

MINING BOOMS (1680 TO PRESENT)

Summary of Theme

Historically, one of the most important economic activities in the proposed Santa Cruz Valley National Heritage Area was mining of precious metals. Gold and silver mining began with the arrival of the first Spanish colonists during the late seventeenth century. However, historians have concluded that the legends of lost mines and treasures of early missionaries are nineteenth-century fabrications, and that mining was not of major importance on this part of the Spanish and Mexican frontiers. Mining became more important after the region became part of the United States in 1854. Repeated mining rushes for gold and silver created boomtowns that briefly flourished and were then abandoned because of dangers of Apache attacks, sudden drops in the market values of the metals, or depletions of quality ores. Although a few gold discoveries received a great deal of interest, silver was the main metal that was mined.

At the end of the nineteenth century, a collapse in the value of silver and the new demand for electrical wire shifted the focus to copper mining. For more than 100 years, the region has been one of the most important producers of copper in the world. Copper mining in the Santa Cruz Valley has also experienced many up and down cycles, but it continues to be important today. While copper mines are increasing production again, ghost towns and old mines throughout the region are visible reminders of numerous mining booms and busts over several centuries.

Description of Theme

Spanish Period Mining

The search for precious metals was one of the drives behind the northward expansion of the frontier of New Spain, including the Santa Cruz Valley. Contrary to legends that have circulated since the mid-nineteenth century, the earliest missionaries who worked in the Santa Cruz Valley between the 1690s and the 1760s probably did not do any mining in this region or elsewhere in New Spain, because they were forbidden by their Jesuit order. The first Spanish miner in this region was probably José Romo de Vivar, who established a ranch at San Lázaro on the upper Santa Cruz River in about 1680; he also founded the mining town of Bacanuchi 50 miles to the southeast.

A large number of Spanish prospectors were attracted to the region in 1736, when the unusual Planchas de Plata (Slabs of Silver) discovery was made near the Tohono O'odham village of Arizonac (from which the territory of Arizona took its name in 1863). In this location—about 1 mile south of what became the United States-Mexico border, and not far west of the twin border cities of Nogales—156 arrobas, or a little over 2 tons of silver, were removed from the ground surface in a short amount of time.

Early historical documents also record that Spanish colonists were mining gold and silver deposits in the Santa Rita Mountains and in the area of the Guevavi mission before they fled during the Pima Revolt of 1751. Although colonists returned to the valley after a presidio was established at Tubac the following year, the Santa Cruz Valley was largely abandoned again during the 1760s, due to increasing Apache attacks. Some settlers returned during the 1770s,

and resumed work in some of the silver mines in the Santa Rita Mountains, introducing the amalgamation method of processing silver ore with mercury.

A presidio on the San Pedro River was moved to Soamca on the upper Santa Cruz River in 1787, providing increased protection to the region. Over the next 30 years, old silver and gold mines were reopened and new ones were started around Tubac and Tumacácori, as well as along Arivaca and Sonoita creeks. In 1814, Yaqui Indians were brought northward to work gold mines near the Guevavi Mission. Mining continued after Mexico won independence from Spain in 1821, although Apache raiding continued and prevented little further development.

