

Native Americans, Geology, and River Uses

Born of Fire and Water

Calaveras and Amador Counties extend from their low-lying western margins easterly almost to the Sierra crest. The landscape, however, looked quite different in the geologic past. About 400 million years ago mountains lay to the west of the counties were eroding large volumes of sediments eastward into an extensive sea the stretched eastward into what is now Nevada. About 225 million years ago, in early Mesozoic time, thick basaltic volcanic flows poured out of fissures, producing the greenstone “tombstone rocks” that today suggestively poke up in fields. Subsequent continental plate movements created much folding, faulting, and metamorphism, and saw the rising of the ancestral Sierra Nevada range in its current location. Molten granite intruded into the overlying metamorphic rocks from great batholiths far beneath the surface. Within these, the Mother Lode, a major fault zone, was born as gold-bearing quartz filled the fissures.

Very rapid geologic erosion over the next 65 million years reduced the Sierra Nevada mountain block to a low range. The ancestral Calaveras River carried the masses of eroded debris down into a subsiding basin now occupied by the Central Valley and Coast Ranges. This ancient system also freed gold from its quartz home and deposited flakes and nuggets along its gravel bed. About 60 million years ago, at the beginning of the Tertiary Period, the peaceful time was repeatedly interrupted and two new generations of rivers were formed, by the dramatic uplift of the Sierra Nevada range. Volcanic eruptions, first rhyolitic and then andesitic, spewed ash, pumice, and some lava over the western flank of the range, running down and capping the old river channels.

Finally, just over a few million years ago, very extensive uplift and tilting of the Sierran block created the new Mokelumne River. This new watercourse excavated deep canyons and ravines and captured much of the watershed of the old Calaveras River. Erosion left some of the paths of volcanic sands and gravels as ridge tops, sculpting our present topographic landscape. A new generation of gold placers was formed in the modern streams wherever they cut through the old Calaveras River channel placers, awaiting discovery by the Gold Rush miners.

The First People

A Mi-Wuk creation story tells how Coyote-man and Falcon flew over the countryside, planting three feathers at the places where they wanted villages to be established: one feather for Chá-kah, the Chief; one for Mi'-yum, the woman Chief; and one for Soo-la-too, the poor. The next day each of the three feathers came to life, and the people lived in the places named by Coyote and Falcon.

Archaeologists also try to reconstruct how and when people first came to populate the landscape. One of the oldest sites in California is a 10,000-year-old village discovered in Salt Spring Valley, buried some nine feet under the surface. Other ancient sites survive at Camp Nine on the Stanislaus River; Texas Charlie Gulch near old Reynolds Ferry; and on Black Creek near Highway 4. About 8,000 years ago California's climate warmed, reducing stream flows, evaporating small lakes, and driving the Alpine tree line higher. In the San Joaquin Valley,

rising sea levels flooded the delta area creating a vast and rich tidal marsh which supported large, wealthy villages.

Cooler weather returned, and the period from 4,000 to 1,000 years ago is called the “Golden Age” of prehistoric California. Foothill villages expanded and traders regularly crossed the high Sierra exchanging obsidian from the eastern slopes for shells and acorns from the west. About 1,000 years ago, the “good times” came to an abrupt end: many large villages were abandoned, desert rock art traditions came to an end, trans-Sierran trade networks collapsed, and conflict and warfare increased. In the foothills, big villages gave way to smaller camps of several families that moved seasonally following available resources. Acorn processing intensified and multiple – sometimes hundreds – of grinding stones have been found at single locations. The causes of these dramatic changes are likely related to a severe drought, increased population, shrinking resources, and introduction of the bow and arrow.

The greatest disaster was yet to come, however. With the discovery of gold in January of 1848, the lives of California’s earliest residents changed forever. The tidal wave of miners that swept over the foothills drove away the game, muddied the streams, and introduced lethal diseases. Mi-Wuk survivors retreated to enclaves, many of their descendents remaining in the county today.

Table 1. Chronology of the Sierra Nevada.

