden urged leaders in Arizona to back the San Carlos plan and to settle their water rights disputes swiftly, in a "friendly" court proceeding. This was not the time to quarrel over water, much less begin a lengthy adjudication proceeding. Instead, a suit to clarify appropriations of water from the Gila River, limited to Pinal County water users, was assigned to Cochise County Judge A. C. Lockwood in June 1914. The Lockwood Decree, issued in early 1916, determined to which lands a water right belonged and assigned priorities in order of appropriation between 1869 and

1919. The Pima Indians as the earliest users received first priority to the Gila River's waters (Introcaso 1986: 51; August 1992: 401-402).

For its \$50,000 appropriation, Congress received a substantial "Report on the San Carlos Irrigation Project and the History of Irrigation Along the Gila River" by Charles R. Olberg and W. M. Reed, two engineers from the Office of Indian Affairs; an even more detailed "History of Irrigation Along the Gila River" by C. H. Southworth of the U. S. Indian Irrigation Service, and several briefer reports on the hydrography of the Gila Basin and the projected costs of the San Carlos Project. These studies covered the length of the Gila River in Arizona. In addition, thirteen large-scale plat maps, done by township, represented the areas of present and previous cultivation and settlement in the irrigated portions of the Gila River Indian Reservation. These plats were done under Southworth's direction, from field surveys made between January 1914 and March 1915.

In an introduction to his field notes, probably written in 1931, Southworth explained that he had been the engineer in charge of the Indian Service's Gila River Survey in 1914. Originally this survey was intended for the sole purpose of "obtaining information looking to the determination of water-rights in the Gila River." Later it was extended and enlarged to permit an investigation of the proposed San Carlos Irrigation Project (Southworth "Introduction"). His interview dates with Pima informants, in May and June of 1914, must mean that the field work was paid for out of the budgets for the small-scale irrigation projects, prior to Congress' appropriation of \$50,000 to fund the Gila River Survey. The engineers seem to have been far ahead of the politicians in their awareness of the need for good information (Southworth "Supplementary Exhibits").

The historical and hydrographic studies and the cost survey were completed by November 1, 1915 and published in 1919 as appendices to Volume II of hearings before the U. S. House of Representatives' Committee on Indian Affairs, in the 66<sup>th</sup> Congress 1<sup>st</sup> Session. The linkage between Southworth's printed report and his maps was a loose one. The maps for example showed individual fields but gave no direct indications of the acreages or areas under cultivation. The hearings themselves (Volume I) included only brief testimony about the Pimas by Congressman Hayden, who served on the Committee on Indian Affairs at that time, and by several other witnesses.

These appended studies were a trove of information about the reservation, not only in 1914 but for decades in the past, because of Southworth's use of oral histories to reconstruct when various canals were built and by whom, the amount of land irrigated from them, and many other details. Lewis Nelson and Rudolph Johnson served as interpreters. The essential findings were noted earlier in this chapter and are tabulated in Table 7. The interviews focused upon land, water, and ditches, and while the fine-grained descriptions offered a tribute to the engineer's interest and diligence, they were not always accurate, as we saw in Chapter 13 with regard to the Louis Morago ditch. Neither was there any need to denigrate Southworth's predecessor, J. R. Meskimons, whose own map and report represented the areas under cultivation and abandoned in a manner much easier to grasp (Meskimons 1904; Southworth 1919: 143; "Supplementary Exhibits").



The finding that "an adjudication suit does not seem to be a necessary prerequisite to a decision upon the building of the [San Carlos] project" must have pleased Arizona political figures. This question was referred to the Department of Justice for an opinion (Olberg and Reed 1919: 13). The authors also finessed the determination of water available for an irrigation project by distinguishing between water legally available (referred to the Justice Department) and water physically available. The latter they estimated by assembling stream-gauge records from seven stations along the Gila and its tributaries, at locations between the east line of the Gila River Indian Reservation and a station in New Mexico (Olberg and Reed 1919: 11-12; Jacob 1919; Palmer 1919).

In the end, the investigators recommended deferring the part of the San Carlos Irrigation Project that involved construction of the dam and reservoir. Instead, two diversion dams should be built on the Gila, along with a distribution system to irrigate 35,000 acres of Indian lands and about 45,000 acres of private lands around Florence, Arizona. The Florence Diversion Dam would lie about eight miles above the town of Florence, while the Santan (later called Sacaton) Diversion Dam would be situated some four miles above Sacaton (Olberg and Reed 1919: 78-81, 100-102; Introcaso 1986: 51-52). The distribution system would include a new main canal and otherwise make use of many of the existing waterways, including the Little Gila River.

#### *The Florence-Casa Grande Project*

The first effort to gain passage of a San Carlos Irrigation Project bill in 1914 failed due to a lack of support from the U. S. Reclamation Service and western congressmen. A campaign to increase public backing followed, that included active lobbying by the Pimas themselves. On May 18, 1916, Hayden and his Senate colleague Henry Ashurst gained passage of the Indian Appropriation Act with initial funding of \$150,000 for the Florence-Casa Grande Project.

Half of this money was for the diversion dam and controlling works on the Gila River above Florence. The other half was for a diversion dam with a bridge superstructure and necessary controlling works, several miles east of Sacaton (39 Stat. 130; Introcaso 1986: 51-52). This 1916 appropriation became the first step in a federally financed irrigation system that would divert flood flows and convey stored waters from a San Carlos Reservoir to Pima and non-Indian farmlands.

World War I intervened and very little was done until 1921, although annual appropriations to finance the construction accumulated year by year. On April 22, 1920, the Secretary of the Interior designated the actual size of the project: 35,000 irrigated acres for the Indians and 27,000 acres of irrigated land for non-Indians. Fortunately, no one sought to have the government buy the old Florence Canal, which was in very poor condition. The army study had found that it would be much cheaper to build a new one. A private company began construction on a Casa Grande Canal in 1912 and in two years had built nine miles of this ditch, which lay just above the old Florence Canal (Alexander to

Comm. Ind. Affs., June 7, 1904; U.S. House 1914: 19-20, 48; Southworth 1919: 155-160; Introcaso 1986: 52; Pfaff 1994: 14-15, 20, 23, 30-32).

The government did buy the newer canal, renamed it the Florence-Casa Grande or Main Canal, and extended it for 21.6 miles from the Florence Diversion Dam to the Picacho Reservoir. This reservoir lay about eight miles south-southeast of Casa Grande National Monument. The dam east of Sacaton would divert floodwaters and channel them into the Santan and Casa Blanca Canals. To prevent seepage losses between the two diversion works when the river was low, water would be conveyed to the reservation from the Florence Diversion Dam via the Florence-Casa Grande Canal and a newly built Pima Lateral. The latter led from the Main Canal to the Gila River above the Sacaton Dam and later via a conduit to the Santan Flood Canal. The Pima Lateral, although originating on non-Indian lands, became the primary distributor of water to the reservation. A smaller North Side Canal originally headed at the Florence dam on the north side of the Gila. It then followed an earlier ditch known as the Cholla Mountain Ditch to the eastern edge of the reservation (Introcaso 1986: 52; Pfaff 1994: 15, 28-38).

Perusal of the annual and supplemental appropriations acts for the Department of the Interior from 1916-1924 indicates that at least \$1.5 million dollars were expended for the Sacaton and Florence diversion dams, their appurtenant structures and distribution canals. Annual appropriations continued for the earlier small-scale irrigation projects as well. With the design and drilling tests to assess foundation conditions completed, the Indian Service hesitated for awhile and then opted to construct the Florence dam themselves rather than contract it out. Because of high prices it was a difficult time to begin such a project, and on January 12, 1921, the Secretary of the Interior approved the work on force account. The work progressed without undue delays and on May 10, 1922, Commissioner of Indian Affairs Charles H. Burke performed the dedication, astutely renaming the Florence Diversion Dam the Ashurst-Hayden Dam. Final construction costs amounted to \$244,005 (August 1992: 406-407; Pfaff 1994: 19-25).

The Sacaton Dam originally was considered necessary for the success of both the Sacaton Contract and the Casa Blanca Project, the dam being located immediately below the intake to the Santan Flood Canal. Design got underway in 1917 but as costs ballooned, construction was postponed. There were design problems and second thoughts as well, and in the end the Office of Indian Affairs built it rather than contract it out. Construction began in earnest in the spring of 1923 and continued for four years. Completed in June 1927, the costs totaled \$719,793. A highway bridge incorporated into the design accounted for almost half of this expense, the bridge being far more expensive than anticipated. Without it, the nearest river crossings had been twenty-three miles to the east at Florence or on the lower Gila at Wellton, scarcely twenty miles from Yuma. This dam failed as a diversion structure because there was too little water and the crest of the dam was too low. A reinforced concrete conduit conveyed water from the

Pima Lateral extension on the south side of the Gila to the Santan Flood Canal on the north side (Dobyns 1989: 77-78; Pfaff 1994: 25-28).

Both the Sacaton and the Ashurst-Hayden dams were actually weirs, floating slabs of concrete that rested on the sand of the riverbed and on pilings driven into the sand below the slabs. They were not intended to halt the flow of water or to create a storage reservoir, but only to raise the level of the floodwaters sufficiently for these to be diverted into the Florence-Casa Grande Canal, the Sacaton Flood Canal, and other ditches in the distribution system. The Gila River's underflow would continue almost unimpeded. The Ashurst-Hayden diversion worked well enough but the Sacaton Dam primarily served as a bridge. The Florence-Casa Grande Project improved water distribution, although the intention had been to divert *floodwaters* for irrigation. Popular support for building a storage reservoir at the San Carlos site remained strong.

### *More Water for the Reservation?*

The concept of a cost-benefit ratio lay far in the future at the time these early water projects were being built, nominally for the benefit of the Pimas. The costs cited in this chapter, from the Sacaton Contract through the Florence-Casa Grande Project, totaled slightly more than \$2,076,000 as of 1924. Congress appropriated another \$10,000 to \$15,000 each year for additional construction, operations and maintenance. Did the Pimas benefit accordingly?

Finding an answer is complicated by the allotment program carried out between 1914 and 1920, which will be reviewed in the next chapter. One scholar (Dobyns 1989: 79-80) indicated that the Indians did not benefit because no more water was available than before. Another (Hackenberg 1983: 174) has said that water was abundant and the cultivated acreage averaged 16,000 for the 1910-1914 period and climbed to 32,000 acres for 1915-1919.

When one looks for evidence as to what happened, this is difficult to find or evaluate. From 1911 through 1920, the Office of Indian Affairs resumed publication of elaborate statistical tables in each annual report. With respect to agriculture, it is not always clear what the figures in the tables represented. My own interpretation is that the escalating totals of 15,000 acres in 1911, 38,460 in 1916, and 45,610 acres in 1919 represent only the acreage under projects and susceptible of irrigation, not the acreage of irrigated lands actually cultivated, as Hackenberg's use of the figures would lead one to believe (Ann. Rpt. Comm. Ind. Affs. 1911: 124, 204; 1916: 163, 166; 1919: 126, 175).

With these excessive acreage figures, the value of crops raised by the Indians (in still another table!) would have amounted to only \$3 to \$4 per acre, which seems unrealistically low. Instead, the estimated 12,000 total acres irrigated in 1911 and 1912 may have increased only to the 12,300 acres susceptible of irrigation and under projects shown for 1919 (Ann. Rpt. Comm.

Ind. Affs. 1911: 204; 1912: 231; 1919: 175). This, as will be seen, is in accordance with the decline in per capita income among the Pimas for this same period. An actual inspection of the Gila River bed, diversion dams and intakes in 1918 showed that the farms of the whites were in excellent shape while the Pimas' fields were parched for lack of water. In support of the war effort, the Pimas had sowed 1,500 acres in wheat. One tract of fifteen acres was fairly well watered and yielded about twenty-four bushels per acre. The rest of the crop largely dried up and was cut for hay (Indian Rights Association 1918: 21-23, 45-46).

Several articles in popular magazines after World War I affirmed that the Pimas were still being dried out and had not benefited from the diversion projects on the reservation. One writer claimed that seepage and well water irrigated only 3,000 acres of Pima lands in 1923 (Blanchard 1922; Atwood 1923; Roberts 1924). However, another source reported 8,965 acres in crops that year, "on account of water shortage" (King and Leding 1926: 5). The truth may lie in between. There had been no increase in the water supply beyond what Inspector Code's pumps delivered and what nature supplied through the normal and flood flows of the Gila. The monies spent on improving the distribution system provided no increase in water to the Pimas.

#### *Faces Old and New: Other Changes on the Reservation*

The early development of government-sponsored irrigation projects coincided with other changes on the reservation, especially among some of the personalities there. On October 20, 1910 Antonio Azul, the last Pima head chief and the last hereditary leader, died (Nuss and Pfeuffer 1970). The Rev. Charles Cook characterized Antonio Azul as a very successful warrior and farmer, a born leader both in peace and in war. In his last years he had opposed the pumping of ground water and plans to allot the reservation (U.S. House 1913: 7; Cook 1976: 12, 228; Hudanick 1983: 414). The 1860 Census schedule estimated his age at thirty-five, which would mean he was around eighty-five at the time of his death.

In 1911 Antonio Azul's son Antonito relinquished what hereditary leadership he retained to a newly organized "business committee" of younger men with formal educations. Among the committee's members were Kisto Jackson Morago, one-time police captain on the reservation and son of Louis Morago, an Apache Wars hero of the 1860s, and Lewis D. Nelson. Nelson had graduated from the Indian boarding school at Albuquerque, taught in the reservation day schools, and currently (1911) was a merchant at Casa Blanca (U.S. House 1913: 14-15; Dobyns 1989: 73-74; 1994a: 81). Other committee members included Harvier Cawker, who in 1936 would become the first governor of the Gila River Indian Community; John Johnson, and Jackson Thomas (U.S. House 1912: 9).

Lewis Nelson had made a name for himself three years earlier when he visited Washington and filed a protest against the government's proposal to create individual allotments of five acres of irrigable land, which it was assumed would be irrigated by pumped water. The Interior Secretary deferred his decision on this. Reportedly, Nelson also helped to initiate the investigation of Pima agent J.

P. Alexander and his financial misdealings (Indian Rights Association 1909: 66-69; Wetzler 1949: 328; Dobyns 1989: 74). Alexander had been in charge of the agency since October 1902.

As a result of charges filed against the agent in December 1910, Inspector Edward B. Linnen visited the reservation the following February and March. Linnen found instances of falsified payrolls, raised vouchers, forged and withheld checks and similar misdeeds. Alexander and six of his subordinates were suspended. The agent was subsequently dismissed, then indicted by a federal grand jury for criminal misconduct and tried on one of the indictments. The jury returned a verdict of not guilty. Selections from the Indian inspector's report were read into the record of investigations by the House Committee on Expenditures in the Interior Department (Ann. Rpt. Comm. Ind. Affs. 1903: 130; Indian Rights Association 1912a: 10-18; 1912b: 19-23; U.S. House 1913: 462-478). As of October 1, 1912 Frank A. Thackery became superintendent of the Pima Agency, probably on the strength of his reputation as a trouble-shooter who restored order to agencies riddled with corruption. It was under Thackery that the small-scale irrigation projects were constructed.

The Reverend Charles Cook, born in 1838, had grown tired and started ailing after forty years as a missionary, most of it spent on the Gila River Indian Reservation. In 1909 the Presbyterian Board of Home Missions asked the Presbyterian seminary presidents to find a man to assist Rev. Cook. The candidate of choice was Dirk Lay at the Dubuque Seminary in Iowa. He accepted the call for a one-year period, which stretched into twenty-seven years. Rev. Lay and his new wife arrived at Sacaton on September 3, 1910 and for the next three years he worked alongside Cook, who formally retired in 1914. Charles Cook died at his daughter's home in Nodaway, Iowa on May 4, 1917 (Robinson 1927-29; Cook 1976: 24, 211-219).

Cook reportedly pledged Dirk Lay to work tirelessly for the economic improvement of the Pimas, and the new minister became emotionally involved with their problems. He was controversial and not one to win friends easily, but he proved to be a skillful money-raiser and organizer. In 1917-18 he led a delegation of Pima Presbyterians on a nationwide tour that raised \$17,000 to rebuild the church at Sacaton. In 1921 he began marshalling Presbyterian support across the country to gain permanently for the Indians the proportion of water to which they were justly entitled.

In this, he was probably being used by others who supported building a dam across the Gila River at San Carlos to capture and store the Gila's floodwaters. When Congress did authorize the San Carlos Irrigation Project in 1924, Representative Carl Hayden saw to it that the reservoir's waters would irrigate an additional 23,000 non-Indian acres as well as 15,546 acres on the Gila River Indian Reservation beyond what the Secretary of the Interior had designated in April 1920 for the Florence-Casa Grande Project. In 1928 the latter was folded into the San Carlos Irrigation Project (Hackenberg 1955: 63-66; Hudanick 1983: 448-449; Dobyns 1989: 75, 79-80; August 1992).

*Agricultural Economics in the Early 20<sup>th</sup> Century*

The Pimas in scarcely one generation found themselves reduced from self-sufficiency and the ability to supply markets all around them to being rationed by the government. Ezell (1994: 378, 382) concluded that this stemmed directly from the deprivation of water for irrigation, and that had they been allowed to keep pace with whites in their use of irrigation water, they would have kept pace with them in the industrialization of agriculture as well. This is most unlikely because success in agriculture depends upon flexibility to adapt to changing markets, access to credit, and the availability of capital or capital equipment. The Pimas had none of these and neither did the first generation of (primarily Hispanic) non-Indian farmers in the Florence area, who were eliminated by the wave of development that followed the railroad and the appearance of canal companies in the 1880s.

Without firm technical guidance and support, well beyond what the Indian traders could provide, the Pimas were instead locked into farming at a subsistence level. This situation was only reinforced by another unfortunate government program, allotments, that nominally assigned everyone a ten-acre parcel of irrigable land and ten acres of grazing land. There was hope nonetheless. In 1905, even as the Pimas were being held to their cultivation practices from the 19<sup>th</sup> century, studies on three agricultural projects in Arizona showed the need for a high-priced staple agricultural product that would serve as a cash crop, give high returns per acre, and not be subject to deterioration in shipping. The Department of Agriculture selected Egyptian (i.e., long-staple) cotton as the crop that would best suit these conditions. A committee that included the Office of Indian Affairs was soon formed, in the USDA's Bureau of Plant Industry (Thompson 1916: 272).

A genuine benefit to the Pimas came from the establishment in 1906 of a USDA Field Station at Sacaton, originally on fifty-five acres of the old agency farm. This was operated through a cooperative agreement between the Office of Indian Affairs and the Bureau of Plant Industry. The original purpose was to study agricultural problems of the Southwestern states with special reference to the crops and plants of possible value to the Indians of the Gila River Indian Reservation. Early successes were reported with growing a type of Egyptian cotton, cultivation of Bermuda onions, and varieties of alfalfa (Ann. Rpt. Comm. Ind. Affs. 1908: 4-6; 1910: 6; 1911: 12-13).

The American-Egyptian cotton, as it was beginning to be called, was a long-staple cotton well adapted to the Gila-Salt valleys. Pima Indian farmers began raising the "Yuma" variety of Egyptian cotton as early as 1912, and in 1916 the superior Pima variety was first grown on a field scale. The name "Pima" reflects only the geographic location, as the cotton formerly grown by the Pima Indians had been a short-staple strain called "Sacaton Aboriginal," similar to the cotton of the Hopi Indians. In 1917 a seed farm was established at Sacaton to provide the Indians on the reservation with pure seed for growing new and improved crop plants developed at the field station (Ann. Rpt. Comm. Ind. Affs.

1912: 33-34; 1915: 26-27; 1917: 31; *The Native American*, April 14, 1917, p. 128; King and Leding 1926; Fulton 1938: 333).

The field station at Sacaton continued to develop and experiment with crop varieties through 1955, when the last field research was done there. In 1956 a new facility known as the Cotton Research Center, a joint operation with the State of Arizona, replaced the Sacaton station. The Cotton Research Center was located on East Broadway just outside of Tempe. During its years at Sacaton the field station had provided seasonal employment for upwards of fifty persons, all of whom were Pimas. In addition to cotton and alfalfa, considerable effort was put into date palms, pomegranates and citrus varieties, and to a lesser extent the culture and experimentation with varieties of other crops (personal communication, Dr. Billy Waddle, April 12, 1997). Only after 1930, as water from the San Carlos Reservoir became available and alfalfa began to replace wheat as their principal crop, were the Pima farmers finally able to make good use of the field station.

## Chapter XV

### FROM ALLOTMENTS TO SUBJUGATION

#### *Prelude to Allotments*

The Dawes Severalty Act of 1887 established in Indian law the process of land allotment - the assigning of a separate parcel of land to each Indian. Allotting Indian lands was seen as part of a process of 'civilizing' them by breaking up their tribal structures and destroying the system of communal land tenure. This in turn would force reluctant natives to develop their lands and lead them towards citizenship and life amongst a largely white population. Commissioner of Indian Affairs John Collier, no apologist for the actions of past administrations, explained clearly how allotment worked.

Under the Dawes Act, tribal lands were assigned or allotted to individuals in parcels that ranged from forty to 160 acres in size. Any lands remaining after allotment were declared surplus and might be sold without tribal consent to the Federal government, which then opened them to white settlement. Land allotment was mandatory, although each person supposedly chose his or her own tract. Title was held in Federal trust for twenty-five years or more, and at the end of the trust period citizenship would be conferred upon all allottees and other Indians who had separated themselves from their tribe and had taken up "the habits of civilized life." The Dawes provision for selling surplus lands is what underlay a proposal to exchange and open for public settlement 180,000 acres of the Gila River Indian Reservation (Collier 1934: 1-5; Young and others c. 1976).

The Dawes Act did not appear out of nowhere. Since the 1850s, various Indian treaties had embodied the principal of individual allotments, at the

discretion of the President. Nor was the law proposed or justified as a means of legally separating Indians from their land. There were those who opposed its passage, but the supporters eventually prevailed. It soon turned out that the critics were right; the legislation became an efficient means for separating Indians from their land and pauperizing them. Sales by the government of so-called "surplus" lands, sales by allottees after the trust period ended, and government sales of heirship lands all reduced Indian landholdings from a total of 138,000,000 acres in 1887 to 48,000,000 acres in 1934.

Allotting proceeded at an uneven pace, those reservations with the most desirable resources generally being allotted first, as happened again with the termination policy in the 1950s. The Indian Reorganization Act of 1934 halted further allotments, extended indefinitely the trust status of allotted lands not yet granted a fee patent, and restricted conveyance of allotment lands to the tribe and to other Indians (Collier 1934: 1-5; Young and others c. 1976: 1-9 - 1-12, 1-23 - 1-35, 7-20 - 7-22). Allotment left about 100,000 Indians across the United States divested of any land, with more than 80 percent of the land values pertaining to all Indians in 1887 taken away from them. When an allottee died and the title passed to multiple heirs, each gained an interest, creating what was called the heirship problem. Disagreements among these heirs rendered much of the land that remained in Indian ownership unusable. By 1935, disputes among heirs had left more than 3,000 acres of good, irrigated land on the Gila River reservation lying fallow (Collier 1934; Woehlke 1935).

The Pima Agency in the 1880s exercised administrative responsibility for four reservations and three Indian groups - the Pimas, Maricopas, and Papagos. Two small reservations for the Papagos or Tohono O'odham lay at San Xavier and Gila Bend, although the great majority of the Tohono O'odham lived off the reservations. The Pimas, and from 1894 the Maricopas, for the most part had their homes on the Gila River and the Salt River reservations. Sooner or later special allotting agents visited all of these reserves, and at three of them the allotment process appears to have provoked little controversy.

At the San Xavier Reservation, 41,600 acres or 60 percent of the land total was allotted among 363 Indians. Only 400 of these acres were in cultivation, the balance being woodland and mesa lands. This took place in 1890. The following year, the Pima agent recommended that substantial parts of both the Gila Bend and Salt River reserves be sold and the money used to purchase water rights for irrigating the remaining lands, which would be allotted to Indians on these reservations. This was not done, but in 1896 a special allotting agent did visit the Gila Bend Reservation and made 679 allotments, of ten acres each, to the Indians living on this 22,391-acre reserve. They had no assured water rights, and three years later only forty families were reported cultivating their allotments (Ann. Rpt. Comm. Ind. Affs. 1890: 7; 1891: 218; 1895: 122; 1896: 115; 1899: 162). With very little water, they eked out a living as best they could.

Bearing this in mind, the agent recommended that since the Indians on the Salt River had water enough to make themselves self-supporting, the sooner their lands were allotted the more rapid would be their progress. Nothing happened



until 1910, when the Salt River reserve was separated and placed under the Camp McDowell superintendent. The lands there were allotted in 1912-1914 (Ann. Rpt. Comm. Ind. Affs. 1902: 158-159; 1910: 18; U.S. House 1913: 479-480; Meister 1975: 231). None of the allotments to date had been accompanied by a sale of "surplus" lands.

Perhaps because of the lack of water, there had been no specific moves to allot the Gila River Indian Reservation. Historian Andrew Hudanick (1983: 410-413) thought that this delay indicated the need by Arizona speculators to find a way to tie a plan for disposing of "surplus" reservation lands to at least the prospect of water rights. The Indian Rights Association (1911: 6) saw this same association - a way to link cheap land with a supply of water - in Inspector W. H. Code's 1904 proposals. Before 1904, only two mentions of allotment had been made. Special Agent Taggart claimed in 1898 that enough good land was available to give each individual under the Pima Agency a forty-acre allotment, once a reservoir was in operation. The following year Elwood Hadley judged that with water to irrigate it, each Indian could be given twenty-five acres of arable land (Ann. Rpt. Comm. Ind. Affs. 1898: 126; 1899: 161). Government agents never again mentioned acreages as generous as these.

In its report of May 12, 1904, the U. S. Geological Survey outlined a proposal to use hydroelectric power generated on the Salt River to pump water from irrigation wells on the Gila River reservation and irrigate 10,000 acres, paying for this development by exchanging some 180,000 acres of reservation lands. This became Inspector W. H. Code's idea when he endorsed it in his letters of June 30 and December 2, 1904. Code excluded from this exchange 5,000 acres at Gila Crossing and 1,500 acres at Maricopa, "at which points land should be allotted to them [the Indians]" (Ann. Rpt. Comm. Ind. Affs. 1904: 18-20; Indian Rights Assoc. 1911: 18-19). Nothing more was said about allotments then, apparently because the \$540,000 that Congress authorized in 1905 for what became the Sacaton Contract obviated a need for funding by the sale or exchange of Indian lands, though the project costs would be reimbursable.

Head chief Antonio Azul and other Pima leaders reacted strongly to proposals that had been negotiated without their involvement, in a series of letters addressed to the Commissioner of Indian Affairs and the Secretary of the Interior (U.S. House 1913: 151-159; Cook 1976: 207-210; Hudanick 1983: 409-414). Their principal complaints were that irrigation by pumping underground water would ruin the land because of the high salt and alkali content of this water, and that their people must receive enough irrigated farmland to support themselves. Code had evidently raised the matter of allotments again, because in a letter of November 29, 1907, Antonio Azul and twenty-three captains protested against both the sale of their lands and the belief by engineer Code that the Indians could make a living on eight to ten acres for each family. "We say that this would be impossible. .... We need at least 30 acres of land which can be irrigated for each family." A year earlier, Azul had said "All our people ask for is enough of water to irrigate from 25 to 30 acre to the family" and enough desert land to supply them with firewood and some pasture (U.S. House 1913: 152-153). The Pimas'

next letter to the Secretary of the Interior on January 27, 1908 made it very clear that they considered his explanation of how the government intended to irrigate their land unsatisfactory (U.S. House 1913: 155).

