SYLLABUS AND TRAINING MANUAL GREENHORN CREEK HISTORY AND ARCHAEOLOGY



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INTRODUCTION

This training manual, or syllabus, was prepared by Foothill Resources, Ltd., as partial fulfillment of a Historic Property Treatment Plan (HPTP) for archaeological properties which will be adversely effected by the Greenhorn Creek Project.

Much of the material upon which the text is based was excerpted from a 1994 report entitled *Cultural Resources Survey and Evaluation for the Proposed Gold Cliff Golf and Country Club, Angels Camp, California.* The report was prepared by Judith Marvin and Julia Costello of Foothill Resources, Ltd., Mokelumne Hill; Roger Werner and John Dougherty of Archaeological Services, Inc., Stockton; and Suzanne Stewart of Stewart/Gerike Consultants, San Andreas.

Additional chapters were written by Willard P. Fuller, Jr. on geology and geography; and on Central Sierra Miwuk by Reba Fuller.

It is anticipated that the manual will be added to and updated as unanticipated information is required and more phases are developed. It has, therefore, been produced in a binder, so that additional information may be readily entered.

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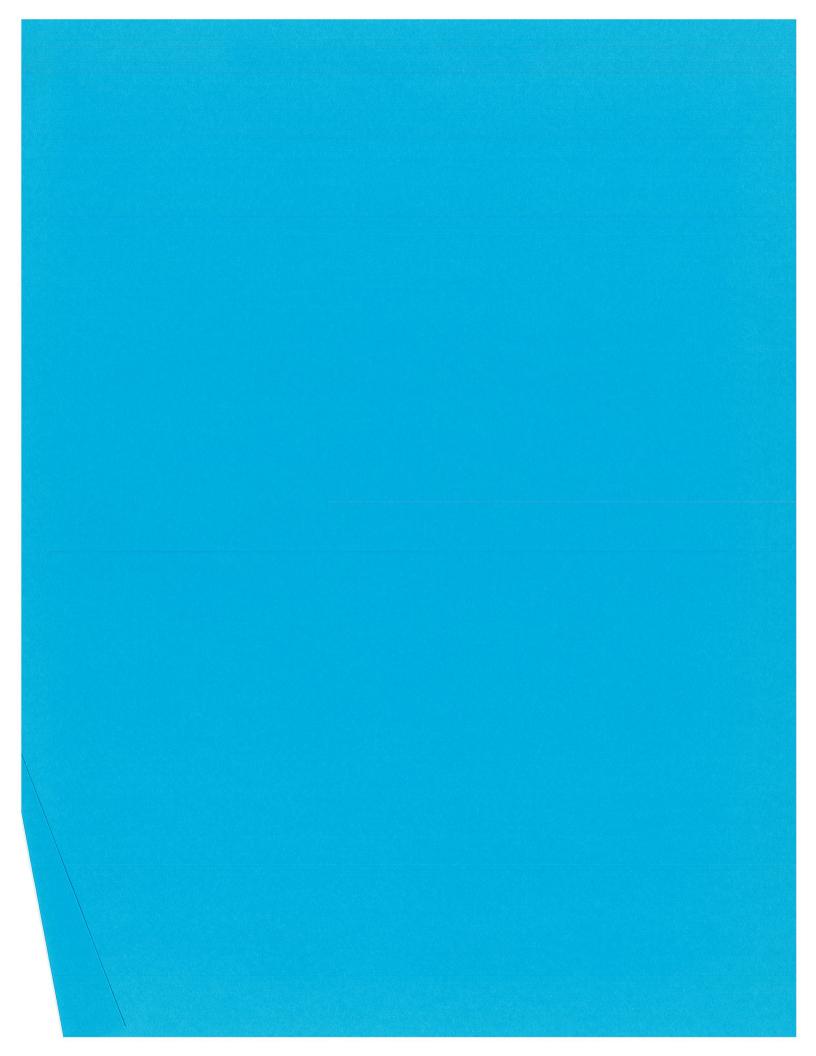
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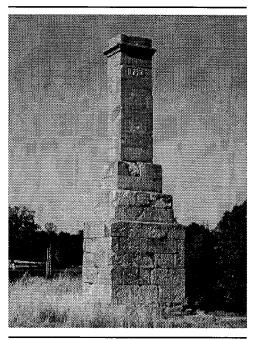
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Greenhorn Creek's

Archaeological Resources

Archaeological Preservation



Greenhorn Creek counts among its many assets the archaeological sites that preserve thousands of years of Native American history and the past century and a half of modern immigrants. These sites are important for several reasons:

- it is rare that sites such as these have survived to the present day;
- the sites contain the unique human history of the Greenhorn Creek property; and
- the sites are important to living peoples as treasured remnants of the past.

An archaeological site can be thought of as a jigsaw puzzle: the elements can be reassembled to give us a picture of past lives and events. The physical position of artifacts on the site (both on the surface and underground) provides vital clues needed for interpretation. Disturbance of these fragile surface patterns or underground layers, or removal of any

material from a site, destroys a part of the puzzle. Once these patterns are disturbed, the original context can never be reconstructed.

Protection Policies

As part of its commitment to the preservation and interpretation of its cultural resources, Greenhorn Creek has placed its most important historic sites into Protected Cultural Resource (PCR) areas. A commitment to protect these sites has been formalized in an agreement with the National Advisory Council of Historic Preservation. The locations of these PCR areas are given on the map below and a short description of each follows.

<u>PCR-1N, Tribelet Center</u> (Northern Area). This is the largest village site in Greenhorn Creek and was likely a tribelet (small tribe) center up to the time of the Gold Rush. No trespassing is allowed. (Site CA-CAL-1564/H, Locus 2)

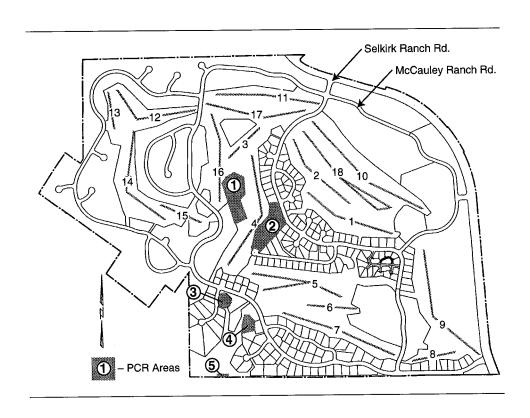
<u>PCR-1S, Milling Station</u> (Southern Area). This large, flat rock, containing 44 milling holes, is related to the adjacent tribelet center. It will be developed with an interpretive trail and signage. Visitors are restricted to the developed route, but golfers may retrieve balls from the lower area. (Site CA-CAL-1564/H, Locus 2)

<u>PCR-2, Selkirk Historic Preserve.</u> This area is to be developed as a public, interpretive park. There are abundant artifacts around the chimney that may be picked up briefly for inspection and then placed back where they were found. Visitors are prohibited from collecting artifacts, removing artifacts from the site, digging, using a metal detector, defacing the stone chimney, cutting vegetation, or climbing on or disturbing the stone walls. (Site CA-CAL-1564/H, Locus 4)

PCR 3, Albasio Court Village and Homestead. The area contains the remains of both a small Native American village and the basement depression of what is likely the first Selkirk home built in 1855. No trespassing is allowed. (Site CA-CAL-1570/H, Locus 1)

PCR 4, Hilltop Village. This Native American village site includes several individual milling holes, it is one of the oldest in Greenhorn Creek. No trespassing is allowed. (Site CA-CAL-1570/H, Locus 2)

PCR 5, Southern Village. Only a portion of this village site is within Greenhorn Creek. No trespassing is allowed within the PCR area or on the neighboring land. (Site CA-CAL-1568/H, Feat. 4)



Site Stewardship

Successful protection of Greenhorn Creek's historic resources depends on a partnership between several parties:

- the City of Angels Camp;
- the Native Americans; and
- the Staff of Greenhorn Creek; the Residents of Greenhorn Creek

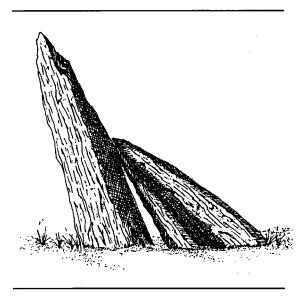
Formal monitoring of the PCR areas will be undertaken every few months by the Grounds Superintendent, the Miwuk, and archaeologists. It is of utmost importance, however, that the people who daily live and work at Greenhorn Creek be actively involved in making sure that these historic areas are treated with respect and preserved for future generations.

If any resident or staff member notices any evidence of mistreatment to the PCR areas, any infractions of the Protection Policies, or knows of any threat to their preservation, they should immediately contact the Golf Course Superintendent at the Maintenance Building, at 736-6201.

Greenhorn Creek Golf and Country Club, PO Box 1419, Angels Camp, CA 95222

Greenhorn Creek's

Geology and Geography



Located on the western slope of the Sierra Nevada, Calaveras County extends from the plains of the Central Valley across the Sierran foothills, and up nearly to the crest of the range. Elevations extend from about 200 feet above sea level on its western boundary to over 7,000 feet on its eastern border. Roughly pie-shaped, it is bounded by the Mokelumne River on the north and the Stanislaus River to the south.

The Greenhorn Creek property consists of approximately 390 acres of mostly level to rolling terrain. Greenhorn Creek winds gently across the area and then drops down into the steep, rocky ravine in the southwest corner. Elevations vary from 1280 to 1520 feet, placing the site in the Upper Sonoran life zone. The area is primarily grassland with scattered oak trees. There are

denser growths of various species of oak and bull pine (*sabiniana*) on hillsides and in drainages. Manzanita, poison oak, and blackberry form impenetrable thickets in some hillside portions. Former residents planted such species as *ailanthus* (Tree of Heaven), catalpa, poplar, fig, pear, apple, rose, narcissus, amaryllis, and daffodil, some of which survive and may be found on the property.

Greenhorn Creek is a flowing stream in the rainy season, draining into Angels Creek about a mile south of the development. Several springs occur on the property, which were used in prehistoric and historic times as a source of water. One of these was well-used by travelers on the old Smith's Flat road to Angels Camp; today it supports an ancient fig tree and entwining rose.

Geologically, the lands are situated almost entirely on the western portion of the fabled Mother Lode zone. This is a major zone of strong, steep east-dipping faults accompanied by gold-bearing quartz veins, extending from Mariposa County north-northwesterly to El Dorado County and beyond. At Greenhorn Creek the underlying bedrock consists principally of ancient volcanic flows and related materials that have been metamorphosed (altered) under geologic conditions of great temperature and pressure into a rock formation referred to as "Green Schist." Originally formed as nearly flat-lying flows and beds, the Green Schist has been intensely deformed during its metamorphism and the flat-lying beds are now standing almost on edge.

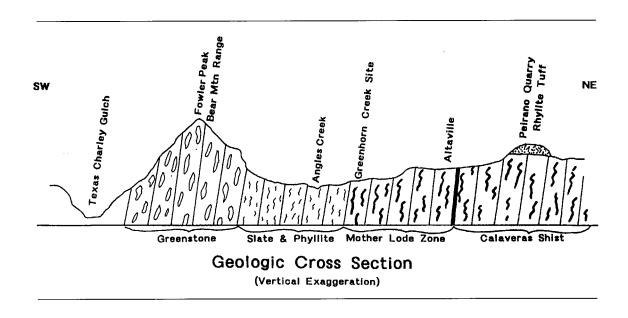
The age of these flows is at least 130 million years and may be closer to 200 or 300 million years, extending back to the early Mesozoic (130-225 million years ago) and perhaps even into the late Paleozoic (300 million years ago) geologic eras. All that is seen today of these old rocks are well-weathered and disintegrated fragments in the soil, known locally as "tombstone rocks," with only rare outcrops of relatively fresh Green Schist except in the steep Greenhorn Creek ravine.

Geologists explain that some 130 million years ago, in late Jurassic time, the Mother Lode zone was created by geologic forces related to the sliding of the Pacific Ocean "plate" under the stable North American plate. This great upheaval not only created the ancestral Sierra Nevada range, but also introduced extensive gold-quartz mineralization into faults and fractures along the Mother Lode zone, as well as in the adjoining East and West Belt zones.

The Madison-Gold Cliff vein in the Angels Camp mining district, situated immediately east of the project site, is on one of the western strands of the main Mother Lode vein. Additional western strands extend northwesterly from the project area into the Smith's Flat district.

This part of the Sierran foothills is dominated by the Bear Mountain Range, several miles west of the Mother Lode. Fowler Peak, a prominent feature about three miles southwest of Greenhorn Creek, reaches to nearly 2900 feet in elevation. Bear Mountain owes its conspicuous height to the hard and massive greenstone formation of metamorphosed volcanic flows that make up its structural spine.

A few miles northeast of Greenhorn Creek the youngest rock formations of the area can be seen, some 30 million years in age. These are beds of a light-colored volcanic rhyolite tuff, which were mined locally at the Peirano Quarry at the intersection of Murphys Grade Road and Rolleri Bypass, where the Selkirk Chimney was quarried, and from a site on Dogtown Road where the facade of the Lodge was quarried. Here, pieces of rhyolite were shaped and tooled into building blocks and used in many of the early structures in and about Angels Camp in the nineteenth century. This rock is a volcanic ash fall that has been vitrified into a firm solid material that is easily quarried with hand or mechanical saws. It rapidly forms an impervious exterior coat when exposed to the air.



Greenhorn Creek Golf and Country Club, PO Box 1419, Angels Camp, CA 95222

Greenhorn Creek's

First Residents

Earliest People



The earliest residents to enter California were nomadic hunters, descendants of migrant tribes who crossed over the Bering land bridge from Asia at least 20,000 years ago. As yet we have no direct evidence of these "Big-Game Hunters" in the Sierra Nevada foothills. We do, however, have evidence of the people who followed them, associated with what is called the Western Pluvial Lakes Tradition. This second wave of settlement marked the transition between the earlier

big-game-hunting Paleo-Indian and the more sedentary Archaic way of life. The best archaeological examples of this transitional culture are found at Clark's Flat, on the Stanislaus River near Camp 9, in Salt Spring Valley, at the confluence of Littlejohn's and Underwood creeks, and at Texas Charley Gulch, about 8 miles down the Angels Creek drainage from Greenhorn Creek.