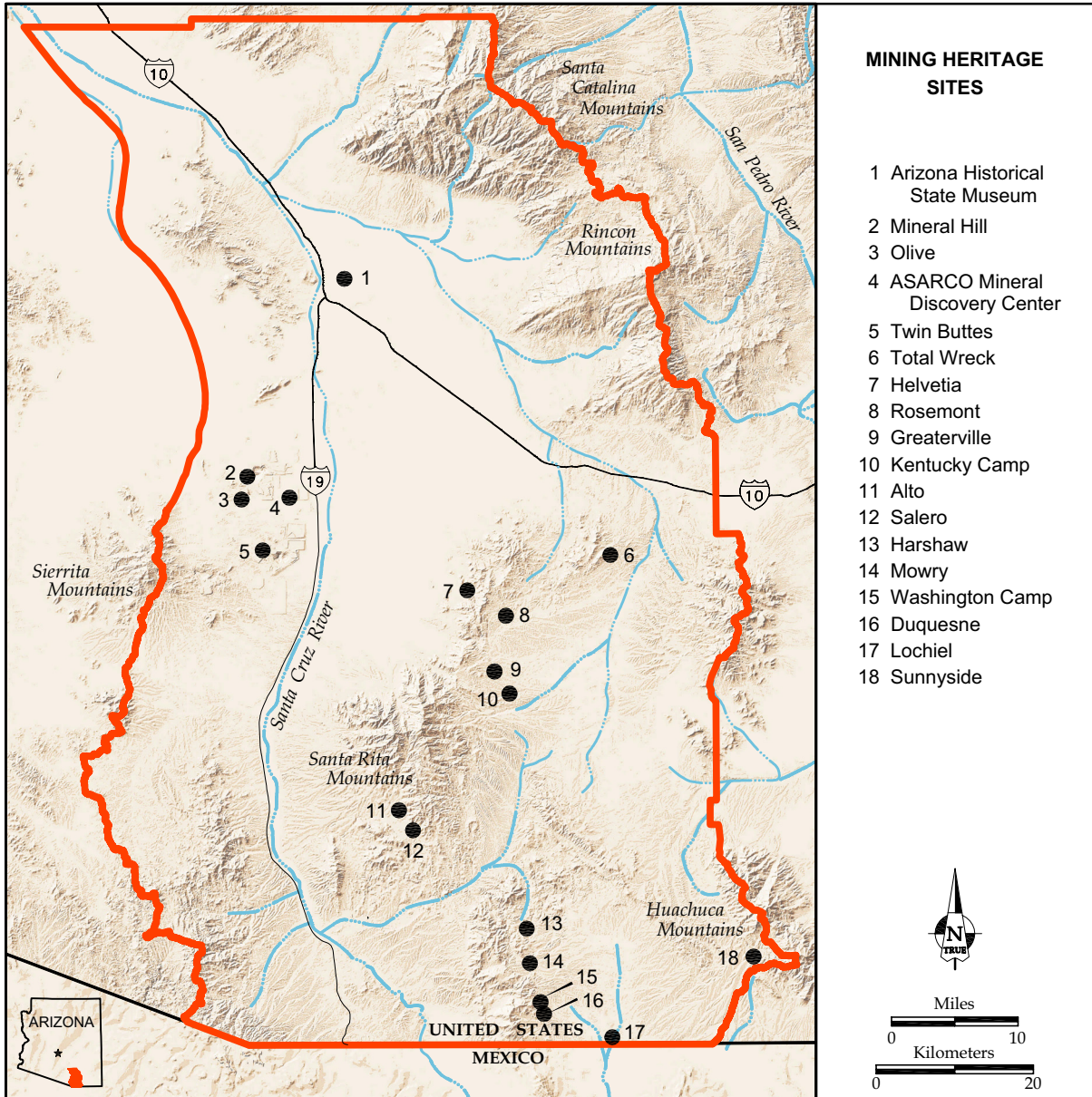
Despite all the mining activities documented in Spanish colonial, missionary, and early Mexican records, the Santa Cruz Valley was never a major mining region before it became part of the United States. The ore deposits were generally shallow, and there were many obstacles to mining in a frontier region vulnerable to Indian attacks and far from sources of mining supplies. While some discovered deposits were very valuable, the total amount of wealth obtained was relatively limited.

American Mining Before the Civil War

Embellished stories of the Spanish mines brought Anglo-Americans into the area following the Gadsden Purchase in 1854, when the region became part of the United States, and after the easily worked placer deposits in California were cleaned out during the California Gold Rush. In 1856, the Sonora Exploration and Mining Company was founded by Charles D. Poston (who would become known as the Father of Arizona) and Samuel P. Heintzelman. They established their headquarters in the abandoned ruins of the Tubac Presidio and reopened about 20 old silver mines in the Santa Rita Mountains along Sópore Wash, and in the Cerro Colorado area west of the Santa Cruz Valley. The following year, the San Xavier Silver Mining Company built adobe furnaces on the Santa Cruz River at Punta de Agua, approximately 3 miles south of the San Xavier Mission. The Salero Mining Company purchased a Spanish silver mine in the Santa Rita Mountains that was originally worked in the early 1700s.