Allotments evidently came up once more because two Pima representatives, Hugh Patten and Lewis D. Nelson, wrote to the Secretary on May 1, 1908 to protest against the manner of allotting their land in *five-acre* tracts, "as contemplated by the Reclamation Service." This last reference indicated that it was lands below the ditches and the line of wells at Santan that the government had focused upon. This time the Interior Secretary blinked, and said that there was no intention of making permanent allotments until the suitability of well water for irrigation had been demonstrated, and not until after the tribe had been consulted and their wishes considered (Indian Rights Assoc. 1911: 15-16). The Pimas were learning from this exchange because their letters became more pithy as time moved along.

Even as work progressed on the wells at Santan, there was a continuing undercurrent about efforts to rob the Pimas of their lands under the plea of allotting five acres to each Indian. All of the villages protested, and Antonio Azul and forty others signed another letter on July 1, 1909. They asked the Secretary of the Interior to put a stop to this five-acre allotment scheme and to send honest and competent officers to look into the matter (U.S. House 1913: 158-159). The Secretary who had listened to them the year before was gone, as a result of the 1908 presidential election, and the new office holder evidently listened to his engineers.

The Pimas already had support from the Board of Indian Commissioners. In 1909 the Indian Rights Association, probably the most effective lobbying organization for Indians at this time, also enlisted on their side. Gradually it developed that the Interior Department was considering allotting 12,000 acres of irrigable land in the Santan District among 4,000 Indians on the Gila River reservation. The first well at Santan began pumping in 1910, and seven of the original ten wells were on line by 1911.

This plan or something like it had probably been the department's proposal all along, and the Commissioner of Indian Affairs sent what was at best a very muddled letter of instructions to Special Allotting Agent Charles Roblin on April 19, 1911. The commissioner's intention appears to have been to ensure at least ten acres of irrigable land to each family. The agent was to survey the irrigable lands in the district that were under ditches in tracts of five acres, but not actually carry out the allotments. The commissioner figured that with three more wells - a total of thirteen - 20,000 acres of land would be required to give five acres with assured water rights to each Indian (Ann. Rpt. Comm. Ind. Affs. 1910: 21; Indian Rights Association 1911: 13-15; 1912a: 45-49; U.S. House 1912; 1913: 147, 161; Wetzler 1949: 327-328).

Planning such as this made for an unpromising start, and it is unclear whether anything at all was accomplished beyond raising a major protest. The Pimas evidently understood the letter of instructions to mean that the agent's orders were to allot all of the Indians and assign ten acres to each family, at

Santan, under the wells. They petitioned the Indian Rights Association for assistance, still asking for the natural flow of the Gila River and protesting the use of well water. They asked that ten acres with assured water be allotted to each person in the tribe, with the rest of the reservation allotted as grazing land. They requested recognition of their rights to the waters of the Gila River and some part of the waters stored in the San Carlos Reservoir, if this reservoir was built. Their 1911 petition did not repeat the offer made two years earlier, to help pay for construction of the reservoir (Indian Rights Association 1911; U.S. House 1912; 1913: 158-159, 180-181)!

By 1911 Antonio Azul was deceased and this petition of July 31, 1911 marked a shift from an earlier position taken by him, if not exactly a concession. It now appeared that the Pimas were requesting individual allotments of ten acres rather than assignments of land by families. The government would never have agreed to the latter. For the moment nothing seems to have happened, and one more cloudy proposal drifted away. Wheels were already in motion, however, the President having authorized allotments to the Indians of the Gila River Indian Reservation in accordance with provisions of the Act of June 25, 1910. The Indian Irrigation Service resumed construction on the Sacaton Contract or Irrigation Project in 1913 and started to reopen the channel of the Little Gila River. The service also planned for the other small-scale irrigation projects scheduled to begin in another year or so.

#### *Allotting the Gila River Indian Reservation*

The Superintendent of Irrigation, C. R. Olberg, was asked for suggestions as to how allotments should be done, since it was clear by now that the allotted tracts would lie within districts irrigated by the Santan, Agency, Blackwater, and Casa Blanca irrigation projects on the eastern half of the reservation. At the time allotments began, the Florence-Casa Grande Project had not yet been authorized, while the San Carlos Irrigation Project lay a decade in the future. Olberg, apparently following a proposal by the Reclamation Service, expected to use floodwater diversions and well water for irrigating the allotments without the benefit of a storage reservoir (U.S. House 1913: 169-171). In Olberg's opinion, allotment and irrigation "need not depend on the actual construction of storage reservoirs to conserve the flood flow of the Gila" (Olberg to Comm. of Ind. Affs., September 27, 1913).

Engineer Olberg made his recommendations in two letters of the same date, one of which covered the lands near Santan Village (the Sacaton Irrigation Project), the other the lands south of the Gila River that would be supplied with irrigating water from the Little Gila River (Olberg to Comm. of Ind. Affs., September 27, 1913). To him, the figures added up. With half the average annual flow of the Gila River, which he put at 200,000 acre-feet, plus pumped well water, there was enough water to justify allotting ten acres of irrigable land to each of 5,000 Indians. Thirty thousand acres would be irrigated with the river's

waters and 20,000 acres by the wells. This set the precedent for a total area of 50,000 acres, which he thought would provide an ample allowance for an increase in population and for unenumerated individuals.

Three weeks later, Indian Commissioner Cato Sells issued instructions to Special Allotting Agent John Baum (Sells to Baum, October 17, 1913). This time the instructions were clear. Baum would begin the process, allotting the available acreage for which water had been supplied and to which it was expected that water would be supplied. The General Land Office had already subdivided the irrigable lands into forty-acre tracts, and people from the Indian Irrigation Service then marked the corners of ten-acre subdivisions. Each Indian would receive ten acres of irrigated land. Allottees would be permitted to select their own lands (parents would select for their minor children) and those with prior occupancy, improvements or other recognized rights should receive the same tracts, not exceeding ten acres.

Baum began his work in 1914 and allotted 1,661 Indians ten acres each of irrigable lands that first year (Ann. Rpt. Comm. Ind. Affs. 1914: 46). The Bureau of Indian Affairs (BIA) Land Ownership Status Maps of the Gila River Indian Reservation and contemporary allotment lists show that the assignments began at the eastern end of the Santan District ("Pima Original Allotments" at ASM Archives, A-349-2). With only a few exceptions (Allotment #1 was one such), each tract measured one-quarter mile in length and one-sixteenth mile or 330 feet in width, with the longer dimension oriented east-west. Baum's work that year covered most of the Santan District and extended well into the area of the Agency Project.

The Gila River Survey township plats coincided in time with the beginning of the allotment program, but otherwise had no connection with it. These plats portrayed the reservation in great detail as of 1914 and were the last maps to show the original layout of Pima fields. The native fields usually had their longer dimension perpendicular to rather than parallel with the Gila River.

Many of the allotting schedules and other records are on file at the BIA's Southwest Title Plant in Albuquerque, as paper copies and on microfilms. First on the list of allottees was Antonio B. Juan, aged 41, his wife, their two sons and four daughters. Each member of this exceptionally large family received eighteen to twenty acres. Their primary ten-acre allotments fell at the eastern end of the Santan District and were contiguous with one another, amounting to eighty acres of land already under cultivation. The family's secondary allotments totaled seventy-two acres of unoccupied, unimproved lands several miles west of Chandler, Arizona. Other recipients generally received two non-contiguous ten-acre tracts as well.

This doubling of the allotment size came about because the commissioner decided in 1917 to award each recipient ten acres of additional, irrigable land, after it had been estimated that so-called grazing lands could be made irrigable (Meritt to Baum, September 21, 1917). In fact, this adjustment reflected congressional approval of the Florence-Casa Grande Project in 1916, although as yet no work had been started. These secondary allotments usually lay well

outside of the irrigation project areas, but some persons who received lands later got their twenty acres in a single block. In later years it was made clear that the intention was for each allottee to receive ten acres as a primary allotment under the San Carlos Irrigation Project and ten acres as a secondary allotment, outside of the irrigation project (Zimmerman to Sec. of the Int., April 21, 1938).

The Annual Reports of the Commissioner of Indian Affairs after 1914 gave only cryptic comments about the allotment program, such as that the work was continuing or the agent was making additional allotments. The tables with these reports included figures for the number of acres allotted, the number of allotments under ditch, the acreage of allotted, irrigated land; the allotted acreage under project, and similar categories. The meanings of these numbers were not always clear and sometimes the same figures were reported for several years. They varied so much that it is impossible to derive trends and even meaning from them, or decide which are creditable and which are not. As a result, the pace of the allotting process and the direction of movement through the project areas or districts is not known.

In 1921, the commissioner's annual report announced the completion of allotment work on this reservation, with 4,869 selections of irrigable and non-irrigable land, approximately 96,000 acres in all. Each selection consisted of ten acres of irrigable land and ten acres that were nonirrigable (Ann. Rpt. Comm. Ind. Affs. 1921: 21-22). In years to come there would be changes and exchanges, especially in the early 1930s, because of the condition of the soil, location of the land, and in particular so that each allottee possessed one ten-acre tract for which water would be furnished by the San Carlos Irrigation Project. As of 1984, the number of Indian allotments stood at 4898. Some non-Pimas received allotments; Adams (1936c: 101) mentioned four Yaquis and two allottees who were half-Hopi. Perhaps they had been adopted into the tribe. Forty-one additional acreages totaled just over 1,500 acres. These were reserved for the Pima Agency at Sacaton, the Sacaton Seed Farm or Field Station, and for a series of churches, cemeteries and schools (Collier to Sec. of the Int., June 16, 1933; Zimmerman to Sec. of the Int., April 21, 1938; Claymore to Johnson, April 19, 1984).

The allotments stretched across the Gila River Indian Reservation discontinuously, from Maricopa Village on the west to where the Southern Pacific Railroad crosses the eastern end of the reserve. The irrigable lands all lay in the eastern half of the reservation, in Township 3 South Range 4 East and eastward from there, in the districts once known as Casa Blanca, Santan, Progressive Colony, Cottonwood, Sacaton Flats, and Blackwater. Many allotments in these districts were irrigable and, if designated as primary allotments, could receive San Carlos Irrigation Project water. A 1988 map by the Bureau of Reclamation titled "Gila River Indian Community, San Carlos Indian Irrigation Project (SCIIP) 1988 Redesignation" illustrates the distribution of eligible and non-eligible allotments.

As Robert Hackenberg (1955: 60-62) indicated, the allotment program had some unanticipated consequences. Whereas most families before had farmed ten acres or less, each person now received ten acres and family farms increased in size to as much as eighty acres. Allotting did nothing to increase the water

supply, however, and most land called irrigable probably grew no crops for another decade or more. The effect nonetheless was that while families in a community had once located their houses near one another in a common village, after allotment they began to spread out and move their houses onto the land they now owned. Allotments ended the old Pima villages as areas of clustered settlement (see also Supt. Ann. Narrative Rpt, 1916: 9-10).

According to Hackenberg, the land surveyor gave out allotment numbers. The numbers in a certain district would be posted. A call was put out for the people in that district to come and select their allotments. Indians went out with the allotting officer every day to choose their land. Usually families picked the land that they had previously occupied as their allotments, but where these overlapped the fields that a neighbor had held previously, it was necessary to pay that person for his crops. Through his informants, Hackenberg recorded other details of how allotting was implemented.

The government farmer at Casa Blanca tied together the benefits that he foresaw from uniting allotments with the Casa Blanca Project in a way that no one else seems to have done (Plake 1915). The Little Gila Project had been completed in 1914 and a large lateral ditch was almost finished that would link the new Casa Blanca canal with the existing ditch system. The 3,500 acres presently cultivated were more than the current ditch system could supply with water, though the wheat crop that spring had been good, especially for those who seeded their fields before December 1 (1914). The barley crop, also good, was used mostly for hay. The biggest problem had been securing an adequate supply of irrigation water, but with the new lateral connection, the Indians should clear and farm the new allotments as fast as irrigation water could be secured. Most were reported to be glad at having their farms in a compact body rather than in little fields scattered about, with irregular boundaries. The average family farm after allotment would not be less than forty acres, all in one body, in the Casa Blanca District.

J. V. Plake, the government farmer, was one of the few who mentioned a government-sponsored credit program for allottees, which he called a reimbursable fund that would enable the Indians to purchase and make use of improved implements and machinery. Many people at Casa Blanca had purchased wire for fencing their allotments. Louis Nelson and Joseph Canner introduced harvesting machinery in the district, and four men at Wet Camp brought in the first thresher that year. Although the loan entries were shown as cash, the applicants actually received seeds, wagons, harness and other equipment purchased and distributed by the agency. The intention was to enable Indian farmers to acquire what they needed to utilize their allotments effectively. Unfortunately there was not enough to go around; one man would receive a horse and the next man the harness. The third in line would get a plough (Plake 1915; Hackenberg 1955: 66-67).

The immediate prospects that Mr. Plake held forth for the Casa Blanca District were dashed when floods damaged the Casa Blanca Canal in 1915. The system remained in disuse until construction of the Pima Lateral, which the Indian

Irrigation Service finally completed in January 1928 (Supt. Ann. Narr. Rpt. 1928: Sect. IV p. 2; Pfaff 1994: 37). As for the reimbursable loan program, no sound provision was made for repayment. There was no schedule, no deadline for collection, and repossession was not permitted without the borrower's consent. By 1936 the outstanding unpaid and delinquent individual accounts stood at \$156,263. More than \$100,000 of this indebtedness was never repaid and the debt was finally cancelled in 1954. A long-term consequence was a misunderstanding of the credit system and the differences between a loan and a gift or relief measure. Indians treated the reimbursable loan program as another way of being issued rations (Adams 1936a: 39-45; Hackenberg 1955: 67-68).

The reality that followed the government farmer's expectations in the Casa Blanca District, and elsewhere, was that allotment accomplished nothing beneficial for the Pimas. In part this was because of the very loose coordination between the allotment program and the small-scale irrigation projects being built at the same time. Neither could provide more water, and construction on the Florence-Casa Grande Project did not even begin until after the allotments had all been made. In the Santa Cruz, Gila Crossing and Cooperative Colony districts on the western part of the reservation, people ignored allotments and farmers depended upon the return flow of the Gila for a water supply. The Maricopa District had an assured supply from the Salt River for 1080 acres of fields, though as time went on the assurances weakened. In the 1920s these fields in the west plus the Santan District, with its supply of pumped water during the summer months, were the only places on the reservation where crops could still be grown. With dry years, the irrigation wells at Santan fell below their normal capacity.

Apparently no one attempted to total the number of allotments by district, but Casa Blanca was the largest from any standpoint and often referred to as the area with the best soil. In 1922, Casa Blanca had seen no crops for two years. In 1925, the superintendent said the 10,000 acres in the Casa Blanca District had been subjugated and the irrigation system was constructed years ago. The land was ready for water, and he renewed a plea for pumps! In 1927 and again in 1928, the superintendent blamed the Indian Irrigation Service for making water available too late in the season to do any good.

Because of the intransigence shown by the people in the Florence-Casa Grande Water Users Association and the ill-timing of the Office of Indian Affairs' own Irrigation Service, the Florence Diversion Dam and the Pima Lateral and Florence-Casa Grande Canal might as well not have existed, for all the benefit they provided to people on the reservation. Claims such as one by the Indian Irrigation Service in 1928, that water had reached all of the cultivated lands in the Casa Blanca District, are highly suspect (Pfaff 1994: 37). The Pimas managed a living by cutting firewood and seeking wage work (Supt. Ann. Narr. Rpt. 1922: Sect. IV; 1923: Sect. IV; 1925: Sect. IV; 1927: Sect. IV; 1928: Sect. IV).

By 1929, with an estimated 30 percent of the original allottees already deceased, their heirs and the 70 percent who still held the lands assigned to them had developed an interesting attitude towards their land holdings:

“...in the fall of 1929, it being the season for seeding alfalfa, barley and winter wheat – it was learned that the allottees were not prepared to take up the work at that point. They lacked teams, harness, plows, harrows, seeders – in fact the lack of everything essential to carrying on the work was apparent. Too, there seemed to be a lack of interest. They did not seem to know what it was all about. They could see that the land was ready for water. That much was apparent. However, when they were told that water was available [from the San Carlos Reservoir] they seemed unable to believe it.”

“Possibly this was not to be wondered at. They had seen construction work of one sort or another being prosecuted on the reservation for many years past. They had seen canals – and checks – and turn-outs put in place, but had never seen any water in these canals, although they had been lying there until they had weathered beyond the possibility of their ever being useful.”

“They had never placed any value on these allotments. The allotments were covered with a heavy growth of vegetation; the surface of the ground was more or less hilly; they were far removed from water; they had never produced anything of value – and any hope or expectation that they might become valuable, provided any such hope or expectation had ever existed – had long since taken its departure.”

“They did not look to these allotments for their support or for any contribution toward their support. Hence, when the first of the newly subjugated allotments were ready for the initial application of water [from the San Carlos Irrigation Project], the allottees were not in a mental state to take up the work, i.e. to irrigate and seed the land. There were mental reasons as well as financial reasons that held them static” (Supt. Ann. Narr. Rpt. 1930: Sect. IV).

Robert Hackenberg (1955: 60-61) indicated that allotments were distributed on a first-come, first-served basis, and that in the Casa Blanca District the old and infirm in the villages were able to claim first choice. This was because the younger, more ambitious people had previously found employment off the reservation. The Indians best able to profit by allotments of good land received instead what had been left after others made their choices. That this was not true everywhere is shown by allotments to persons in the Progressive Colony having been made the first year (1914), when water from the Little Gila Project also became available. The situation there was the opposite of what Hackenberg described. An analysis of the ages of the first 200 allottees revealed that only 12 percent of these individuals were persons aged sixty or more, so that the old (and presumably infirm) in the Santan District were actually a small proportion of the



persons receiving land allotments. Again, the more capable received most of the allotment lands.

Almost half of the recipients (48.5 percent) in the 200-person sample were young to middle-aged adults, between the ages of eighteen and fifty-nine, while a smaller proportion (39.5 percent) of the allotments went to sons and daughters from one to seventeen years in age. This low ratio of children to adults was reminiscent of the 1860 Census, as was the high absolute numbers of husband-wife families with either no children (at least as allottees) or only a single child. Analysis of the ages of death for these individuals showed that a high mortality rate among infants and young children was largely responsible for the rapid appearance of heirship problems, and the Superintendent's Annual Narrative Report for 1926 indeed said that infant mortality was high (Sect. II).

Of the 4894 allotments assigned, 648 allottees (13 percent) were deceased by 1925 (Supt. Ann. Narr. Rpt. 1926: 6). Twenty-seven of the seventy-nine children aged seventeen and under in the 200-person sample, 34.2 percent, died before 1930. Both proportionately and absolutely, more Pima children than adults died up to 1930 (27 vs. 25; 34.2 vs. 25.8 percent). All of the children and most of the adults and oldsters left an heirship problem, largely with their secondary allotments ("Pima Original Allotments" at ASM Archives, A-349-2). Because of the children's deaths, however, inheritance questions arose much sooner than might otherwise have been the case. By 1952, 86 percent of the original allotments were in heirship status (Hackenberg 1983: 176).

Like homesteads, allotments were a 19<sup>th</sup> century solution to the orderly disposition of publicly-owned (and reservation) lands; a solution that was workable in the prairie plains of the Middle West but had no place in the irrigated desertlands of the Southwest. It was a one-size-fits-all program and officials in the Office of Indian Affairs were left no choice but to apply it until 1934, when the Indian Reorganization Act suspended the allotment system. The Pimas were fortunate in that only trust patents were issued to give title to the allotments and not fee patents, so that neither individually owned nor heirship lands could be sold off, as happened elsewhere. Nor were "surplus" lands ever declared or returned to the public domain. Coming on top of the allotment process, the agreements embodied in the Florence-Casa Grande irrigation project and the subsequent San Carlos Irrigation Project did benefit the Pimas in one important way by ensuring that the Gila River Indian Reservation would remain intact.

### *Measuring Indian Incomes*

In 1867, the Commissioner of Indian Affairs began to include statistical tables with his Annual Report. While the form and content of these tables changed from time to time, they generally became more elaborate as time went on. Education for example came to be tabulated in many ways. Much of this information was intended to show progress in 'civilizing' the Indians and is now of little use, but population figures and those for agricultural productions are still useful, if somewhat suspect. The dollar amounts for various activities and

programs were often included, but in 1867 few Indians were wage earners and the idea of measuring their well-being by income in dollars lay far in the future.

For the agricultural tribes, however, the amount of their principal productions could serve as an approximate scale (Tables 5, 6). Annual reports through 1904 included numerous tables, but from 1905-1910 these were virtually cut back to educational statistics. In 1911 and continuing through 1920, statistical tables proliferated once again and if possible contained even less information. After 1920 the commissioners' annual reports became very brief and included few tables of any kind.

Over a course of fifty-some years, native peoples converted to a money economy. The published statistics gradually came to reflect this by giving the values of such things as tribal property, livestock holdings, housing, sawmill output and agricultural productions. Except for the last, these were largely static figures and tied to real property, of which Boca Arriba Aguila's two Yuma scalps valued at \$100 each would be an example (see Chapter IX). Values are not the same as income, but into the 1930s the common measure of worth was stated as values. Even by 1920 economists had come to realize that national income, personal income, standard of living and real wages were more efficient measures of the production and distribution of economic wealth. On the personal level, they began to express this as per-capita income (National Bureau of Economic Research 1921; Leven 1925; Faulkner 1935: 688-689).

The first year for which we have earnings figures for the 6,178 Indians on the Gila River, Salt River, and Gila Bend reservations, plus the Papagos not living on a reservation, is 1907. These numbers showed that they were already earning more as wages from working outside of the reservations than from farming, even though the wheat, barley and hay crops were said to have been very good that year (Supt. Ann. Narr. Rpt. 1907: 1-2). From then until 1926, the value of their crops usually made the greatest single contribution to the Pimas' income, but the amounts varied widely from year to year. Available information after 1926 is that except in 1931, wages and other outside sources of income contributed more to the Pimas' income than did the value of their crops.

From 1907 through 1935 it is possible to calculate per-capita income numbers, using published and unpublished figures compiled by the Office of Indian Affairs. For groups elsewhere in the country, such projections at this early date are mostly estimates, but for people administered by the Pima Agency, the statistics can be calculated from annual population figures and the income reported from various activities. In 1912 and 1913 the Commissioner of Indian Affairs actually did report per-capita earnings for the Indians of each superintendency across the country, but these were not true per-capita incomes because only wages and wage-earners were included. Nonetheless there were more Pimas employed during those two years than any other Arizona native group, though their per-capita earnings were only \$53.55 in 1912 and \$41.68 for 1913 (Ann. Rpt. Comm. Ind. Affs. 1912: 158; 1913: 132).

Pima Agent J.B. Alexander had said he included a fairly accurate estimate of the Pimas' earnings with his 1904 report, so economic information may exist

for years before 1907. We do not have his 1904 estimate, and figures either have not been found or are too incomplete to make calculations for 1908-1910, 1924, 1932 and 1933. Time was lacking to locate income estimates for the decade 1936-1945. The statistics for 1907 and from 1920 through 1935 have been calculated from the Superintendent's Annual Statistical Reports for those years, which are available on microfilm. These reports had a narrative counterpart that continued the tradition of an annual report by each superintendent, which until 1907 had been published in company with the Commissioner of Indian Affairs' own report. Some of these unpublished manuscripts unfortunately survive only as fragments, and no annual statistical reports from before 1920 have been found. For the years 1911 through 1920, the income figures were included as part of a table in the Commissioner's annual reports; in Table 12 (1911), Table 13 (1912 and 1913), Table 6 (1914), Table 10 (1915-1919) and Table 11 (1920).

For 1920 and 1935 it was possible to calculate per-capita incomes in two separate ways, which then served as a check on the reliability of the computations. In 1920, income and population figures were published in Table 11 (Ann. Rpt. Comm. Ind. Affs. 1920: 113) as well as in the Superintendent's Annual Statistical Report for that year. The per-capita figures from the two sources differed by only 14¢, and the lower figure (from the published data) has been included here. In 1935, a total income figure of \$516,540 from Lister (1936: 23) divided by a population of 4,696 as given in the extant parts of the Superintendent's Annual Statistical Report resulted in a per-capita income of \$110.00. Lucy Wilcox Adams' careful tabulation of estimated annual cash income for 1935 (\$516,870) and her population of 4,894 according to the agency census yielded a per-capita figure of \$105.61 (Adams 1936a). The point is that with such close agreements in both years, the figures listed below are as reliable as any that can be calculated.

<u>Year</u>	<u>Per-Capita Income</u>
1907	\$ 39.68
1908	55.22
1909	20.77
1913	35.10
1914	35.33
1915	38.16
1916	43.45
1917	43.69
1918	43.35
1919	48.30
1920	193.97
1921	33.33
1922	71.91
1923	82.33

1925	86.42
1927	128.89
1928	133.04
1929	234.78
1930	188.15
1931	183.47
1934	165.66
1935	110.00

Because of the Indian Office administrative structure at the time, the population and presumably the earnings numbers reflect the Indians under the Pima *Agency*, not just the Pimas and Maricopas living on the Gila River Indian Reservation. There is usually no way to factor out the Ak Chin, Gila Bend, Papago and other reservation and off-reservation groups who were administered by this single agency. Only for 1934 and 1935 is it reasonably certain that the income and population figures related solely to the Gila River Indian Reservation. The differences that may have existed between reservations are not known.

Adams, in her “Pima Economy” study, found wide differences from district to district across the Gila River Indian Reservation. Reporting these as average *family* income, the five districts surveyed intensively by the TC-BIA project yielded these figures for 1935:

<u>District</u>	<u>Average Family Income</u>
Casa Blanca	\$ 605
Santan	600
Blackwater	351
Gila Crossing	45
Maricopa	43

These did not include income from the sale of farm products, livestock or wood (Adams 1936a: 18). The principal reason for the differences was the range in average size of household farms; from fifty-eight acres at Casa Blanca and forty-four acres in Santan, to only ten acres in Gila Crossing. Adding to this was a 300 percent difference in farm incomes, from \$4.50 per acre at Gila Crossing to \$13.64 per acre at Santan. This in turn reflected the reliance on pasture crops at Casa Blanca and Santan as against a continuing dependence on wheat at Gila Crossing. At Blackwater, much of the land subjugated and placed in production in 1929 produced a single crop and then reverted to brush (Adams 1936a: 18, 20; 1936c: 84-88; Stanton 1936: 81-83, Appendix).

By way of comparison, Arizona was well up in the ranks of states (No. 14 of 49, including the District of Columbia) arrayed by per-capita current income in 1919 (Leven 1925: 267). The numbers for the state were:

<u>Year</u>	<u>Per-Capita Income</u>
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1919	\$ 689
1920	726
1921	504

For the country as a whole, another estimate showed an uneven progression:

<u>Year</u>	<u>Per-Capita Income</u>
1909	\$ 319
1910	340
1911	333
1912	346
1913	354
1914	335
1915	358
1916	446
1917	523
1918	586

(National Bureau of Economic Research 1921: 68).

Estimates of personal income derived from Bureau of the Census numbers covered a wider range of time but showed similar trends - \$295 for the period 1907-1911; \$689 in 1920, declining to \$572 in 1921; \$647 in 1925; \$705 in 1929, declining to \$625 in 1930 and to \$473 in 1935 (U.S. Bureau of the Census 1960: A1-16, F1-21). All of these figures illustrate the abrupt drop in agricultural prices between 1920 and 1921 that affected all farm producers, and the drastic decline followed by a slow recovery after the onset of the Depression in 1930.