These earliest Calaveras County residents experienced a much wetter and cooler climate than that of the present. These people continued some practices held over from the earlier Paleo-Indians who made Clovis and Folsom projectile points. Stone tools were still beautifully crafted and abundant points indicated a similar dependence on hunting. Other aspects of their culture foreshadowed developments which characterize the Archaic, including the use of grinding stones—manos and metates—and the trend toward a more sedentary lifestyle. These early foothill populations lived in relative isolation and archaeological evidence indicates that they did not trade regularly with neighboring groups.

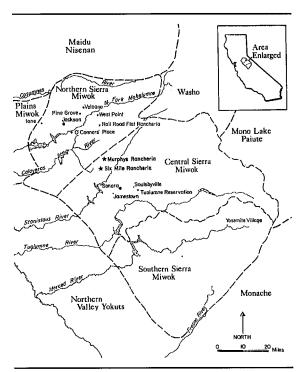
Somewhere around 7,000 years ago there was a dramatic change in the California climate, resulting in major population shifts. At the close of the Ice Age, the climate in the western United States shifted from cool and moist to hot and dry, with severe drought stretching from around 7,000 to 5,000 years ago. The early part of this period was so devastating that in some areas of the foothills the slopes were denuded of first vegetation and then topsoil, exposing underlying clay and bedrock. The rains that did come were summer monsoons which caused massive erosion, burying former meadows under several feet of alluvial deposit and clogging the rivers with silt.

About 5,000 years ago relief came with a cooler and more moist climate. In the Delta, the rich and populous Windmiller culture experienced its florescence, sending the ancestors of the Yokuts out to the eastern edge of the San Joaquin Valley. These people occasionally traveled up into the lower Sierra Nevada foothills, sometimes interring their dead in the caves which were common in the limestone formations. There were also permanent foothill residents at this time, however, as discovered at the recently excavated Skyrocket site in nearby Salt Spring Valley. By 3,000 years ago several large villages had been established along the Stanislaus River drainage to the south. Throughout the region there was a general cultural florescence with trade extending to distant coastal and Great Basin groups. Greenhorn Creek's Protected Cultural Resource areas PCR 3, PCR 4, and PCR 5 may represent small, seasonal hunting camps used by Native Americans during this time.

Evidence throughout the Sierra Nevada suggests that between 1,500 and 500 years ago there was a rapid drying and warming that played havoc with settlements in the lower foothills. At the same time, there was a revolution in hunting and warfare technology as the bow and arrow, invented several thousand years earlier on the eastern seaboard, reached California and virtually overnight replaced the atlat! throwing dart. It has been suggested that this massive culture change seen in the archaeological sites of the region represents the migration of the Miwuk people into the Central Sierra.

The Sierra Miwuk

The designation Miwuk describes a language group whose people, over time, became dispersed over north-central California. They are distinguished by geographic region, as these very different environments greatly influenced how they lived. The Coast Miwuk lived north of the Golden Gate, around Marin County; the Bay Miwuk occupied the delta area of Walnut Creek and Rio Vista; and the Plains Miwuk lived in the eastern valley, along the lower reaches of the Cosumnes and Mokelumne Rivers. The Sierra Miwuk, encompassing the foothill region from the Cosumnes south to the Fresno river, are further divided into Northern, Central, and Southern groups. The area of Angels Camp and Greenhorn Creek were within the territory of the Central Sierra Miwuk.



In prehistoric times, the population of the Sierra Miwuk is estimated to have been about 7,000. People lived in extended family groups, forming villages of 30-150 persons. Several villages were aligned in tribelets under hereditary chiefs, who hosted religious and social gatherings in the tribelet village roundhouses. PCR 1 at Greenhorn Creek is likely such a tribelet village. Most of the Miwuk's food was obtained from plants, augmented by hunting and fishing. Although earlier peoples processed acorns for food, the Miwuk used the acorn as a staple, developing complexes of multiple grinding holes for producing the acorn flour, such as are present in the southern portion of PCR 1. Roots, bulbs, berries, and seeds were also gathered seasonally. Deer herds provided a staple meat source. Tribelets, associated with specific herds, would disband in the spring and follow the browsers to the cooler high country, returning with the deer in the fall to gather in their winter village sites. Trout and salmon were taken from

the rivers and birds from the lowland marshes. The Miwuk lived in conical houses made of bark, made clothing of plant fibers and animal skins, fabricated a wide array of stone and bone tools, and wove beautiful baskets. They participated in a lively trade with the Washo and Mono of the Great Basin, and through the Yokuts with the Coastal groups to the west.

The presence of foreigners along the California coast beginning in the late 1700s was felt long before the newcomers actually appeared in the foothills. Trade with the Spanish missions and ranchos brought not only manufactured items but also new diseases to which the Miwuk population had no immunity. Even before the tidal wave of gold seekers struck the foothills, the population was already much reduced. By 1860 only several thousand Sierra Miwuk survived; by 1910 they numbered in the hundreds. With their forests cut, meadows dug up, and creeks and rivers clogged with silt from mining, the remaining Miwuk retreated from their traditional lands, established small communities, and survived.

CENTRAL SIERRA ME-WUK

The Me-Wuk people of California have traditional territory ranging from San Francisco Bay to the summit of the Sierras, Placer County to the north and Mariposa County to the south. Major groups (containing sub-groups) represented in this area are the Coast, Bay, Lake, Plains, Northern, Central, and Southern Me-Wuk.

The territory represented in this region is occupied by the Central Sierra Me-Wuk. The people re hunters and gatherers and their diet consisted of wild plant foods and mammals, birds, and fish. Utilizing a variety of environments, the people would travel to the summit of the Sierras after spring for the gathering of wild plant foods, hunting, and trade. After summer the people would then travel to the coast for trading.

In the Central Sierra Nevada foothills, Black Oak trees were in abundance, providing the Me-Wuk with one of the most valuable trading resources--acorns. The Black Oak acorn is the most preferred for acorn soup and bread. With this valuable resource, the Me-Wuk would trade with other Indian people on the Eastern Sierra for salt, obsidian, and other items and the Coastal Indian people for olivella and abalone shells, trade beads, and other items.

A Central Sierra Me-Wuk village resembled a wheel with a hub (the main living area) and spokes (areas in which different activities occurred, such as tool manufacturing and food processing areas, cemetery, gathering, children's play, and shaded work areas for the women). The roundhouse was the center of activity. It was a place where the people gathered for ceremonies, meetings, meals, and conversation. Individual houses were conical in shape, and made of cedar bark slabs tied with wild grapevine. The floors of the roundhouse and dwellings were covered with pine needles. For warmth, blankets were made of woven rabbit pelts and other furs. Each village would have a captain, and average in size between 40 to 400 people.

Today, the Central Sierra Me-Wuk Cultural and Historic Preservation Committee has been sanctioned to oversee the protection and preservation of traditional cultural resources areas. This Committee represents five Me-Wuk Bands in a four-county area: the American Indian Council of Mariposa County, the Tuolumne Bank of Me-Wuk Indians, Calaveras Bank of MiWok, and the Jackson Band of Miwok and the Sierra Native American Council, both of Amador County. The Committee actively participates in cultural resource management for future generations of Me-Wuk children so that the traditional cultural heritage is carried forth. Also today, significant legislation has been enacted to provide processes for protection of cultural resources.



Greenhorn Creek's

Miners and Settlers



Those who replaced the Native Americans on the land were the prospectors and placer miners, who first found "color" in the small tributaries and drainages above Greenhorn Creek, and then worked their way up to its source in the Mother Lode vein. As the story goes, Greenhorn Gulch was a rich watercourse in which the gold was not discovered by the veteran miners of the district, and to which, as a joke, they had directed some newly arrived "greenhorn" miners who made the discovery. When this readily available gold was depleted, the miners moved on to richer strikes elsewhere, leaving behind the remnants of their assiduous labor: rock-lined channels, piles of hand-stacked waste rock, and the rock foundations of their simple dwellings.

Close behind the prospectors and miners came the agriculturalists, families from the eastern states who saw opportunities for stock raising and truck gardens on the open grasslands. The ranching and agricultural history of the Greenhorn Creek development has been linked with one family, the Selkirks, and their daughters and families, from the mid-1850s to the late 1930s—more than 80 years.

David and Perlina Selkirk and their two daughters took up 160 acres of land on the Smith's Flat to Angels Road in 1856. There they resided in a log cabin before building a small home with a magnificent stone chimney in 1862. Two other daughters, and a son who died in infancy, were born on the ranch.

While blasting stumps to clear his land, David Selkirk was blinded by exploding dynamite, and thereafter made his living playing the fiddle at local dances. Subsequently, Perlina ran the ranch with the assistance of her daughters and Ah Sun, a Chinese immigrant who came to the ranch as a young boy and remained with the family until his death. The traces of their endeavor are distinguished today by a stone chimney, corral, and stone walls that will be preserved for future generations to enjoy and will be developed as an interpretive park with public access encouraged. Ah Sun's cooking hearth is a feature of the Fourth Fairway.

The Selkirks, like many others in the Angels Camp area, made their living by practicing a mixed economy. They planted orchards and a vegetable garden, raised cattle, sheep, goats, and poultry, planted and harvested fields of hay with horses and mules, and boarded local miners and farm workers. The daughters acquired husbands and ranch holdings were enlarged and used by all family members.

The eldest Selkirk daughter, Sarah Jane, wed local miner Isaac McCauley in 1867 and they took up 90 acres of land adjoining her parents. There the McCauleys built a pleasant frame house with all the accouterments of a prosperous ranching operation. The Ninth Green now occupies this site.

Daughter Jennie, the second eldest, found two husbands among her mother's boarders. After her first husband, Englishman George Lucas, died, she married local miner James Maltman and they took up lands in the southeast portion of the property.

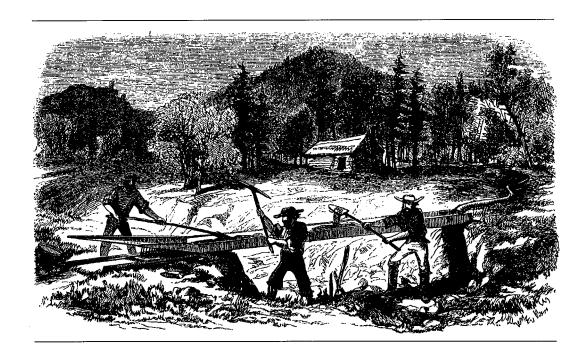
Daughter Alice married farmer and miner Charles Hinkleman and they also resided on the family lands, in a house they built on the Greenhorn drainage shaded by two catalpa trees. There they resided from 1883-1900, raising the two children of the youngest Selkirk daughter, Clara, and her second husband John Steele.

In the early 1900s most members of the Selkirk and McCauley families moved to Stockton. The three McCauley sons, William, Burton, and Edward, continued to operate the dairy business, selling cordwood to supplement their income. Sarah Jane returned to the ranch in summers, while Jennie and Alice and their families only returned for periodic visits. In 1937 the ranch was sold to local cattleman Ed Wilson, and the last Selkirk descendant moved from the ranch.

In the early 1850s gold was discovered in the Mother Lode, or Boulder, vein, on the northeastern boundary of the property. The Lindsay mine, discovered in the 1850s and worked sporadically through the 1930s, is located on the property, marked by shafts, adits, vein workings, and extensive piles of waste rock.

Another mineralized zone, known as the western strand of the Mother Lode, was located southwest of the Boulder and included several small veins which were developed on the Blair, El Dorado, Jumper, Tough Nut, Mary Belle, and Triple Lode claims. There, from the 1880s through the 1920s, the Minard, Blair, Susich, and Belloni families, from the United States, England, Serbia, and Italy, resided and made a living working their claims and obtained fruits and vegetables from small gardens. During the Depression other miners staked claims and wrested enough gold from the land to eke out a living for themselves and their families. This area, located on the western side of Greenhorn Creek, is marked by numerous piles of waste rock, vein workings, shafts and adits, and the stone and concrete footings of two generations of mills on the Blair Lode.

A hearth, next to piles of rocks from placer mining, surrounded by a scattering of Chinese ceramics and other artifacts, was all that remained of the abode of two Chinese miners. These "Celestial" placer miners were able to make a living on ore left behind by earlier prospectors. Two of these men, Ah Young and Ah Len, resided at this site in 1870. Their stone hearth, on the north side of the lake, has been restored.



Greenhorn Creek's

Street Names

Alawa Place

Information to come.

Albasio Court

Dr. Dante Albasio, a long-time (1947-1987) country doctor in Angels Camp and an avid golfer, has been honored for his work in the community.

Chimney Hill Court

All that remains of the Selkirk family home is a stone chimney, quarried from local rhyolite tuff, and dated "1862."

Cornelia Place

Cornelia Barden Stevenot, a native of Angels Camp and descendant of the pioneer Rolleri and Barden families, taught school in that community for over 40 years.

Fiddler's Court

After he was blinded while blasting stumps in 1857, pioneer settler David Selkirk supplemented the ranch income by playing the fiddle at local dances and events.

Lindsay Court

The Lindsay, a hard-rock mine located on the eastern boundary of the Greenhorn Creek development along McCauley Ranch Road, was discovered in 1855. It was active in the periods 1882-1888, and again in the early 1890s to 1900s.

Lightner Place

Discovered in the early 1850s, the Lightner Mine was productive from the mid-1880s to World War I. All that remains of the 30-stamp mill, constructed in 1897, is the rusting hoist drum, located south of Highway 49 above Utica Park in Angels Camp.