In 1858, the Santa Rita Company split from the Sonora Exploring and Mining Company and took over the mines in the Santa Rita Mountains. It established headquarters at the Hacienda de Santa Rita near the abandoned mission at Tumacácori. The following year, a printing press was brought from Ohio to Tubac, and the first newspaper in Arizona, the *Weekly Arizonan*, began with the support of the two related mining companies. Also in 1859, the firearms inventor and manufacturer Samuel Colt became chief stockholder of the Sonora Exploration and Mining Company and replaced Heintzelman as president. Colt also invested in the Sópore Land and Mining Company and the Arizona Land and Mining Company in the Santa Cruz Valley.

During this same period, soldiers stationed at Fort Buchanan at the head of Sonoita Creek began prospecting in the Santa Rita and Patagonia ranges. Several of the soldiers joined together in 1858 to purchase the Corral Viego Mine from a Mexican prospector, and they sunk shafts and built furnaces at the renamed Patagonia mine. The following year, the Patagonia Mine was purchased by Lieutenant Sylvester Mowry from nearby Fort Crittendon. The renamed Mowry Mine eventually became an enormous success, with a population of several hundred and 12 blast furnaces reducing the rich silver and lead ore into bars.



Mining heritage sites in the proposed National Heritage Area.

United States troops were withdrawn from the region at the start of the Civil War in 1861, and many mines closed due to increased raiding by Apaches who thought they had defeated the troops, and because of rebellions by oppressed Mexican laborers who thought the United States government had collapsed. The Mowry Mine was one of the few mines that continued, and many miners went there seeking protection in numbers. However, when Union troops returned in 1862, Mowry was arrested under the charge of selling lead to make Confederate bullets. The mine was auctioned and then poorly managed by Union agents, and the mine never again reached levels of significant production. New owners brought the Mowry Mine back into production in the 1890s, and the population swelled to 200. This new boom only lasted a short time, and the camp was largely abandoned again by 1913.



Ghost towns are reminders of several gold and silver mining booms and busts in the Santa Cruz Valley since the 1860s.

Mining will be another distinctive theme of this National Heritage Area.

Gold and Silver Mining After the Civil War

More United States troops returned after the Civil War ended, and renewed military protection encouraged American prospectors to begin mining small placer gold deposits (places where native gold had weathered out of bedrock and become concentrated in nearby streambeds) in the Tucson, Sierrita, and Santa Rita mountains. Larger deposits were discovered in those and other mountain ranges through the 1870s. In 1874, a major gold discovery in the eastern Santa Rita Mountains led to the development of Greaterville, with about 500 residents, and nearby Kentucky Camp. However, these towns were abandoned when the gold played out in 1886.

A large vein of silver was discovered in the Santa Rita Mountains in 1877, giving rise to the boomtown of Harshaw. By 1880, the Hermosa Mining Company built a stamp mill and the town had about 2,000 residents, a mile-long main street with seven saloons, and its own newspaper. Damage from storms and a fire and decreasing ore quality forced closure of the Hermosa Mine in 1882, but mining began again on a smaller scale in 1887. In 1903, the new mine owner died, the price of silver dropped, and by 1909, the town was abandoned once again. A final period of occupation lasted from 1937 to 1956, when the Arizona Smelting and Refining Company (ASARCO) worked some nearby mines.

South of Harshaw in the same mountains, Washington Camp was settled by silver miners in the 1870s, but it did not prosper until it was purchased by the Duquesne Mining and Reduction Company in 1889. The company headquarters were established in nearby Duquesne, and a reduction plant was built in Washington Camp. During the 1890s, the towns of Duquesne and Washington Camp were headquarters for the owners of more than 80 mining claims covering 1,600 acres. By 1900, both towns reached their peak populations of around 1,000 each. The post office that served both communities was closed in 1920, but the two old mining camps still have a few residents today.