For the Pimas, these per-capita income figures serve to document how desperately poor they remained in comparison with either Arizona or the entire United States in the years before the San Carlos Irrigation Project first provided water in 1929. In Arizona, the Pimas' income averaged much less than 10 percent of the state-wide average in 1919 and 1921. In 1920, which had been an exceptionally good crop year on the reservation, incomes rose to slightly more than one-quarter of the Arizona average. Income figures for the Pimas averaged about one-eighth to one-tenth of the U.S. figures except in the unusually good years of 1920 and 1929, when reservation incomes rose to about one-third of the country-wide total. In the Depression years, Pima incomes increased to one-third to one-fourth of the national income levels, but this relative improvement came during a short-term period of local prosperity created by government payrolls during the subjugation period, which continued through 1935.

Per-capita incomes on the reservation actually declined, after peaking in 1929, seemingly in spite of the government jobs that subjugation work provided. The expectation that a renewal of agriculture would make up for the loss of these subsidized jobs was not realized, and by 1940 the average family income had

dropped to \$484, less than \$100 per capita. National per-capita income by then had risen to \$596 (Adams 1936a; Walker 1944: 215, 218; Hackenberg 1955: 92; 1983: 175; U.S. Bureau of the Census 1960: A1-16, F1-21).

There were some compensations that kept the Pimas from being impoverished in spite of their continuing low incomes. One was that most of them, especially those who were least well off, still grew their own food. They had an assured land base on the reservation with no rent to pay, with a huge support structure (their relatives) in place. Their health and educational needs were provided free of cost, if sometimes indifferent in quality. If they farmed, they now had credit arrangements to help ease the cost of seeds, provide equipment, and otherwise meet their expenses. For those who wanted jobs, working for the government generally paid better than fieldwork or other unskilled labor for employers off the reservation. In short, non-Indians with the same level of income and lacking any or all of these amenities would have found themselves much worse off than did the Pimas.

### *The San Carlos Irrigation Project*

On the heels of the first Florence Canal diversions in the 1880s, Indian agents began asking for the construction of a storage reservoir on the Gila River to meet the Indians' need for irrigation water (Ann. Rpt. Comm. Ind. Affs. 1888: 6-7; 1889: 120; 1890: 5). After investigations of several proposed dam locations, hydrographer J. B. Lippincott (1900) recommended that the government build a large masonry dam and reservoir at the San Carlos site. Despite early enthusiasm for this proposal, approval of a major dam and reservoir on the Salt River in 1903 meant that the Gila River would not be an early choice for a public works project.

Nine years later, Congress directed the Secretary of War to determine the "reasonability and practicality" of constructing a dam and reservoir at the San Carlos site. In their report, the army board of engineer officers recommended that the San Carlos Irrigation Project be adopted and carried out by the United States under certain conditions, as we saw in Chapter 14. Without the needed support in Congress, legislation to authorize this project was not approved. Then in 1916 Arizona Senator Henry Ashurst and other Progressives in the U.S. Senate's Committee on Indian Affairs, together with Congressman Carl Hayden in the House of Representatives, gained funding to begin the Florence-Casa Grande diversion dams and appurtenant structures. No storage dam or reservoir was included. The San Carlos Irrigation Project remained only a proposal.

Construction on the diversion dams was delayed another five years, partly because of World War I, but also because of the serious conflicts over rights to water between white land owners above Florence and the Indians. The former objected to previous tentative agreements and insisted on a division of the waters that the Commissioner of Indian Affairs labeled "manifestly unfair to the Indians." The Office of Indian Affairs sought to resolve these claims and eventually an agreement was reached that designated 35,000 acres of Indian land and 27,000 acres of white-owned lands as included in the project (Ann. Rpt.

Comm. Ind. Affs. 1918: 42-43; 1919: 44-45). This once again postponed any settlement of the Indians' water rights (Nicklason 1976: 696).

This agreement and a subsequent one meant little to the white water-users. In the Superintendent's Annual Narrative Report for 1926, he complained that water to irrigate about 1,000 acres of land in the Blackwater District had been diverted at the Ashurst-Hayden Dam, this being about one-third of the amount it was agreed should be conveyed to the reservation. A 1922 agreement with the Casa Grande-Florence Water Users Association said that fifteen second-feet of water, sufficient to irrigate about 3,200 acres of land, should be delivered to the Indians. This delivery had never been made nor had there been any provision for it. The ditches as constructed could not possibly carry that amount of water. While renewed construction of the Florence-Casa Grande Canal was already underway, to deliver water to non-Indian lands, the Pima Lateral to bring water to the reservation remained only partially completed. The Indian Irrigation Service appeared to be deliberately dragging its feet. Altogether in the past several years, approximately 2,600 acres had gone out of cultivation (Supt. Ann. Narr. Rpt. 1926: Sect. IV p. 2; Pfaff 1994: 28-29).

While these problems were being fought out and the Pimas continued to wait for water, lobbying in favor of a San Carlos Dam continued. Representative Carl Hayden used the plight of the Pimas to argue for the legislation. Whatever the importance of Hayden's role, it was largely lobbying by Rev. Dirk Lay and groups like the Indian Rights Association, the General Federation of Women's Clubs, and the Presbyterian Church that led to authorization of a high dam at San Carlos as part of the San Carlos Irrigation Project. Congress may also have considered that, having spent millions on the Sacaton Contract and the small-scale irrigation projects, it made sense to build a reservoir at San Carlos. This converted the Florence-Casa Grande Project from a dependence on floodwaters to a storage system (U.S. Senate 1924; Robinson n.d.; 1927-29; Mott 1930; Hackenberg 1955: 63-66; Hudanick 1983: 448-449; Introcaso 1986: 53; Dobyns 1989: 79-80; August 1992; Pfaff 1994: 15-17).

The San Carlos Act, passed by Congress and signed by President Coolidge on June 7, 1924 authorized construction of a dam and reservoir for irrigation of *allotted* lands of the Pima Indians on the Gila River Indian Reservation, as part of a San Carlos Irrigation Project. The maximum cost of \$5.5 million would be apportioned among Indian, public and private ownership. The Indian share of the costs was made reimbursable by the sale of surplus unallotted lands, until this provision was cancelled in 1931. Another act passed in 1928 merged the Florence-Casa Grande Project with the San Carlos Irrigation Project and established the project size at 50,000 acres of non-Indian lands and 50,546 acres of allotted Indian lands (U.S. Senate 1976: 33; Pfaff 1994: 17-18; 43 Stat. 475; 45 Stat 211; 46 Stat. 1519).

With one-half of the San Carlos project inside the reservation and the other half lying elsewhere in the Florence-Coolidge-Casa Grande area, the Act benefited white farmers as well as Indians. This was necessary in order to pass the bill at all. The Act did not designate the lands to be included nor did it

actually apportion any of the water. It did not specify clearly how the reimbursements were to be made, or how the operating costs would be met. These lapses created problems later, but the Indians were eventually relieved of any of the costs (Hackenberg 1955: 65-67). At this same time, congressional infighting over authorization of Boulder Dam on the Colorado River and what became the Colorado River Compact produced an amendment that granted Arizona exclusive rights to the Gila River (Sheridan 1995: 223). However the waters of the Gila River were apportioned within the state, they would not belong to California or Mexico.

Engineers with the Indian Irrigation Service designed the San Carlos (Coolidge) Dam, and the Los Angeles firm of Atkinson Spicer Co. built it. It was a concrete, multiple dome design, the domes anchored by two buttresses and standing approximately 250 feet high. The authorized storage capacity was 1,285,000 acre-feet, with the maximum storage during any year through 1942 being 819,200 acre-feet. The first dirt-moving began in January 1927 with actual construction work initiated on November 24, 1927. Work proceeded very rapidly and the dam had essentially been completed by November 1928, when water was first stored behind it. The contractor finished his work one year ahead of the specified contract period. Water first flowed, in small amounts, to the Pimas' fields in 1929 (Walker 1944: 68, 82, 98; Introcaso 1986: 56-63, 67-70, 76, 81-83; Pfaff 1994: 19). The reservoir never filled to more than two-thirds of its authorized capacity because the average annual runoff for the years following its completion amounted to less than half of the figure (460,000 acre-feet) used to estimate the reservoir capacity and design the dam (USGS 1969: 494-496; Hackenberg 1983: 175).

Until the Sacaton Field Station developed its "Yuma" and then the "Pima" varieties of American-Egyptian or long-staple cotton, white-owned farms in the Florence-Casa Grande valleys grew thousands of acres of alfalfa, wheat, barley, vegetables, melons, citrus and other crops. With the outbreak of World War I came a tremendous boom in the demand for long-staple cotton for industrial needs, such as the cords in automobile and aircraft tires and cotton fabric to cover aircraft wings. Goodyear Tire & Rubber Company bought 24,000 acres of land adjacent to the reservation south of Chandler and rushed 1,500 acres into cotton growing in 1917. Production in the valley jumped from 29,000 acres in 1917 to 69,000 acres the following year. By 1920, Arizona farmers were growing 200,000 acres of cotton, 9,000 of those in Pinal County, of which only a very small proportion would have been produced by Pima farmers (*The Native American*, December 15, 1917 pp. 321-322; June 1, 1918 pp. 172-173; Hackenberg 1955: 69; Sheridan 1995: 212-213). The Commissioner of Indian Affairs' annual reports no longer listed the nature and amounts of Indian crops.

The cotton bubble burst in the fall of 1920 and prices plummeted to less than the cost of production. Farmers who avoided bankruptcy returned to wheat, barley and alfalfa, but they also planted citrus groves and produce, especially lettuce. A thriving feedlot industry developed, but the cultivation of cotton, now primarily the short-staple, upland varieties, continued as Arizona's most important



agricultural product. Cotton led to what one scholar called "factory farming" - large-scale, mechanized production by commercial growers with large land holdings. The Pima farmers with a horse and ten acres saw themselves being pushed to the margins once again, their holdings being too small to use machinery even if they could have afforded it. As one government farmer said "It took the heart out of them" (Hackenberg 1955: 69-70; Sheridan 1995: 214, 216).

To support an expansion of agriculture, farmers needed access to capital, new sources of labor (for labor-intensive cotton growing) and especially new supplies of water. Market-driven forces, as much as lobbying and legislation to restore water to the Pimas, helped to bring the Florence-Casa Grande Project and subsequent San Carlos Irrigation Project (SCIP) into existence. The World War I expansion could not wait for government projects to be completed, and the new acreages were irrigated by pumped ground water, especially in the area between Florence and Casa Grande. In 1929, before water from the San Carlos Reservoir became available, more than 100 farmers in the Casa Grande Valley grew 18,000 acres of cotton and several thousand acres of vegetables and other crops, with water supplied principally by 140 wells in the valley (Walker 1944: 87; Hackenberg 1955: 70-71).

The San Carlos project was designed to irrigate 80,000 acres with gravity water flows from the Gila River and 20,000 acres with pumped groundwater. Indian lands were to receive half of all the underground water pumped by the project. Until 1934, pumping supplied non-project lands with between 40,000 and 54,000 acre-feet of water annually, and SCIP acreages with only small amounts. Serious shortages in the surface supply led to heavy pumping by the San Carlos project beginning in 1934, after which an average of more than 82,000 acre-feet was pumped annually through 1942. For non-project lands in the same part of Pinal County, pumping increased to an estimated 82,100 acre-feet in 1935, then more than tripled by 1940 and continued to increase. With the combination of increasing demands and the circumstance that pumped water quickly became an important factor in the water supply for the SCIP, an overdraft developed between the withdrawals and the recharge to ground water in the Florence-Coolidge-Casa Grande area that averaged in excess of 150,000 acre-feet. The town of Coolidge had had its beginning in 1928 (Rott 1936: 83; Walker 1944: 87-96; Hackenberg 1955: 71).

Not all of the irrigable acreages on the reservation became part of the San Carlos Irrigation Project. The 50,000 acres designated for the project in fact were never selected, largely for reasons that will be seen in the next section. As Hackenberg (1955: 75) said, this meant that even the holders of primary allotments, the lands eligible to receive SCIP water, could see their lands excluded at any time by the same arbitrary means through which they had been selected. The holders enjoyed one dubious benefit, which was that no one could lose their water right.

From 1930 through 1942, the acreages of non-Indian, San Carlos Irrigation District (SCID) lands irrigated by both pumped and gravity waters of the San Carlos Irrigation Project always exceeded the acreages of Indian lands so

watered. This difference totaled only 1,260 acres in 1939, but the spread was much wider – c. 11,000 vs. 40,000 acres - in 1930 and 1931. The proportions averaged about 62.5 percent district lands and 37.5 percent Indian lands. The original ideal of a 50-50 division was an illusion, and while at times the SCID utilized more than 92 percent of its designated acreage, the Indians rarely made use of 61 percent of their project lands (Walker 1944: 101).

As for the plan that 20 percent of the project lands be irrigated with pumped groundwater, this was another illusion. Through 1942 it was always more than that. After the wells built by the Sacaton Contract began going online in 1909, it was not until 1934 that major expansion of pumping capabilities began. Releases from the San Carlos Reservoir had been much less than what was anticipated, while the irrigation district reclaimed thousands of new acres each year. In 1934 the number of irrigation wells was increased to provide sufficient water for irrigating about 9,600 acres. By the late 1930s, eighty-one wells had been drilled in all parts of the SCIP lands, and they drew enough water to irrigate more than 25,000 acres. In particularly dry years like 1938 and 1939, pumping contributed as much as 57 percent of the water delivered to San Carlos project lands (Walker 1944: 89, 101; Pfaff 1994: 55-56, 64).

Other statistics can be worked out and Pfaff (1994: 64-66) has given some updated figures. These only confirm that the pattern of the past was repeated; whites benefited at the expense of the Indians. By virtue of its stored floodwaters and the delivery of these to the reservation and other users, the SCIP did benefit the Pimas materially by making available waters that had been diverted from them sixty years earlier. When water arrived in the ditches, however, no one was ready to receive it.

#### *Subjugation of San Carlos Indian Irrigation District Lands, 1929-1936*

Coolidge Dam was completed in November 1928 and storage of water in the San Carlos Reservoir behind it began on November 15, 1928 (Walker 1944: 68; Introcaso 1986: 81-82). The contractor's early completion of his work caught the Office of Indian Affairs and the Pimas with no means to deliver water from the reservoir beyond the Pima Lateral, or to receive it on the 50,000 acres of primary allotments eligible under the SCIP. At this point, allotments had not been consolidated with any development of water resources in mind, and the only improvements were whatever individuals may have accomplished on their own. To use the water that would presumably be available in abundance, a major project was needed to reclaim fields that had fallen into disuse as well as whole new areas and turn these into useful, irrigated farmlands. Robert Hackenberg (1955: 74-86) has synthesized the difficulties with both allotments and the reclamation work. The latter, called subjugation, increased the irrigable acreage on the reservation from 11,200 to 30,550 acres between 1929 and 1936 (Walker 1944: 101).

One superintendent, A. H. Kneale, directed most of the subjugation work. According to his autobiography, he assumed charge of the Gila River Indian

Reservation on January 1, 1930, with specific responsibility for the reclamation program and supervising utilization of the new water resources (Kneale 1950: 387; Hackenberg 1955: 74). However, there is an error of one year here, as Kneale swore in testimony before the U. S. Senate Subcommittee on Indian Affairs that he had been superintendent of the Pima reservation since January 1, 1929 (U.S. Senate 1931: 8234). His Superintendent's Annual Narrative Reports for 1929, 1930 and 1931 plus several other first-hand accounts (Mott 1930; Kneale 1935, 1950; Robinson 1935, 1936) are the best sources for reconstructing what was done at this time, although close examination shows that these contain omissions, false claims and misstatements. Comments by Hackenberg (1955) and Dobyns (1989: 83-85) help to provide a balance.

A. E. Robinson was Kneale's superintendent of field operations and also his successor as superintendent of the reservation. Robinson had arrived in 1921 and was soon placed in charge of the farm at the old Pima Boarding School (converted to a day school in 1931). He continued the reclamation work after Kneale retired in 1935. Partly because it started with no planning, but also because its human and physical dimensions became more complex than anyone could have foreseen, subjugation was prolonged until it became the most important Depression-era employment program on the reservation.

Kneale made an early estimate that 40,000 virgin acres covered with mesquite, catclaw and ironwood would have to be subjugated. Another 10,000 acres had at some time in the past been cultivated. Clearing began on April 26, 1929 with one sixty-horsepower Caterpillar tractor. A crew of three men began pulling out trees in Section 7, Township 5 South Range 8 East, at the eastern end of the Blackwater District. Three more tractors were added in June, followed by a fourth and a fifth, and another three on January 20, 1930. By 1936 Superintendent Robinson had thirty-four heavy-duty tractors at work uprooting mesquite and ironwood trees.

One tractor with an operator and a crew could clear about one ten-acre allotment in a day. Ever conscious of statistics, the superintendent estimated an average of around 160 trees per allotment, with as many as 427 on a single allotment. By the fall of 1929, about 500 acres in the Blackwater District had been cleared, leveled and seeded with wheat. By the end of 1930, some 3,500 acres had been cleared, leveled, ditched, bordered, and made ready for irrigation in the Blackwater area. The subjugation crews worked together as a single large unit and in the early spring of 1931 they moved from Blackwater to the Casa Blanca District. The end of that year saw approximately 3,800 acres ready for cropping and another 4,000 acres cleared (Supt. Ann. Narr. Rpt. 1929, 1930, 1931; Robinson 1936: 5).

Allotments were necessarily ignored during clearing operations but would become an issue later. Within the first year a routine developed, the first step being to pull the trees out. Looping a wire cable around the base of a tree and uprooting it with a direct pull of the tractor accomplished this. The crews discovered that some mesquites had root systems that spread laterally and were

relatively easy to pull out, while others with tap roots had to be grubbed out by hand (Supt. Ann. Narr. Rpt. 1930; Kneale 1950: 403, 406).

An axe crew followed immediately behind the tractor to grub out any roots that had broken off, then cut up the trunks and heavy branches for firewood and pile this into wood wagons. This fuelwood was then corded along the roadsides or at high places until it accumulated in such quantities that it interfered with further operations. Indians were invited to help themselves as trees were uprooted or dug out, with the condition that they pile the brush for burning. In the first year, Kneale estimated that the wood harvest ran to around 20,000 cords (Supt. Ann. Narr. Rpt. 1929, 1930; Mott 1930).

After the axe crew came the brush drag, a home-built monstrosity made from 90-pound railroad rails in the shape of a capital "A," forty feet in length and (the sources disagree) from twenty to twenty-four feet in width at the base. This weighed some 4,500 pounds and had a plank deck upon which another half-ton of sand might be piled. A T-beam that extended into the ground, something like the centerboard on a sailboat, provided stability. Pulled by a tractor, the drag proved effective in removing the undergrowth by pushing it out by its roots, leaving it to tumble off along the left side. A very heavy hay rake attached at the right rear corner gathered the brush and left it in stacks, where it was burned in place (Supt. Ann. Narr. Rpt. 1930; Mott 1930; Robinson 1936: 6-7; Kneale 1950: 406-407).

With the surface cleared, a surveyor invaded the field (usually a forty-acre unit) and cross-sectioned it with stakes marked to indicate the cuts and fills needed to create an "irrigable grade" of 0.2 to 0.4 feet per 100 feet along the length of a field. Laterally, any gradation was removed by creating parallel terraces, each one-half mile in length by two rods (thirty-three feet) in width. Differences in elevation between terraces were slight, but a levee or border about eighteen inches in height and created during the leveling process separated any two adjoining terraces (Mott 1930; Robinson 1936: 7; Kneale 1950: 408-409).

With the stakes in place to show the cut and fill locations, the tractors now returned with ten-foot rotary fresnos or hydraulic scoops with a capacity of up to four cubic yards. These did the major earth moving, cutting down the elevations and filling in the depressions, including any number of old canals. Archeological remains including pottery and house floors turned up continually during all of this activity; one hydraulic scoop spent an afternoon leveling a huge prehistoric mound and then tore apart an adobe wall far below the original surface. A mesquite came up with three perfect, white ollas nestled in its roots (Mott 1930; Kneale 1950: 413-415). A museum was started in a government building at Sacaton to house the artifacts being taken from the ground. As for evidence still in the ground, the Smithsonian Institution sent a representative to study and map the ancient canals:

"When the land had been laid bare by the removal of vegetation, the old Pima canals were very much in evidence. Less easily, but none the less surely, could be traced a much earlier canal system" (Kneale 1950: 413).

Superintendent Robinson reflected on these archeological findings a few years later:

"During the past ten years some 25,000 acres of this desert land has [*sic*] been reclaimed for irrigation and frequently over this area we have found traces of old prehistoric canals deep below the surface, indicating many centuries have passed since the black Gila River silt which we find in them, had been deposited there. Some of these canals are as much as ten to twenty feet across and many feet deep and when we consider that they were excavated with stone implements and the earth carried out in baskets we marvel at the industry and perseverance of these ancient people."

One of these old canals discovered in the Snaketown District in 1938 lay ten feet below the surface of the surrounding desert (Robinson 1939).

Robinson and the land surveyors found that the engineering skills of the canal-builders were deficient. The ditches did not take full advantage of the topography and could not operate at maximum efficiency, which usually meant that they had insufficient grade (Mott 1930). The modern engineers noticed this because they could follow virtually none of the old lines in laying out their own lines and ditches. This was not solely a prehistoric problem; the Pimas sometimes had to contend with this before Rev. Charles Cook began surveying new ditch alignments for them. The Florence Canal had been constructed with a low grade, which left the canal company unable to prevent a silt buildup that reduced its capacity (Olberg and Reed 1919: 52; Southworth 1919: 133; "Supplementary Exhibits", statement of Tor White).

In any event, with the surface reduced to a proper grade, a harrow followed by a float or earth plane removed the smaller irregularities. Later in the project, a road grader did the same job. A border plane, pulled by a tractor, created border levees along the edge of each terrace in a single operation. Laterals and sublaterals, supplied with water from the main canal, in turn provided feed ditches with just enough water for the needs of each field. With the new fields measuring 1,320 feet in length by thirty-three feet in width, each field contained exactly one acre. A standard allotment therefore contained ten of these fields. The corner markers for the original allotments had been obliterated by all of this work, and these had to be relocated and new fences built. Finally, roads were graded on each section and mid-section line so that every allotment had an outlet (Supt. Ann. Narr. Rpt. 1930; Robinson 1936: 7; Kneale 1950: 409-410).

Because of relinquishments and exchanges, which were ongoing by now, subjugated lands overlapped but did not entirely coincide with allotments. The same is true with respect to reservation lands eligible to receive SCIP irrigation water. Allotments, for example, covered the reservation from Maricopa in the west to Blackwater on the east, while both subjugation and the designations of SCIP eligibility extended from Blackwater only through the Snaketown and Vahki (Casa Blanca) districts.

The extensive use of heavy machinery and wide-scale earthmoving obviously remade much of the landscape on the Gila River Indian Reservation, but we have only a loose sense of where this was done. Archeological sites were destroyed, mounds leveled, and old canal traces of all ages covered over, but virtually our only information about these comes from passing remarks (Mott 1930; Kneale 1950: 413-415). The collections in the incipient museum at Sacaton had evidently disappeared by the time Gila Pueblo began its Snaketown project in 1934. The map or study of the old canals by a Smithsonian representative was probably Neil Judd's aerial photomosaic of the Salt and Gila River valleys, which Phoenix archeologist Odd Halseth followed up with ground verifications (Anonymous 1930). Robinson (1936: 7) mentioned contour maps made when the surveyors cross-sectioned the subjugation areas; if these maps still exist and if they were tied to permanent land survey monuments or elevational references, they would show what areas were reclaimed.

As it is, some estimates can be made. The Superintendent's Annual Narrative Report for August 15, 1931 (Sect. III p. 27) said that "About 2,000 acres were subjugated in the Blackwater district and were ready in 1930 for fall cropping." Other estimates contained in the 1936 TC-BIA community reports assembled by Adams (1936c) were Santan District - 1,070 acres; Snaketown - 940 to 960 acres; Stotonic, 2,500 acres, and Bapchule - 260 acres. Gladwin et al (1965: 1) said that approximately 2,000 acres had been cleared and leveled between Snaketown and Sacaton, which would be about right. These figures should probably be read as illustrative rather than exhaustive, because for many districts the community reports said nothing about subjugation.

What is certain is that the subjugation program on the Gila River Indian Reservation achieved something less than the original target of 50,000 acres. Congress, beginning in 1929, appropriated money for the superintendent to level and prepare for cultivation the allotted Pima lands within the SCIP. This funding lasted through 1932, by which time 8,033 acres had been subjugated. Between 1933 and 1937 work continued with PWA and IECW funds, which paid for leveling, bordering, lateral construction and other improvements on both allotted and tribal lands. This increased the irrigable Indian acreage from 16,519 acres in 1933 to 33,889 acres in 1937. In 1937 control passed to the Gila River Indian Community. A report from December 1936 clearly referred to what became the agency farm when it said that subjugation had seen approximately 11,700 acres of raw, desert land cleared, of which 7,293 acres had been planted, mostly to alfalfa. Until 1952 the government operated this farm on some 12,000 unallotted acres in the South Side Area (i.e., between the Casa Blanca and South Side canals) (Stanton 1936: 95; Walker 1944: 101; Pfaff 1994: 61).

Pfaff (1994: 56) cited a reference that 39,265 acres of Indian land had been subjugated by 1936. This figure must have included farmlands that the Pimas had reclaimed by their own efforts. In the Santan District some Indians had their own tractors and subjugated their own lands, the amount of land reclaimed privately exceeding what the government did (Adams 1936c: 81, 87).

At Gila Crossing, Santa Cruz, Sacate and Maricopa, the farmlands simply continued in cultivation, using water from seepage and some new wells.

The point to be made is that in spite of the size and organized sequence of mechanical activity in the subjugation program, practically every other part of this project was uncoordinated. It continued a thirty-year-old tradition of land and water improvement projects that expended increasing amounts of money and brought few lasting benefits to people on the reservation. The principal reward from subjugation was that Pima workers received more than \$500,000 in wages during the eight years (1929-1936) they were employed on reclamation or related work (Woehlke 1937: 4). In the later years, their salaries came from IECW and PWA budgets - New Deal relief programs that practically eclipsed older public works activities after 1932 (*Indians at Work*, February 1, 1934 p. 29; Adams 1936a: 14). The short-term benefits for the Pimas' agriculture were virtually nil. There were several reasons for this.

One was that until the spring of 1931, allotments and subjugation had been carried out without benefit of a soil survey that might have shown whether allotment areas were suitable or unsuitable for irrigated agriculture. No one had thought of this, though soil surveys were not a new technique. One that had been done for this area in 1917 and published in 1920 was either unknown or ignored (U.S. Senate 1965a: 77-81). During subjugation work early in 1931, lands heavily charged with alkali were met with frequently. A. T. Strahorn of the U.S. Department of Agriculture was called upon to do a soils survey of the lands tentatively selected for the San Carlos Indian Irrigation District. He examined 48,760 acres and classified 14,272 of these as permanently non-irrigable and 9,869 as temporarily non-irrigable, due to excessive amounts of alkali, leaving a balance of 24,619 irrigable acres (Supt. Ann. Narr. Rpt., August 15, 1931: 48-49; 1934: 5-6; Ag. Ext. Agt. Ann. Narr. Rpt., December 31, 1931: 19-20).