McCauley Ranch Road

Isaac and Sarah Jane McCauley were the son-in-law and daughter of the Selkirks, pioneer settlers of Greenhorn Creek. The McCauleys purchased lands within the eastern portion of the Greenhorn Creek development and they and their descendents eventually managed the combined ranch holdings. The Ninth Green is located on the site of their home.

Miwuk Way

The Sierran Miwuk, a Native American group who shared a common language, resided in the Greenhorn Creek drainages from about 1000 years ago to the time of the Gold Rush.

Olivia Place

Olivia Barden Harbinson, sister of Cornelia Stevenot, was a member of the pioneer Angels Camp Rolleri and Barden families. She was the namesake of her aunt, beloved Angels Camp innkeeper "Grandma Rolleri." Olivia was director of the University of California Extension Program in San Francisco for over 30 years.

Raggio Court

Named for a pioneer family in the Angels Camp area, whose descendant Paul Raggio, was mayor of Angels Camp when Greenhorn Creek was developed.

Rock Forge Loop

A rock footing, located near the rock wall on the west side of the Fourth Fairway, was used as a forge in the early years of the 20th century. Archaeological excavations, however, revealed that the structure was originally constructed as a U-shaped Chinese cooking hearth, probably by ranch hand Ah Sun, and later modified into a forge.

Sasa Place

Sasa is the Miwok word for the Interior Live Oak (*Quercus wislizenii*). Acorns were a primary food of the Miwok, gathered from the ground into burden baskets when they fell from the trees in the autumn. The Interior Live Oak is the most common native oak at Greenhorn Creek.

Selkirk Ranch Road

Pioneer settlers David and Perlina Selkirk, established their ranch here in 1856, first residing in a log cabin. In 1862 they built a house, now marked by a remnant stone chimney and stone corral west of the Fourth Fairway. Their descendants remained on the ranch until the late 1930's.

Smith Flat Road

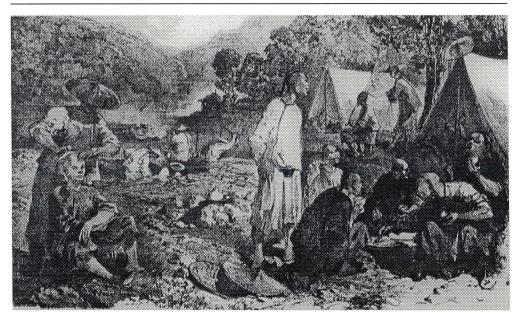
This was the name of the old road which traversed the Greenhorn Creek property from Smith's Flat on Highway 4 to Angels Camp. A major route from Stockton, it was abandoned in the early 1900s.

Springhouse Road

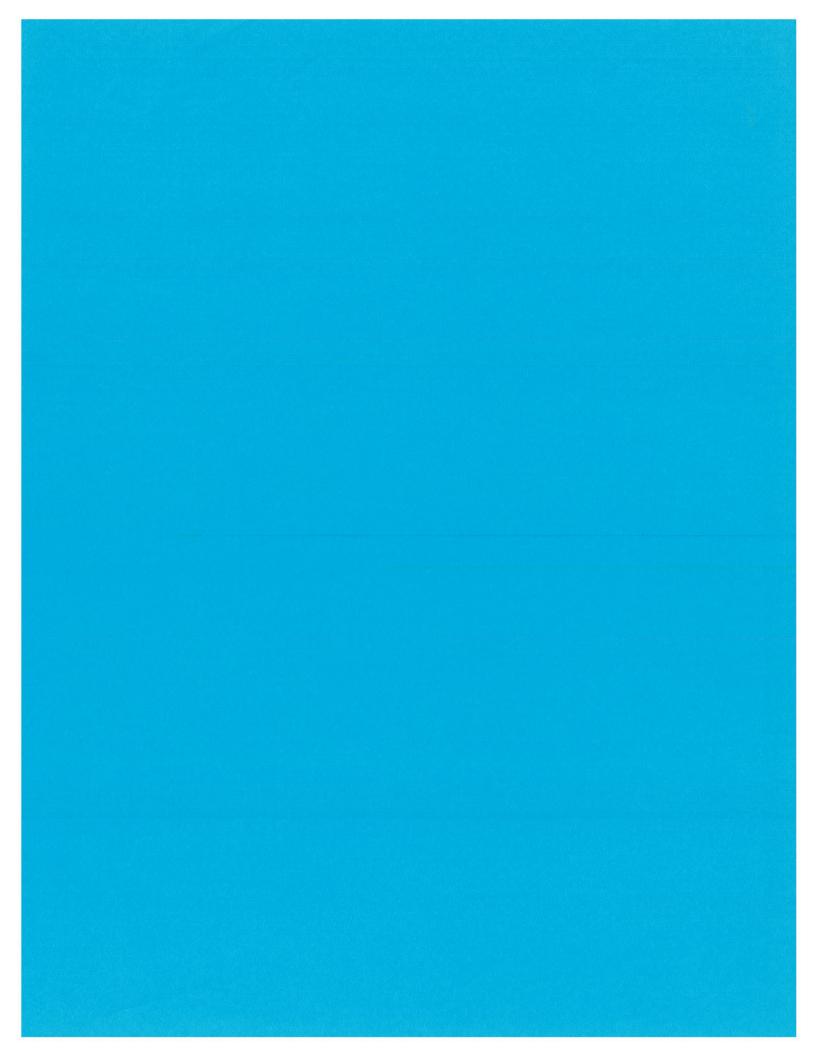
A residence, located adjacent to an improved spring, was once located on the knoll above the drainage. Only remnant stone footings and a scattering of artifacts marked its original site.

Stone Corral Court

A stone corral, located in the Selkirk Historic Preserve, was built by members of the pioneer Selkirk family to contain their stock.



Chinese placer miners' cooking hearth (in center of illustration).



HISTORIC PERIOD OVERVIEW

HISTORIC PERIOD OVERVIEW

The economic and social development of the Angels Camp/Altaville area has centered around several themes: mining, ranching and agriculture, ethnic settlement, water development, and transportation networks, all historically linked to the presence of gold in its streams and vein systems.

REGIONAL SUMMARY

Calaveras County

Located in the foothills of the Sierra Nevada, Calaveras County extends from the plains of the Central Valley to just below the crest of the Sierra. It ranges in elevation from about 500 feet above sea level on its western boundary to over 7,000 feet on its eastern border. Roughly pie-shaped, it is bounded by the Mokelumne River on the north and the Stanislaus River on the south.

The name of the county was derived from the Calaveras River which courses through its northern half, reputedly named Rio de los Calaveras ("River of Skulls") by members of the 1806 Moraga expedition who discovered the skulls of Native Americans along its banks. The first recorded visit by a non-native to the area was in October, 1806, when Gabriel Moraga, with his diarist and chaplain, Padre Pedro Munoz, visited the Stanislaus River while searching for inland mission sites (Munoz 1806). During a subsequent visit in 1808, the Moraga expeditions named the major rivers in the region, calling the Stanislaus River Rio De Nuestra Senora de Guadalupe.

General Mariano Vallejo was in the area in 1829 with a party in search of the escaped mission Indian, Chief Estanislao, for whom the river may have been named. It is believed that Estanislao was named at baptism, for one of the two Polish Saints Stanislas. The river, which became known as Rio Estanislao, was Anglicized into "Stanislaus River" by John C. Fremont in 1844 (Fremont 1845).

Jedediah Smith appears to have been the first Anglo-American to enter the area. From his camp on the lower Stanislaus River, Smith and two companions traveled upstream and crossed the Sierra in eight days in May of 1827. The Bidwell-Bartleson party entered California somewhere in the eastern part of the region and traveled down the Stanislaus River drainage in 1841. In February 1844, Kit Carson and John C. Fremont entered the upper elevations of Alpine County on their way to Sutter's Fort for supplies. There is substantial evidence to believe that French trappers were living in the vicinity of Mokelumne Hill as early as 1837. Members of the Hudson's Bay Company, they were headquartered at French Camp near Stockton, and trapped for beaver in the streams of the Sierra (Gilbert 1879) (Davis-King, et al. 1992:4.1-4.3).

Gold Mining

The discovery of gold in the American River in 1848 precipitated a world-wide rush of peoples to the Sierra Nevada foothills. Virtually overnight the land was populated with gold-seekers from the Atlantic seaboard, the Midwest, Mexico, Central and South America, Europe, and Asia. The movement that ensued has been called the greatest mass migration in human history: an economically, ethnically, and culturally diverse population converged upon the Sierra foothills, all in search of the promised gold. That same year California was annexed to the United States, formalized by the treaty of Guadalupe Hidalgo, facilitating the arrival of an estimated 10,000 gold-seekers to the

Stanislaus River area by the end of 1849 (Hall 1978). One year later, when California was granted statehood, Calaveras was one of its original 27 counties.

Although it is not known who first mined for gold in the region, pertinent evidence supports the fact that the people were of Hispanic origin. Diaries and accounts of American miners recount finding Mexicans working the flats and streams upon the latter's arrival in the area in 1848. There are also accounts of Native Americans assisting in mining and in leading miners to specific locations, but it is probable that they learned from the Hispanics, as there is no indication that they ever mined the precious metal for themselves prior to the arrival of non-native people.

Gold was located in Calaveras County along the banks of Carson's Creek, and the Mokelumne, Calaveras and Stanislaus Rivers, as well as in virtually every stream drainage. Towns, such as Murphys, Angels Camp, and Mokelumne Hill, quickly sprang up around the major strikes.

Extensive placer mining was carried out during the early years of the Gold Rush in nearly all the ravines and gulches in the Angels Camp area and the results of this work may still be seen over much of the project area.

In demographic terms, mining attracted a specific type of individual: at first, young, unmarried males seeking quick wealth during the Gold Rush era; later, married and unmarried men looking for employment in hard-rock mining. Given the composition of the population and the vagaries of the mining economy, with its cyclical pattern of prosperity and depression, instability was injected into the population from the outset. Immigrants flowed in with each mining boom and poured out with the arrival of hard times.

Mining also accounted for the location and names of most of the towns and communities within the area. The larger towns were located where major strikes occurred, or where supply camps sprang up to provide necessities for the surrounding encampments. Along the Mother Lode, Angels Camp was named for Henry P. Angel, who operated the first trading post there in 1848, while Carson Hill was named for James H. Carson, who first reached the area in August, 1848. San Andreas and Mokelumne Hill were the center of mining in the Tertiary stream channels. San Andreas, for Saint Andrew, was the name given by Mexican miners to the first church in the community, while Mokelumne Hill is after the Mokelumne River, possibly named for the Miwok or Yokuts village of Mokul (Gudde 1969:207).

Other communities, such as Murphys (named for John and Daniel Murphy, miners who arrived in 1848 and set up a trading post), and West Point (called Indian Gulch until 1853), were located on the East Belt of the Mother Lode; Copperopolis and Campo Seco were on the West Belt. Still other towns were centers of placer mining on the major rivers and their tributaries.

Until recent times, socioeconomic development in the area has occurred primarily within the context of the mining industry. Not only did the industry lead to the formation in 1850 of Calaveras County, mining was the main pillar of the local economy for nearly 75 years thereafter. Almost all other businesses operated within the shadow of mining and were directly or indirectly affected by it. Mining changed over the years, from early placer mining, to hydraulic and hard-rock (or quartz) mining in later years (Davis-King and Marvin-Cunningham 1990). Consolidation of the mines took place during the 1880s and 1890s, facilitated by advances in technology and financing.

Angels Camp and Altaville

The histories of Angels Camp and Altaville are typical of the many other such towns in the foothills, with their booms and busts, colorful characters, and almost century-long dependence on mining for their economic base. The prosperity of the communities was first dependent upon the rich placer gold found in Angels Creek and its neighboring tributaries of China Gulch, Six Mile Creek, Cherokee Creek, Greenhorn Creek, and their drainages.

It wasn't long, however, before both communities had become trading centers for the neighboring mines. Angels Camp, named for Henry Angel who operated one of the first trading posts in the booming camp, had a population of over 300 by the spring of 1849 (Wood 1955:9). Altaville, also known as Forks in the Road and Cherokee Diggings, took its present name at a town meeting in 1857 (Gudde 1969:8).

It was not until 1854 that the first important quartz locations were made, all on the Davis-Winters Lode, where the Winter Brothers and Davis & Co. were ground-sluicing. This lode roughly paralleled present Highway 49, running southeasterly from Altaville down to Angels Creek. Over the next few years the vein was developed all the way to the creek, over 4,700 feet in length. The low grade of the ore, however, coupled with the difficulty of processing the sulphurets bound up in the ore, ended the boom.

There was intermittent activity through the 1860s, and another small boom in the 1870s, but little sustained mining until the late 1880s (Leonard 1968:1), when advanced mining and milling technologies and the availability of foreign capital combined to warrant large-scale underground mining. Although not a consistant employer, the industry experienced several significant revivals, particularly in the late nineteenth century and again in the early twentieth, and provided the lifeblood of the Angels Camp area.

Of the numerous mines along the vein, only a few became significant producers, and then only after the consolidation of several small claims. The most productive of these were the Utica, Angels, Lightner, Stickle, Sultana (Bovee), and on the Fritz. At the height of the mining activity in Angels, 320 stamps were dropping daily. These mills recovered more than \$25,000,000.00 in gold before closing in the 1910s and 1920s (Leonard 1971:10).

Two other important claims, the Gold Cliff and the Madison, were located on a second vein--considered to be the main Mother Lode--about one-half mile west of the Davis-Winters Lode. They eventually became part of the Utica holdings and operated through the 1920s. This vein system was located immediately northeast of the project area, and undoubtedly contributed most of the placer gold to its streams and drainages.