A little farther south, on the border with Mexico, the few residents of the town of Lochiel are all that is left of a thriving mining and ranching community that developed in the 1880s, and had two smelters and a peak population of 400. The Mexican revolutionary Pancho Villa and his men frequently came across the border in this area to rustle cattle.

Banks were needed to handle the money generated by the the mining rushes, and the first bank in southern Arizona, named the Pima County Bank, opened in Tucson in 1879. Many silver mines and banks in the Santa Cruz Valley and in the rest of southern Arizona closed when the Sherman Silver Act was repealed in 1893, as silver dropped from \$1.25 to \$0.25 an ounce, bringing an end to the post-Civil War mining boom.

Early Copper Mining

Mining in the Santa Cruz Valley and elsewhere in southern Arizona became focused on copper beginning in the late 1880s, and the advent of the electrical age and World War I increased the demand for copper during the next three decades. While some copper mines and associated settlements developed in the Santa Cruz Valley, the most important mines and all the smelters were opened in neighboring valleys between 1885, and the end of World War I. By 1900, copper production in southern Arizona had risen to three times the value of Arizona's combined gold and silver production, and this region led world copper production by 1907.

In the Santa Cruz Valley, Helvetia was one of the richest copper mines during the 1880s and 1890s, operated by the Helvetia Mining Company after 1891. Copper mining began in the Sierrita Mountains in the Twin Buttes region about 1870, and by 1903, the Twin Buttes Mining and Smelting Company was operating several shaft mines, and a major mining camp had sprung to life. Establishment of a post office and completion of the Twin Buttes Railroad branch connected the boomtown of Twin Buttes – with some 300 residents – to the Southern Pacific Tucson-Nogales line at Sahuarita in 1906.

During World War I, demand doubled the price of copper and stimulated another mining boom in southern Arizona. However, the fall in demand after World War I resulted in the closing of many copper mines, leaving another trail of ghost towns in the Santa Cruz Valley and other parts of southern Arizona.

Modern Copper Mining

World War II again increased the demand for copper, although it was not until the development of open-pit mining, in the 1960s, that copper mining resurged in the Santa Cruz Valley and other areas of southern Arizona. The Anaconda Mining Company began a large operation at

Twin Buttes during that decade. By 1976, the four open-pit mines in the Santa Cruz Valley produced 10 percent of the nation's copper and employed 5,000 workers. In the late 1970s, there were still several producing copper mines in the Santa Cruz Valley – all located in the Pima Mining District in the Sierrita Mountains.

During the 1980s, an extended depression in the copper mining industry began as a result of subsidized foreign competition and a deflated value for copper in world markets. By the mid-1980s, most of the copper mines in southern Arizona were idle, or working at greatly reduced capacities. During the same period, just south of international border, copper production was increased at Cananea, and a new major smelter was built at Nacozari. In 1999, the parent company of these facilities, Grupo México, bought ASARCO, which has operated mines and smelters in southern Arizona for more than 100 years. Today, copper mining is again on the rise in the Santa Cruz Valley in response to the climbing value of the metal in world markets.

Distinctiveness of Theme

The National Coal Heritage Area in West Virginia and three National Heritage Areas in Pennsylvania (the Delaware and Lehigh, Lackawanna Valley, and Schuylkill River Valley National Heritage Areas) have coal mining as a central theme. However, no other existing or planned National Heritage Area has precious metal mining as a theme or a working landscape, and this will be one of the distinctive features of the proposed Santa Cruz Valley National Heritage Area. Mining of gold, silver, and copper is an important part of the story of the western United States, with beginnings in the Spanish and Mexican periods.

Mining continues to be an important economic activity, shaping the landscape and lives of residents of the Santa Cruz Valley. Local residents and tourists can learn about the history of mining in this region by visiting well-preserved ghost towns and museums. Designation of a Santa Cruz Valley National Heritage Area will increase awareness about the important role of mining in the history and economy of this region, and it will encourage heritage tourism.