A second survey covered all unallotted tribal lands whose physical location made possible the application of stored water, in an attempt to find lieu lands to replace the 24,000+ acres condemned by Strahorn. Fortunately the second survey was successful and with its completion the Pimas once again had 50,000 acres available, after subjugation, to receive stored water. All of the SCIP lands on the reservation had now been examined by a qualified soils man (Supt. Ann. Narr. Rpt. 1934: 6).

The lands condemned by Strahorn's examination included 1,000 acres completely made ready for cultivation in the Blackwater District (Adams 1936c: 20; Hackenberg 1955: 82). According to the TC-BIA community reports, he also condemned 600 to 650 acres in the Sacaton Flats District, c. 440 acres at Santan and 400 acres at Bapuche. The terms "some" (Progressive Colony), "a good deal" (Snaketown and Sacaton), and "much" (Stotonic) were used in referring to the amounts of land condemned in other districts (Adams 1936a: 12; 1936c: 2, 58, 65, 81, 100).

A later survey determined that the alkali was primarily sodium bicarbonate, and mapped extensive areas of this in the Blackwater, Casa Blanca, Santan and Snaketown districts (Walker 1944: 64, Map 3). Sodium bicarbonate is

one type of baking powder; Asa Clarke and George Evans had discovered this use of the white efflorescence almost a century earlier, when '49ers used it in their bread and batter cakes (Evans 1945: 155; Clarke 1988: 74). These salt accumulations were primarily in the surface soil, and a combination of deep plowing, flooding, the addition of organic matter, and planting to alfalfa could eventually reclaim these lands, classified at the time as non-productive. As a result of Strahorn's survey, however, people with primary allotments condemned by him had to relinquish these and be assigned new lands elsewhere in the San Carlos Irrigation Project.

It was intended that each of the nearly 5,000 primary allotments receive irrigation water for that ten-acre tract. But in providing each allottee with a primary and a secondary allotment, it sometimes happened that an individual had both allotments within the limits of the SCIP, or both outside of it, or even with the two side by side. A person with both primary and secondary allotments inside the project was now expected to relinquish the secondary one and accept lieu land of equal size and value outside the project. The party owning both allotments outside the project would relinquish one and receive a ten-acre parcel inside the SCIP. This then became his primary allotment, entitled to SCIP water.

The exchanges of course could not be done so simply because one or both allotments might be impregnated with alkali and therefore unsuited for an exchange. There was also the problem of fractional ownerships since many of the original allottees had died and all of the heirs for each tract had to agree to a relinquishment. In addition, it was necessary to make the exchanges so that primary allotments would make up compact bodies within the project and allow for economical deliveries of water (Supt. Ann. Narr. Rpt. August 15, 1931: 50-52; 1934: 6; Woehlke 1937: 5; Kneale 1950: 396-397; Hackenberg 1955: 76-77).

Superintendent Kneale confessed later that the consolidation and exchange program, upon which the success of the SCIP really depended, required an immense amount of work both locally and in Washington. "Our task," he said, "would have been vastly more easy of completion had we found the Pimas unallotted and the irrigation system still to be installed." Many allotment exchanges needed to be effected and a full 50 percent of the allotted lands were found to be unsuited or unfit for farming. Substitute lands had to be sought in unallotted areas outside of the existing canal system. Selection of these lands required enlarging and revamping the entire delivery system for SCIP water (Kneale 1950: 397).

To make the allotment exchanges possible, a tract of some 12,000 acres now known as the South Side Area was subjugated from unallotted tribal lands. The idea was that less fortunate allottees who had received poor lands in the original allotments would be able to select irrigable lands in this reserve tract. Some people got the idea that they would have to pay operation and maintenance assessments if they accepted these newly subjugated allotments. The Indian Reorganization Act of 1934 then made it impossible to create new allotments. Nor could assignments of land be made until the Pimas had accepted the Act, adopted a constitution and bylaws, and created an organization whose duty it was



to make assignments. Subjugation in the meantime was continuing with trees cleared and removed from 20,000 acres in the South Side Area and subjugation work completed on about 1,000 acres of this land (Supt. Ann. Narr. Rpt. 1934: 7; Hackenberg 1955: 76-77).

In the face of this impasse, the program began to accumulate large areas that had been cleared and subjugated, but which could not be allotted or assigned. Water was short in 1934, which increased the amount of newly-subjugated land that had to remain fallow, and most Pimas lacked equipment to work the land even if these other problems could have been resolved. The result was that the 12,000 acre South Side Area remained unallotted tribal land that initially was worked as an agency farm, then (from 1952) as a tribal farm. After the land had been made ready in 1936, the government planted it to alfalfa and then harvested the crop by pasturing livestock under leases with parties outside of the reservation. Individual Indians began to do likewise and alfalfa was soon growing on approximately 70 percent of the allotted Indian acreage (Supt. Ann. Narr. Rpt. 1934: 67; Woehlke 1937: 6; Allstrom 1938; Walker 1944: 162-163; Hackenberg 1983: 176). This was the inception of the so-called "lease and loaf" program, which saw outsiders paying Pima land owners 3 to 4½ cents per day to allow feeder cattle to graze on their alfalfa pastures (Adams 1936c: 109-110).

Hackenberg (1955) has detailed an unending string of unintended consequences that came about as a result of the government's efforts. One of these was that as the fields were made ready, initially in the Blackwater District in the fall of 1929, and again in 1930, the Indians were not prepared to farm the land. According to Superintendent Kneale, "... there seemed to be a lack of interest. They did not seem to know what it was all about." The allottees lacked teams, harness, plows, harrows, seeders, everything necessary for farming. Rather than see the new fields blown away or drifted over and the ditches filled with sand, the superintendent took over seeding of the land and then irrigation as well. The Pimas saw the water running in the ditches and the fields turning green. Their interest revived and they made a crop that first year (Supt. Ann. Narr. Rpt. 1930, Sect. III: 55-57; Sect. IV: 30-32). The land was planted in wheat but for a variety of reasons - insufficient manpower, a family already raising sufficient produce for its needs, equipment shortages - much of the land never had a second crop. By 1936 the Blackwater, Sacaton Flats and Vahki districts experienced an excess of land over the needs of the inhabitants for it (Supt. Ann. Narr. Rpt. August 15, 1930: 27-30; Adams 1936a: 20, 26; 1936c: 23, 67, 113).

Another consequence was the matter of an agricultural education. The Pimas had been thrust abruptly into commercial farming, as opposed to their earlier subsistence practices, and found themselves having to abide by a set of rules not of their own making in cropping the new fields. Agricultural extension service agents replaced government farmers in 1932, but with a classroom format and gross understaffing, these agents were just as ineffective. Also essential in a successful agricultural economy were farming implements and credit. The reimbursable loan program had been in effect since 1914 with the bulk of the

\$215,000 made available loaned after 1932. Neither equipment nor credit was provided in anything like the amounts needed.

The heirship problem led to fragmentation of land holdings as the original allottees died and their interests were inherited according to Arizona law. This apparently posed difficulties more for the anthropologists who studied the Pimas than for the Indians themselves. The TC-BIA community studies in 1936 found that heirships were a minor problem at Bapchule, Blackwater, Sacaton Flats, Santan, Snaketown, Stotonic, and Vahki. At Cooperative Community, Gila Crossing and Santa Cruz (which were allotted but not subjugated) even the allotments were ignored in practice (Adams 1936c: 7, 21, 27, 37, 67, 72, 78, 83, 92, 111; Hill 1936b; Woehlke 1937: 5; Hackenberg 1955: 78-86).

In all of the contemporary accounts about what was and was not done in connection with the SCIID lands on the Gila River Indian Reservation and the subjugation program, no one ever mentioned soil fertility or the possible need for organic and chemical fertilizers. In later years Superintendent Kneale, long retired and with the benefit of hindsight, wrote that the Pimas were interested in only two crops, wheat and cotton. During the winter of 1930-31, so he said, every acre in readiness was seeded to wheat. We saw earlier that his chronology had slipped by one year, so he meant the fall of 1929, when the first water releases were made from San Carlos Reservoir. Kneale went on to say that the new fields were capable of producing one excellent crop of wheat or cotton, but continued production of those crops would impoverish the land. In the old days when silt deposited from the floodwaters of the Gila fertilized the land, this was not a problem. Irrigation water pumped from the ground had no silt, and the flows from the reservoir contained relatively little. Kneale's remedy to maintain fertility was to plant alfalfa (Kneale 1950: 416-417).

The Superintendent's Annual Narrative Report for 1930 mentioned (p. 28) that wheat had been harvested and that cotton, with some small acreages of alfalfa, corn, gardens, and hegari were now growing. Late in 1930 some 300 acres in the Blackwater District were sown to barley and alfalfa. The government did this with the purpose of providing feed for farm livestock (Supt. Ann. Narr. Rpt., August 15, 1931: 28, 40). As with everything else, this didn't work out as the administrators anticipated. By 1934, newly subjugated lands were not being seeded and in fact were "piling up" at the rate of about 500 acres a month because of a serious shortage of irrigation water (Supt. Ann. Narr. Rpt. 1934: 5).

To keep the new fields from blowing away or drifting over, they were planted with alfalfa, including all 12,000 acres that were destined to become the agency farm and another 2,000 acre block in another location (Kneale 1950: 417). The superintendent didn't explain it quite this way, but others did, and seeding the lighter soils on the upper terrace was a wise move. Alfalfa did well in soils with moderate alkalinity, and by adding nitrogen it helped to build them up while protecting against erosion. The Office of Indian Affairs went further and arranged to have the alfalfa crop harvested by feeder cattle, whose owners paid a fee that ranged from 75¢ to \$1.75 per animal month for pasturing their stock. This in turn produced an immediate cash revenue that encouraged the Pimas to devote more of

their land to pasture, principally Sudan grass at first. Pima farmers in the subjugated districts put their own allotments into pasture. The Pimas, encouraged by their earnings from emergency relief programs and subjugation work, came around to a cash economy via the hay and pasture route (Wright 1935: 37-41; Woehlke 1937: 6).

The statistics were impressive. Cultivated acreage on the Gila River Indian Reservation went from more than 75 percent cereals in 1931 to less than 20 percent in 1935, with a steady decline each year. Farmers planted barley as a small grain in 1931, and as pasturage in 1934. The pasture crops (including alfalfa, clover, sorghum, and Sudan grass) increased from 7.2 percent in 1931 to 72 percent in 1935 when 6,000 new acres were planted, all of it in alfalfa. In the latter year, alfalfa acreage on the reservation totaled 15,796, of which 8,000 were on allotted lands and 7,796 on lands cropped by the government. The percentage of land in alfalfa remained at around 70 percent, concentrated in districts with the largest acreages of arable lands - Blackwater, Casa Blanca and Santan (Adams 1936a: 9-10, 32; Stanton 1936: 10-12, 45; Walker 1944: 162-163).

Pasturing of custom cattle as they called it at the time, or "lease and loaf" as it became known later, quickly grew into the principal method of cropping in those districts where farmers had the resources to keep their lands in pasture. In the poorer districts such as Gila Crossing, Santa Cruz, Sacate, Stotonic and Snaketown, people continued to depend upon cutting and selling mesquite wood for posts and firewood while raising a little wheat and barley (Adams 1936a: 13, 18; 1936c: 22, 38-39, 70-73, 85, 94-95, 104, 111-112).

There were some surprises. In Gila Crossing and Maricopa, average *family* incomes totaled only \$45 and \$43 respectively in 1935, excluding sales of farm products, livestock or wood. The farmers there cultivated some 2,459 and 1,339 acres, none of which had been subjugated by the government or were receiving SCIP water. Only four government loans were outstanding in Gila Crossing and none in Maricopa, where the Indians had more tools, equipment, and work animals than at Casa Blanca, Santan or Blackwater. Most purchases were made through the implement dealer in Laveen, Arizona, who said that payments had been made very promptly (Adams 1936a: 18, 42; 1936c: 32, 38, 40-41). As case examples, the Gila Crossing and Maricopa districts convey a very strong impression that the Pimas would have fared better all around had they simply been given the water without allotting or subjugating their lands. This of course is what they had sought for many years.

Subjugation completed what allotments began. While the Pimas did receive more irrigation water on the eastern half of the reservation, the principal effect was to emphasize divisions in Pima society between the "haves" with access to resources and the "have nots" for whom little had changed since the 1870s, while otherwise maintaining a status quo. The government began the programs and ran them with no input from the natives; by 1940 per capita incomes on the reservation had sunk to around \$100, where they had been in 1925-27 when the San Carlos Irrigation Project first began (Walker 1944: 212, 215-218).

*The Public Works Administration (PWA) and Indian Emergency  
Conservation Work (IECW) Programs on the Reservation*

One of President Franklin Roosevelt's Depression-era agencies, the Public Works Administration (PWA), furnished loans and grants to build more than \$20 million in federal, state and county facilities across Arizona in the 1930s. It spent another \$38 million on the construction of Hoover Dam (Sheridan 1995: 254-255). The PWA and another public works program also provided much of the funding from 1933 to 1937 for improvements to Indians lands under the San Carlos Irrigation Project, and for other projects until 1942. A total of 8,033 acres had been subjugated on the Pima and Maricopa Indian Reservation by the time the original funding ran out in 1932. When work resumed with PWA funds, another 10,604 acres of tribal lands were newly subjugated and provided with distribution works (Pfaff 1994: 55-56).

According to an unsigned article,

"At present 20,000 acres of Indian land is [*sic*] already under irrigation. Funds to take care of the remaining 30,000 acres have been provided from the Public Works appropriation to the amount of \$2,338,000. This will finance the construction of the canal, the distributing system, the storm channels and structures."

The money also provided for drilling fifty wells on Indian lands, equipping these with electric pumps and building the power transmission lines to the wells (*Indians at Work*, February 1, 1934, pp. 29-30). This allocation presumably came from the \$7 million for irrigation that was part of the first allotment to the Indian Service from the PWA (*Ibid.* June 15, 1935, p. 8).

Walter Woehlke in his 1937 summary report on the TC-BIA survey referred to the special appropriations and PWA allocations that had enabled the canal system to cover 50,000 acres as well as to clear, level, border and seed some 25,000 acres. With this money, the cultivated areas had grown in size each year. At the same time, employment offered by subjugation operations and emergency relief work, which also began in 1933, made the Pimas more dependent upon wage labor and less upon farming (Woehlke 1937: 5-6). In his report for the fiscal year ending June 30, 1934, Superintendent Kneale confirmed the source and importance of the extraordinary amount of money being poured into subjugation and the construction of irrigation works. The funds used were PWA monies, \$1 million having been allotted for completion of the subjugation work. This money was available only until June 30, 1935 and whatever had not been spent or contracted for by then would be lost by reversion (Supt. Ann. Narr. Rpt. 1934: 5).

Lucy Wilcox Adams indicated how part of this money was expended in her entry of \$67,483.19 for "PWA - new ditches, Indian payroll," which amounted to some 26 percent of the income from wages on the reservation in 1935 (Adams 1936a: 14). The PWA obviously became the major source of funds for

completing the irrigation works to bring the SCIID lands into productive use. Since the bulk of the allotted land had already been subjugated by early or mid-1934, the PWA monies would have gone largely to clearing and improving the South Side Area, which became the agency and then the tribal farm (Kneale 1935: 37; Pfaff 1994: 54-55).

A companion public works program was widely known as the Civilian Conservation Corps (CCC). From 1933 until 1942 it recruited single males whose parents were on relief. For periods of approximately six months, the enlistees were assigned to companies and then to camps where they worked on soil erosion control projects and constructed fences, roads, wells and check dams. They also fought forest fires, manned fire lookouts, built picnic areas and park facilities, and in general conserved and improved public lands. In Arizona the Federal government spent nearly \$44 million on CCC projects between 1933 and 1939 (Sheridan 1995: 254). Enrollees received a salary of \$30 a month, of which \$25 was sent to their families.

Standing in the shadow of the CCC was the CCC - Indian Division, known from 1933 to July 1, 1937 as the Indian Emergency Conservation Work (I.E.C.W. or IECW). This program operated under somewhat different rules, and two good articles have outlined its history (Parman 1971; Gower 1972). Almost any male Indian over the age of eighteen could serve and the men often lived with their families, even at home, while enrolled. Their focus was on improving reservation lands rather than public lands, and until 1938 the program emphasized job skills and good work habits as against improving the enrollees' education.

By comparison with ECW/CCC programs elsewhere, activities on the Gila River and AkChin reservations were very modest. The extent to which these involved subjugation work or irrigation improvements is not clear. One company of 100 Papago, Pima, Maricopa, Yuma and Cherokee youths completed one of the first projects in 1933. This was construction of an eight-room forestry cabin at the foot of Baboquivari Peak, southeast of Sells, Arizona (*Indians at Work*, December 1, 1934, p. 21).

The Office of Indian Affairs' own periodical *Indians at Work* included a substantial amount of information regarding the IECW, including short reports about activities on the Pima and Maricopa Reservation. The IECW spent much less money than did the PWA; Adams (1936a: 14) put the 1935 expenditures by the Indian ECW on the reservation at \$15,308.80, of which almost 98 percent went for Indian salaries. Because so much of its money went for wages, the IECW became a significant employer, although probably for not more than one company of men at a time.

Like the CCC, the IECW was fond of listing major projects completed (*Indians at Work*, October 15, 1934, p. 16; June 15, 1935, p. 17). Their projects included showcase affairs such as a highway first-aid station built at Olberg (Cornwall 1938). In June and July 1935 a company of 103 Pimas, evidently from the Salt River Reservation, built a camp in the Nantes Mountains and worked at unspecified tasks on the San Carlos Apache Reservation. One achievement of dubious value was a collective weight gain of 600 pounds (Easchief 1935).

Most or perhaps all of the other projects were on the Gila River and AkChin reservations, and an appendix to the TC-BIA range management report listed the Indian ECW projects as of March 31, 1936. These included two large *charcos* or watering-holes for livestock; range wells at Blackwater and Santa Cruz; some seventy-three miles of boundary fence construction, and fifteen cattle guards along the fence (Lister 1936: Appendix B). The company also built six livestock corrals, five of them on the western part of the reservation. These, as range examiner P. B. Lister explained, were to aid in gathering the feral cattle that congregated in the mesquite and salt cedar thickets near the Gila and Santa Cruz Rivers (Ibid. pp. 28-30). They were also useful for rounding-up wild horses (*Indians at Work*, December 15, 1935, p. 48). The total cost for all Indian ECW projects in Lister's list came to \$26,774.66.

Other notes in *Indians at Work* from 1935 into 1938 mentioned fence construction most often. These would necessarily have been of post-and-wire construction. Some boundary fences were intended to keep Pima cattle inside the reservation while excluding livestock owned by outsiders (*Indians at Work*, December 15, 1935, p. 48; February 1, 1936, p. 49; February 15, 1936, p. 48; February 15, 1937, pp. 50-51; March 1, 1937, pp. 49-50; June 1, 1937, p. 50; February 1, 1938 p. 37). Other IECW activities included construction and landscaping of the Little Gila Picnic Grounds, the Maricopas' lowering of their canal banks, trapping gophers, erosion control work near Gila Crossing, and placing rock water spreaders to control erosion in the Blackwater District (*Indians at Work*, November 15, 1935, p. 50; July 15-August 1, 1937, p. 50; May 1938, p. 40; February 1939, p. 47). A 1939 illustration showed a road under construction at the Pima Agency (*Indians at Work*, August 1939, p. 44). For purposes of instruction, the Phoenix Boarding School became the Phoenix training school, where the trainees received instruction in telephone maintenance and the construction of telephone lines (*Indians at Work*, March 1941, p. 32).

As subjugation work entered its last year and many Pimas found employment on PWA and IECW projects, a government-sponsored group of white academics and other specialists working for the Soil Conservation Service began a human dependency survey of the reservation. On February 1, 1936 this team of anthropologists and agronomists, together with a range examiner, geologist, economist, soil scientist and probably other specialists, directed by a former publisher of *Sunset* magazine, arrived to begin their little-known but thoroughly modern socio-economic survey. They intended to elucidate the problems of the Pimas and Maricopas and to recommend measures for their solution (Woehlke1936b; Ann. Rpt. Sec. of the Int. 1936: 187-188).

## Chapter XVI

### GOVERNMENT STUDIES AND GOVERNMENT POLICIES IN THE 1930s

Individual Pimas and Maricopas retained very little room for initiative by the 1930s. If one lived in the reservation's western districts, it was possible to ignore allotments and continue living by traditional agriculture, supplemented by woodcutting, since there was no San Carlos Irrigation Project there. East of the old Maricopa and Phoenix Railroad right-of-way, the irrigation project was now a major factor in the lives of those who still sought to earn a living by farming. Many no longer tried to do so and preferred wage work, an alternative made familiar by the relatively well-paid jobs that PWA and IECW emergency relief programs provided from 1933 through 1936. The government funded health care and education too, and supposedly guided the tribal administration.

John Collier, a reformer transplanted from New York City to California, served as Commissioner of Indian Affairs from April 1933 until January 1945, through most of President Franklin Roosevelt's years in office. Collier had been a vociferous although apolitical critic of Federal Indian policies for more than a decade, and upon appointment as commissioner, he brought with him his own agenda (Kelly 1974). He was a strong advocate for the Indians and sought to enlist the government in their economic rehabilitation and the provision of opportunities, principally on the reservations. Another part of his agenda was assisting tribes to organize so that they could manage their own affairs, and encouraging their civil and cultural freedom (Collier 1963: 172-173).

Some of his reforms, such as termination of both the 1887 allotment act and reservation boarding schools, and establishment of a program for Indian self-government, were welcome changes. Collier's record of accomplishment was uneven, however. He had had no significant role in passage of the Indian Citizenship Act in 1924 and no role at all when Congress passed and President Coolidge signed the San Carlos Act a few days later (Hackenberg 1955: 63-66; Stein 1972; Dobyns 1989: 79-86; Sheridan 1995: 293-294). In his retrospective writings he would claim credit for virtually everything that happened during his long tenure, except livestock reduction.

#### *The TC-BIA Survey of 1936*

One program that Collier said nothing about and which apparently remains unknown, except for several references by Hackenberg (1955: 67, 73, 78), was the TC-BIA ("Soil Conservation Service Project for Technical Cooperation With Bureau of Indian Affairs") as it was referred to at the time. The Annual Reports of the Secretary of the Interior (1936: 187-188; 1937: 211) mentioned the TC-BIA surveys briefly, and the 1937 Report gave this sketch of the program:

"In December 1935 the Soil Conservation Service organized, in cooperation with the Indian Service, a unit of technicians for making physical and human surveys of various reservations for the purpose of producing plans and programs in

the execution of which the Indian Service would bring about a better and more complete use of reservation resources. The basis of these programs was the introduction and application of land-use practices which would check erosion and bring about not only the full development but also the conservation management of Indian resources."

"At the end of the fiscal year 1937, surveys had been completed and land-use plans made for Havasupai, Papago, Pima, and Walapai Reservations in Arizona, the Mescalero Reservation of New Mexico, the Shoshone Reservation in Wyoming, and the Uintah and Ouray Reservations in Utah; ...." (Ann. Rpt. Sec. of the Int. 1937: 211).

Later, Collier commented on what he called "The Final Report of TC-BIA on the Lower Brule Reservation, South Dakota. .... It is called a 'Human Dependency and Economic Survey'" (Collier 1938: 1-2). He called it readable, comprehensive, profound; one of a series of TC-BIA reports. A second such report, even more exhaustive, had recently come to his office - "A Study of Economic Conditions on the Uintah Project, Utah." He said nothing about any of the other TC-BIA reports.

In the course of the present research a colleague, David M. Brugge, reminded me of the U.S. Soil Conservation Service Records at the University of New Mexico Library's Center for Southwest Research (CSR). Both of us had used these records earlier on other projects. By their contents they are primarily "gray literature" or in-house reports from the 1930s and 1940s that at one time had been in the Soil Conservation Service's (SCS) Albuquerque office. They are now cataloged as MSS 289 BC in the CSR manuscript inventory. At least one cover page still bears the SCS Library stamp.

A perusal during an early research trip showed that this collection included, mostly in Box 18, a number of folders labeled as Gila River Indian Reservation and Pima Indians. Nearly all of these dated from 1936. With related and supplemental material, fifteen folders were scattered through three boxes. Also present was a copy of A. T. Strahorn's 1932 "Irrigable Area Classification" of the reservation, and fragments of TC-BIA reports for several other tribes to which Collier had referred.

Closer examination indicated that these unordered, typescript manuscripts closely resembled the reports of the Tewa Basin Study, a Human Dependency Survey carried out at the same time in northern New Mexico. There, specialists from a variety of disciplines in several Federal agencies undertook to examine every important aspect of soil and water, plant life, animal life, human life and economic conditions within a watershed or other study unit. The disciplines included agronomy, engineering, geology, range management, soil science, forestry, sociology, and agricultural economics, although not necessarily limited to these. Marta Weigle (1975: 1-18) wrote an introduction to her edited reprint of Volume II ("The Spanish-American Villages") of the Tewa Basin Study. In this



she explained what the project was about, and her introduction is almost equally valid as a guide to the TC-BIA study of the Gila River Indian Reservation. The folders in MSS 289 BC included the equivalent of a Tewa Basin Study for the Gila River Indian Reservation in Arizona.

Apparently, there are no other known copies of this Gila River Indian Reservation survey. The National Archives in Washington D.C., the National Archives - Pacific Region at Laguna Niguel, California, and other possible repositories such as the National Agricultural Library reported no holdings of this nature. The Phoenix Area Office of the Bureau of Indian Affairs has the accompanying atlas of thirty-four hand-colored maps. These primarily show the results of a hydrologic survey, soils reconnaissance, erosion, land classification and other mappable landscape characteristics, done in detail for the Maricopa, Cooperative, Gila Crossing and Santa Cruz districts. These districts lie outside of the SCIID.

Each of the surviving reports appeared to be complete with the possible exception of Underhill 1936a, but some had not been paginated. There were internal references to still other reports not found in any of the folders. An undated outline listed sections that appear to be present but which have different titles, as well as others such as a general account of allotment and the land situation by Korn and committee that are not present. A letter (Johnson to Calkins, February 1, 1937) accompanied one set of six reports prepared by the Technical Survey Section. Four of the six - geology and water resources; soil, alkali and land classification; farm management; and the range and wildlife management plans - are accounted for, while the woodland survey and engineering control plans are missing. Reports on Pima contacts with the whites, a program for Pima schools, and Pima government are in the folders, but were not listed in the outline. While all of these parts contributed to a human dependency survey of the Gila River Indian Reservation, the project never reached the state of a final report. The contributors are now evidently all deceased.

Two well-known anthropologists participated in this study. The first half of W. W. Hill's "Report on Pima Land Tenure and Heirship" (Hill 1936b) was published by Hill (1936a) the same year the study was made, with no acknowledgement of the project's existence. Hill had included an appendix in his study that illustrated the almost fantastic complexity of the heirship status in a single section of land at Blackwater, a situation not unknown to the Office of Indian Affairs at that time. Hackenberg (1955: 78-80) summarized two studies prepared by this same TC-BIA project on allotments, neither of which is the same as Hill's report or any others in the CSR collection. Hackenberg did not cite the location of the studies he saw. Hill never referred to the land tenure topic again.

Ruth Underhill contributed three known sections: "Pima Government" (1936a), "Returned Students on the Pima Reservation" (1936b), and "Pima Contacts with the Whites" (1936c). All are useful and when she occasionally projected backwards in time, it was to an ethnographic past, not a chronological one. Underhill evidently never published these or referred to them in her later writings. A recent sketch of her professional career did not mention this TC-BIA

survey (Griffen 1988: 355-359). The author of that sketch hinted that "highly-educated outsiders" employed as so-called soil conservationists clashed with the old-line Office of Indian Affairs employees who ran the reservations. Underhill herself was not allowed to participate in government projects involving the Tohono O'odham after she made strenuous objections to the constitution they were expected to adopt (Ibid. 358).