The preeminence of mining ensured that all other local industries would be its auxiliaries. Hence the lumber industry developed primarily to meet the demands of mining operations (construction of miles of flume, with their decadal replacement, headframes, and timbers for the miles of shafts and tunnels) but did not come into its own until the demise of hardrock mining in the twentieth century. Transportation, water, power generations, and ranching have all been directed and influenced by the mining industry (Davis-King and Marvin-Cunningham 1990).

Close behind the prospectors and miners came the agriculturalists, families from the eastern states who saw opportunities for stock raising and truck garden operations on the open grasslands. Following the decline of placer deposits in the Mother Lode after ca. 1860, ranching became more important to the foothill economy. Settlers established farms in the area where they grew hay, alfalfa, wheat, and planted orchards. Most

families practiced a mixed agricultural economy, raising cattle, sheep, hogs, and poultry, which supplied them with a steady supply of foodstuffs augmented by vegetable gardens and orchards.

Some families established vineyards and produced wines and brandies for personal use and for sale, while others bottled the clear, fresh waters of local springs and sold them commercially. Hops were grown and baked in kilns in breweries that produced local beers and ales.

Impetus for agricultural development came from disenchanted county boosters who blamed mining for Calaveras' socioeconomic problems and perceived farming as a panacea. A host of problems plagued the county's agricultural development, not the least of which was the public perception of the foothills as mining territory incapable of fostering anything better than infertile "bedrock ranches." Local farming never developed beyond a subsistence level and gradually gave way to livestock operations. As the mining economy declined, however, farming gained importance as a family enterprise which helped to establish more permanence and stability in the society (Giovinco 1980).

Recent History

All of the mines in the town of Angels Camp closed during World War I, never to reopen. On the western fringes, the Gold Cliff struggled on for a few more years, as did the smaller family-operated mines in the area. Only the Melones Mine at Carson Hill, a few miles south of town, provided steady employment for a few of the numerous out of work miners. Many families moved from the area, seeking employment in the towns of the Central Valley or Bay Area, and Angels Camp slumbered.

The City of Angels, the only incorporated one in Calaveras County, was formed from Altaville and Angels Camp in 1924, reflecting the hopes of that era for an increased prosperity. Only five years later the Great Depression would provide an impetus for growth, as prospectors and miners flocked to the foothills to eke out a living on the small amounts of placer gold remaining in the streams and to work in the hard rock mines, many of which reopened in the 1930s.

World War II, by Executive Order L208, effectively ended gold mining in the Mother Lode, but the recent fluctuations in the price of the ore has inspired the reopening, and subsequent closing, of several mines. The Angels area, like the rest of the foothills, has recently experienced a rapid growth in population and the economy is presently dependent upon employment by units of government, service industries, manufacturing, construction, tourism, and agriculture. In 1992 the lands in the project area were annexed to the City of Angels as the Greenhorn Annexation, and the city prepared for yet another influx of population.

Project Lands

The history of much of the land in the project area is closely entwined with one family, the Selkirks and their descendants. David Selkirk, a native of New York who learned to mine at Galena, Illinois, first came to California in 1855. The following year he sent for his wife, Perlina, and their two daughters, taking up a land claim to 160 acres watered by year-round springs. There they built a log cabin, and, in 1862, a frame two-room house with an impressive stone chimney.

Three other children were born to the Selkirks after their arrival, a son who died in infancy and two daughters. All four daughters married locally, and the oldest, Sarah Jane,

took up the adjoining ranch lands with her husband, Ike McCauley. Daughters Jennie and Alice resided on the ranch after their marriages to miners and the expanded family practiced a mixed economy, ranching, farming, and mining. In the 1890s the McCauleys and their sons went into the dairy business, an operation that continued until the 1930s. After the deaths of the third generation, the Selkirk/McCauley Ranch was sold in the early 1940s to local cattleman Ed Wilson; it has been used for cattle grazing since that time.

The remainder of the project lands were associated with placer and hard rock mining, and were undoubtedly worked sporadically since the earliest years of the Gold Rush. Their most recent development, however, occurred in the 1910s and 1920s, primarily on the Triple Lode Claim.

MINING HISTORY

Placer Mining.

The names of the first men to placer mine in the project area are lost to history, but undoubtedly they first found "color" in the small tributaries and drainages above Greenhorn Creek, and then worked their way up to its source in the Mother Lode Vein.

Although not as productive as the placer mines along the Angels Creek tributaries, the extensive workings within the project area attest to the finding of at least an appreciable amount of gold. Placer mining remains were found along Greenhorn Creek and its tributaries and extend almost as far north as the Mother Lode Vein. Rock-lined channels, piles of hand-stacked waste rock, and random piles of stream gravels and cobbles were found throughout the drainages. Dams and ditch systems, carrying water from the tributaries, as well as from the Gold Cliff Ditch, were found in virtually every drainage, providing the necessary water for ground-sluicing and placering operations.

Two residential sites within the project area appear to be related to early placer-mining activities. A stone foundation and collapsed chimney are all that remain of a placer miner's cabin, located on the east bank of Greenhorn Creek above a placer mining ditch and rock-faced dam. The cabin appears to date to the earliest years of the Gold Rush, before the land was taken up by the Selkirk family.

Another domestic feature related to placer mining activities is a semi-circular stone hearth, with associated Chinese artifacts, which was apparently used by Chinese miners. Two miners, Ah Young and Ah Len, were noted by the Federal census taker in 1870 as residing somewhere between the Selkirk and McCauley homes and this may have been the location of their claim.

It is also probable that members of the Selkirk and McCauley families were responsible for many of the placer mining features in the project area as they were engaged in placer and hard-rock mining activities as well as farming. Family members recalled that the McCauleys mined throughout their lands, utilizing the waters of the Gold Cliff Ditch, to which they had water rights on specific days (Rodney McCauley, personal communication 1993).

Hard Rock Mining.

The history of the hard-rock mines in the project area closely resembles that of the more famous Angels Camp mines to the east on the Davis-Winters lode. They were discovered in the 1850s, operated sporadically through the 1860s, 1870s, and early 1880s, boomed in the late 1880s and 1890s, and closed forever in the 1910s and 1920s. By the early 1890s

most of the claims in Angels Camp had been acquired by the Utica Gold Mining Company, which operated them in conjunction with their other mines in the area.

The first mining was by open cut on the veins, then in shafts with the ore and waste rock raised by windlasses, until, finally, large headframes were constructed to hoist the deeply buried ores. The first mills were primitive arrastras, then small mills of two to five-stamps were erected in the 1880s, larger 10- to 20-stamp mills in the 1890s, and, eventually, 40-stamp mills in the 1910s and 1920s. Power for the hoists and mills was provided at first by water and steam. The Madison and Gold Cliff mills were both operated with overshot water wheels, with water from the Gold Cliff ditch supplying the power. Other mills operated with steam power, necessitating the logging of acres of timber to feed the horizontal boilers. In 1899 the mills switched to electric power, provided by the Utica Powerhouse constructed that year above Murphys (Marvin and Stewart 1992:9).

The Mother Lode, or Boulder, Vein is located along the northeastern boundary of the project area. The most important of the claims were the Gold Cliff and the Madison, located in 1855 and 1857, but mined as early as 1850. Other mines on the Mother Lode Vein were the Lindsay, Pioneer, Pilot Knob, and the Brown, Smythe, and Ryland Consolidated. Just west of the vein, and east of the project area, were located the North Star, Western Star/Dorroh, and the Adeline/Golden Rule. The latter three mines were never very successful, although Otto Dolling erected a 40-stamp mill on his North Star claim in 1909, only to close forever in 1913. Although substantial underground development was done through the North Star and Angels Deep shafts, production from these properties was also relatively insignificant.

Located almost completely within the project area boundaries, the Lindsay mine, also known as the Black George, Machu, San Antonio, and Antone, was discovered in 1855 and active in the period 1882-1888 and the early 1890s and 1900s. It was owned by Mr. Keyes, who also owned the Gold Cliff mine, and was named for Mrs. Keyes maiden name (Frank Crespi, personal communication 1988). In 1890 the Lindsay was controlled by the Utica Gold Mining Company who worked the ore with arrastras. It was developed by an open cut and a 100-foot shaft (Clark and Lydon 1962:162), with the ore milled in the adjacent Gold Cliff. During the mid-1940s the Tindell family worked a cut and shaft and operated a small mill on the claim.

An area of intense mining activity, including cuts, vein workings, shafts, and adits, is located on the southwestern boundary of the project area, on both sides of Greenhorn Creek. A platform, supported by a rock wall, may have once supported a portable mill. As the lands on which the mining activity are located were patented to David Selkirk and J. Glass, it is probable that they were leased from them. The Star of India mine was developed just west of the site on another tributary of Greenhorn Creek and may have been operated by the same owners. It was active during the 1890s and developed by an adit and shafts (Clark and Lydon 1962:181).

Another mineralized zone, the western strand of the Mother Lode, was located southwest of the Boulder Vein and included several small veins which were developed on the Blair, El Dorado, Jumper, Wagon Rut, Gold Hill and other claims. Of these mines, the Tough Nut, Mary Belle, Consolidated El Dorado, and the Blair Lode are located within the project boundaries. First worked in the 1880s, all of the claims were located in the Smith's Flat Mining District, except for the Tough Nut which was in the Altaville District. These mines were small, and little gold was recovered. All of the claims are marked by extensive early placer mining activities, as well as 1890s-1920s surface vein workings, adits, shafts, cuts, and prospects.

The earliest of these to be developed, the Blair Lode, was first worked by Thomas Blair in the early 1880s. Hard-rock mining commenced in 1892 when Blair began working a fissure of the main vein (Irelan 1893:172). He was assessed that year for a quartz mine bounded north by Graham's claim, and known as Blair & Co.'s claim; the only improvement noted was a cabin. In 1893 a 20-stamp mill was erected and the low-grade ore mined from a 450-foot shaft with two stopes. Sometime during the 1890s Blair built a residence on his claim, up a drainage above the mill.

There was apparently no further mining activity after 1898 until the property was acquired by Triple Lode Gold Mines, Inc., in 1920 (Logan 1934:148-149). The newlyformed company sunk a new shaft with 3,000 feet of drifts and crosscuts, about 700 feet away from the old one, to a depth of 560 feet. Plans were underway in 1924 for the erection of a new mill when the company fell into financial difficulties as a result of labor liens and all work ceased (Logan 1934:148-149).

Just north of the Blair Lode was the Consolidated El Dorado Lode, surveyed in 1922 for Triple Lode Gold Mines, Inc., but most of the features appears to date to the 1880s and 1890s. A residential site, denoted by a cabin foundation, privy, historic trash scatter. and a cache of metal blacksmith tools was located in the northwesterly section of the claim, just below a historic ditch.

Adjoining the Consolidated El Dorado on the north was the Mary Belle Lode, surveyed for Stephen Susich in 1916 and 1922. Susich resided with his family in a house on the property while working his mining claim.

Mark Belloni surveyed his Tough Nut Lode in 1921. North of the Mary Belle, Belloni's claim included a cabin where he resided with his family.

Several small shafts, cuts, and prospects were located on the Selkirk/McCauley lands, and were undoubtedly worked or used by members of the family. Isaac McCauley, the husband of Selkirk daughter Sarah Jane, was assessed in 1881 for a waterwheel and two arrastras, located in Altaville, where he may have been working the ores recovered on the Selkirk and McCauley lands. According to family letters, McCauley took over the Charlie Waterman mine at Smith's Flat in 1894 (Selkirk Letters 1894), and probably also worked others.

Daughter Jennie first married a miner named George Lucas, and, after his death, miner James Maltman, who patented the lands in the southeast corner of the project area. In 1895 Mrs. Selkirk leased the waters of a spring to George Turner for use on his claim (Selkirk Letters 1895), and some of her boarders may also have mined on the property.

RANCHING AND AGRICULTURE

The location of the first Selkirk abode, a log cabin, is unknown, although it may have been the one constructed on a slope above year-round springs on a tributary of Greenhorn Creek. This site, marked by a cellar depression and artifact scatter, may also have been the later home of Ah Sun, a Chinese immigrant who came to the farm as a boy and remained until his death.

In 1857 David Selkirk was blinded by exploding dynamite in a tragic accident and afterwards made his living playing the fiddle for local dances. Perlina then took over major responsibilities in running the farm, with the aid of their children and Ah Sun. As

well as running the farm, Mrs. Selkirk took in boarders, usually local miners (*Stockton Record*, January 13, 1951).

In 1862 the Selkirks built a two-room house, with a fine stone chimney constructed by their friend and neighbor, Alexander Love. Behind the house was a storage cellar; a blacksmith shop was located south of the home and stone walls and a stone corral delineated the yard. A garden pad was located on a hillside south of the stone wall, where vegetables were grown in season. A remnant orchard, consisting of two fig trees, and two clumps of rose bushes are the only exotic vegetation remaining on the ranch. Water for residential and agricultural use was obtained from a ditch, which branched from the Gold Cliff Ditch north of the project area.

The first of the Selkirk daughters to marry was Sarah Jane who wed Isaac McCauley at her parents' home in 1867. By 1870 they had taken up residence on the adjoining McCauley Ranch, along with her sister Jennie and her husband, the English miner George Lucas, who had been a boarder in the family home (Calaveras County Vital Statistics; Stockton Record, January 13, 1951; Federal Census Record 1870).

David Selkirk died in 1878 and Jennie's husband the following year. Jennie and her young daughter Hattie then moved back into her mother's home, where her younger sister Clara still lived. Alice, the third daughter, wed Charles Hinkleman in 1880 and they resided on the McCauley Ranch for many years before moving to Stockton. In 1882 Jennie remarried, this time to miner James Maltman, another boarder, and they took up land in the southeast corner of the project area (*Stockton Record*, January 13, 1951; Patent Maps; Federal Census Record 1880).

The youngest daughter, Clara, married teamster Frank Bates in 1885. Divorced from him, she married John Steel, by whom she had two children. After that divorce she married a man named Rogers, leaving her children to her sister Alice to raise.