Related Resources

Residents and visitors can learn more about the history of mining in the Santa Cruz Valley at two local museums. The main **Arizona Historical Society Museum** in Tucson has a large permanent exhibit that includes replicas of a mine shaft, typical buildings, rooms, and furnishings in mining camps, as well as displays of mining artifacts. Near Green Valley, the **ASARCO Mineral Discovery Center** has exhibits of local mining artifacts, including a wooden headframe for a mineshaft, pumps, engines, hoists, and rail ore carts.

A number of mining ghost towns can be visited, although some are on private property, so “No Trespassing” signs must be obeyed. The Forest Service acquired **Kentucky Camp** (1874-1904) in 1989, as part of a land swap, and has worked with volunteers to stabilize the five remaining buildings. This historic mining camp is open to the public, and visitors can rent a restored three-room adobe building for an overnight stay (contact the Nogales Ranger District of Coronado National Forest). The 1887 brick home of James Finley in **Harshaw** (1873-present) has been carefully preserved. Some intact adobe buildings are occupied by current residents, and several crumbling adobe structures can be seen from the road. The remains of **Mowry**

(1857-1913), one of the oldest mining camps in Arizona, is on private property, but can be seen from the Forest Road that bisects the townsite. In the small community of **Lochiel** (1884-present), the historic cemetery is on a hilltop overlooking a church and the old United States Customs station; there is also an adobe one-room schoolhouse, built in 1918. All of these buildings are on private property, but can viewed from the road.

Primary References

Ayres, James E.

- 1984 *Rosemont: The History and Archaeology of Post-1880 Sites in the Rosemont Area, Santa Rita Mountains, Arizona*. Archaeological Series No. 147. Archaeological Research Services, Inc., Tempe, Arizona.

Greeley, Michael N.

- 1987 The Early Influence of Mining in Arizona. In *History of Mining in Arizona*, vol. I, edited by J. M. Canty and M. N. Greeley, pp. 13-50. Mining Club of the Southwest Foundation, Tucson.

Heinrichs, Walter E., Jr.

- 2000 *Forerunner of the Mission Complex: The Pima Mine Story*. Western Economic History Center, Marana, Arizona.

Keane, Melissa, and A. E. Rogge

- 1992 *Gold & Silver Mining in Arizona: 1848-1945*. Arizona State Historic Preservation Office, Phoenix.

Mendoza, Jose

- 2001 *Back in Them Days – When Patagonia Was a Mining Town: Stories and Recollections*. iUniverse.

Officer, James E.

- 1987 Mining in Hispanic Arizona: Myth and Reality. In *History of Mining in Arizona*, vol. II, edited by J. M. Canty and M. N. Greeley, pp. 1-26. Mining Club of the Southwest Foundation, Tucson.

Pima County

- 2001 *A Link to the Past... Ghost Towns and Mining Towns of Pima County*. Sonoran Desert Conservation Plan, Pima County, Arizona.

Polzer, Charles W.

- 1968 Legends of Lost Missions and Mines. *The Smoke Signal* No. 18:182-183. Tucson Corral of the Westerners.

Poston, Charles D.

- 2004 *Building a State in Apache Land*. Kessinger, Whitefish, Montana.

Sherman, James E., and Barbara E. Sherman

- 1969 *Ghost Towns of Arizona*. University of Oklahoma Press, Norman.

Varney, Philip

1994 *Arizona Ghost Towns and Mining Camps: A Travel Guide to History*. Book Division of Arizona Highways, Phoenix.

Wehrman, G.

1965 Harshaw: Mining Camp of the Patagonias. *Journal of Arizona History* 6:21-36.

Williams, Jack

1994 *From the Ground Up: Stories of Arizona's Mines and Early Mineral Discoveries*. Arizona Department of Mines and Mineral Resources, Phoenix.

Wilson, Eldred D.

195? *History of Mining in Pima County, Arizona*. 6th ed. Tucson Chamber of Commerce, Tucson (year of publication unknown).

Wilson, John P.

1995 *Islands in the Desert: A History of the Uplands of Southeastern Arizona*. University of New Mexico Press, Albuquerque.