The superintendent of the Gila River Indian Reservation in 1936 was A. E. "Bert" Robinson, a deeply entrenched figure who effectively controlled that reservation into the 1950s. His role in the project, if any, is not known. An article in a local newspaper gave a synopsis of the findings with regard to farm management, range, wildlife, and water resources. After three months on the Gila River Indian Reservation the survey party moved on to Peach Springs, Arizona (*The Coolidge News*, July 10, 1936: 1). We are fortunate that so much of their work survives. Altogether there are hundreds of pages accompanied by many charts and graphics, in addition to the atlas. These TC-BIA reports are probably the most useful single body of information about land use on the Gila River Indian Reservation and the people there from any time between the 1860 Census and the present.

Two of the best and also the longest reports would now be called socioeconomic studies. "Pima Economy" (Adams 1936a) and "Community Reports" (Adams 1936c), as well as "A Program for Pima Schools" (Adams 1936b), were written and/or compiled by Lucy Wilcox Adams, who did outstanding research in this line that is now little known. Her sections especially would fit Collier's characterization of being readable, comprehensive and even profound. Upon request, her son Dr. William Y. Adams made a search of his mother's papers, but he replied that these contained no draft documents or other references to this TC-BIA project. Adams 1936a and 1936c were cited extensively in Chapter XV. Also useful was the farm management plan, a straightforward agronomic survey. A range management report surveyed the economics of the Pima livestock business and gave proposals for managing and upgrading the ranges (Stanton 1936, Lister 1936).

#### *A Summary of Economic Conditions in 1936*

Walter V. Woehlke as Field Representative of the commissioner had responsibility for direction of all the TC-BIA studies. Woehlke had been editor of the popular California monthly, *Sunset Magazine*, and a close associate of Collier in the Indian reform movement (Collier 1936: 4-5; Kelly 1974: 273). Under his leadership the technical service group of the Soil Conservation Service launched its surveys of the Pima and Walapai reservations on February 1, 1936 (Collier 1936: 4-5). By July 10<sup>th</sup> the fieldwork was done and the individual reports on the Gila River Indian Reservation were already in draft form.

Adams (1936a, 1936c) and Stanton (1936) especially provided much hard data to support descriptions of economic conditions on the reservation, both at the time of their writing and extending back for several years. They were able to put

numbers to what some of the engineers, agents and others had been saying. For example, gullies and wind action had affected 89 percent of the reservation lands and removed up to twelve inches of topsoil from 60 percent of the area. Perennial range grasses had vanished, replaced by weeds and annuals with little feed value. One cow yearlong now required 467 acres of Pima range, almost three-quarters of a square mile. Revenues from grazing on the open range dropped to barely one percent of the reservation's total income in 1935 (Lister 1936: 10-11; Stanton 1936: 117; Woehlke 1937: 1-2).

As Indian ownership of livestock trended downward because of overgrazing, the "custom" cattle business grew rapidly as an early fruit of the San Carlos Irrigation Project. About 400 head of white-owned animals pastured yearlong on irrigated pastureland, under permits, in 1933. Their numbers increased to 3,200 in 1934 and to 4,400 animals in 1935 (Lister 1936: 15-16). Much of this pastureland was in alfalfa, which the owners or leasees normally cut four times a year and grazed the balance of the time. Approximately one-half of the newly subjugated allotment lands and all of the 11,000 acres in the unallotted tribal farm had been sown to alfalfa. Cereal crops were the principal casualty, wheat and barley (grown as a cereal) declining from 75 percent to 19 percent of the acreage in cultivation between 1931 and 1936. At the same time, pasturage (mostly alfalfa) rose from 6 to 69 percent of the cultivated acres (Adams 1936a: 10, 32-35; Stanton 1936: 100-101).

The principal industry in all of the reservation communities continued to be agriculture, with 87 percent of the inhabitants dependent wholly or in part upon farming as a livelihood. Apart from the rapid shift in emphasis regarding pasture and cereal crops, there were some marked differences. Two isolated districts, Sacate and Snaketown, grew no alfalfa and had relatively large areas in wheat, reflecting the conservative nature of the residents and their desire to continue with a form of subsistence agriculture. The Maricopa, Cooperative, Gila Crossing and Santa Cruz districts likewise devoted only small areas to alfalfa and barley. All of these lay on the western part of the reservation and outside of the San Carlos Irrigation Project.

In the Casa Blanca, Santan and Blackwater districts on the other hand, much higher proportions of land were in alfalfa and barley, with barley (grown as pasturage) the dominant crop in the Santan area. Sacaton was a special district because of the presence of the agency, and it exhibited a great diversification of crops as well. Cotton, which had been much more important as a cash crop two decades earlier following development of the American-Egyptian and Pima long-staple varieties, was still grown everywhere except at Snaketown and Sacate. It had declined now to less than 3 percent of the cultivated acreage. Up to one-quarter of the agricultural lands in all of the districts lay idle and abandoned for one reason or another (Adams 1936a: 8-10, 25-26, 31; Stanton 1936: 45-46, 107).

After agriculture, the most important source of income was wage work. Nearly all of this derived from government jobs on the reservation such as subjugation (until the end of 1936), roadwork, building the PWA irrigation works, and Indian ECW activities including fence building. The decline and

disappearance of these jobs led to a real decrease in per capita incomes (see Chapter 15) (Adams 1936a: 13-15). As wage work increased, woodcutting, which was hard labor and poorly paid, began to lose out. In poorer districts such as Snaketown, Gila Crossing, Cooperative Community, Santa Cruz and Maricopa, woodcutting continued to supply a substantial part of the individual incomes (Adams 1936a: 13; 1936c: 28, 38-39, 50-52, 63, 71-72, 93-94).

Crafts were still alive and Pima baskets ranked among the finest in the Southwest. About 100 women on the reservation made and sold baskets, either to traders in nearby towns or on the streets of Phoenix, earning only an estimated \$1,500 annually. Pottery making was limited to the Maricopas, who produced a black-on-red and a black-on-buff ware. About half of the pottery was used on the reservation and the balance found a market in the towns. These sales brought in another \$500 (Adams 1936a: 15-16). In three-quarters of the Maricopa families, pottery making was an important source of income, even the main one, and the best-known potter earned from \$7 to \$9 per week while a mediocre one could make \$2 a week. One entrepreneurial type bought vessels from other potters and made monthly trips to Tucson to sell barrels full of the Maricopa wares there (Adams 1936c: 52-53).

The social and economic data in the TC-BIA reports provide an exceptionally detailed look at the reservation as of 1936. One sees how fragmented and independent the communities had become, yet people continued to find their identities as members of a community, and any efforts to change that were met with silent resistance. Lucy Adams predicted for example that the 11,000 acre tribal farm would be parceled out under the new land code or assigned to Pimas who were not already allotment holders, but she also gave the reason why this would never happen.

Most of the people in the older districts had no desire to move to the newly subjugated area, even with its prospects of greater income. They were attached to their communities and content with their present way of life, which made no strenuous demands on their time and energy. Fewer than forty families had expressed a desire to move to the new land (Adams 1936a: 30-31, 34). Besides, under the system of contracted cattle pasturage, the agency handled the details and gave a check to the Indian owner. This was not calculated to develop initiative.

#### *A View of Traditional Pima Social Organization*

Ruth Underhill wrote perhaps the best single account of traditional Pima social organization, together with an outline of their farm and community associations, age and religious (Presbyterian, Catholic) groupings, as of the 1930s. Her report included still another list of old villages, with the localities to which their people had moved. She said this predated Russell's (1908: 23) list and referred to the situation about 1860.

By comparison with the 1860 Census (Chapter IX), with Frederick Grossmann's listing for the 1870 Census (Chapter XII), and Rev. Charles Cook's

tabulation from around 1900 (Chapter XIII), Underhill's listing most closely resembles Grossmann's. None of the communities were still occupied at the time of her writing. Her table has the additional value that she was interested in associations and loyalties. She prepared it as an internal history of movements or migrations, as a way to trace relationships between districts of the present-day reservation (Underhill 1936a: 14-15):

<u>Community</u>	<u>Location/residents moved to ....</u>
Standing Alone	(West of present hospital) People now on allotments in Lower Santan.
Mountain Top	(Seven miles west from Standing Alone) People went to Cottonwood and kept their unity for a long time. They have now scattered, mostly to Sacaton.
Ashtree	(Where Progressive Colony now is) The people moved north of the river to upper Santan, which was called Thundering, because they were the first people to have guns. Gradually, they cleared land by communal effort and spread into Lower Santan.
Stotonic	(Many Ants. Where Sweetwater now is) Floods changed the river course and people moved north of the river to present Stotonic, some to Lower Santan.
Bapchule	(Double Curve, named from neighboring mountain) In present location. Many families moved to Blackwater but the village core remained.
Vahki	(Ancient House) Some moved to Blackwater. A few are still found on old lands near the river.
The Pool	(Present Wet Camp) Many went to Salt River; a few remained.
Under the Hill	(Present Sacate) Moved to Gila Crossing. A few left.
Many Snakes	(Present Snaketown) Closely related to Wet Camp, many had fields in both places. Some moved to Salt River, some remained.
Maricopa	(Two and a half miles east [ <i>sic</i> ; west] from Standing Alone) Moved [to] present position, some also to Lehi and Laveen (Underhill 1936a: 15).

Underhill's "Maricopa" would have been the Maricopa settlement of Hol-che-dum, and "Standing Alone" probably the original site of Santan on the south side of the Gila River. Rev. Cook taught day schools at Hol-che-dum from 1871-1874 and at Santan from 1873 to 1878. "Mountain Top" evidently referred to Old Mount Top village, also known as Buen Llano. Scarcity of water prompted these migrations, until the old villages were broken up. Those who moved did so in family groups, which formed the core units within the communities. Sometimes the old village chief moved with them and the old government continued, as at

Sweetwater. At other times, as happened with Cooperative Colony, the group would choose a new leader.

The essential or core social unit was the large family, a group of houses occupied by the father and mother with unmarried children and by married sons and their families. The 1860 Census schedules reflected this and the 1920 allotment schedules gave the actual relationships. A village was an aggregation of these family groups. The family was also the key economic unit.

### *Pima Government: From Chiefs to Council*

Each village had a chief, whose office was loosely hereditary and whose functions were something like those of a family head on a larger scale. To assist him, a chief had a crier and one or more messengers. In addition, the hunt chief, war chief, and ceremonial leader were all offices hereditary in the same way.

The governing force in a village consisted of the council, composed of all the mature male householders. The men met frequently, sometimes every night, very much in the manner that Fray Pedro Font described in 1775 (Chapter IV). They talked over everything connected with village life, serving the purpose of a governing body, and acted only when all of the members were in agreement.

One of this body's duties and the one most thoroughly organized was administration of the community irrigation system. Each village had its own brush dam with a canal and a water captain (John Walker's "water *Alcalde*"). A community or a group of families built a dam and a ditch anywhere they pleased, without consulting others. The council appointed the water captain, some of whom held office until old age; others were chosen every year. This official then divided the ditch into sections and appointed a ditch tender for each section. Under the ditch tenders, all of the men in a village worked in relays to clean the ditch as often as necessary. Runners summoned the ditch-users, routing the lazy ones out of bed and lecturing the unwilling. When the brush dam washed out, the male villagers were summoned to rebuild it. The force was moral suasion, but it was a public duty to respond immediately.

Each man who helped with a ditch had the right to use water, but measurement was informal. There were no headgates and flood times brought plenty of water for all. In dry seasons, fields near the head of the ditch, which included those of the chief, took the water. In most villages the fields were served in regular order, from the head of the ditch down, each farmer using the water until his field was thoroughly irrigated. Until the time of water scarcity began, there was enough for all (Underhill 1936a: 1-6). The agent said that when irrigation water first flowed from the San Carlos Reservoir in 1929, the Indian water-users handled it to suit themselves. This led to dissatisfaction and many quarrels. A water-boss or *zanjero* was needed (Supt. Ann. Narr. Rpt. 1929, Sect. 1: 1)! This of course was exactly what the Pimas had, a half-century earlier.

The village chief and the council acted as a court to settle complaints or disputes. Their authority again consisted of moral suasion and the sanction was public opinion, which generally sufficed to bring an offender into line. All of the

villages were united in a loose federation, with one being regarded as the head and its chief as the head chief, though he had only the authority to summon the other village chiefs to a council. The unity of the River People was due to contact with the Maricopas and their warring against the Apaches. Participation in the Pimas' fighting force, as with their other actions, was completely voluntary (Underhill 1936a: 5-7).

Agent Frederick Grossmann penned an account of Pima chieftainship that may be romanticized, but which gives information not found elsewhere. According to Grossmann, control of the tribe was traditionally in the hands of the old royal family, with leadership passing from father to son. The reign passed to Shón-tarl-Kör'-li (Old Soldier), the last in a direct line of the royal house. The Maricopas came to the Pima country during this time. Eventually Shón-tarl-Kör'-li received a fatal wound, a musket ball in his forehead, during a fight with the Apaches.

The old chief had no son and upon his death-bed he recommended that Stjō'-e-teck-e-mús, one of the sub-chiefs, be elected head chief. This was done and he reigned for years, "respected and beloved by all his tribe." He led the Pimas against the Apaches many times and was repeatedly wounded, but finally died in consequence of sickness. Although Grossmann did not say so, Stjō'-e-teck-e-mús should have been the chief known as Culo Azul.

When Antonio Azul or A-vá-at-Ká-jo assumed the position of his father, this led to dissention. According to John Hays' calendar stick Antonio Azul's father died in the winter of 1854-55 (Jones 1961). The father had been chosen for his boldness and wisdom, virtues that did not necessarily descend from father to the then-young Antonio. Some thought that the warriors of the tribe should choose a new chief; others asserted that a distant relative of the old chief, with royal blood in his veins, ought to govern. Antonio Azul survived an accusation of witchcraft and became generally recognized as head chief, but believed his position to be insecure and therefore temporized with the bad men in the tribe rather than risk a disruption and possible loss of his office. The Indians took advantage of this weakness (Grossmann 1873: 411-412).

Antonio Azul outlived his enemies and upon his death in 1910, his son Antonito carried on the early government in a weaker form. When he died in 1923 the office lapsed. By this time the Indian agent was effectively in charge anyway and the lack of irrigation water had led to a breakup of the villages, so that the old village chiefs were not replaced when they died. The earlier irrigation organizations continued as long as there was any water and at Cooperative Colony, Santa Cruz and Gila Crossing they still functioned in 1936. In many cases the Presbyterian elder or the Catholic *fiscal* called out the men, just as the old chief had done (Underhill 1936a: 9).

Ruth Underhill (1936a: 9-10) noted that other forms of economic cooperation continued, such as the community tilling land for its incompetents, and that families kept together and continued to move in a body in spite of village breakups. The family groups were very stable, and village meetings continued at Bapchule, Sweetwater and Snaketown, in each of which a village core persisted.

As a substitute for the old government, every village formed a farm association or 'chapter' that began to assume some of the communal responsibilities such as clearing new land, road and ditch work. With creation of the San Carlos Indian Irrigation District and agency control of land and water operations, these associations shifted more to handling business transactions, including credit arrangements and seed deliveries (Supt. Ann. Narr. Rpt. 1927 Sect. IV: 1; 1928 Sect. IV: 1; Underhill 1936a: 16-18).

C. E. Faris, superintendent of the agency in 1925-1926, was credited with saving political organization on the reservation from possible extinction by setting up a tribal council. This began as an advisory body of prominent older men, suggested by the people in their districts and then appointed to the council. The council itself was a white creation and the Pimas were unfamiliar with the idea of decisions by majority rule, rather than by their own custom of unanimous consent.

Missing here was any mechanism for submitting matters to the council members' own village councils or for reporting their decisions through meetings in the villages. Because the Pimas did not know what the appointed councilors were doing, they came suspicious and claimed that the council was a tool of the agent and the Presbyterian missionary. Some districts did not elect representatives and the council was thus only partially organized. It also remained split along religious lines between Presbyterians and Catholics, each inclined to oppose what the other might suggest. Because the Pimas could not tolerate disagreements or lack of a consensus, this initial step towards a central government did not work (Supt. Ann. Narr. Rpt. 1927 Sect. V: 1; 1928 Pop. Sect.: 1; Underhill 1936a: 10-12; Hackenberg 1955: 68-69). Faris' two annual reports, for 1925 and 1926, made no mention of his setting up a tribal council.

The Pimas applied for a new election, which was held in 1929 and saw many of the older men removed. The newcomers consisted of returned students between thirty and forty years of age, persons who had spent some time away from the reservation. This council foundered for the same reasons and in 1936 was voted out. No firm local organization existed to take the place of the old village groups and individuals had no means for expressing their opinions, which led to passive resistance to council actions. The idea of representative government was as foreign as ever (Underhill 1936a: 11-12).

In 1934 Congress passed the Wheeler-Howard Act, otherwise known as the Indian Reorganization Act, a "New Deal" for the Indians. Besides ending allotments, extending the trust period on lands already allotted and encouraging tribal assignments as a preferred form of land tenure, the advisory council would be replaced by an elected tribal government organized under the Act. The adoption of a constitution and chartering of the tribe as a corporation, followed by enactment of a land code, would allow the Pimas to convert their fractional interests in allotments into an assignment in one place, as well as to consolidate the scattered individual allotments held by members of a family into a single farm (Woehlke 1935: 19-20; Hackenberg 1955: 95-96).

Thirty-one Indian reservations held referendums on December 15, 1934 that resulted in twenty-seven accepting the Indian Reorganization Act. Among



these were the Gila Bend, San Xavier, Sells (Tohono O'odham), Salt River, Ak Chin and Gila River Pimas. The rolls on the Gila River Indian Reservation listed 2,308 eligible voters, of whom 1,188 gave their approval and 116 voted no. The voting pattern on most of the reservations was similar, although Hackenberg has said that most of the tribal leaders and successful farmers voted in opposition (Anonymous 1935: 6-7; Hackenberg 1955: 95-97).

Delegates were then selected and they met with a Phoenix lawyer [Felix Cohen?] to draft a constitution and bylaws for the Gila River Indian Community, subsequently approved by the government. A Charter was issued on April 1, 1937 and adopted by the reservation's residents in another election on February 28, 1938. The constitution divided the reservation into seven electoral districts, each of which elected a member to the new council. This body then chose Xavier Cawker, leader of the older advisory council, as the first tribal governor in 1936 and 1937. Johnson McAfee succeeded him in office (Walker 1944: 213; Hackenberg 1955: 96-99; Dobyns 1989: 86).

Hackenberg (1955: 99-114) has outlined the subsequent course of administration and tribal government on the Gila River reservation through the mid-1950s. Much of the activity appears to have involved factional infighting, establishing relations between the tribal government and the world outside of the reservation as well as relations (mostly antagonistic) between the native government and the Pima agency, and between the tribal council and local communities. These issues were largely political and are now, with one principal exception, either quiet or forgotten.

### *The Gila River Decree*

The exception is the Gila River Decree and the course of litigation leading to it, known as Globe Equity 59. In 1925, with construction about to begin on Coolidge Dam and appurtenant structures of the San Carlos Irrigation Project, the United States filed suit in Federal District Court in Arizona on behalf of the allottees on the Gila River Indian Reservation. The purpose was to get an apportionment of the water under this project and establish the senior rights of the Indians to water in the river and the reservoir. Ten years later, Federal district judge Albert B. Sames approved the consent decree that settled this case.

The decree allowed the Pima allottees water for the irrigation of lands on the reservation with a priority date of time immemorial for 35,000 acres included in the San Carlos Indian Irrigation District, and with a priority date of 1924 for an additional 15,000 acres. In the last few days before approval of this decree on June 29, 1925 the advisory council on the Gila River Indian Reservation sought to be made a party to the suit and have their approval solicited before the court accepted any consent decree. The U.S. Attorney denied that the Pimas possessed authority to intervene, the Indians being wards of the government with the United States representing their interests.

Such a rebuff to the council resulted in antagonism by the Pimas to the Gila River Decree. The decree was inconsistent and even contradictory in its

language as regards the provisions of the San Carlos Irrigation Project act (Rott 1936: 34-35; Walker 1944: 77-84; Hackenberg 1955: 99-101; Dobyns 1994a, b). This settlement appears to have had no practical effect in allowing the Pimas to claim prior rights to the waters of the Gila River.

Without venturing further into a history of water rights litigation, it might be useful to clarify several points with respect to this decree, since litigation involving it continues. The Gila River Decree assigned priorities, and with respect to the Gila River Indian Reservation it pertains only to those lands under the San Carlos Irrigation Project. These amount to approximately one-half of the allotted lands. One would anticipate that the tribal farm, originally called the South Side Area and subjugated in the middle 1930s, would not be part of the SCIP and the SCIID since it is neither allotted nor assigned to individuals. This area was reclaimed in part if not entirely after allotments ceased with adoption of the Indian Reorganization Act in 1934. Yet a 1988 redesignation map of the Gila River Indian Community's San Carlos Indian Irrigation Project lands, provided by the Bureau of Reclamation, includes the tribal farm as a substantial part of the SCIIP acreage. No explanation for this has been found.

The exclusion of the council as a party to the suit in 1935 is more understandable since it was the older advisory council that had petitioned. In 1935 the Pimas and Maricopas were not yet self-governing; the Secretary of the Interior approved the constitution establishing a Gila River Indian Community only on May 14, 1936 (*Indians at Work*, June 1939, p. 46; also U.S. House 1945: 948). Finally, the Gila River Decree was a consent agreement to apportionment of the irrigation water that might be delivered from San Carlos Reservoir, not an adjudication of rights to the waters of the Gila River.

This last may be done in the 21<sup>st</sup> century, if at all, and if indeed the Federal government is not successful in asserting its ownership of all waters in the Gila River. Non-Indian landowners were required to execute an agreement in 1924 that, among other things, recognized that the water rights included in the San Carlos Project were the property of the United States (Walker 1944: 81). The Indians of course signed no agreement, and the actual ownership of water rights appurtenant to SCIIP lands on the Gila River Indian Reservation, as opposed to use rights, is less clear. The Gila River Decree gave the Indians a right to use the water from the Gila River, but it guaranteed them nothing.

### *Health on the Reservation*

In 1894, the last year for which medical statistics were published, health problems on the reservation consisted primarily of conjunctivitis, bronchitis, diarrhea and dysentery, and a mild influenza epidemic. The dysentery was confined to three villages in the Blackwater District. Tuberculosis "in its many forms" was found in fully half of the Pima families. Venereal disease occurred more commonly among the Papagos and Maricopas, the Pimas being quite free of this, although people only spoke of it reluctantly. The school children enjoyed

excellent health (Ann. Rpt. Comm. Ind. Affs. 1893: 120-121; 1894: 107, 636-647; 1898: 127-128).

Beginning in 1910, the superintendents' annual narrative reports included brief sections about health on the Gila River reservation. These summaries by the superintendents tended to be repetitious and not very informative. In the first surviving annual statistical report, from 1920, the only reportable diseases were trachoma and tuberculosis. Both were of serious concern, the estimated incidence of TB in 1910 being 34 percent and for trachoma 38 percent (Supt. Ann. Narr. Rpt. 1910, Health; Supt. Ann. Stat. Rpt. 1920 Sect. III: 5).

Sanitary conditions in general were poor and these did not improve for another twenty years. Most houses, built of adobes, had dirt floors and roofs and many had no windows. Not unreasonably, the superintendents traced the continuing high infection rate of TB and trachoma to unsanitary homes (Ann. Rpt. Comm. Ind. Affs. 1903: 133; Supt. Ann. Narr. Rpt. 1913, Sect. II: 6-8). During the influenza epidemic of 1918-1919, a quarantine of the reservations in the Salt and Middle Gila River valleys resulted in very few cases there (*The Native American*, December 28, 1918, p. 341). We are told that another influenza epidemic in January 1922 left no fatalities, although 75 percent of the school population and 25 percent of persons on the reservation came down with the flu (Supt. Ann. Narr. Rpt. 1922, Health).

A recent study of Indian Service medicine among the Navajos c. 1863 to 1955 equated conjunctivitis, a late-19<sup>th</sup> century term roughly meaning 'sore eyes', with trachoma, which is defined as a chronic, contagious conjunctivitis marked by inflammatory granulations on the conjunctiva surfaces and caused by a rickettsia (Webster's 1976: 937). Equating the two almost certainly oversimplifies the situation since trachoma is a more specific as well as a more recent identification. The same author assumed also that trachoma was the only eye affliction that reached epidemic proportions (Trennert 1998). This train of assumptions bears on the Pimas as well and requires analysis.

The medical anthropologist, Dr. Aleš Hrdlička, visited the Pimas beginning in 1902 and found among other maladies a moderate number of cases of trachoma and "numerous instances of conjunctivitis in all forms." He apparently was the first to mention trachoma by name. Hrdlička also referred both to simple ophthalmia and irritation of the eyes (quite common) and to chronic ophthalmia among the Navajo. He found ophthalmias among the most common diseases of the Hopi Indians, often the direct result of irritation produced by fine, wind-blown sand, which entered the eyes. Rubbing these with unclean hands led to continuing inflammation. Gonorrheal ophthalmia and trachoma were also met with there (Hrdlička 1908: 180-182).

It would be tempting to think of trachoma as an updated and more exact identification for what John D. Walker and his successors identified as ophthalmia in 1871, and later as conjunctivitis. In the absence of accurate descriptions of symptoms, it is impossible to equate their older disease terminology with modern names. By 1910, trachoma reportedly had become the principal medical problem among the Pimas and it continued so into the 1920s.

Author Kenneth Roberts in his vivid account of the Pimas' experiences said that the Pimas, like all Indian tribes, were heavily afflicted with trachoma (Roberts 1924: 162).

Whether the trachoma statistics included other, milder eye problems caused by unhealthy environmental conditions was never settled, because there was no provision for reporting the latter separately. The superintendent's annual report in 1916 said that a large number of trachomatous cases had been treated by operation (presumably by grattage; i.e. scraping) or otherwise, and that the climate was particularly favorable to conjunctivitis and other eye diseases (Supt. Ann. Narr. Rpt. 1916, Sect. II: 2-3).

Some evidence points to non-contagious causes for the Pimas' sore eyes. One possibility, the custom of living in smoke-filled *kiik* during the winter, had been alluded to more than once (Ann. Rpt. Comm. Ind. Affs. 1882: 7; 1892: 572; *The Church at Home and Abroad*, June 1891, p. 529). An agency physician attributed inflammations of the eyes, very prevalent among the children, to a lack of sanitation. These cases generally cleared up without other treatment when the children followed boarding school rules of cleanliness (Ann. Rpt. Comm. Ind. Affs. 1898: 127-128). The physicians' reports from the 1870s confirmed that nearly all of the ophthalmia/conjunctivitis cases were discharged as cured.

The consensus from these observations, and courses of treatment, is that the Pimas suffered from non-contagious eye afflictions, probably brought on by environmental conditions, and exhibited some cases of trachoma. Hrdlička's unique juxtaposing of ophthalmia, conjunctivitis and trachoma showed that these terms as used at the turn of the century were not synonymous. The agency annual statistical report in 1934 suggested a possible range of maladies when it distinguished conjunctivitis (pink eye), 139 cases, from trachoma, 191 cases. This leaves uncertain how many of the earlier cases may have been pink eye, a highly contagious but less serious form of conjunctivitis caused by organisms different from the one responsible for trachoma (Supt. Ann. Stat. Rpt. 1934, Sect. VI, Gila River Indian Res.: 28).