The Selkirk daughters resided in the homes of their parents and siblings at various times, as well as in homes of their own on the McCauley lands (Assessment Rolls, 1881, 1893, 1898). Other family members and friends also appear to have resided on the property at times. The location of these residences is unknown, but one may have been the cellar with associated catalpa trees, and another the one above an improved spring.

Perlina Selkirk died in 1900 and the house was leased to the Gerardi family who raised beef for sale in Angels Camp. The Selkirk house burned in a range fire in the early 1920s (Clenn Whittle, personal communication 1988).

Isaac and Sarah Jane McCauley took up land north and east of the Selkirk ranch, and built their home and barns in an open field on the adjoining property line. McCauley, a native of Carrolton, Illinois, arrived in California in 1850 with his father James and brothers Edward and Thomas. By the spring of 1851 they were engaged in mining on Angels Creek, south of Angels Camp.

After his marriage to Sarah Jane, McCauley continued to mine as well as manage the family farm. In various years he was noted in the census records as a miner or farmer. Assessment rolls in the early 1880s note that McCauley had only two cows and one calf, but 30 goats and 15 kids, but by the 1890s he had gone into the dairy business with his three surviving sons, Burton, Edward, and William (Standard Genealogical Publishing Company 1901:306).

The McCauley house, described as being a rambling one-story home with three bedrooms, also had a living room, a big kitchen, and a dining room where the harvest crew were fed. The well was under cover of the porch of the house and the privy located "out back, under an oak tree." A smokehouse was located near the house, where the family prepared ham, bacon, sausage, and head cheese. Pigs were raised by the stream. The house was surrounded by fruit trees, including orange, plum, apple, quince, fig, and apricot (Rodney McCauley, personal communication 1993).

A hay barn, where the hand-scythed hay was stored, was located on a knoll east of the house, while the horse barn was built on a hill behind the main house. A hand-stacked rock wall, made of greenstone, appears to have been used as the northern boundary of the McCauley Ranch hay field. A rectangular structure pad (PR-16), outlined with rock, is located in an open field on a slight slope above the house; its purpose is unknown.

After Isaac's death in 1903, Sarah Jane moved to Stockton and thereafter came up to the ranch only in the summertime. The dairy operation was then run by the three McCauley sons. In the late 1890s William and his wife Florence built a home on the hillside behind the main ranch house, living there with their three sons until moving away in the early 1920s. The dairy continued to be operated by Will's brothers, Burt and Ed, who also sold cord word, and resided there until their deaths (Rodney McCauley, personal communication 1993). The house burned in the early 1940s, and the land was purchased by Ed Wilson and his wife Pinkie Gardner for use as cattle pasturage. Shortly after World War II Wilson built a new barn, shed, and corrals from the salvaged tin and stone footings of the earlier structures (Clenn Whittle, personal communication 1988).

Two other residences which appeared to be associated with early day agriculture were recorded on the project lands. Both of the homes, although used by members of the McCauley family for many years, were found to be outside of the project area after a recent survey. Located on the southern boundary of the project area, the Tryon house was occupied by miner George Tryon as early as 1861 (Assessment Rolls) and as late as the early 1870s (General Land Office 1870). The McCauley family worked an alfalfa patch on the site in the 1910s and used the dilapidated house as a storage shed. They recalled it as the Prouss house (Rodney McCauley, personal communication 1993), but it may have been the residence of J. Glass, who patented the land in 1887 (Patent Maps). Only the agricultural ditch and reservoir remain on the project lands.

Only a rock alignment and historic trash scatter remain of the original Marsh residence site. The cellar, privy, and structure pad, located 200 feet north of the present property boundary, were recently destroyed when the adjacent Angels Oaks subdivision was built. The William McCauley family resided in the house in the early 1890s and recalled it as the "Marsh House" (Rodney McCauley, personal communication 1993); it appears to be the same residence noted as the "Gillen House" in the early 1870s (General Land Office 1870).

Since the McCauley home burned in the early 1940s, the lands of the Selkirk/McCauley Ranch have been used for cattle grazing operations, first by rancher Ed Wilson, and later by a succession of lessors.

ETHNIC SETTLEMENT

The mining booms and busts which characterized the history of the California Mother Lode created an ethnically diverse mobile and fluid society within Calaveras. As noted by an early chronicler, "From the time of the first discovery of gold in this country, men speaking different languages, accustomed to different habits, educated in different

schools, brought up under different governments, and controlled by different prejudices, flocked to the land of gold..." (San Andreas Register, September 15, 1866).

In the same vein, Edward Brown recalled that in Mokelumne Hill of 1851 "the jabbering of so many different languages gave me a faint idea of what it must have been at the building of the Tower of Babel" (*Calaveras Prospect*, February 11, 1893).

In 1850 the immigrant population comprised 34.6% of the 16,884 total; in 1860 42.0% were native born, 34.9% foreign born, and 22.4 Chinese out of a total population of 16,299. By 1870, the county's population had decreased by almost one-half; of those remaining 8,895 souls, 51.9% were native born, 31.3% foreign born, and 16.2% from China. Of the foreign born population 16.0% were Italian, 16.3% Irish, 10.2% English, 1.8% Scots, and 14.6% German. The census figures for 1880 remained relatively static with a total population of 9,904, of which 62.9% were native born, 25.6% foreign born, and 11.4% Chinese.

A decade later the population remained relatively unchanged with a total of 8,882, but the percentages had changed dramatically, undoubtedly due to the birth of many second generation children to the original immigrant population of the early years. The percentages in 1890 were: native born 72.1%, foreign born 22.4%, and Chinese 3.6%. The figures for 1900 were much the same, with a total population of 11,200; 77.0% native born, 19.8% foreign born, and Chinese, 1.3%. The major difference, however, were the percentages, which showed an increase of those of Austrian nationality from 1.8% to 10.5%, reflecting the large immigration of Yugoslavian nationals who were imported to work in the hard rock mines and the Camp Nine powerhouse project (Giovinco 1980:Tables).

By 1910 this immigration pattern continued:

...the newly-arrived were mainly southern Europeans, primarily Slavs and Italians, seeking employment in the mines. However, by then the quartz industry was entering a permanent course of decline and one mining operation after another began laying off workers, eventually closing down permanently. With few employment opportunities available to them in the foothills, the new immigrants headed elsewhere, threeby depriving local ethnic communities of a continued infusion of new blood necessary to perpetuate Old World cultures. The acculturation process was speeded still further first by the outbreak of World War I, which stopped the overall flow of immigration to American, and subsequently by the postwar immigration quota laws of 1921 and 1924. With the immigration gates shut tight, Calaveras County's chapter in immigration history was over, but the recognition of its importance to our collective heritage had yet to arrive (Giovinco 1980:50-51).

Four different ethnic groups have been involved in the history of the project area lands: Yankees, Chinese, Italian, and Yugoslavian.

Yankees.

The majority of the immigrants to the Angels Camp/Altaville area were from other areas of the United States. Coming to "get in, get it, and get out," many of the early miners stayed to settle in this warm and hospitable land, where acreage was free for the taking and the growing season considerably longer than on the East Coast. Others, who returned to "the states," came back to California with wives, brides, and families to take up land and forge a new life for themselves.

Within the project area, two such families, David and Perlina Selkirk who hailed from New York and Kentucky, and Isaac McCauley, a native of Illinois, were representative of the many such Easterners who settled in the Angels Camp area. Their histories have been recounted at length within the context of the agricultural history of the project area and won't be repeated here, but they followed the traditional pattern of miners families who turned to agriculture as the mines waned and whose continued existence was based upon a mixed agricultural and mining economy.

Chinese.

During the boom years in Calaveras the Chinese accounted for over 22% of the population, most of them engaged in placer mining on the streams and drainages of the Calaveras, Mokelumne, and Stanislaus Rivers. Virtually all of the Chinese who traveled to the Golden Mountain were from Guangdong province in southeastern China where (JULIA). Like Europeans, Chinese immigrants were preponderantly males who were single or had left their families in China, but unlike the Europeans the Chinese had a larger share of assisted immigration, working as "coolie laborers" for the Chinese merchants and district companies that had sponsored them (Giovinco 1980:39).

J. D. Borthwick, visiting Angels Camp in 1851, noted that:

I came upon a Chinese camp in a gulch near the village. About a hundred Chinamen had here pitched their tents on a rocky eminence by the side of their diggings. When I passed they were at dinner or supper, and had all the curious little pots and pans and other "fixins" which I had seen in every Chinese camp, and were eating the same dubious-looking articles which excite in the mind of an outside barbarian a certain degree of curiosity to know what they are composed of but not the slightest desire to gratify it by the sense of taste. I was very hospitably asked to partake of the good things, which I declined; but as I would not eat, they insisted on my drinking, and poured me out a pannikin full of brandy, which they seemed rather surprised I did not empty. They also gave me some of their cigaritas, the tobacco of which is aromatic, and very pleasant to smoke, though wrapped up in too much paper.

The Chinese invariably treated in the same hospitable manner any one who visited their camps, and seemed rather pleased than otherwise at the interest and curiosity excited by their domestic arrangements (Borthwick 1948:261).

By the mid 1850s the commercial center of the Chinese community came to be located north of Angels Creek and along both sides of the Angels Camp-Murphys Road, just east of Main Street. At its height, the Chinese population numbered around 200; by the 1890s only 30 remained. Chinatown consisted of about 20 separate properties and included gardens, lodging houses, gambling dens, opium dens, three stores (two of brick and one of adobe), and a wash house. On the hill to the north of the community was located the graveyard. The vegetable gardens were along the creek, and hogs and ducks were raised both for the use of the Chinese and for sale to local markets, as were the excess vegetables.

As most of the Chinese were single men, many resided on bunks in lodging houses. There were, however, a few families, mostly belonging to the merchant class. Many of the single men worked as miners along Angels Creek in the Slab Ranch area to the east, as well as along its tributaries (Cunningham [Marvin] 1983).

As the rich placers were played out and the Anglo-European miners departed for richer diggings, the Chinese moved in to glean the remaining color from the deep crevices with scrapers. Working as "contract labor," the Chinese dug ditches and canals for diverting or carrying water, piling the rock walls to contain the tailings, and, using a yoke or pole and baskets, transported the gold-bearing gravel. The China Pump, a device for removing the water from deep pools, was invented by the Chinese and proved very successful in draining the water so they could collect the gold left behind by the "49'ers" (Leonard 1963:2-3).

Although it is unknown how many Chinese might have mined the drainages of Greenhorn Creek during the early years of the Gold Rush, at least one of their camps was located within the project area. Defined by a semi-circular stone hearth, a large Chinese brown stoneware fragment and a smaller brown stoneware sherd attest to the presence of Chinese placer miners beside an extensively worked drainage. Two Chinese miners, Ah Young and Ah Len, were noted as residing somewhere between the Selkirk and McCauley homes in 1870 and this may have been the location of their claim.

Ah Sun, a Chinese immigrant who came to the Selkirk homestead as a boy, assisted the family in operating the farm and remained with them until his death years later (*Stockton Record*, January 13, 1951). The length of Ah Sun's tenure at the ranch is unknown, but family letters written in 1865 and 1869 note his presence during those years (Selkirk Letters). The Chinese U-shaped hearth, located near the Selkirk house, and later converted to a blacksmith forge, was undoubtedly used by Ah Sun.

After the death of Ah Sun, there was no longer a Chinese presence on the property, an eventuality that was reflected in the county as a whole:

The 1909 flood which destroyed most of the Chinatown of Angels Camp takes on symbolic importance considering that the following year the federal census would record only 49 Chinese in Calaveras County. By 1910, that population had declined to the point of insignificance and its role in the development of Calaveras had come to an end (Giovinco 1980:50).

Italian.

According to one source, two-thirds of the Italians in California in 1849 had come from the East Coast, and the remainder from South America, especially Argentina and Peru. Arriving in San Francisco, by 1850 78% of them opted for the Southern Mines, with only 17% in the Northern. Once established, chain migration served to replenish the lifeblood of the Italian community (Giovinco 1980:12).

Mining was undoubtedly the contributing factor that influenced the continued influx of Italian immigrants to Calaveras, although they quickly took up land and planted gardens, orchards, and vineyards. Hailing from the hill country of Genoa in Northern Italy, these Genovese brought with them their expertise in mining and quarrying, gardening and wine-making, and stone construction. Unlike the Chinese and Latin Americans, who were forced to live in ethnic enclaves, the Italian population was spread throughout the county, although some areas, notably Calaveritas and Vallecito, had a higher concentration of Italians than the county as a whole.

Italians operating boarding houses or related hotel and restaurant businesses exemplify a crucial element, making for the long-term residential stability of that immigrant group, namely occupational diversification. Compared to some other ethnic groups, the Italians

were not so heavily concentrated in town businesses, but were more diversified occupationally:

Another occupational pattern common to a large number of Calaveras Italians was a tendency to engage simultaneously in diverse employments. Initially, this may have been prompted by economic necessity, especially once the flush placer mining days had ended. Italians began to cultivate small plots of land for garden produce--a skill these peasants had learned in Italy--which they either consumed or sold for supplementary income. Eventually they became full-time farmers, but when a shrinking population limited their market, they again relegated farming to a part-time occupation and took up selling some of their home-grown produce along with dry goods (Giovinco 1980:15-16).

No other group of immigrants was so quick to obtain citizenship and to vote in their adopted country. During the 1860s the Republican Party attributed their naturalization to local Democratic politicians who gathered them at election time and instructed them to vote the party ticket. By 1877, however, the Republican party was unsuccessfully running Joseph Devoto for county treasurer because he was "a representative man among an influential class of our citizens--the Italians-- and it would certainly be unfair, as well as impolitic, for Republicans to give the slightest occasion for a suspicion that they had been lukewarm in support on account of nationality " (Calaveras Chronicle, September 1, 1877).