ARCHAEOLOGICAL PERIOD	GEOLOGICAL PERIOD	AGE RANGE (CAL BP)	MAJOR CHARACTERISTICS
Early Archaic	Early Holocene	11,500-7000	Seasonal occupation of sites; dart points made from local stone; milling activities
Middle Archaic	Middle Holocene	7000-3000	Winter and summer villages; house structures and storage pits; deer major food source; decorative ornaments; atlatl and dart weapons
Late Archaic		3000-1100	Similar to Middle Archaic, but Great Basin groups occupy high Sierra
Recent Prehistoric I		1100-610	Climate dryer; bow and arrow introduced; bedrock mortars increase
Recent Prehistoric II	Late Holocene	610-100	Acorn processing dominates, multiple grinding holes, longer occupation in foothills region, basketry making increases, shell traded in from Coast

The Sierra Mi-Wuk

The Mi-Wuk traditionally occupied the central Sierra Nevada between the Merced and Consumnes watersheds and a portion of the adjacent Sacramento-San Joaquin river valley. Anthropologists and linguists estimate that the Mi-Wuk arrived in central California about 800 years ago. They are one of the “five Penutian nations”; that is, they all traditionally spoke languages of the Pen-Utian stock located in the Sacramento-San Joaquin Delta area. The Western (Bay/Coast) and Eastern (Valley/Foothill/Mountain) Mi-Wuk languages separated some 2,500 years ago.

By the 1700s, the Mi-Wuk were a well-established society of hunters, fishermen, and plant-food gatherers whose territory stretched from the edge of the San Joaquin Valley to the high elevations of the Sierra Nevada. This wide topographic and vegetative range provided the native people with all manner of foods: antelope, elk, rabbit, salmon, waterfowl, and valley-oak acorns in the lowest zone; deer, rabbit, salmon, valley quail, gray pine nuts, and blue- and live-oak acorns in the foothills; and, at higher elevations, deer, squirrel, trout, mountain quail, pigeons, sugar-pine nuts, and black-oak acorns. Acorns were particularly important and the Sierra Mi-Wuk carefully preserved the oak trees from which they annually gathered their staple food.

Old Mi-Wuk villages that are known to anthropologists were clustered along the Mokelumne, Calaveras, and Stanislaus river drainages. Traditional Mi-Wuk houses were made of thatching, tule matting, or slabs of bark over a conical framework of poles. In fine weather the people cooked and prepared food outdoors; in bad weather they used an interior hearth and oven. Some families also dug storage pits into the floors of their houses. Other important village structures were the sweat lodge and the dance house, both of which are still in use today. Sweathouses are used mainly by men for health and purification, while the semi-subterranean dance houses were used as an assembly hall and for important ceremonies. Remains of some of these large structures have been found at archaeological sites in the central foothills.

The archaeological record also contains remnants of a rich material culture, with flaked stone hunting and butchering tools; plant-processing implements; cooking, eating, and storage vessels (including beautifully made stone bowls); and beads and ornaments made of shell, animal bone, and stone. No doubt there were a great many other items made of basketry, cordage, or wood which have not survived. Like other northern and central California groups, the Mi-Wuk made (and still make) excellent baskets, but as far as we know they did not traditionally make or use pottery. Small lumps and objects of baked clay have been found at several sites in the valley and lower foothills, but no pots or dishes. The foothill groups did make vessels from soapstone, and many of these also have been found in archaeological deposits.

The first large-scale contact between native people and outsiders (not counting the occasional trapper or explorer) took place in the second half of the eighteenth century, when Spanish explorers and missionaries arrived. They had already missionized most of the coastal groups—those that had survived the European diseases—and now looked toward the interior for new converts. Many Mi-Wuk people, along with their neighbors, ended up at Mission San José. A few generations later, those Mi-Wuk still living in their traditional territory were overrun by gold seekers and settlers, who appropriated their hunting grounds and limited their access to other resources.

Although many among the general public today assume that the Mi-Wuk were an ancient people who “passed from the scene,” they are, in fact, alive and well, and working to maintain as much as they can of their cultural and religious traditions.