Dr. R. V. Parlett, the senior physician at the Pima Agency, introduced still more doubt in his 1931 annual narrative report. After saying that he had found many more cases of trachoma than he anticipated, he opined that many of the old people suffered from a chronic congestion of the eyes as a result of prolonged exposure to the glare of the sun and not from trachoma (Supt. Ann. Narr. Rpt. 1931, Sect. III: 10-11). He also testified that his hospital had very little trachoma (U.S. Senate 1931: 8261). He wanted an active campaign waged for elimination of the problem. While his attribution of cause to the sun's glare is highly unlikely, Dr. Parlett might have been dealing with a non-contagious form of ophthalmia induced by environmental conditions, as well as with other types of infection and forms of eye irritation that his predecessors treated and, by their reports, generally cured. Modern medical dictionaries recognize many varieties of ophthalmia and conjunctivitis (Anderson 1994: 369-370, 1184; Thomas 1997: 432, 1347-1348).

This prolonged example illustrates the hazards in attempting to identify specific infectious diseases in a historical setting if one has only anecdotal reports

and early medical statistics. Even observations by physicians may leave questions. The accurate descriptions of symptoms needed for identification of many diseases are rarely found.

The best-trained medical personnel on the western frontier in the middle and late 19<sup>th</sup> century were usually U.S. Army doctors. They seldom used the term "malaria" for any of the several varieties of this epidemic disease, although the etiology of the diseases they did treat would make malaria a candidate (Kraemer 1996; Roberts and Ahlstrom 1997). Other physicians followed suit, and as with trachoma, one is uncertain about its incidence among the Gila River Pimas and Maricopas. "Malarial fevers" were common there in the early 1880s but afterwards found no mention (Ann. Rpt. Comm. Ind. Affs. 1881: 6; 1882:9). Their disappearance may be due to an absence of standing water.

Doctor Parlett wrote an exceptionally good report about health conditions in 1931. Gastro-intestinal problems (dysentery, diarrhea); skin infections (impetigo, scabies); eye, ear, nose and throat conditions (i.e. trachoma); venereal diseases (gonorrhea, chancroid, syphilis), and tuberculosis (especially pulmonary TB) were the afflictions most frequently met with on the reservation. Bronchitis had been common in the late 19<sup>th</sup> century, but pulmonary tuberculosis was very prevalent and it had apparently increased in incidence through the 1920s. Gonorrhea, dysentery, diarrhea and the skin diseases were all treatable, and while no reports said anything about the medicines or procedures used, Dr. Parlett did describe some of the curing practices that native medicine men employed. He didn't approve of these (Supt. Ann. Narr. Rpt. 1931 Sect. III: 7-13). Hundreds of Papagos received treatment, in both the outpatient clinics and at the hospital.

Dr. Parlett was the first to mention diabetes mellitus, following Aleš Hrdlička's reference to a single case in his 1908 report. This was Type II, non-insulin-dependent diabetes, controllable by dietary restrictions, and it did not seem to bother the Pimas very much. Dr. Parlett wrote that:

"I have seen more cases of diabetes mellitus during the past two years on the Pima Reservation than I have in all the other tribes of Indians among whom I have worked. It seems quite common, though without a great deal of difficulty they seem to live and get by. I am unable to explain the reason for the prevalence of this disease unless it is the fact that these Indians are not great meat eaters, as are the Navajo and Apache Indians, and that they do eat huge quantities of beans, wheat products, fresh vegetables, sugar and many native foods derived from parts of the desert flora" (Ibid. 11).

Doctor Parlett had said many of the same things, sometimes in greater detail, when he submitted a prepared statement and then testified in hearings before a U.S. Senate subcommittee on the condition of Indians in the United States (U.S. Senate 1931: 8238-8242, 8260-8267). In 1944 another government

report remarked on the high occurrence of both diabetes and gall bladder disease, and reiterated that the Pima diet appeared to be excessively high in carbohydrates:

"The most striking feature of this diet is the large daily amount of white flour. If this same weight of flour represented whole wheat grain, as it used to do, it would contain the supplementary food factors necessary for the oxidation of the sugars into which the starchy foods like flour are converted" (Walker 1944: 212-213).

By 1995, the National Institutes of Health estimated that 50 percent of adult Pima Indians had diabetes (National Institute of Diabetes & Digestive & Kidney Diseases 1995: 16).

Infant mortality was also higher than it should have been, not a new observation since it had been called "excessive" in 1925 and "high" in 1926 (Supt. Ann. Narr. Rpt. 1925, Health: 1; 1926, Health: 1). The only actual mortality figures given by a Pima Agency physician, in 1928, claimed that the death rate was 18 2/3 per 1,000 as compared with a figure of 12 per 1,000 for the United States (Supt. Ann. Narr. Rpt. 1928, Health: p. 1).

Occasional epidemics of smallpox, whooping cough, measles, and mumps around southern Arizona left people on the Pima-Maricopa reservation largely unaffected, as during the Spanish flu epidemic of 1918-1919. School children experienced measles epidemics but by the 1930s they had received vaccinations against smallpox and diphtheria (Ann. Rpt. Comm. Ind. Affs. 1900: 198; Supt. Ann. Narr. Rpt. 1907: 2; 1931 Sect. III: 13-14). The superintendents' annual reports contained a few medical statistics as recently as 1935. These and any comments about health conditions focused upon use of the hospital rather than on the medical problems of individuals.

The agency general hospital, located one mile west of the Pima Boarding School, was a fifty-bed structure of frame construction. The original building had been constructed with one story and a basement in 1915-1916 and added to many times. By 1931 it was inadequate, a "long drawn out" frame structure with a second story addition for use by the nursing personnel. There were no private rooms and the patients had to use outside lavatories and bathrooms. While it had just received radiologic (X-ray) equipment, the doctor hesitated to use the operating room, which he termed "make-shift." The water supply at least was of excellent quality, and with a new transformer the building would *soon* have adequate electricity. The senior agency physician had charge of the hospital and its staff of four graduate nurses, two cooks, a matron and four attendants (Supt. Ann. Narr. Rpt. 1931 Sect. III: 17-19).

By 1935, health care on the reservation stood at a barely-adequate level. The agency had sought to maintain up to three full-time physicians and a contract physician (at Gila Bend) along with the supporting staff. One of the full-time doctors had a clinic at Gila Crossing (Supt. Ann. Narr. Rpt. 1929, Health: 1-2). In 1935 the principal maladies, in descending order of incidence, were whooping cough (pertussis) (238 cases), measles, conjunctivitis (pink eye), influenza,

impetigo, and finally tuberculosis (62 cases). The relatively low incidence of TB probably owed less to effective treatment than to sending the more serious cases to a sanitarium at Laguna, New Mexico. No agency reports before or after 1930-1931 mentioned diabetes nor were statistics ever given. Apart from diabetes and tuberculosis, the diseases on the reservation were treatable, not life threatening or seriously incapacitating. The Pimas by and large were still a healthy people.

*The Gila River Indian Reservation in the Late 1930s*

The TC-BIA planners envisioned a rapid change on the Pima-Maricopa reservation from subsistence agriculture, recently supplemented by government wage work, to an economy based upon a combination of commercial and subsistence farming. An Indian-owned cattle industry would rely upon irrigated pasturelands (Adams 1936b: 2-4). None of this worked out as planned. Abnormally low water levels in the San Carlos Reservoir from 1938 through 1940 meant not only inadequate amounts of water for irrigation, but also a great reduction in the power generated by the Coolidge Dam hydroelectric plant. After the installation of groundwater pumps in 1934 to provide more water, power for these had to be purchased.

Increasing demands for water led to the drilling of more wells. From fifty irrigation wells in 1934, the number increased to eighty-one in 1939, with a capacity of 750 acre-feet of water per day. These numbers rose still more until by 1943 there were 100 project wells, eighty-six of which were operational. Instead of a projected 20 percent of all irrigation water to SCIP lands being pumped groundwater, the amount increased from 16.4 percent in 1934 to more than 30 percent in 1936. It declined for one year, then ranged from 38.6 to 43.3 percent of the water applied to the land in 1938-1940. The decade between 1957 and 1967 saw thirty-one new irrigation wells added, and by 1994 ninety-eight project wells were in operation, forty-six of these on the reservation (*The Coolidge News*, June 30, 1939, p. 4; Walker 1944: 100; Pfaff 1994: 53-56, 64-65).

Even with pumped water, an average of only 62 percent of the project area was irrigated in the years between 1937 and 1957. Indian lands invariably comprised the lesser share. During this same span of time, surface waters furnished about 62 percent of the project supply, with the balance from wells. These wells had to be drilled deeper as the groundwater level dropped, which added to the pumping costs. Between 1970 and 1988, the portion of irrigation water derived from wells ranged from 9 to 60 percent. In addition, the amount of groundwater pumped for irrigation on lands in the same area but outside the SCID averaged double to triple the pumpage for project lands. And finally, in the years between 1937 and 1957 approximately 35 percent of all water diverted or pumped into the system was lost to seepage, evaporation and waste. In recent years this loss is estimated to have increased to about 52 percent (Walker 1944: 87-89; Pfaff 1994: 64-65).

There were problems other than with the water supply. Lucy Wilcox Adams urged creation of an agricultural school to teach modern, irrigated farming

practices to the reservation's farmers. Others would suggest this as well (Adams 1936b; Pfaff 1994: 66). The old system of government farmers teaching by example and personal demonstration, never very effective, had been done away with upon creation of the Indian Bureau Extension Service and arrival of the first agricultural extension agent at Sacaton in 1930. Four-H clubs were formed and grew from two clubs with twenty-three members in 1934 to nineteen clubs with more than 200 members in 1937 (*Indians at Work*, January 1938, p. 36; February 1939, p. 44).

The extension program required Indians to gather in groups to see the new methods and techniques demonstrated. Initially the farmers failed to turn out, partly because of the lack of viable community organizations, but in 1937 the farm aides in the different districts suggested the formation of district farmers' associations. It was the extension service working with the pasture committees of the farmers' associations that got the program of leasing irrigated alfalfa pastures to cattle companies started. The Indians even furnished the cowboys (Wright 1935). Within a year, these associations were established in Blackwater, Casa Blanca, Sacaton and Santan districts, but with only one aide per district, the aides were spread very thin.

When the Gila River Indian Community received its charter from the Office of Indian Affairs in 1938, the farmers' associations were established as tribal enterprises. That year the government began cutting back appropriations and within ten years, the extension service staffing dropped from thirteen people to a single agent. The work of the farm aides was abandoned. The home aides, who helped to form home extension clubs and had been quite successful with the Pima women, were likewise dismissed (Hart 1937a,b; Burton 1937; Hackenberg 1955: 83-85, 111-112).

There were other dimensions to the failures in social preparation of the Indians for their participation in the San Carlos Project. One was the structure of the irrigation service with its procedural requirements for taking water from a ditch. The old water *alcalde* or water captain had been replaced by free-for-all grabbing for whatever water was available in the early 20<sup>th</sup> century. Now there was a watermaster and ditch riders, requisitions and deliveries, complications that apparently went unexplained, and in the all-too-frequent times of low water left farmers receiving too little water or trying to cope with delayed deliveries (Hackenberg 1955: 86).

Another dimension was the old reimbursable loan program, instituted around 1914, to provide credit for Indian farmers. Most of the \$215,000 made available in the next twenty years was loaned after 1932. The Indian Reorganization Act authorized a \$12 million revolving loan fund to capitalize agriculture, stock raising and other tribal industries. Congress appropriated some \$6 million for this fund, from which the Office of Indian Affairs provided only \$17,000 for use by the Pimas. Indians had difficulty in obtaining credit to conduct their farm operations, while non-Indians experienced little trouble in getting loans to finance crop production, especially for cotton. Not until 1940 did cotton finance companies extend credit to Indians to any extent, and then only to



a group in the Blackwater District (Ann. Rpt. Comm. Ind. Affs. 1914: 37; Woehlke 1936a: 8; U.S. House 1943: 4-5; Walker 1944: 134; Hackenberg 1955: 85, 114; Pfaff 1994: 65).

The resolution of heirship problems and the consolidation and exchange of scattered land holdings foretold by Walter Woehlke never really happened. Reportedly this was most successful in the south Casa Blanca area and least so in the Blackwater District, the natives in other districts being reluctant to surrender their rights to irrigable allotments for a promise of land elsewhere. By 1941, studies of Indian allotments showed 55 percent of the land in heirship status, with the complexities of land ownership a leading cause for the non-use of numerous irrigable allotment lands in the project area.

No happy resolution of this situation was in sight. While an independent appraisal had determined that forty acres constituted an economic farm unit, a detailed study in 1940 showed 142 representative Indian families farming 3435.25 irrigable acres, or slightly more than twenty-four acres per farm. A 1941 analysis found that 118 farms in the project area averaged twenty-nine acres each. These family farms were too small for people to earn a living from them. The trend towards larger farms among the non-Indians around Casa Grande, Arizona never developed on the reservation (Walker 1944: 160-161, 214-220; Hackenberg 1955: 77, 83, 90, 117).

O. D. Stanton, the assistant agronomist who wrote the "Farm Management Plan, Gila River Indian Reservation" for the TC-BIA survey in 1936, returned in 1939 to find a large part of the agricultural acreage idle because of the anticipated water shortage. The San Carlos Reservoir then contained between 19,000 and 20,000 acre-feet of water, about 1.5 percent of the 1.285 million acre-feet it was designed to hold. Project wells were being pumped to capacity. Blowing winds caused sheet erosion of newly-subjugated lands, not yet planted. Severe gullying cut into fields where improperly regulated irrigation waters ran over steep banks along the river, also where terraces had been cut on slopes with steeper gradients (Stanton 1939).

Stanton, and others, said that crops would thrive after lands had been in alfalfa for a few years. But the alfalfa was beginning to thin out, partly because of the age of the stands, partly because of the water shortage. The waters in the irrigation ditches now carried little or none of the silt that used to fertilize the lands, and no one had suggested using artificial fertilizers. Agent Kneale, while recognizing that leasing his land for pasturage would give the farmer an almost immediate return, naively agreed that the several years of alfalfa growth plus cattle droppings would assure bumper crops (Kneale 1935).

The subjugation program turned the San Carlos Project area into a gopher's paradise. No one had anticipated that the endless rows and ridges of fresh, loose soil would be an open invitation for pocket gophers to burrow into the borders and ditch banks and weaken these. This in turn permitted gullies to form, causing serious damage to the fields and a loss of irrigation water. The IECW stepped in with a reservation-wide gopher control program and reported the

average catch per man "fairly satisfactory" (Stanton 1939; *Indians at Work*, February 1939, p. 47).

Perhaps the most difficult challenge had been the repayment of San Carlos Project construction costs and the assessments for operation and maintenance charges. As of June 30, 1943, the United States had expended \$9,830,077.40 as the net reimbursable construction costs for the irrigation system, plus another \$1.6 million for building the power system. According to the original San Carlos Act in 1924, repayment was to be divided equally between the Indian and non-Indian lands served by the project. A 1931 contract between the San Carlos Irrigation and Drainage District (SCIDD) and the United States defined the construction costs, terms of repayment, and obligations of the district to assess and collect both the construction costs and the operation and maintenance (O&M) charges. O&M charges from 1929 through November 30, 1933 were included in the construction costs. Under another Act of July 1, 1932, the collection of construction costs for Indian-owned lands was dropped until such time as these lands left Indian ownership (Walker 1944: 189, 199; Pfaff 1994: 60).

Individual allottees were expected to begin paying the O&M charges assessed against their lands in 1933. It was another three years before custom pasturage on allotted lands became significant. This left Pima farmers already in debt for farm equipment, work animals and seeds, obliged to subsist themselves and their families for at least that long before they could realize any returns to apply towards a reimbursable debt. They obtained a deferment in paying O&M charges until the spring of 1937, by which time many allottees had thought it over and declined to pay these charges on both moral and legal grounds.

The new tribal council then approved a portion of the net income from the newly subjugated South Side agency farm to meet the O&M assessments against all Indian-owned lands in the San Carlos Project. However, income from the custom-pasturing operation on the South Side lands failed to meet all of the O&M charges, with the result that by 1944 Congress appropriated about \$465,000 of reimbursable money to supplement the tribe's contribution. Since 1952, income from the tribal farm has been sufficient to meet the assessments, to pay the costs of the tribal government, and for other services as well (Kneale 1935: 36-37; *Indians at Work*, March 15, 1937, p. 22; Walker 1944: 162; Pfaff 1994: 61).

The facilities of the San Carlos Irrigation Project were divided conceptually into three groups; the Indian Works, the District (SCIDD) Works, and the Joint Works. The operation and maintenance charges against the Indian Works, and 50 percent of the charges against the Joint Works, have been controversial, misunderstood and divisive since they were first made. As Walker (1944: 199) said, the SCIP has a number of complicated fiscal problems and a correct financial analysis is difficult to make. Attempts to do so include the relevant sections in Walker (1944), Hackenberg (1955) and Pfaff (1994). This problem is an important one because the SCIP is a central fact of existence on the reservation, and the lack of communication and indecision that followed from the failure to pay the charges initially were partly responsible for the decline in Indian farming (Walker 1944: 162; Cannon 1939: 45).

Without attempting to add one more explanation, it should be noted that when the council passed a resolution to use net revenues from the agency farm to pay all O&M charges levied against Joint and Indian Works, it removed these 12,000 acres from assignment to individual Pimas. Such assignments had been the intention originally (Hackenberg 1955: 122). Hackenberg (1955: 101-110) reviewed the political problems stemming from the O&M controversy while Walker (1944: 162, 193-205) analyzed the expenses, receipts, and nature of the agreements involved. Walker judged that there were no legitimate or logical reasons why the Pimas should not pay the costs of operation and maintenance, especially since the costs of construction would continue to be deferred (Ibid. 194). This ignored the problem of most farms being too small to be operated economically. The compromise whereby the GRIC paid all of the Indian O&M charges with income earned from the agency (later tribal) farm was probably the only practical resolution of this controversy. One personal casualty of the dispute was Xavier Cawker, the first tribal governor, who resigned and left the reservation (Hackenberg 1955: 102).

Despite the initial hopes that the Indians held for the San Carlos Irrigation Project as the solution to their water and irrigation problems, the reality was quite different. Irrigated farming continued to be the economic base for the people on the reservation, but it was difficult to earn a living this way. The principal change that affected individual Indians was the shift to alfalfa and pasturage in 1936-1937, but insufficient water deliveries during the next three years caused almost half of the alfalfa to die. The stands thinned out on the remainder (Walker 1944: 137; Pfaff 1994: 66-67). Statistics can be misleading too, as the actual number of acres cropped by the Pimas, compared to the acreage irrigated, dropped from almost 95 percent in 1935, to 67 percent in 1936 and to less than 50 percent in the years through 1942. Although the figure of irrigated acreage is often cited, only 47.8 percent of the Indian lands under irrigation produced crops in 1940 (Walker 1944: 101, 138; Pfaff 1994: 67-68). The distinction between these statistics is often lost.

The average annual income on the Pima-Maricopa reservation declined from an estimated \$707.70 per family in 1935 to \$484 in 1940, in part from the loss of wages as Depression-era government agencies decreased their activities. Partly too it was because 1940 came at the end of a series of poor agricultural years (Adams 1936a: 16-17; Walker 1944: 215-220; Pfaff 1994: 66). Low-wage off-reservation agricultural wage work replaced subjugation jobs. Wide differences existed between districts on the reservation, with the contribution of agriculture being most important in the districts within the San Carlos Irrigation Project; i.e. Casa Blanca, Blackwater, and Stotonic.

The failure of the SCIP to bring farming prosperity, much less general prosperity, to the Gila River Indian Reservation is mirrored also by comparing crop values from Indian and non-Indian lands within the project. In 1938, the total crop value on Indian lands was \$313,025, and on non-Indian lands, \$1,280,175 (Pfaff 1994: 65). In 1939, the Coolidge newspaper reported that the Indians realized a crop value of \$254,456.46 from 25,064 acres (approximately

\$10.15 per acre). Non-Indians by contrast cropped 27,435 acres and earned \$1,106,687.35, for an average of \$40.34 per acre (*The Coolidge News*, February 9, 1940, p. 1 col. 7; Pfaff 1994: 65). This 4:1 difference lessened to 3:1 in 1952, when the Indian/non-Indian crop values stood at \$3,309,867 and \$10,502,469 respectively (Pfaff 1994: 67). One cause for the difference lay in the crops, 58 percent of the acreage cropped by non-Indian farmers being cotton in the years between 1930 and 1942, versus 8 percent for the Indian farmers.

The irony was that analyses had shown that optimum yields of short-staple cotton on San Carlos Project lands required 3.0 acre-feet of water, while the optimum yield of alfalfa was obtained with 4.5 acre-feet of water per year (Walker 1944: 115-120). Water was not always abundant, but even in the driest years of 1938-1940 the deliveries averaged 2.55 to 2.65 acre-feet on the non-Indian lands and 2.79 to 2.96 acre-feet on Indian lands in the SCIP area (Walker 1944: 101, 140, 148). Pimas who depended on agriculture were still in the great majority, but for them a shortage of water was no longer the principal problem. It was that once again they were growing the wrong crop.

There were other changes in the late 1930s. The government boarding school on the reservation had been done away with in 1932, following a change in the school system to day schools served by school buses. The day schools (which taught through the 3d grade) were enlarged, and at Sacaton the Pima Central High School was organized. It graduated its first class in 1938 and closed in the 1940's when improved transportation made it possible for many children to live at home and attend public schools in Coolidge or Casa Grande (Supt. Ann. Narr. Rpt. 1930, 1931, 1934, Schools; Robinson 1938: 9; Hackenberg 1955: 87, 110-111; Officer 1956: 20-21).

Occasionally a voice from the past would be heard again. The Rev. Dirk Lay had dropped from sight after passage of the San Carlos Project Act in 1924, though he was still on the reservation as a Presbyterian minister. At the time of a U.S. Senate subcommittee hearing at Sacaton in April of 1931, Dr. Lay and others testified at length about the efforts by himself and others over the years to finance the needs of Indian farmers. Currently this was done through the Pima Indian Development Association, a recently organized non-profit corporation, of which Lay was the Secretary. Before this and going back some ten years, Lay had raised money privately and sometimes made loans to farmers from his own pocket (*The Arizona Republic*, June 19, 1930: 1-2; U.S. Senate 1931: 8299-8328).

Later in the 1930s, Rev. Lay went in search of an issue that would once again raise him to a position of prominence. He took up the O&M issue and allegedly made speeches opposing payment of the charges and promoting non-cooperation with the Indian Service. Word of this reached Presbyterian officials in the East and instead of support, he received a "call" to Pine Ridge, South Dakota in 1937. He returned to Arizona at least once, in 1939, and when the 158<sup>th</sup> Infantry, Arizona National Guard, was called up and sent to Fort Sill, Oklahoma for training, Lay went along as a chaplain. In January 1942 his regiment was ordered to the Panama Canal Zone to receive further training. One year later, when the 158<sup>th</sup> Infantry shipped out to the southwest Pacific, Lay

remained in the Canal Zone. He died there in December 1944 (*The Coolidge News*, September 27, 1940, p. 1 col. 7; December 6, 1940, p. 1 col. 2; *The Coolidge Examiner*, October 22, 1954, p. 1 col. 1; October 29, 1954, p. 1 cols. 1-3; Hackenberg 1955: 63-65, 103-104; Cochran 1968: 15).

## Chapter XVII

### THE PIMAS AND MARICOPAS IN THE WAR YEARS

#### *Native Americans in the U. S. Army*

Popular writers in earlier years paid only brief attention to Native American contributions in World War I, but recent scholars have shown greater interest (*The Literary Digest*, February 8, 1919, pp. 54-57; Appleton 1919; Ann. Rpt. Comm. of Ind. Affs. 1919: 12-17; Wise 1931: 523-544; Cochran 1968; White 1979; Barsh 1991; Britten 1994; Zissu 1995). Just prior to that war, Indian reform groups had been seeking to establish segregated units in the army as one means of preserving native cultures. The Secretary of War, the Army Chief of Staff and the Commissioner of Indian Affairs all opposed this, and throughout that conflict Indians served alongside other soldiers (White 1979: 13-14; Britten 1994: 4-5). Because of this integration, studies of Native American participation have had to focus on Indians as a group. There were no units specifically for Indians or individual tribes. However, anecdotal and personal accounts are sometimes used to illustrate individual achievements.

One partial exception was the 36<sup>th</sup> Infantry, in which half of the approximately 600 Indians in the division were Oklahoma National Guardsmen, federalized on August 7, 1917 and consolidated with units of the Texas National Guard to form the 142<sup>nd</sup> Infantry Regiment (White 1979: 9). Another National Guard regiment was the 1<sup>st</sup> Arizona Infantry, which had one company (F) composed almost entirely of Pima and Maricopa Indians. The 900-odd men of the 1<sup>st</sup> Arizona had been called into Federal service on May 9, 1916 when President Woodrow Wilson sent the militias and National Guardsmen of Texas, New Mexico and Arizona to the Mexican border. The Arizona soldiers were later federalized for World War I and redesignated the 158<sup>th</sup> Infantry Regiment, 40<sup>th</sup> Division, on October 5, 1917 (Cochran 1968: 9-10; Leeburg 1970: 11; Ariz. Mil. Mus. "The Sergeant," 1981; Wilson 1995: 229).

Whereas in Oklahoma most Native Americans were already American citizens, nearly all of the Pimas, Maricopas and other Arizona Indians were not. The Selective Service Act placed them in a curious position because it required non-citizens to register for the draft, but they were not subject to being called up. They could volunteer, however. Many did so, and an estimated 12,000 to 12,500 Native Americans served in the armed services during World War I. Some 6,500 were draftees while another 6,000 volunteered for service. Their enlistment and

casualty rates both exceeded those of other Americans in the AEF, the American Expeditionary Force (Wise 1931: 525; Britten 1994: v, 86-99).

At the Phoenix Indian School, Superintendent John Brown forbade his students to even enlist in the Arizona National Guard, but after the United States' entry into the war he reversed himself and encouraged students to enter military service. Perhaps his change of mind had something to do with Brown's own son volunteering to serve as an *ambulancier* with an Illinois unit of the Red Cross and his departure for France in May 1917. Later that year, Allen Brown received a commission in the Field Artillery. Extracts from his letters home, sometimes quite graphic, appeared in issues of the school newspaper, *The Native American* (*The Native American*, June 9, 1917, p. 197; June 23, pp. 205-206; September 22, pp. 214-218; December 15, pp. 314-317; November 2, 1918, pp. 249-252; Britten 1994: 110-111). His field artillery battery evidently did not include Indians.

In common with other Indian schools, the one in Phoenix organized its students along militaristic lines. The boys wore cadet uniforms, marched in the early morning and were subject to frequent inspections, while everyone found their life ordered by a fixed schedule much as if they were in a military institute (Trennert 1988: 115-118). For those who served later in the military, this experience helped ease their introduction to army discipline. When war came, the school paper served as the principal source for reporting what the school's enrollees and graduates, many of them Pimas and Maricopas, were accomplishing in the service. An honor roll published in September 1918 listed sixty-one Phoenix Indian School students from twenty tribes who were serving in the army and navy (*The Native American*, September 21, 1918, back cover).