To summarize the Italian experience in Calaveras County:

...it appears that their early arrival in large numbers, coupled with occupational flexibility and diversification, enabled a significant number of those immigrants to withstand local economic fluctuations and to establish long-term residence. In turn, residential stability and the overall shrinkage of the county's population gradually led to that group's integration into the local society and a dilution of ethnic identity (Giovinco 1980:22-23).

Within Angels Camp two of the most notable merchants were named Peirano, Joseph and John, and operated general merchandise stores at opposite ends of Main Street. Olivia "Grandma" Rolleri, the legendary proprietess of the Calaveras Hotel, was another Italian success story. Widowed in 1888, she moved to Angels Camp and established a boarding house. She soon purchased an adjoining hotel property, and operated a butcher shop, with meat from her cattle ranches, and a saloon as well. "This hotel," stated an ad in an 1897 edition of San Francisco's Italian newspaper, "the largest on the Coast, is supplied with all the comforts which science can provide. More than 100 very clean and airy rooms are available to any class of people" (*L'Italia*, September 16, 1897). She died in 1927, after nearly 40 years of entrepreneurial endeavor (Harbinson 1966:3-4).

One of the mines within the project area, the Tough Nut Lode, was operated by Italian immigrant Mark Belloni. He resided with his family in a small house on his claim, surveyed in the early 1920s (Finley 1921; Ed Stokes, personal communication 1991). Although Belloni's occupation of the land occurred in the twentieth century, he was representative of many of his countrymen in the latter half of the nineteenth century in his diversification of employment.

Yugoslavian.

The first Yugoslavian to mine for gold was apparently a sailor, Mathew Ivancovich, who was working at Sutter's Mill when gold was discovered in 1848. Within a few short years

numerous of his countrymen had sailed from the Dalmatian coast as mariners and passengers on ships that came around the Horn; others came overland, primarily from the Gulf Regions. Many worked as miners, but those that didn't find gold turned to business, operating coffee houses and saloons, supply stores, and boarding houses. Others turned to ranching or worked in the lumber camps or farmed. During later "mineral rushes" of the last and this century, this process was repeated again and again (Matt 1983).

Naturalizations of "Austrians" in Calaveras County numbered less than a dozen in the mid-1850s; there were a few more in the late 1880s and early 1890s, but the vast majority were naturalized in the first years of the twentieth century (Calaveras County Declarations of Intention). 1910 was the watershed year for this immigrant group in Calaveras County; that year they made up over 10% of the population (Giovinco 1980:Table 13), with over 100 of them imported to work on the Camp Nine powerhouse the previous year. Immigrating to work in the booming hard-rock mining industry in the late 1880s and 1890s, most of them settled in Angels Camp and Jackson, where they established churches and benevolent societies. In Angels Camp, the Serbians established the St. Vasilije Serbian Orthodox Church in 1910, the third oldest in North America. The Slavonians, however, were members of the Catholic faith, and worshipped at nearby St. Patrick's Church. The Serbian Orthodox Cemetery is located west of Altaville, near the Catholic Cemetery and across old Highway 4 from the Protestant Cemetery.

The Slavonians and Serbians in Angels Camp resided on separate hills: the Serbs near their church on the east side of Main Street and the Slavs on Democrat Hill on the west side. They maintained many of their traditions, especially at Christmas time when the men would go door to door to each house, partaking of the special dishes offered by the Yugoslavian families. They also maintained a tradition of caroling, singing the songs from the old country on religious days and during the Christmas season. Whether because they were relative late-comers to the gold country, or because they fit in so well with their fellow Europeans, the Yugoslavians were quickly assimilated into the community and intermarried with those of many other nationalities (Eve Zumwalt, personal communication 1983).

The Mary Belle Lode and the Susich home are both related to Yugoslavian immigrant Stephen Susich who surveyed his claim in 1916 and 1922. The family resided in the home while Susich worked his claim, one of yet another generation of immigrants who came to Angels Camp to wrest the precious metal from its matrix.

WATER DEVELOPMENT

Mining first, and agriculture later, reaped the benefits of the extensive ditch, flume, reservoir, and power systems created in the early years of the Gold Rush. Vast streams of water were needed for all types of mining operations, especially in the early placering and hydraulicking years. Unable to work during the dry seasons, the industrious miners soon discovered ways to bring the waters of rivers and tributaries to their diggings. Virtually every major community set up its own water company, with stock issued and work commenced within a few years of the initial rush. Originally constructed for use by the mining companies, these networks were eventually taken over by agricultural and domestic consumers as the importance and needs of the mining economy declined and towns and farms developed (Davis-King and Marvin-Cunningham 1990).

Union Water Company.

Water for mining purposes was first brought into Angels Camp in 1853 by the Union Water Company, organized in Murphys in January 1852, and formed as a combined effort

by two rival companies who had begun construction of water systems in 1851 to bring water to the miners in the area. The first fountainhead of the ditch was located at the Junction of Union (Love) and Sawmill (Mill and Moran) Creeks, about 10 miles above Murphys, where a small dam and reservoir were constructed. Two other reservoirs were soon built, from where water was released from the head of Angels Creek into the bed of the creek, following the natural channel into Murphys. From there the ditch branched down the creek to the diggings on Murphys Flat and Red Hill (South Ditch), while another branch swung out through Owlsborough northerly to the Oro Plata mine before reaching Murphys Flat (North Ditch).

The system was finally completed to Murphys in 1853. That same year, utilizing the bed of Angels Creek southwest of Murphys, the ditch was extended to Washington Flat and Angels Camp, through the North Ditch, to provide water for placer mining and ground sluicing purposes. Seeing a need for additional sources of water, the company was incorporated in 1854 and extended its system of ditches and flumes to the north fork of the Stanislaus River, 14 miles above the Big Tree Grove. The company continued to expand in the ensuing years, purchasing the Torrey or Montezuma Ditch, which took water to the Dogtown and French Gulch areas, in 1855; extending the South Ditch from the Douglas Flat area to Vallecito; purchasing the Albany Flat and Carson's Ditch (to Carson Hill) by 1860; constructing the Union Reservoir high in the Sierra in 1859; purchasing the Murphys Flat Fluming Company in 1863; the Calaveras County Water Company in 1866, and the McElroy Gravel Mining Company Ditch in 1879.

Over the following years the system was improved numerous times, especially after its acquisition by Windsor A. Keefer, the owner of the Jupiter Deep Blue Gravel Mine near Dogtown. That same year the company was sold to Grayson and Borland, San Francisco financiers who had acquired controlling interest in the Melones Consolidated Mining Company in 1883. These men, in turn, sold their interests to the Utica Gold Mining Company of Angels Camp in March of 1888, who completed most of the improvements to the present system during that company's tenure. These included damming the waters of Silver Creek and constructing Alpine Dam in 1889, Utica Reservoir in the early 1890s, improving the Union Reservoir, and constructing several lower elevations dams in the early 1890s: Ross Reservoir, Pipe, and Lane Reservoirs.

Most of the mills in Angels closed during World War I, including the Utica, which was shut down forever in 1915 (Leonard 1968:2-4). With few mine customers for their water, the Utica Mining Company began negotiating agreements with various water users' associations for the delivery of water for agricultural and domestic purposes. During the 1930s they signed agreements with the Angels Ditch Water Users Association, the Calaveras Water Users Association, and the Bret Harte Sanitarium in Murphys, signaling a shift from the importance of mining to that of agricultural and residential use (Pacific Gas and Electric Company 1947).

The company, however, retained the rights to generate power, serving the mines at Melones and Sheep Ranch and the communities of Murphys and Angels Camp. When the last of the mines closed in 1942, the company lost most of their customers and began negotiating to sell to Pacific Gas and Electric Company (Oliver Garcia, personal communication 1991). In 1946 the entire system was purchased by Pacific Gas and Electric Company, ushering in a new era for the system that was built on the dreams of men who tried to wrest the golden riches from their foothill matrix (Marvin 1991:12-13).

One of these ditches is located within the project area. The Gold Cliff Ditch is an extension of the Union Water Company Ditch, which coursed around Bald Hill, crossed present Gardner Lane, and then continued westerly to Altaville, where it branched

southeasterly to the mines in Angels Camp, and southwesterly to the Gold Cliff and Madison mines. The ditch was altered in the early 1890s when Lane's Reservoir was constructed; water was then brought down a ditch from the reservoir to a point where it was flumed across Gardner Lane and then ran parallel with (and south of) Dogtown Road before turning south into an open field, from where it branched. Numerous smaller lateral ditches carried water for irrigation and mining purposes to various points in Altaville.

Within the project area, water from the Gold Cliff Ditch was diverted to various points on the Selkirk and McCauley lands for mining and agricultural uses. One branch carried water past the Selkirk house and down a drainage to a garden spot, while others provided water to the McCauley house and various garden areas and irrigated fields.

The Triple Lode Ditch System, which also apparently obtained water from the Gold Cliff Ditch, conveyed water through seasonal drainages, ditches, and reservoirs through the Tough Nut, Mary Belle, Consolidated El Dorado, and Blair Lodes as far as the mines at Smith's Flat. Segments of this ditch likely date to the mid-1850s, while the ones to the Blair Lode were probably constructed ca. 1890 when the claim was developed.

The Gold Cliff Ditch was abandoned in the early 1940s, when the present Highway 49 was improved (Banchero 1994).

TRANSPORTATION NETWORKS

The first non-Native American visitors to the Angels Camp area may have been Spanish or Mexican military personnel who passed through on explorer expeditions or looking for runaway Indians. Early French and American trappers may also have passed through the area while traversing the Sierra Nevada.

Following the discovery of gold in 1848, hordes of gold seekers poured into the Southern Mines, reaching the Stanislaus River by that summer. At first, travel was on foot or on horseback and most people traveling to the "Stanislaus Diggings" used the established Indian route: the Antelope Trail. Also known as the "Stanislaus Trail," the "Old Stockton Trail," and "Marshall's Trail," it was promoted by Ben Marshall in 1849:

Old Antelope Trail from Stockton to Murphy's New Diggings and vicinity. Take Antelope Trail to Antelope Ranch (Marshall's) and Rock Creek and Salt Spring Valley, connecting with Bear Trap Trail over Bear Mountain to Valley east of Bear Mountain (Marshall 1849, in Frances Bishop Notes).

This was indeed the most direct route from Stockton to Angels Camp, Murphys, and neighboring camps, as well as to the Stanislaus River Ferries.

As traffic increased, a wagon route from Stockton to the higher Calaveras mining camps was sorely needed, and, by 1854, the Antelope Trail had been improved to accommodate wagon traffic. Now known as the Angels Road, it crossed Salt Spring Valley and went up the newly-constructed Carmen Grade over Bear Mountain and over Antelope Pass to Angels, Murphys, and other higher camps (Fuller, Marvin, and Costello 1991:7-8).

In 1858 the road was described as commencing near the east end of Washington Flat and traveling westerly to Altaville, west of the Foundry, to Smith's Flat, across Cherokee Creek west of the old road to Parnell's Ranch, to the head of the canyon at Westbrook and Harmon's Ranch, then to the ranch formerly known as the Hive Ranch and then following the valley and grade of mountains to its base at Carmen's Ranch in Salt Spring Valley (Calaveras County Road Records Book: 264). This road branched to Angels Camp and

San Andreas at a point known as Altaville, Forks of the Road, and Cherokee Flat, just north of the project area.

Within the project area, another branch of this road, known as the Smith's Flat to Angels Road, traveled easterly from Smith's Flat on present Highway 4 through the Selkirk Ranch and Pioneer Mine, to join Gold Cliff Road near the present grammar school before continuing on to the main Altaville and Angels Camp Road. The road provided a short cut for travelers to Angels Camp and a respite from the steep grade into Altaville.

The road was noted as early as 1856 (Land Claim Book A:253) and was still in use in the 1880s (USGS 1888). After the advent of the automobile, the steeper direct road into Altaville became the route of choice and the Smith's Flat Road was relegated to a ranch road.

Other roads course through the Selkirk and McCauley ranches, most of which appear to have been used primarily as ranch roads. One section, however, appears on an early survey map (1869/1870) and runs north south through the project area from Greenhorn Gulch past the Selkirk house and connects with the Smith's Flat Road (General Land Office 1870). The property has been closed to traffic since at least the early 1940s and the roads used only for ranch access.

Another road, which courses southeasterly through the Blair Mine, provided access to the Mark Hanna property, off the project area, as well as the Blair Mine. A segment of the road is located on the plat Map for the Consolidated El Dorado Lode, 1922, suggesting that a portion of the road was used for mining. The road is graveled and maintained by Ed Stokes, who now owns the Hanna property.

SITES HISTORY

1564/H SELKIRK RANCH

The historic features of this site were part of the ranch of David and Perlina Selkirk, who filed a land claim May 5, 1856, to 160 acres of agricultural and grazing land on the trail running west from Angels Camp to Smith's Flat (Land Claim Book A:253). David Selkirk, who was born in New York, later became a lead miner in Galena, Illinois. He arrived in California in 1855 and sent for his wife Perlina and their two daughters the following year. The family first lived in a log cabin on the property (its precise location is unknown, but may have been Locus 3 of 1570/H).

Selkirk was blinded by exploding dynamite in 1857 and afterwards made his living playing the fiddle for local dances. Perlina then took over major responsibilities in running the farm with the aid of their children and Ah Sun, a Chinese immigrant who came there as a boy and remained with the family until his death. As well as running the farm, Mrs. Selkirk took in boarders, usually local miners, as well as farm workers (*Stockton Record*, January 13, 1951; U.S. Federal Census 1870).

The family built a new home in 1862 (Feature 3), a small two-room house with end-gable roof, lap siding, six-over-six pane sash windows, and a magnificent rhyolite tuff fireplace. The fireplace appears to have been constructed by their neighbor, Scotsman Alexander Love, a master stonemason who constructed several stone walls and gateposts in Angels Camp. A separate stone-lined storage cellar was located to the north of the house (Feature 4) and was apparently always separate from the house (Rodney McCauley, personal communication 1994).

The stone footing for a blacksmith forge (Feature 5) was located west of the house and was evidently within a structure at one time (Rodney McCauley, personal communication 1994). The pipe adjoining the footing once held a bellows crank (Ed Ordway, personal communication 1994).

An improved spring (Feature 7), was known locally as "Fig Tree Spring" and was used by travelers on the Angels Camp to Smith's Flat Road, as well as by other local residents (Rodney McCauley, personal communication 1993; Ed Stokes, personal communication 1994).

A rock faced dam and reservoir (Feature 15) was noted in a quartz mining claim located in 1863 and filed in 1865. Known as the One Hundred and Ten Men Claim, it mentioned "commencing at a stump a little west of D. Selkirk's house, between the Old Reservoir and Creek and running westerly on the vein to the top or near the top of the large hill southerly of the Cherokee Quartz Mill," and ran 10,000 feet on the vein (Angels Mining District Book A:71). As it was noted as the "old reservoir," it may have predated the Selkirk ownership of the land and have been related to earlier placer mining activities on the drainage. The two other reservoirs on the site (Features 6 and 16) apparently relate to the Selkirk tenure and were for agricultural purposes.

The mine shaft (Feature 9) and prospect pit (Feature 14) may relate to the One Hundred and Ten Men claim, as may the hard rock mining features (P-05-189, Feature E) in a tributary of Greenhorn Creek.

The Selkirks had five children: Sarah Jane, Jennie, J. W., Alice Matilda, and Clara. Sarah Jane, born ca. 1841, married miner and farmer Isaac McCauley in 1867. After their marriage they took up land east of the Selkirk Ranch where they resided for many years (1565/H). Jennie, who was born in 1851, married boarder George Lucas in 1869, and, after his death, miner James Maltman in 1882. The only son, J.W., was born in 1856 and

died two years later. Alice Matilda was born on the ranch in 1860. She married Charles Hinkleman in 1880 and raised her sister Clara's two children. The youngest daughter, Clara, was born in 1866. She married Frank Bates, a teamster on the road from Copperopolis to Angels Camp, in 1885. After that marriage ended in divorce she was married to John Steel. A third marriage was to a man named Rogers (Vitals; Rodney McCauley, personal communication 1993). All of the daughters and their families resided on the Selkirk or McCauley ranches either with their parents or in separate houses with their siblings.

For some unknown reason, the Selkirk property does not appear in the assessment rolls until 1867, and then disappears again in the late 1870s, only to reappear in 1887 (Calaveras County Assessment Rolls 1856-1935). The assessments for adjoining properties always mentioned the Selkirk homestead, so they were evidently residing on the land, but were not listed on the tax rolls.

By studying the existing assessment rolls for successive years, however, it is possible to ascertain some alterations in the Selkirk's use of the land. The record for 1873-4 mentions a house and barn, orchard, vineyard, and fence, 2 wagons, a horse, 6 head of cattle, 1 mule, 3 hogs, and poultry; the assessment for 1876 was virtually the same. In 1892 it was noted that Mrs. Selkirk owned two cows (Calaveras County Assessment Rolls 1867-1898).

It is probable that after David Selkirk's death in 1878 the operation of the farm passed to Perlina's son-in-law, Isaac McCauley, who operated it in conjunction with his adjoining acreage. In 1880 only Perlina and her daughter Clara were residing there (U.S. Federal Census 1880). In 1884 another daughter and son-in-law, Alice and Charles Hinkleman, were residing on the McCauley ranch and undoubtedly assisting in working the family acreage as one farm (Calaveras County Assessment Rolls 1884-1898; Great Register of Voters 1888).

Shortly before the death of Perlina in 1900, the property was given to Sarah Jane McCauley, Alice Hinkleman, Clara Steele, and Mary (Jennie) Maltman (Assessment Rolls 1899). By 1904 Isaac McCauley had assumed Clara's interest and in 1908 Alice sold her 1/4 interest to her sister Sarah Jane (Deed Book 51:554).

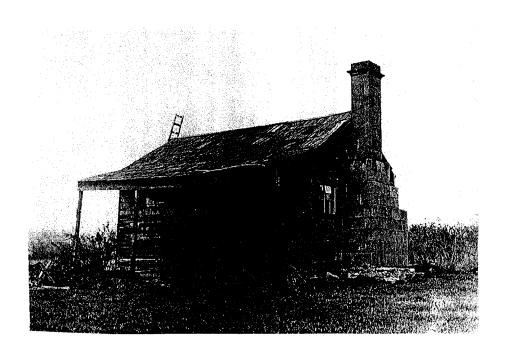
During the early 1900s the house was rented to the Reister family, who owned a ranch on Smith's Flat. About 1904 the Reisters purchased a house that was located on the Angels Mine property in Angels Camp and moved it to their ranch and departed the Selkirk ranch (Ed Ordway, personal communication 1994). After that time the house was rented to the Gerardi family who had a butcher shop in Angels Camp and raised beef cattle on the property (Clenn Whittle, personal communication 1988; Ed Stokes, personal communication 1994).

In the late 1910s and early 1920s the Selkirk house was the residence of Edward McCauley, the middle son of Isaac and Sarah Jane. He and his wife were separated and he lived there when not out prospecting with his burros. A neighbor boy recalled that sheep were kept in the corral during that period (Guy Castle, personal communication 1994). Another neighbor, Mark Hanna, recalled that there was a barn in the corral and that Native Americans resided in the upper story while tending the sheep (Ed Stokes, personal communication 1994).

The house burned in a range fire ca. 1920 (Calaveras County Assessment Rolls, 1920, 1921; Clenn Whittle, personal communication 1988; Rodney McCauley, personal communication 1993).

The Selkirk Ranch continued to be operated as part of the McCauley ranch, and undoubtedly as pasture and hay field for the dairy herd of Isaac McCauley and his sons (Calaveras County Assessment Rolls; U.S. Federal Census 1900; Standard Genealogical Publishing Co. 1901:305-306).

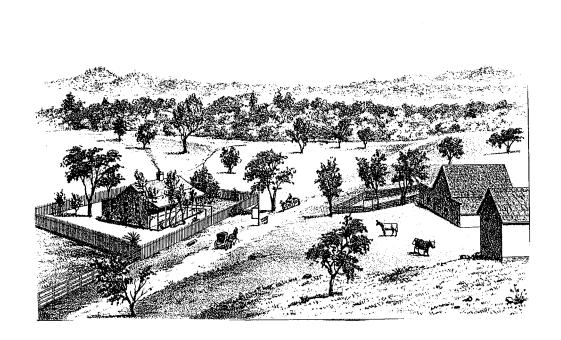
Ed Wilson purchased the entire McCauley holdings in 1937 and the land was used for cattle grazing since that time (Official Record Book 1:325; Clenn Whittle, personal communication 1988).



1565/H MCCAULEY RANCH

There is no assessment record for Isaac McCauley until 1872, but the 1870 census noted that he owned real estate valued at \$200 and was residing in a home with his wife Sarah Jane, son James, and his wife's sister Jennie and her husband, miner George Lucas. The home was not far from the Selkirk Ranch and was probably located on the 80 acre piece of property just east of it. This property appears to have been part of a 200 acre parcel owned by Alexander Love from the mid-1850s to the mid-1860s (Land Claim Book A:253; Calaveras County Assessment Rolls 1860, 1863), although there is no deed of transferral. In 1872 McCauley's improvements were valued at \$70, from 1873-1875 at \$60, and in 1876 at \$100.

By 1877 McCauley had added another 160 acres to his holdings, the majority of it owned by farmer W.R. Mays from 1861-1876. Again, there is no deed of transferral, but the land description is the same and the value of Mays house, barn, and fence (\$70) the same as McCauley's assessment of 1877. Mays house may have been located on the Smiths Flat-Angels Road, near the later Hinkleman residence. McCauley continued to be assessed for two houses, a barn, and fence valued at \$50 and \$70, and then at \$150 together, until 1885. (Calaveras County Assessment Rolls)



1566H SPRING RESIDENCE

The early history of this site is unknown at this time, although it may have been the early home of Isaac and Sarah Jane McCauley. The site is located on a 150 acre parcel of land claimed by David Selkirk in 1856 (Land Claim Book A:253). The assessment records for the Selkirk and McCauley lands in the late 1860s and early 1870s are contradictory and confusing, making it difficult to ascertain the exact location of the McCauley abode, or even his landholdings.

In 1867 and 1868 Selkirk was assessed for 320 acres of land, and it appears likely that he claimed the former Alexander Love ranch noted as located east of his ranch from as early as 1856 until it disappeared from the assessment record in 1866 (Land Claim Book A:253; Calaveras County Assessment Rolls 1860-1866).

Isaac McCauley and Sarah Jane Selkirk were married at the home of the bride's parents April 25, 1867 (Vitals), and may have moved onto a portion of the former Love ranch at that time, although there is no deed or assessment record until 1872. In 1870 the young couple, their infant son James, and the bride's sister Mary Virginia (Jennie) and her husband George Lucas were residing together in a home and land valued at \$200 (U.S. Federal Census 1870). Jennie's residence with the McCauleys appears to have been temporary, however, as the Lucas family soon moved to town.

Jennie and the English miner George Lucas, who had been a boarder in her parents' home, were married in October 1869; by the time their daughter Hattie was born in March of 1872 Jennie was already a young widow (Stockton Record 1951). Before his death Lucas had purchased a house (lot 12/block 5) in Angels Camp for his young wife, where she resided for many years, even after her marriage to another miner, James G. Maltman, in 1882 (Calaveras County Assessment Rolls; Florence Deveggio, personal communication 1988).

The record of McCauley's assessment for the years 1872-1876 note that he had 80 acres valued at \$40, and a house and fence at \$50, described as "bounded north by Selkirk, east by Barringer, west by Tryon, and south by Vicini." This location, although impossible to ascertain exactly, generally fits the site of the Spring Residence, but may also have been located on lands south of the later McCauley Ranch. By 1876 the assessed value of McCauley's improvements jumped to \$100; by 1877 it had fallen to \$50.

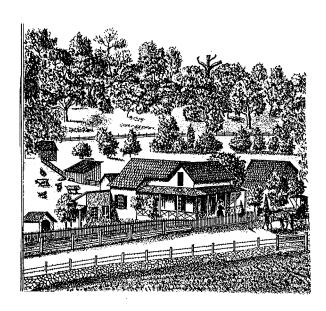
After McCauley's acquisition of the Mays property (1567H), he was assessed for two houses, a barn and fence on a total of 240 acres. His assessment record for 1879-1882 notes only 160 acres with two houses, a barn and fence valued at \$150.

Adding to the confusion is the assessment record for James Matteson/Madson Tiberghien for the years 1881-1883. Tiberghien was taxed for a house "on the land claim of Isaac McCauley, bounded west by Mrs. Selkirk's property, north by H. West and valued at \$30." The assessor also noted furniture, a sewing machine, one head of stock cattle, and a dog. This location appears to fit the Spring Residence, and Tiberghien may have moved into an old McCauley house.

Mat Tiberghien, noted as an old resident of Angels Camp in his obituary in 1904, was a miner by trade and an old friend of the Selkirk and McCauley families (Selkirk Family Letters and Photographs). He worked a quartz claim northwest of the ranch near Cherokee Creek for many years, but by the late 1890s was residing on the Osborne Ranch and working as a wheelwright (Great Register of Voters 1896; Vitals 1904).

By 1885 McCauley's assessment jumped from \$150 to \$237, apparently reflecting the construction of a new home on his ranch (1565/H). The fate of the Spring Residence is unknown, but it apparently burned as the site included burned glass and ceramic artifacts, although it is unknown whether it burned in a range fire or was consumed in a house fire. No informant or family member could recall any information regarding its existence.

In later years, however, the site was used by goat herder Dave Casseretti, who built a shed on the point of land for his angora goats. His use of the site continued through the mid-1970s (Ed Ordway, personal communication 1994).



1568/H TRYON/GLASS/MCCAULEY PROPERTY

George C. Tryon filed a land claim to 160 acres on January 4, 1861, noting that it was located south of David Selkirk's Ranch (Land Claim Book A:). Based upon the legal description, the property included the W 1/2 of the NW 1/4 of Section 4 and the E 1/2 of the NE 1/4 of Section 5, T2N, R13E MDBM.

Tryon was residing on the property with his wife Adelia, daughter Catherine, and son Walter at least as early as 1860, when the Federal Census taker visited the family and noted that Tryon was a miner by occupation. Certainly he was involved in various mining enterprises in the area over the next several years. In 1863 Tryon, along with a party of men which included his neighbors David Selkirk, George Osborne, and others filed a claim to 3900 feet on a vein on Greenhorn Gulch "lying about 800 or 1000 yards west of the residence of G.C. Tryon" (Angels Mining District Book A:70). That same year Tryon was one of those who filed the "One-Hundred and Ten Men Claim" which ran for 10,000 feet on a vein from just west of Selkirk's house westerly to the Cherokee Quartz Mill (Angels Mining District Book A:71). The Adelia claim, located on his property and named for his wife, was noted as developed by a shaft but long idle in 1962 (Clark and Lydon 1962:134).

Tryon continued to be assessed for the property on Greenhorn Gulch until 1885, although he purchased Lake's Hotel in Angels Camp and was residing there by 1870 (U.S. Federal Census). In 1873 it was noted that he owned 177 acres, along with a house, barn, orchard, vineyard, fence, and 4 cattle; by 1876 only a small house and 127 acres were noted. The "improvements" on the property appeared to be quite simple, valued at \$25 in 1876 and \$36 in 1877. By 1885 there were no improvements assessed on the property.