#### *The National Guard and the Mexican Border*

The single National Guard regiment in Arizona, the 1<sup>st</sup> Arizona Infantry, apparently was organized in 1914 although the territory had a militia, several hundred strong, dating from at least 1903. By 1916 the regiment consisted of eleven companies plus a band and a headquarters company, although the machine-gun and supply companies existed in little more than name. The strength at inspection stood at 632 officers and men. The band and Companies A, B and F were based at Phoenix; Headquarters Company and two others at Morenci; and the balance in other cities around southeastern Arizona. Commanded by Colonel A. M. Tuthill, a practicing physician, the men patrolled the Mexican border (U.S. War Dept. 1916: 949, 967; *The Native American*, December 28, 1918, pp. 341-342). Many of the men in Company F came from the Gila River Indian Reservation and had attended Phoenix Indian School, including everyone but Corporal Jean K. Stacy in a group photograph taken at Camp Kearny in California (*The Native American*, September 22, 1917, p. 231; March 23, 1918, p. 92; Leeberg 1970: 11).

By April 1917, some of the men in Company F had already served two to three years, with a year of active duty behind them. The muster roll for May-June 1917 showed that Private Molesto Rios joined on July 24, 1914, and Corporal

Ross Shaw enlisted August 3, 1914, while Captain Lee J. Holswarth received his commission on October 11, 1915. Sergeant Harvier Adams of Casa Blanca enrolled on May 6, 1915, which meant that he was not, as claimed later, one of those who organized the company. Captain Holswarth had been the Boys' Advisor at the Phoenix Indian School and Corporal Stacy a teacher there. This suggests that Company F may have been organized or based at the school (Muster Roll, Co. F 1<sup>st</sup> Arizona Infantry, June 30, 1917; *The Native American*, January 26, 1917, p. 19; June 1, p. 178; Leeburg 1970: 11; Ariz. Mil. Mus. "The Sergeant," 1981).

When called into active duty in 1916, the 1<sup>st</sup> Arizona Infantry took station at Douglas, Arizona. Very little documentation of the regiment's activities has been found, but one writer said that Company F spent more than a year stationed at Naco, Arizona, guarding the border. Normally this meant patrolling, enforcing the neutrality laws, and keeping down gun-running. They replaced one or more companies of the U. S. 10<sup>th</sup> Cavalry that had garrisoned Naco since 1914, while that regiment formed part of the Punitive Expedition sent into Mexico in 1916-1917 (Glass 1921: 64-69, 81-82). The 1<sup>st</sup> Arizona soldiers were not involved in any major actions but evidently skirmished with Mexican soldiers or guerrillas on several occasions (Trennert 1988: 160-161).

The muster roll for Company F indicates that sixteen of its members were discharged at Naco in May and June of 1917, all on account of dependent relatives, while another four mustered out for other reasons during the same period. For almost all of these men, the muster noted their character as excellent and their service as honest and faithful (Muster Roll, Co. F 1<sup>st</sup> Arizona Infantry, June 30, 1917). Sixty years earlier, Major Alexander might well have said the same about their grandfathers. Recent duty for three soldiers mustered on June 30<sup>th</sup> included detached service as bridge guards at Mescal, Cianago [Cienega?], and Fairbanks, Arizona. Corporal Stacy wrote several letters that indicated Company F remained at Naco until departing for Camp Kearny, north of San Diego, California, late in October 1917. There the regiment, now the 158<sup>th</sup> Infantry, began some nine months of systematic training to integrate it into the 40<sup>th</sup> Infantry Division, American Expeditionary Force (*The Native American*, October 6, 1917, p. 249; November 3, pp. 279-280; January 12, 1918, p. 16).

Maricopa soldiers Fred Vest Jackson and Charley George, both buglers, and Private Scott Eldridge served with Company F on the border and later shipped out with the regiment for Europe. The Pimas in the company included Sergeants Harvier Adams, Joshua Morris Sr. - *Geheh Gath* (Big Bow) and Frank Stanley; Corporals Blaine Carlisle, Lewis Carlisle, Ross Shaw - *Julger Thonal* (Crooked Light) and Oliver Sneed; band sergeant Charles Laws, and musician (corporal) William T. Moore - *Gath Thenuck* (Bow Tinkle). Among the privates were Wallace Antone, William Enas, Harry Lewis, Peter Moore, Harry Lives, Maura Devogue, Robert Julian, Salonia (or Solonio) Nuñez, Prudencio Reavaloso, Molesto Rios, and Albert Ray. Several from the reservation who had dependents to support took discharges before the regiment went to California. They included Walter Wind and Sam Albert. Edward Johnson and Robert P.

Stanley were discharged in California because of ill health (Muster Roll, Co. F 1<sup>st</sup> Arizona Infantry, June 30, 1917; *The Native American*, September 22, 1917, p. 231; October 6, p. 249; November 3, p. 279; January 26, 1918, p. 32; March 23, p. 92; September 21, back cover; Leeburg 1970: 11).

While the Arizona guardsmen in Company F did duty along the border and then trained with the 40<sup>th</sup> Division at Camp Kearny, the Phoenix school newspaper carried extracts from a number of their letters home. Letters from Naco mentioned visits to Phoenix and Bisbee, the football and baseball teams (which won some games and lost some), and promotions within the regiment. Charley George and Fred Jackson had become accomplished buglers, and Charles Laws was solo cornetist in the regimental band. Maura Devogue, the "Ideal Soldier Model," made private first-class and also a perfect score at target practice. As for Charlie Cough, one of the regiment's mechanics, "If anything needs repairing, Charles is the fellow for the job" (*The Native American*, October 6, 1917, p. 249; November 3, p. 279). As recently as 1956, Charlie Cough supplied firewood to people in the Phoenix area and appeared regularly at pioneer celebrations (Leatham 1985).

The letters from Camp Kearny were not terribly informative. Jean Stacy, the former teacher at the Phoenix school, praised the merits of army discipline but lamented that the men could not associate with women of their own age in San Diego. He left to enter officers' training. At Christmas 1917 the boys all received gift boxes sent by people at the school. Their army training grew more intensive and some in the regiment had to be discharged for health reasons. Molesto Rios specialized in signal corps work, Blaine Carlisle and Ross Shaw were each "the last one standing" in their platoons in competitive manual of arms drill, while Prudencio Reavaloso and Lewis Carlisle proved to be dead shots on the rifle range. There were promotions; Maura Devogue made sergeant while Juan Enas, Albert Ray, and Edmund Mareno received corporal's stripes. Everyone had their life insured for the maximum amount, \$10,000 (*The Native American*, January 12, 1918, p. 16; January 26, pp. 19, 32; March 23, p. 92).

### *"The Great War"*

While these named individuals may fairly represent the school attendees who volunteered for the army, many Pimas and Maricopas who were not students also enlisted. We know few of them by name, nor do we know the total number from the Gila River Indian Reservation who served during World War I. At least two Pimas joined the navy; Isaac José, with the rank or speciality of mason, and Stewart Lewis as a printer. Isaac José entered as a shipwright and because of his skills he drew a handsome salary of \$33 a month, as did other former students who had learned skilled trades (*The Native American*, June 23, 1917, p. 205; September 21, 1918, back cover). In a letter from San Francisco, Isaac wrote that the navy was kind of hard at first, like school, but he was trying his best to do his job right (*The Native American*, June 9, 1917, p. 197). One year later, he was in



France with the U. S. Naval Aviation Forces (*The Native American*, March 23, 1918, p. 92; June 1, p. 178).

The 158<sup>th</sup> Infantry trained for almost a year at Camp Kearny, where they joined other National Guard troops from western states to form the 40<sup>th</sup> Division. Their former commander, Colonel A. M. Tuthill, received a promotion to brigadier general and commanded one of the three brigades in the division as it shipped out for England, then to France in August of 1918. In France it was reorganized and designated the 6<sup>th</sup> Depot Division, responsible for receiving, training, equipping and forwarding replacements of officers and men for the infantry and for the ammunition and supply trains. The 158<sup>th</sup> Infantry apparently never saw combat as a unit, but the 40<sup>th</sup> Division sent some 7,500 replacements to three other divisions during September, while the regimental field hospital was transferred to the VI Corps (U. S. Army 1988: 254-259).

It becomes impossible to track the movements of most individual soldiers or even companies at this point, but some of the men in this regiment did see combat, probably in the Meuse-Argonne offensive that began on September 26, 1918. Joe McCarthy, a Tohono O'odham, was wounded, gassed, and taken prisoner in his first big battle. Private Lee Rainbow, a Yuma, had enlisted right after the declaration of war and became the first Phoenix School boy and possibly the first of his tribe to die of wounds received in action. Sergeant Joshua Morris, Sr. apparently served with a section of the machine-gun company of his regiment and helped hold off a German attack through a barrage of gas attacks until other units reached safety, Morris' lungs being badly injured by the gas. He died shortly after returning to the Gila River reservation (*The Native American*, December 28, 1918, pp. 341-343; Leeburg 1970: 11).

There was also Matthew B. Juan, a resident of Sacaton, educated at the Sherman Institute in Riverside, California, who joined the army as Matthew B. Rivers. He volunteered shortly after the United States entered the war and was en route to France on the troopship *Tuscania*, in company with 2,000 American and Canadian soldiers, when a German submarine torpedoed and sank the transport off the coast of northern Ireland on February 5, 1918. Private Juan survived, although 166 of the troops and forty-four crewmembers did not (*The Native American*, September 21, 1918, p. 214; *The Coolidge News*, May 30, 1941, p. 1; Halpern 1994: 436).

In France he joined Company K of the 28<sup>th</sup> Infantry Regiment, a unit of the First Division, AEF. Company K had the honor of being the first American unit to arrive in France, on June 26, 1917. On May 28, 1918, the 28<sup>th</sup> Regiment led the assault when the First Division attacked German positions in the battle of Cantigny, one of the earlier AEF military operations. Although almost shot to pieces, the regiment took the city and then held its ground in an action that was important both tactically and psychologically. Private Juan was one of those killed in this battle, the first Arizona soldier to die in action during World War I.

His death was not in vain or on a forgotten battlefield. The commanding general of the First Division commended the 28<sup>th</sup> Infantry for its gallantry and sacrifices at Cantigny, and the American Legion post at Chandler, Arizona was

later named in Matthew Juan's honor (*The Native American*, September 21, 1918, p. 209; Society of the First Division 1922: 6, 86-87, 322; *The Coolidge News*, May 30, 1941, p. 1; Hemingway 1988: 158). A few months later, the French Commander-in-Chief added his own citation:

General Headquarters,  
French Armies of the East  
Staff

Personnel Bureau  
Decorations

General Orders, No. 11.875"D"

After approval of the General Commander-in-Chief of the A.E.F. in France, the Marshal of France, Commander in Chief of the French Armies of the East, cites in Army Orders:

28<sup>th</sup> Regiment of U. S. Infantry:

"A regiment inspired by a magnificent offensive spirit, under command of Colonel H. E. Ely, this regiment rushed forward with irresistible dash to attack a strongly fortified village. It reached all its objectives and held the conquered ground in spite of repeated counter-attacks."

General Headquarters, November 24, 1918.

The Marshal of France,  
Commander in Chief of the French Armies  
of the East:

(Signed) PÉTAIN.

(Society of the First Division 1922: 87-88).

At the end of the fighting, when President Woodrow Wilson arrived for the Paris Peace Conference, the 158<sup>th</sup> Infantry was detailed to act as guard of honor during the president's residence in France. The regimental band formed part of the escort. Early in 1919, the 40<sup>th</sup> Division re-embarked at Bordeaux and returned to Camp Kearny for demobilization, where the 158<sup>th</sup> Infantry was mustered out on May 3, 1919 (*The Native American*, December 28, 1918, pp. 341-342; U.S. Army 1988: 260-261; Cochran 1968: 10). A special issue of *The Native American* published an elaborate photographic spread of the Phoenix Indian School boys who served in the army and navy during World War I. On various reservations, superintendents noticed that Indian soldiers returned with improved English skills and a sense of discipline and self-reliance (*The Native American*, December 28, 1918; Ann. Rpt. Comm. Ind. Affs. 1919: 12-18).

Military service was only one way in which the Gila River community and the Phoenix Indian School supported the war effort. Students and staff at the school were actively encouraged to purchase Thrift Stamps, War Savings Stamps, Baby Bonds, and Liberty Bonds, and they did so in large amounts. By the summer of 1918, the students had bought \$27,200 worth of Liberty Bonds and \$1,268.50 in War Savings Stamps. Both the Red Cross Auxiliary and the Junior Red Cross organized chapters to raise money and otherwise aid the work of the

American Red Cross, while events were scheduled to help support the Y.M.C.A. War Fund. American servicemen and Belgian refugees alike appreciated the sweaters, socks, shirts, hospital garments and linens that women and girls knitted and sewed by the thousands (*The Native American*, October 6, 1917, p. 249; January 26, 1918, p. 32; March 23, pp. 92-93; June 15, p. 196; September 21, p. 213; December 28, p. 342; Ann. Rpt. Comm. Ind. Affs. 1918: 10-13; Trennert 1988: 162-163; Barsh 1991: 284).

The government also made extraordinary efforts to raise food production during the war. It encouraged boys from the Indian schools, the Phoenix school in particular, to spend their summers working on farms and in the fields. Officials sought to increase the number of Indian farmers and the acreage planted on Indian lands as well. The increase in commodity prices for agricultural products, particularly for cotton, gave farmers an added incentive. By 1918, the Commissioner of Indian Affairs wrote that practically every reservation showed additional acres under cultivation; from 5 percent to 100 percent. Although the reported figures indicated a modest 12 percent improvement in the amount of land cultivated by Indians from 1916 to 1918, the irrigated acreage rose by more than 56 percent (Ann. Rpt. Comm. Ind. Affs. 1916: 112, 166; 1918: 13-15, 41-48, 135, 186; *The Native American*, December 15, 1917, pp. 321-322; June 1, 1918, p. 172; Trennert 1988: 162; Britten 1994: 248-249; Zissu 1995: 556-557).

The degree to which Pima and Maricopa reservation farmers helped to enhance food or fiber production is unknown, but it may have been minor because of the problems they faced. Irrigation water was in chronically short supply, and the Commissioner of Indian Affairs' 1916 figures for acreages cultivated on that reservation were simply repeated in the 1917 and 1918 Annual Reports (Ann. Rpt. Comm. Ind. Affs. 1916: 163, 166; 1917: 168, 171; 1918: 135, 186). Per capita incomes remained flat, even though most of the men in Company F reportedly sent home a good share of their army pay (*The Native American*, November 3, 1917, p. 279). If wartime prosperity reached the Gila River Indian Reservation, its impact was probably short-lived.

### *Interlude*

In the interval between the two World Wars, the 158<sup>th</sup> Infantry Regiment retained its designation when it returned to National Guard status. As before, the Guard companies were headquartered at cities around Arizona – Company D at Casa Grande, F at the Phoenix Indian School, G at Safford, Arizona. During the 1930s a detachment was occasionally called out for search-and-rescue duties, for firefighting, or on one occasion to prevent Parker Dam across the Colorado River from being anchored on the Arizona side. On September 16, 1940 President Franklin Roosevelt ordered the Arizona National Guard into Federal service. By the end of the month, the companies entrained for Fort Sill, Oklahoma to begin five months of training (*The Coolidge News*, September 27, 1940, p. 1; October 18, p. 1; December 6, p. 1; Cochran 1968: 12-15, 17; Arthur 1987: 14-20).

Company F was known as the all-Indian company, with Pima, Maricopa, Apache, Hopi and Navajo members, its captain (Jacob Duran) being a Pueblo Indian from New Mexico and its first Lieutenant (Stewart Lewis) a Pima who had graduated from the Phoenix Indian School. The roster of Company D included one person from Maricopa, one from Blackwater, and ten from Sacaton, in a company that mustered five officers and 123 enlisted men. On February 28, 1941 the regiment moved to Camp Barkeley, Texas to continue training with the 45<sup>th</sup> Infantry Division, known as the Thunderbird Division, which had more than 2,000 Native Americans from the Southwest (*The Coolidge News*, October 18, 1940, p. 1; Cochran 1968: 14-15; Arthur 1987: 17, 20; Townsend 1991: 144).

As at the beginning of World War I, there was a debate about the formation of all-Indian units. When the argument arose in 1941 it was again rejected, the Secretary of War and the army's Assistant Chief of Staff opposing segregation while Commissioner of Indian Affairs John Collier apparently waffled (Bernstein 1991: 40-41; Townsend 1991: 113-116). Indians now were subject to the draft, those who served in World War I having received citizenship in 1919 while all others became eligible in 1924. Arizona and New Mexico still denied them the right to vote.

During the 1930s, Nazi propaganda had sought to lure American Indians towards a favorable view of Nazi ideology and turn them against the American government. German views of Indians were highly colored by the late-19<sup>th</sup> century adventure novels of Karl May with his Apache Indian hero, Winnetou. American Indians paid little attention to the Nazis, the Silver Shirts or other propagandists (Neuberger 1942: 628-629; Holm 1981: 70; Townsend 1991: 51-95). According to one writer, German agents posing as anthropologists had tried to infiltrate Indian tribes beginning in 1933 to enlist members as spies, while learning Indian languages they felt would be used against them in a future war (Franco 1983: 55). However, there is no present evidence that the Pimas and Maricopas received any of these attentions.

### *The Second World War*

When war broke out for the United States on December 7, 1941, Native Americans met it with an outburst of patriotism. They enlisted in greater proportions than did any other elements in the population, and by the war's end more than 25,000 Indians had joined the army, navy, Marine Corps and coast guard. Since they served in integrated units, there is no way to easily measure the contributions of individual tribes, apart from the Navajo code talkers, and authors have necessarily had to write at the level of Indians and the war effort (Holm 1981; Franco 1983; Bernstein 1991; Townsend 1991). In Arizona, the Phoenix Indian School had ceased to publish a newspaper, nor was there one on the Gila River Indian Reservation. The Coolidge paper carried little reportage about Pima and Maricopa contributions.

Hackenberg (1955: 119) estimated that around 300 Pimas were in the armed services by 1943 and about 500 saw service before the end of the war.

Superintendent Robinson testified in 1944 that approximately 400 young men were in service, some 8 percent of the 5,095 Indians in the tribe, and Cyrus Sunn of the Maricopa tribe added that they had twenty-four boys across the water (U. S. House 1945: 919, 947). There is little published information as to what military units individuals served with, or in what theaters of action, but two accounts track the 158<sup>th</sup> Infantry (Cochran 1968: 14-22; Arthur 1987: 20ff). A wartime commander of Company G wrote one of these.

From Fort Sill, the companies moved to a new training post at Camp Barkeley, Texas at the end of February 1941. They continued training until detached from the 45<sup>th</sup> Division and ordered to Panama in late December. Here they remained for one year, guarding the coasts, the airfields, the trans-isthmian highway, and at the same time learning jungle-fighting skills. The regiment took the name Bushmasters, after the deadly snake of the Central American jungles. On January 2, 1943 the Bushmasters shipped out for Australia and then on to New Guinea. At the end of the year one company (G) saw the regiment's first combat in World War II, on New Britain Island. In 1944 the men were back on New Guinea and fighting the Japanese 6<sup>th</sup> Tiger Marine Division.

The following January, beefed up to divisional strength and designated the 158<sup>th</sup> Regimental Combat Team, a convoy landed the men on Luzon island in the Philippines. For the next several months they fought their way across that island, before being relieved to spearhead the invasion of Japan. Their orders were to go in two days ahead of the American landing to silence Japanese air-warning stations south of Kyushu. Fortunately, Japan's surrender spared the 158th Infantry from what could well have been a suicide mission (Cochran 1968: 15-21). Arthur (1987: 15ff.) included some of the experiences of Ralph Cameron and Daniel French, two Maricopa Indians in Company F and of others in the regiment.

At least one Maricopa and sixteen Pima boys gave up their lives in World War II according to the Office of Indian Affairs pamphlet, *Indians in the War* (1945). Marine Corporal Richard C. Lewis, who had enlisted during his third year at Arizona State Teachers' College (now ASU), died in the South Pacific early in 1943 as did Edison Jones (*Indians at Work*, May-June 1943). Others lost in the course of the war included Haskell A. Osife, Anthony José, Joe Terry, Willacot Anton, Robert E. Allison, Joshua Morris, Leander Shelde, Joseph Thomas, Percy Osife, Fred Washington, Phillip Largo, Alfred Perkins, Fred James, and Johnston Peters, all Pimas, the last two killed in the Pacific and in Germany respectively.

Manuel E. Jones of Blackwater never made it overseas. A member of the U. S. Army Medical Corps, he died at Ft. Lewis, Washington in January 1942. Alfred Ferguson, the Maricopa soldier, lost his life in France. PFC Alonzo Enos was wounded in action and awarded the Silver Star for valor. Captain Sam Thomas commanded a company in Europe, and Urban Giff became the first Indian commissioned as a Marine Corps officer (*The Coolidge News*, January 16, 1942, p. 4; *Indians in the War*: 9, 16, 30; Dobyns 1989: 88-89). Captain Harlyn Vidovich, a Shoshone-Paiute whose parents moved to Sacaton, Arizona from

Nevada in 1936, served in Africa, India and China. A pilot in the Flying Tigers, he was killed when his plane crashed in China on January 18, 1944 (*Indians at Work*, May-June 1944, pp. 14-15).

Corporal Ira H. Hayes of Bapchule enlisted in August 1942. Following boot camp, he trained as a Marine Paratrooper. After completing that program, he shipped out with the Third Parachute Battalion to New Caledonia and Guadalcanal. The fighting there had already ended, but in late 1943 he took part in the assault on Bougainville Island in the Solomons. Hayes survived that green hell and returned to San Diego, where he was reassigned to Company E, Second Battalion, 28<sup>th</sup> Marine Regiment as a BAR (Browning Automatic Rifle) man.

His new unit left California in September 1944, destined to join in the assault on the Japanese-held island of Iwo Jima. At Iwo, Ira Hayes' battalion landed on the beach forty-one minutes after the first Marine touched ground there on the morning of February 19, 1945. On the fourth day and with the Japanese still resisting bitterly, Ira Hayes and five other Marines hoisted the U. S. flag atop the island's Mount Suribachi. An Associated Press photographer, Joseph Rosenthal, captured the moment in a Pulitzer Prize-winning photograph. The island fell after three weeks of fierce fighting.

As a result of the photograph, Ira Hayes became the most widely known Native American soldier of World War II. He had already gained recognition from his photograph as a paratrooper, carried by *Indians at Work* in its issue for October-December 1942 and early 1943. Although he survived the war unscathed, Ira Hayes died tragically in January 1955 when he froze to death near his home on the reservation (Hemingway 1988).

As in World War I, Native Americans wholeheartedly supported the war effort on the home front. Indians purchased war bonds and defense stamps individually and with tribal funds, bond sales to Indians reaching \$50 million by 1944. Native Americans raised money for the Red Cross, increased agricultural production on the reservations, donated corn, meat, wool and rugs, and worked as farm laborers as well as in defense industries off the reservations (Holm 1981: 72-74; Franco 1983: 63-82). The only financial reporting found specific to the Gila River Indian Reservation was Superintendent Robinson's estimate of off-reservation employment in 1943:

100 working R.R. for \$150 per month	\$ 180,000
400 picking cotton for 110 days each	88,000
60 doing regular farm labor, 300 days each	72,000
30 working in war industries @ \$60 per week	93,600
282 in armed forces	<u>143,178</u>
	\$ 576,778

(Hackenberg 1955: 122).

Long-staple cotton could be grown only in the Southwest and had never been subject to the government controls placed on short-staple cottons. In 1942 the army needed the long-staple fiber for manufacturing parachute webbing,

balloon cloth and machine-gun belts. The Secretary of Agriculture set a minimal production goal of 150,000 acres for 1942 while the War Production Board asked for all available seed of SxP, an improved variety of Pima long-staple cotton, to be planted (*The Coolidge News*, February 13, 1942, p. 1; February 27, p. 1; March 13, p. 1). The response created a short-lived boom that chiefly benefited non-Indians.

That it happened this way was ironic in view of the abundance of irrigation water in 1941-1942, as well as the Pimas' response to America's need for long-staple cotton during World War I and the recent additions to the amount of irrigable land on the reservation (Sheridan 1995: 211-215, 271). There were problems, which affected other crops as well. More than 83 percent of the cotton grown on the reservation in 1941 (almost all of it short-staple) was raised in the Blackwater District. As we saw earlier, the farmers there had newly-available production credit. The managers of cotton gins in Coolidge encouraged the increase in cotton planting and provided close supervision of crop operations (Walker 1944: 225-226). Hackenberg's (1955: 123) assessment was that to Pima farmers, the results were disappointing. They complained that cotton was too much work and that expenses were too high for them to make a profit. The reasons for the high costs were that the Pimas lacked their own equipment and had to rent it, and also had to hire labor.

Another problem was that although the San Carlos Reservoir in 1942 reached the highest level of water it would have for some years (814,510 acre-feet), the war made new demands for water. In February 1942 the Secretary of War signed an order that allowed the Phelps Dodge Corporation to use Gila River water in its towns, mines and smelters upstream. Until the war ended, Phelps Dodge diverted about 14,000 acre-feet of water each year, enough to have irrigated some 3,500 acres of land on the Gila River Indian Reservation (Dobyns 1989: 90; Pfaff 1994: 64). Also in 1942 the War Relocation Authority (WRA) leased 6,977 acres of land in the South Side Area for a Japanese relocation center. Here through 1946, some 1,000 acres were used for growing vegetables and the remainder for custom pasture operations. This was the area of unallotted tribal land worked earlier as an agency farm, and the Office of Indian Affairs continued cultivating some 3,000 acres through this period. Another 770 acres were leased to a non-Indian who used it to grow long-staple cotton (Walker 1944: 139; Hackenberg 1955: 120). These diversions of pumped and river water all meant less for the Pima farmers.

Pfaff (1994: 66) offered the depressing assessment that the amount of land under irrigation by Indians [in the early 1950s] did not differ substantially from the amount prior to the beginning of Euro-American settlement in the 1860s. We saw in Chapter IX that the 1860 Census reported 7,291 acres as the amount of improved (i.e., cultivated) land at the Pima Villages. In 1942, a rare *Statistical Supplement to the Annual Report of the Commissioner of Indian Affairs* listed 7,084 acres as the acreage harvested on the Pima Agency – more than 200 acres less than before the Civil War.

Is this creditable? Such an interpretation is possible if one considers that approximately 11,500 acres of irrigated cropland were leased out to four different parties, all non-Indians, for which the lessees on some 4,600 acres had to develop their own water supplies (i.e., wells). These leases generated revenue for the tribe, but individuals did not benefit. The balance, shown as 13,603 acres cropped or 16,731 acres irrigated, was about 60 percent in alfalfa, much of it in poor stands on lands that individual Indians operated and leased for pasturage (U.S. Dept. of the Int. *Statistical Supplement...* 1942: 31-32; *Post-War Program...* 1944: 20; Walker 1944: 137-139).

These lands supported livestock, but this was not the same as growing a crop, so the amount of acreage harvested after deducting the lands used for custom pasturage may have been even less than the Commissioner stated. Hackenberg (1983: 175) and Tamir et al (1993: 99) have made much the same point. While as many as 10 percent of the Pimas and Maricopas served in the U. S. armed forces, it appears that those who remained on the reservation during the war years fared poorly. Their gains during the 1930s were erased.

#### *The Gila River Relocation Center*

When Japan attacked Pearl Harbor on December 7, 1941, fears arose about conspiracies and espionage by the more than 100,000 people of Japanese descent living on the West Coast and in Hawaii. Most of these individuals were American citizens, but newspaper editorials and slanted reporting fanned public hysteria in California, while in Arizona the FBI began arresting Japanese-American men. In less than three months, the southern portion of Arizona was designated a military zone because of concern about installations such as Luke and Williams Army Air Bases. Anti-Japanese sentiments in Arizona and restrictions placed on their activities during the 1930s had already prompted many Japanese-Americans to leave. Their population declined to only 632 in the 1940 Census (Tamir et al 1993: 9-11).