Although no deed of land ownership was filed, J.W. Glass was assessed for 137 acres of land which included the north half of the Tryon piece in 1886. His assessment for 1886 and 1887 noted that he had a cabin valued at \$25, as well as five cows, poultry, furniture, and a sewing machine. This same property, lots 3 and 4 of Section 4, lot 1 and SE 1/4 of NE 1/4 of Section 5, T2N, R13E, was patented by his son George Washington Crum Glass in March, 1898 (Patent Maps).

In 1888 George Glass married Carrie Harris (Vitals), the daughter James Harris who patented the adjoining eastern 80 acres in 1892 (Patent Maps), and probably built a new house or improved the cabin (Feature 3); by 1893 the assessment had jumped to \$100 for the improvements on the property. George Glass, a native of Ohio, was listed as a farmer in the Great Register of Voters in 1888. In 1893 he was assessed for the land with cabin and fence, a watch, furniture, sewing machine, wagon, harness, horse, 2 cows, 40 calves, 2 stock cattle, and poultry. Glass was evidently operating a small farming operation like those of his neighbors along Greenhorn Gulch.

Glass evidently lost the property and it returned to Tryon ownership sometime before 1900. That year Glass, his wife, and young son and daughter were residing with his mother-in-law Jane Harris, and her son Henry at their home in Angels Camp. In 1904 the land was sold to Sarah Jane McCauley for \$10, including 170.3 acres with buildings and improvements (Deed Book 46:362).

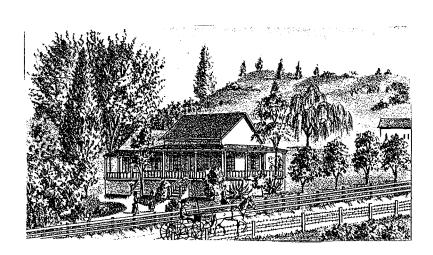
Sarah Jane's grandson recalled that the family had a large alfalfa patch on the property and that they stored tools in a dilapidated shack there during the 1910s (Rodney McCauley, personal communication 1993). The ditch, reservoir, and rock dam (Features 1, 2, and 6) appear to have been constructed by the McCauley family sometime after they purchased the property in 1904, undoubtedly to water their alfalfa field.

The trash scatter (Feature 7) may date to as early as the Tryon tenure on the land, but certainly to the Glass occupancy and probably also to McCauley use.

Feature 5, a prospect hole, is one of many such located on the McCauley ranch. According to informants, Isaac McCauley and his sons Burton, Edward, and William, prospected all over their land, sinking shallow shafts, and looking for rich pockets (Guy Castle, personal communication 1994; Ed Stokes, personal communication 1994).

Based upon the above information and the artifact assemblages, the Tryon/Glass/McCauley property was occupied from ca. 1860 to ca. 1900 by the families of George Tryon and J.W. and George Glass. Others may have resided on the property during the 1870s and early 1880s after the Tryon family moved to Angels Camp; it is unknown whether they leased the land to tenants, or simply continued to farm it themselves while residing in town.

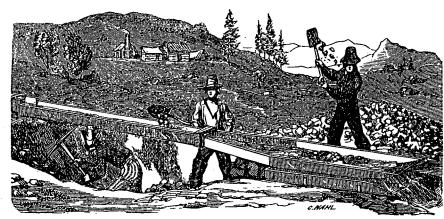
After the McCauley family purchasd the land in 1904 the house was used as a tool shed and the surrounding land planted in alfalfa. Although the fate of the house is unknown, it probably burned in the early 1920s wildfire that consumed the Selkirk ranch house.



1569H PLACER MINER'S CABIN

Placer mining and ground slucing on the Selkirk Ranch appear to date to the earliest years of the Gold Rush, and possibly into the early 1860s. Most of the placer mining occurred in the drainages located below the main Mother Lode vein which strikes northwest/southeast on the hillsides to the northeast. Gold was washed into the drainages from the vein, and not from the Tertiary channels which were located east of the Mother Lode in Altaville/Angels Camp (Willard P. Fuller, Jr., personal communication 1994).

There doesn't appear to be any way to identify the cabin with a particular miner or date, as there are no patented mining claims in the area and the early placer mining claims are almost impossible to connect with any specific location. It seems probable, however, that the cabin was abandoned by the time David Selkirk filed an agricultural claim to the land in 1856 (Land Claim Book A:253).



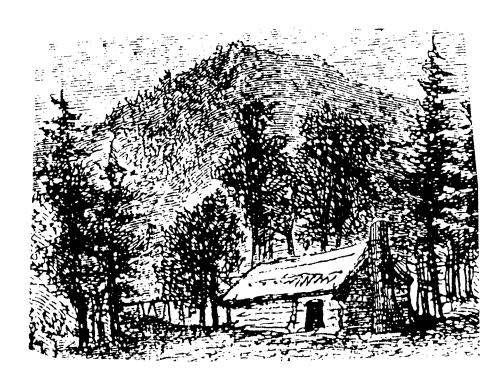
MINING WITH THE LONG-TOM.

1570/H RESIDENCE/PREHISTORIC SITE

Locus 3, Features 1 and 2. The historic component of this site is located on a 160 acre parcel of land claimed by David Selkirk in 1856 (Land Claim Book A:253). David and Perlina Selkirk and their elder three daughters first resided in a log cabin before building their frame home with stone chimney in 1862 (1564/H, Feature 3). This cellar may have been the location of that cabin.

Selkirk's land claim noted that it was taken up for agricultural and grazing purposes, and was located on the trail running west from Angels Camp to Smith's Flat, about 1 1/2 mile from said camp (Land Claim Book A:253). The homestead, filed in 1861, noted the presence of a dwelling and other improvements (Homestead Book A:251). As a perennial spring and drainage are located just southeast of the cabin site, it appears probable that this may have been the location of the earliest Selkirk home.

Extensive historic research and oral history failed to discover any information regarding these features. No informant recalled their existence, and there was no mention of it in the documentary record.



1571H MINE IN CREEK

Mining in Greenhorn Creek appears to have been carried on since the earliest days of the Gold Rush and to have continued through the Depression era. Placer mining was undoubtedly the first method used in the recovery of gold from the creek, but it wasn't long before that source was exhausted and miners began to sink shafts in the quartz veins exposed by the creek drainage.

One of the earliest of these quartz claims may have been that of David Selkirk, George Osborne, George Tryon, D.C. Demarest, and others who located a claim in 1863 "about 800 or 1000 yards west of the residence of G.C. Tryon" and running 3900 feet on the vein, and on Greenhorn Gulch (Angels Mining District Book A:70).

It is probable also that members of the Selkirk and McCauley families or their lessees worked the mines on the tributaries of Greenhorn Creek during their tenure on the property.

Assayer Edward Hanna worked the creek extensively in the early 1900s, and sank the shaft in the creek (Feature 2), which was reportedly very rich. He also worked several of the other shafts and adits in the area, many of which may have been reworkings of earlier prospects. The ore was transported downstream and milled on his property off the project area (Ed Stokes, personal communication 1994).

Rodney McCauley recalled going in the shafts and tunnels as an eighth grader ca. 1917 and remembered a gallows frame and ladders, but noted that the claims appeared abandoned (Rodney McCauley, personal communication 1994).

Edward Hanna's son, Mark, also worked the mines in the creek for many years, as did his friend Carl Johnson who lived at the Hanna place from the 1930s until his death in 1963. The ore was milled in a ball mill on the Hanna property (Ed Stokes, personal communication 1994).

The platforms, ore dumps, shafts, adits, and prospect holes which comprise this site appear to have been used and worked for over 100 years, from the 1860s through the 1960s, by numerous different miners and prospectors. The area was evidently never very rich, but must have contained enough pockets of gold to make it worthwhile to continue prospecting and pocket hunting for ten decades.



1572H LINDSAY MINE

Also known as the Black, George, Machu, San Antone, and Antone, the claim was taken up by Angels Camp Justice of the Peace Thomas L. Lindsay and others on May 20, 1868. The claimants were T.L. Lindsay, J.M. Lindsay, D. Quigley, James Meloy, and B.R. Prince, the claim measured 500' on the vein and was 300' wide. The claimants noted that it was formerly known as the Antone Illick/Jillick? claim (Angels Mining District Book A:74).

The mine is located on a vein striking northwesterly and dipping approximately 45 degrees northeasterly, and which may be a northwesterly continuation of the Gold Cliff Zone. The weathered zone was mined in a small open pit. Other surface test pits and several small adits also prospected the outcrops of the vein, most of which were probably worked in the early days.

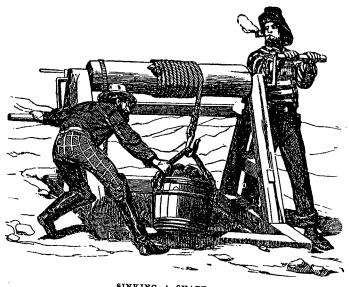
In 1882 underground development was begun by sinking an inclined shaft. By 1892, when essentially all work was terminated, the shaft was 125 feet deep, with the principal level workings at 112 feet, with drifts opening up about 125 feet of the vein along the strike. One raise from these workings reached the surface. The ore was processed in arrastras. There is no recorded production of gold from these limited workings on the Lindsay vein, and the mine does not appear to have had any major output (Willard P. Fuller, Jr., 1993).

In 1892 the mine was assessed to T.L. Lindsay and assessed at a value of \$100 with a shop and windlass appraised at \$50.

The affadavit of labor, filed in December 1894, noted that Henry J. Peachy had expended the requisite amount of money the previous year in "sinking shafts and open cuts and generally prospecting" (Mining Claim Book 0:429).

An application for patent for the Lindsay Quartz Mine was advertised in the Mountain Echo on June 25, 1904, noting that the patentees were B.R. Prince, John Meyers, Bertha M. and Lucetta M. Peachy, Mary Keys (daughter of T.L. Lindsay), and Eva Barney; Thomas Peachy was their agent. The article mentioned that the patent was for 1890' x 600', and that the shaft was placed within the adjoining Pilot Knob Mine. The survey plat map was completed that year by W.S. Coulter (Coulter 1904).

The mine was later purchased by the Utica Mining Company but never worked extensively, just sampled (Guy Castle, personal communication 1994).



SINKING A SHAFT.

1573H CHINESE HEARTH

Federal census data for 1860 notes 21 Chinese miners, in five households, residing near the Selkirk family. In 1870, four Chinese miners in three households were residing somewhere between the Selkirk and McCauley homesteads. In the absence of assessment records for any Chinese in the area, it appears impossible to ascertain the exact date or persons associated with the hearth, although they were apparently placering the drainage immediately to the south of the hearth.

Although the hearth may date to the period before David Selkirk filed an agricultural claim to the ranch in 1856, it appears probable that the Chinese were simply working the placers with his permission. A Chinese, Ah Sun, resided with the Selkirks and assisted them with their farming operations until his death many years later (*Stockton Record* 1951).



THE CRADLE AND MANNER OF USING IT.

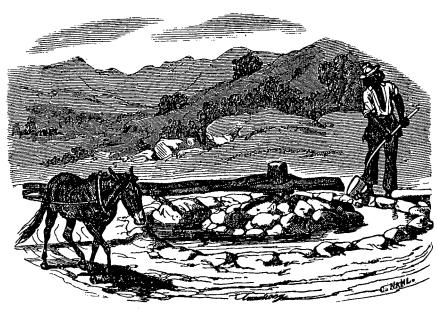
1574H STONE ARRASTRA

Mark Hanna recalled that the arrastra was being worked by two men, who turned it by hand with a long pole, ca. 1908, and that it was in use as late as 1925-1927. A mule, donkey, or horse was also occasionally used for power. He remembered sitting on the dragstone, which was two feet in diameter, ca. 1908. At that time it was used by his father, Edward Hanna, to mill the ore from mines on the El Dorado claim to the northwest (Ed Stokes, personal communication 1994).

Although located immediately over the property line on the Selkirk Ranch, the arrastra was used to mill quartz from the mines on the adjoining El Dorado claim. The El Dorado Consolidated Gold Mining Co. was incorporated July 13, 1897, for the business of mining, milling, prospecting, building ditches, aqueducts, etc., and "also and in particular to purchase, work, open, and develop the so-called 'El Dorado' and Emeline' claims in Angels Mining District." The seven-member board of directors included Moses Arendt, Peter Johnson, D.C. Demarest, Ernest F. Hubler, G.F. Pache, W.A. Bisbee, and Robert Rasmussen, all residents of Angels Camp (Articles of Incorporation:Record Storage Box 116).

In 1919 the Triple Lode Gold Mines were incorporated in San Francisco and included the El Dorado Consolidated and the Blair Lodes, with a board of directors who resided in that city (Articles of Incorporation:Record Storage Box 119). The company sunk a new shaft on the Blair lode in the early 1920s and planned to build a new mill on the property, but went bankrupt and were sold at a sheriff's sale to Henry Demaria in 1923.

It appears unlikely that the builder of the arrastra will ever be determined, but it may have been constructed by the developers of the El Dorado Consolidated in the late 1890s, or by Edward Hanna, who milled the ore from the mine from the mid-1900s until the late 1920s. Evidently property boundaries were not adhered to as exactly as they are today, and loose agreements were made as to use of land for mining and milling purposes (Ed Stokes, personal communication 1994).



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- 1917 Plat of the Claim of Frank M. Raymond Known as the Mable Fay Lode, in Smith's Flat Mining District, Calaveras County, California.

Finley, James H.

- 1916 Plat of the Claim of Stephen Susich Known as the Mary Belle Lode, in Smith's Flat Mining District, Calaveras County, California.
- 1921 Plat of the Claim of Mark J. B. Belloni, et al. Known as the Tough Nut Lode Claim, in Altaville Mining District, Calaveras County, California.
- 1923 Plat of the Claim of Triple Lode Gold Mines Known as the Consolidated El Dorado Lode, in Angels Mining District, Calaveras County, California.

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