With the western half of California, Oregon and Washington as well as southern Arizona designated a military zone by mid-March 1942, President Roosevelt created a new agency, the War Relocation Authority (WRA), to administer the evacuation of Japanese-Americans from this area. After initial notice, the affected households had six days in which to sell their property and businesses, pack such clothing, bedding, and other articles as could be carried, then report to collection points for transport to hastily contrived assembly areas. Working under a presidential Executive Order and several public proclamations issued by the army, the WRA and a second agency, the Wartime Civil Control Administration (WCCA), oversaw and controlled this evacuation. Their orders covered anyone with 1/16<sup>th</sup> or more Japanese blood as well as the aged, the infirm, newborns, children from orphanages, and even children adopted by Caucasian parents (Tamir et al 1993: 11-13; Burton 1996: 17-19).

Indian Commissioner John Collier almost immediately involved his agency by suggesting that evacuees be placed on the Gila River Indian



Reservation, where considerable agricultural land was available for them to farm. By April, when the WRA began moving people to a series of ten relocation centers, the War Department had approved placing 10,000 internees on the Gila River reservation. Collier had in mind that relocation could work to the Indians' benefit, and he believed that the Indian Service's history of dealing with minority groups made his agency better equipped than any other to provide for the uprooted Japanese. He anticipated that the barracks and other improvements at the center(s) would revert to the Indians after the war (Bernstein 1991: 82-83; Tamir et al 1993: 104-105).

Others within his office opposed relocating Japanese-Americans on Indian lands. There was also the problem that the Gila River Indian Community's government had been in operation for several years under its 1936 constitution, and the GRIC council had the authority to negotiate with the United States and others for the lease or encumbrance of tribal lands. Although the Secretary of the Interior had given his approval for the War Department to enter the reservation and begin construction of housing, the various proposals and approvals were acted upon without the council's knowledge or consent until late April. Superintendent Robinson had no part in the negotiations either, until Commissioner Collier asked him if the matter had been presented to the Pima Council yet (Bernstein 1991: 83-84; Tamir et al 1993: 104-107)? The Indians had not been consulted, although newspapers discussed the pending construction of the relocation center freely.

When the matter was first explained to the tribal council on April 29, 1942, they disapproved of the Japanese coming onto their reservation. A week later Robinson tried again, and at this second meeting he stated that 9,000 acres of unimproved land would be developed by the WRA for farming, that a lease would mean \$165,000 in tribal income, and a road might be paved from the relocation center to Chandler, Arizona. The council took no action, and in the summer and fall the two camps at the relocation center, Canal and Butte camps, were under construction. The first Japanese arrived on July 20, 1942. The evacuees continued to stream in as the WRA and the Interior Department reached a formal agreement for use of the land. Robinson still sought the tribal council's agreement (Tamir et al 1993: 107-108; Burton 1996: 27).

The council finally approved a permit for the Japanese to use the developed and undeveloped land, camp sites and utilities, by a five to four vote on October 7, 1942. What apparently swayed the council members was Robinson's insistence that the tribe was losing \$387.60 a day by not leasing the lands. One lease was for 1,289 acres of improved farmland (Parcel A), which quickly went into cultivation. Probably more important was a provision in the agreement for the WRA to subjugate some 8,850 acres in Parcel B.

The WPA subjugation of the South Side Area, where all of these lands were situated, had stopped several years earlier when funds ran out. At that time the Pimas and Maricopas had substantially less than 50,000 acres of Indian land ready to receive water, this being the acreage they were entitled to irrigate under the San Carlos Irrigation Project. In 1942 it was estimated that preparing the land

in Parcel B for farming would cost the WRA \$368,842 (Tamir et al 1993: 107-110). With demands for water already overextended, perhaps it was just as well that only forty acres of lands in Parcel B were ever improved for farming.

The majority of the Japanese-Americans arrived at the Gila River Relocation Center in July and August 1942. A peak population of 13,348 was recorded December 30, 1942. Arizona had two relocation centers, the second one at Poston on the Colorado River being somewhat larger, with three camps spaced at five-mile intervals. Neither center had watchtowers and there was little or no barbed wire. Although required to move there, the internees evidently had complete freedom of movement within the camps during the day.

In time, the WRA worked out an indefinite leave process that reduced the overall population at the relocation centers and allowed those who answered "yes" to a loyalty questionnaire to leave if they found a sponsor. By the war's end, more than 50,000 Japanese-Americans had relocated to the eastern United States. The population at the Gila River center reflected this trend by declining to around 9,600 people in October 1943, a level it maintained until it decreased again beginning in early 1945 (Tamir et al 1993: 23-27; Burton 1996: 27, 37).

The two camps of the Gila River Relocation Center lay south of Sweetwater and west of present-day Interstate 10, largely in the area between the South Side Canal and the Casa Blanca Canal. The land there was classified as "good" agriculturally. Altogether the center leased 17,000 acres from the Gila River Indian Community, 6,977 acres of this being improved agricultural land rented at \$20 per acre per year. Butte Camp, the larger of the two settlements, lay immediately east of Sacaton Butte. Some three miles to the east was Canal Camp (Tamir et al 1993: 20, 25, 65). Civilian contractors built the camps following plans drawn up by the army's Corps of Engineers, although the WCCA had responsibility for determining the building requirements. Construction work was well advanced when the first Japanese arrived, although it required two years for completion. At the time, the two camps had perhaps twice the population of the balance of the Gila River Indian Reservation - more people in fact than any Arizona communities other than Tucson and Phoenix (Tamir et al 1993: 19; Burton 1996: 28).

Relocation centers were intended to be self-contained communities, complete with residences, schools, factories, a hospital complex and other facilities, each camp laid out on a grid system and situated on a dead end road. The central core consisted of residential blocks, each block with ten to fourteen barracks, a mess hall, laundry, recreation hall, and separate structures between the barracks with toilet and shower facilities for men and women. Block sizes varied in the non-residential areas, which housed the administrative area, warehouses and hospital. Butte Camp had twenty-eight residential blocks, each with fourteen barracks. The 20 x 100 ft. barracks were divided into four or more one-room apartments, each apartment with a single electric light suspended from the ceiling, a stove for heating, and an army cot with a blanket for each person. Any other furniture the people made themselves. Normally a single family occupied one apartment (Tamir et al 1993: 21-23; Burton 1996: 28-32).

The study by Tamir et al (1993) included much more information on the physical nature, the economic and employment activities, and the social relationships at the Gila River Relocation Center. Burton (1996) added to this picture. The WRA was the largest and most important employer at the camps and it hired Japanese-Americans for nearly all of the jobs available. The mess operation with up to 2,326 employees was one of the largest sources of employment. Residents received very low wages, only \$16 or \$19 a month. With private enterprise forbidden, there was little incentive for outside persons to seek employment here.

The availability of agricultural land and water for irrigation had been the most important factor in locating the Gila River Relocation Center on the Gila River Indian Reservation. The two camps were not treated as part of this reservation. The evacuees grew much of their food and shipped agricultural products to the other centers. Eating in mess halls meant that everyone ate the same food, and two staples - fish and rice - necessarily had to be imported to the camps.

In spite of the 6,977 acres of improved agricultural land leased from the Gila River Pima community, the use made of this land was minimal. In 1942-1943, the first farming year, 1,289 acres were planted to vegetables while the remainder stayed in pasture. The next year crop production increased, again mostly vegetables and grown on 1,194 of the leased acres. There were livestock operations as well - hogs, cattle, and chickens - and the value of agricultural products for fiscal 1944 was estimated at \$1 million. Most of the farm workers were *Issei* or first-generation Japanese. For 1945 there are no detailed figures, as a decision was made to close the relocation centers in December 1944 and this meant a reduction in agricultural operations. In early 1945 the old vegetable fields were reseeded to alfalfa in preparation for returning the land to the Indian agency (Tamir et al 1993: 29, 37, 51, 65-69).

As Tamir et al (1993: 95) observed, the local Pimas and Maricopas are nearly invisible in the history of the Gila River Relocation Center. Some Pimas, perhaps many, worked on construction of the camps, and others found employment during the six months that a camouflage net factory operated at the center. A few WRA jobs were available to the Pimas, and the Japanese-Americans sometimes bought chickens, fruit, eggs, hogs and canned goods from individual Pimas or at stores on the reservation. Those Indians who worked at the center later had a strong and positive remembrance of the people there, perhaps in part because the two groups felt a special relationship from both being persecuted minority groups (Tamir et al 1993: 100-103)

Economic benefits for the tribe were more substantial, from rentals of the 17,000 acres of tribal and allotted lands. Between 1942 and the end of 1945, lease of the 6,977 acres of irrigated lands netted the tribe \$422,134. The Butte and Canal camp sites added \$6,490 to the tribal revenues, and owners of the 491 allotted acres within the center's boundaries received \$2,454 from the WRA. The net income from the operation of the leased lands, however, went towards paying the operation and maintenance charges assessed against all Indian lands under the

San Carlos Irrigation Project (Walker 1944: 227-228; Tamir et al 1993: 102). With these monies diverted, and the promise of subjugating some 8,850 acres in Parcel B shown to be an empty one, the Pimas had good reason to regret this poor bargain. In the end it may even have cost them money.

Approximately 1,200 young *Nisei*, second-generation Japanese, volunteered for service when the draft was reinstated for them. The local newspaper, the *Gila News-Courier*, gave excellent reporting about local boys in uniform, all of whom would have served in the Nisei regiment formed from the 442<sup>nd</sup> Regimental Combat Team and the 100<sup>th</sup> Infantry Battalion of the Hawaii National Guard. With an authorized strength of 4,000, it became the most decorated regiment in American history. An Honor Roll at the Gila River Relocation Center honored those who had joined from that community. It was one battalion from that regiment that discovered and liberated the Dachau Concentration Camp in Germany. Virtually unrecognized are the 16,000+ Nisei who served during the war in the Pacific and in Asia, performing intelligence and translation duties. For them, capture would have meant certain death (Burton 1996: 41-42).

The War Department announced the lifting of the West Coast exclusion orders on December 17, 1944 and at the same time the WRA stated that the relocation centers would be closed within one year. The next day the U. S. Supreme Court effectively freed all loyal Japanese-Americans still being held in the relocation centers. Many of them had no place to go; a poll taken during March 1945 showed that they feared prejudice and economic hardship. They left nonetheless, in increasing numbers and accompanied by their possessions. The center's engineering office arranged to ship more than five million pounds of evacuees' property between July and November 1945, with four-fifths of this sent back to the West Coast (Tamir et al 1993: 27, 52, 89-91; Burton 1996: 42-43). Last to leave were 155 Hawaiians transported to Los Angeles on November 11, 1945.

With reference to the Pimas, the government's conduct in regard to the Gila River Relocation Center was unfortunate at best. There were no improvements to revert to the Indians after the Japanese-Americans departed, in contrast with what Walter Woehlke and John Collier had hoped. The promise of expanded farmland was not kept. The buildings and other camp property were auctioned off and removed. Worse, the WRA left behind a mass of concrete and rubble. The estimate to remove this ran to \$120,000, much more than the rent paid and greatly exceeding the value of the land. In the end and following litigation, the Pimas and Maricopas received only the diminution in the fair market value of the land caused by the rubble, a small percentage of the cost to restore it (Tamir et al 1993: 52-53, 109-111; Lieder and Page 1997: 244-245).

### *An End and A Beginning*

John Collier may have been disappointed with the failure of the relocation project to benefit the Pimas, but others on the reservation probably saw it as the

latest in a long series of paternalistic government actions, none of which left individuals any better off. From allotments through subjugation and the predictions by Lucy Wilcox Adams, A. L. Walker and others, the expectation was that Indian farm operators should be able to earn incomes comparable to those of non-Indian farmers in the San Carlos Irrigation Project (Walker 1944: 227). Water deprivation had, over a number of decades, turned the Pimas and Maricopas into non-farmers. When water again became available on a modest scale, few were interested. Those few generally lacked access to capital, credit, and the larger-size land holdings that made economies of scale possible. The one success along this line was the agency farm, which became the tribal farm in 1952, with cultivation of 12,000 acres in the South Side area.

World War II marked a turning point by breaking down the insularity of the reservation. Elementary education continued in BIA and Roman Catholic schools, but high school students now attended public schools at Chandler, Coolidge, Casa Grande and Tempe as well as BIA boarding schools in Phoenix and outside of Arizona. Some 500 young men had been taken away from the reservation and placed in an English-speaking environment, giving them a grasp of the language never available before. Their exposure to other people, places and experiences afforded them a more sophisticated knowledge of the world as well as the ability and determination to deal with it more aggressively.

The Indian Reorganization Act in 1934 enabled the government and the old-style Indian agent, A. R. Robinson, to become more paternalistic, but with the agent's retirement in 1951, the people of the community were freer to make their own decisions and even hire their own legal counsel. A young Pima veteran was elected governor and another young Pima soon after gained appointment as manager of the tribal farm. Standards of living began to rise once the old ideal of converting the Pimas and Maricopas into yeoman farmers finally fell into discard. Some new government programs such as relocation from the reservation were beneficial because these helped migrants to the cities to obtain jobs that paid decent wages, while relieving pressure on the reservation's strained resources.

More important were new social and economic programs with broad-based applications, not specifically directed to reservation Indians. Populations rose too, from 5,041 on the Gila River Indian Reservation in 1942 to some 6,797 reservation residents in 1961. San Carlos Irrigation Project lands were still the primary magnet for attracting outside investment, but the instrument for channeling this investment became the long-term development lease. Yet to be resolved is the Gila River Indian Community's oldest problem, that of a reliable water supply for irrigated agriculture, which is still an economic mainstay for the tribal economy if no longer so for individuals. The revenues that tribal enterprises now provide may in time lead to a solution of this difficulty, and enable individual community members to look to the future with a new confidence.

## **Appendix I**

## AGENTS FOR THE PIMAS AND MARICOPAS, 1849-1951

This listing of Indian agents for the Pimas and Maricopas is based upon a variety of published and unpublished sources. These include references cited earlier in this book, especially the annual reports of the Commissioner of Indian Affairs. Also useful is a 1989 introduction to records of the Pima Indian Agency, prepared by the National Archives - Pacific Region at Laguna Niguel, California. Only a few of the actual appointment files have been consulted. Hopefully, the names of everyone who served officially are shown, including special agents, deputy, interim, and acting agents, but there may be omissions.

In 1864, Arizona's first Superintendent of Indian Affairs, Charles Poston, named several persons to be Indian agents. Some eventually received confirmation. Ammi White was one of those who did not, although he may have performed some duties of an agent from his store at Casa Blanca. A later letter explained that he was ineligible because of his being engaged in trade with the Indians (Van Valkenburgh to Leihy, September 8, 1865).

Col. John Walker's term was for four years, although his correspondence shows that he began work about six months after his appointment. He left without resigning at the end of his term and Superintendent James Collins reassigned Lorenzo Labadie from another agency to replace Walker. Confederate sympathizers in southern New Mexico prevented Labadie from continuing to Tucson and assuming office. In later years, persons with regular appointments seem to have held office until they resigned or were replaced. At one time, the Pimas and Maricopas had one regular agent (Col. Walker) and two special agents (Sylvester Mowry and Silas St. John). During much of 1861-1862 and 1864-1866, they had no agent at all.

Silas St. John was the first Indian agent to reside and have an office on the reservation. Levi Ruggles became the first regular agent to maintain his office there, until September 1868. Not all of the Indian agents after Ruggles were full-time residents, however. C. H. Lord, a deputy agent whom the regular appointee left in charge after making a brief visit to the reservation, apparently lived at one of the mining camps south or west of Tucson. Frederick Grossmann established his headquarters at Sacaton and completed the agency buildings there in 1870. He was also the first agent to have a staff.

The title of the Pima Agency's chief administrative officer apparently changed from Agent to Superintendent about the time that J. B. Alexander assumed office. A study of the agent's responsibilities would belong to administrative history and need not be explored here. John Walker, as Indian Agent for the Tucson Agency, had jurisdiction over all of the Indians in southern Arizona. He was also referred to as agent for the Indians of the Gadsden Purchase. His predecessor in 1849, Col. John C. Hays, had the title of sub-Indian agent on the Rio Gila, but he did not remain in the area. Abraham Lyon in 1862-1863 had the same field of responsibility as Walker. Poston's arrival at the beginning of 1864 marked the beginning of separate agencies.

Except for Col. Hays, the agents and superintendents listed here all had the Pimas and Maricopas as a principal responsibility. The Pima Agency also administered the Papago Indians (except those at the San Xavier Reservation) and the reservations at Salt River, Gila Bend, Maricopa (Ak Chin) and Fort McDowell until well into the 20<sup>th</sup> century. The present situation with the Pima Agency responsible only for the Gila River Indian Reservation dates from the 1930s.

We know more about the earlier years of this agency than we do about the later ones because National Archives microfilm publications of Pima Agency records extend through 1880, and the agents' annual reports continued to appear as part of the commissioner's reports through 1906. National Archives Microcopy M-1011 includes unpublished annual reports through 1935, but because these were usually unsigned and gradually became an agency report, we cannot be sure of who wrote them. In the list below, a year by itself means we do not know when within that year an individual assumed or left office.

<i>Agent</i>	<i>Dates of Service</i>
Col. John C. Hays (sub-Indian agent on the Rio Gila)	1849
Col. John Walker (Tucson Agency, or Indians of the Gadsden Purchase)	March 12, 1857, for a term of 4 years
Silas St. John (Special Agent for the Pima and Maricopa Indians)	February 18, 1859 – May 10, 1860
Sylvester Mowry (Special Agent)	c. May 12, 1859 – November 1859
Abraham Lyon	Sept. 12, 1862 – January 10, 1864
M.O. Davidson (Special Agent for the Pimas and Maricopas)	September 7, 1865 – April 20, 1866
Dr. Charles H. Lord (Deputy Special Indian Agent)	c. February 1 – October 31, 1866
Levi Ruggles	October 31, 1866 – October 1, 1869
Captain Frederick Grossmann 1871	October 1, 1869 – July 24, 1871
John H. Stout	July 24, 1871 – March 1876
Charles H. Hudson (Agent-in-charge)	May 1 – c. September 23, 1876
John H. Stout	October 7, 1876 – c. August 1879
Abram B. Ludlam	August 11, 1879 – c. January 1881
E. B. Townsend (Special Agent)	c. January – June 1881
Roswell G. Wheeler	June 1881 - 1883

A. H. Jackson	1883 - 1884
Roswell G. Wheeler	September 1884 – October 1886
Elmer A. Howard	November 1886 – May 1888
Claud M. Johnson	May 1888 – June 1890
C. W. Crouse	July 1890 – August 16, 1893
J. Roe Young	August 16, 1893 – July 1897
H. J. Cleveland	c. July 1897 – May 1898
S. L. Taggart (Special Indian Agent-in-charge)	May 24, 1898 – 1899?
Elwood Hadley	1899 - 1902
J. B. Alexander	October 1902 – March 1911
C. L. Ellis (Special Agent-in-charge)	1911
Graves Moore (Supervisor-in-charge)	1911
Harry C. Russell (Principal-in-charge)	1911
Frank A. Thackery	October 1, 1912 - 1916
Ralph A. Ward	1916 - 1918
Wilbur F. Haygood	1918 - 1920
August Duclos	1921 - 1924
F. E. Brandon	1924
Chester E. Faris	1925 - 1926
Billie P. Six	1926 - 1928
Albert H. Kneale	January 1, 1929 – Sept. 30, 1935
Alanbert 'Bert' E. Robinson	October 1, 1935 – 1951

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(*The*) *Native American*, Phoenix, Az.  
 1915: June 5  
 1917: Jan. 26, Apr. 14, June 1, 9, 23, Sept. 22, Oct. 6, Nov. 3, Dec. 15  
 1918: Jan. 12, 26, March 23, June 1, 15, Sept. 21, Nov. 2, Dec. 28

(*The*) *Railroad Gazette*  
 1880: September 24

(*The*) *San Diego Union*, San Diego, Ca.  
 1869: November 11, 18  
 1872: November 21

*San Francisco Chronicle*, San Francisco, Ca.  
 1892: August 28

*San Francisco Herald*, San Francisco Ca.  
 1861: September 3

*Santa Fe Weekly Gazette*, Santa Fe, N.M.  
 1865: July 22

*Semi-Weekly Southern News*, Los Angeles, Ca.  
 1861: March 20, June 21

(*The*) *Tri-Weekly Telegraph*, Houston, Tx.  
 1862: May 12

(*The*) *Weekly Arizona Miner*, Prescott, Az.  
 1868: Sept. 26, Oct. 17, Nov. 21, 28, Dec. 12, 19  
 1870: Jan. 1, 15, July 2, 23, Aug. 13, 27, Sept. 3, 17

(*The*) *Weekly Arizonian*, Tubac, Az.  
 1859: March 3, 10, 24, July 21, Aug. 4, Sept. 29, Nov. 17



## Maps

1761(?) Pimería Alta, con los Ríos Colorado y Gila, por Padre Bernardo Middendorf. No scale. Reproductions in Navarro Garcia (1964) No. 61, and as frontispiece in *New Mexico Historical Review* 6(2) from Library of Congress, Woodbury Lowery Collection #430.

1859a Pimo and Maricopa Reservation, Containing 64,000 Square Acres, Surveyed According to Act of Congress of 1859 [topographic], by Geo. Gunn. Scale: 1"≈360 chains. National Archives, Map RG75-CMF-147.

1859b Tracing of Unfinished Sketch of the Pimo and Maricopa Reservation, Surveyed According to Act of Congress of February 28<sup>th</sup> 1859 [planimetric; original?], by A.B. Gray. Scale: 1" = 5000 ft. National Archives, Map RG75-CMF-391.

1859c Pimo and Maricopa Reservation, Containing 64,000 Square Acres, Surveyed According to Act of Congress of 1859 [topographic], by A.B. Gray. Scale: 1" ≈ 360 chains. Bureau of Land Management, Arizona State Office, Historic Withdrawal Documents, Pima and Maricopa Indians.

1859d Pimo and Maricopa Reservation, Containing 64,000 Square Acres, Surveyed According to Act of Congress of 1859 [planimetric], by A.B. Gray. Scale: 1" ≈ 360 chains. Bureau of Land Management, Arizona State Office, Historic Withdrawal Documents, Pima and Maricopa Indians.

1869a Military Map of Arizona. Engineer Office, Military Division of the Pacific, San Francisco, California, August 25, 1869. Scale: 1" = 12 miles. National Archives, RG 94, Records of the Adjutant General's Office, Letters Received, File #P-98 (1870), Map of Arizona.

1869b Captain Frederick E. Grossmann's Map of the Gila Valley. Enclosure with Capt. F.E. Grossmann, Pima Villages, to Supt. Geo. L. Andrews, Oct. 19, 1869. Approximate scale 1" = 4 miles. National Archives, M234 Roll 3, file #Ariz. A-561, frame 0825. Published in *The Journal of Arizona History* 24(3): 224 (Autumn 1983).

1870a Map Showing Proposed Extensions of the Pima and Maricopa Indian Reservation, Gila Valley, Arizona, Surveyed ... by 2<sup>nd</sup> Lieut. Eugene O. Fechet, Bvt. 2<sup>nd</sup> Lieut. Richard H. Savage, April and May, 1870. Scale: 1" = 2 miles. National Archives, Map RG75-CMF-508 [old File Mark A.1310].

1870b Claims Improvements On and Near Pima and Maricopa Indian Reservation and Its Proposed Extensions, by R.H. Savage, Lieut. of Engineers, July 1870. Scale: 1" = 100 ft. National Archives, Map RG75-CMP-393 [old File Mark A.1310].

1879 Gila River Reservation and Surroundings, Pima Agency, A.T. [c. March 8, 1879]. Scale: 1" = 4 miles. National Archives, Map RG75-CMF-659.

1904 Map of Pima and Maricopa Indian Reservation, Arizona, Showing Location of Land in Passed (*sic*) and Present Use – Canals, Dams, Etc., by J.R. Meskimons, Supt. of Irrigation (August 1904). Scale: 1" ≈ 320 chains or one mile. Copy on file at the Bureau of Indian Affairs Phoenix Area Office.

1904(1955) Gila River Indian Reservation, Arizona, From Map Showing First Complete Survey of Indian Irrigation on Pima and Maricopa Reservation, As Surveyed and Mapped by J.R. Meskimons, Supt. of Irrigation, in 1904 (retracement; June 1955). Scale: 1" = 2 miles. Copy on file at University of Arizona, Arizona State Museum, Planfile 1, Pocket 5, Folder 4L, #028181.

1913 Sacaton Project, Gila River Indian Reservation, Arizona. Map showing Indian Fields from Survey of 1913. W.M. Reed, Chief Engineer, and C.R. Olberg, Supt. of Irrigation. Scale: 1" = 2000 ft. Copy on file at University of Arizona, Arizona State Museum, Planfile 1, Pocket 5, Folder 4L, #028182.

1914 Topographic Map showing Proposed [Diversion] Dam & Bridge Site [across the Gila River], Location of Proposed Canal and Present System of Irrigation Ditches (Nov. 30, 1914). W.M. Reed, Chief Engr., and C.R. Olberg, Supt. of Irrigation. Scale: 1" = ½ mile. Copy on file at Gila River Indian Community, Cultural Resource Management Program, Sacaton, Az.

1914 Gila River Survey .... Pinal / Maricopa County, Arizona. Plane Table Topographic Survey Showing Irrigated and Irrigable Lands Under Ditches Taking Water from Gila River. Surveyed by C.H. Southworth (January 1914 – March 1915). Scale: 1" = 1000 ft. Thirteen sheets, from T5S R8E to T1N & T1S R1E, G&SRM. Copies on file at Gila River Indian Community, Cultural Resource Management Program, Sacaton, Az.

1936 Gila River Indian Reservation, Technical Survey Maps, 1936 (title on cover sheet). Folio of thirty-four manuscript, hand-colored plat maps to accompany TC-BIA reports. Maps illustrate different land classifications, as soils, alkali, forage, woodland, hydrology, with more detailed mapping of the Maricopa, Cooperative, Gila Crossing and Santa Cruz districts. Bureau of Indian Affairs Phoenix Area Office.

1935 Map of Gila River Indian Reservation Showing Approximate Areas Under Cultivation, July 1, 1937, by R.A. DuPont, BIA Land Division, Sacaton (July 16, 1937). Scale: 1" = 2 miles. Copy on file at University of Arizona, Arizona State Museum, Planfile 1, Pocket 5, Folder 4L, #002033B.

1965 Land Ownership Status Map as of 7-23-65, Gila River Indian Reservation. Scale: 2" = 1 mile. Eight sheets, on file at Bureau of Indian Affairs, Southwest Title Plant, Albuquerque.

1988 Gila River Indian Community, San Carlos Indian Irrigation Project (SCIIP), 1988 Redesignation. Scale: 1" = 4000 ft. U.S. Bureau of Reclamation, Arizona Projects Office, Phoenix.

### **Personal Communications**

Dr. Robert W. Frazer, Hemet, Calif. Commenting on weight vs. volume of commodities purchased by the Army and absence of records of purchases by the Army per se at the Pima Villages, in letter of December 23, 1997.

Dr. Billy Waddle, Prescott, Ariz. Notes from interview, April 12, 1997, on the last years of operation of the USDA Sacaton Field Station and its closure.