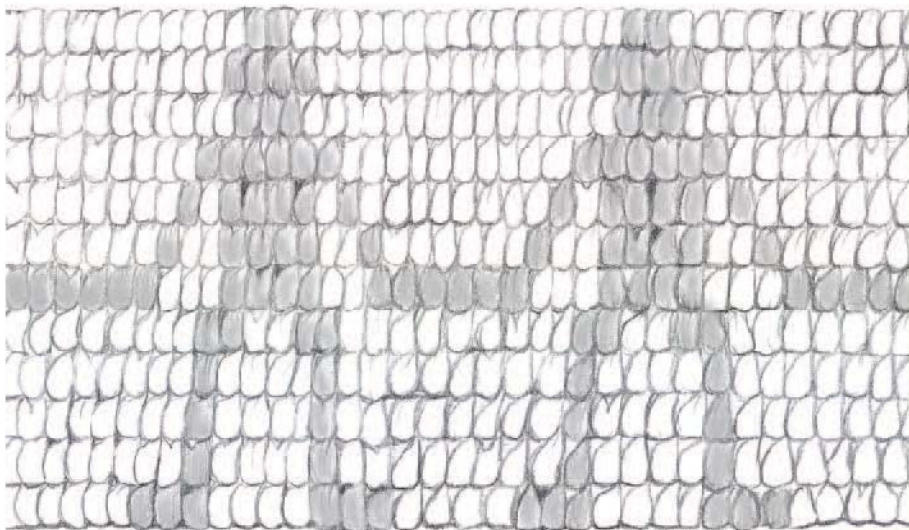


# People of the Tules: Archaeology and Prehistory of California's Great Central Valley

**In 2006 Caltrans contracted with archaeologists to collect information from a prehistoric village site called CA-SJO-3 that lay in the path of a new freeway overcrossing. Excavations at the site recovered a wide variety of artifacts and food remains, and revealed evidence of great environmental and cultural changes through time in California's San Joaquin Valley.**



*Yokuts Basket Design*





*Archaeologists Working at Site CA-SJO-3*

## A Great Marshland: The Environment Then and Now

Climate change is not a new phenomenon. The place we call California has seen periods of cooling and warming, wet weather and dry, which have shaped the land and the lives of the people who came here.

Some of the oldest artifacts in the state have been found on the shores of Tulare Lake in the southern San Joaquin Valley. These artifacts—called fluted spear points—have been dated to the end of the last ice age 13,500-11,500 years ago, shortly after glaciers had receded from much of North America. Little is known about the first inhabitants of California's Great Central Valley, those who used these early tools. We believe they were nomadic people, following the animals they hunted and the ripening plants they gathered.



*Fluted Spear Point  
From Tulare Lake*

*The name Tulare is from the Spanish word for tule—a marsh plant that once grew in broad bands along the lake shores and rivers of the Central Valley. Tules were a very important renewable resource for early inhabitants of the Valley.*



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**From 8,000 – 4,500 years ago**, warmer and dryer weather continued to melt the remaining glaciers and ice sheets covering parts of North America, Europe, and Asia, and the water from the melting ice caused sea levels worldwide to rise dramatically. The rising Pacific Ocean flooded the low land that is now under San Francisco and San Pablo bays and created the Sacramento-San Joaquin Delta. The marshy delta area was rich in food resources such as fish, ducks, turtles, and mammals—including large herds of tule elk. The abundance of food in the area allowed people to settle into villages and stay in one place for longer periods of time. Other parts of what is now California became very dry at this time, and life was more difficult for people living there.

**From 4,000 - 1,000 years ago**, the climate became cooler and very similar to our weather today. Increased rain and snow melt filled once-dry lake beds, and more water flowed into the Valley and Delta. The Native population of the state grew dramatically and flourished for three thousand years.

**Most of the archaeological deposits found at site CA-SJO-3 date to the end of this period, about 1,600 to 1,300 years ago.**

**About 1,000 years ago** a dramatic change affected some parts of California and the West. There is increased archaeological evidence of warfare, and many settlements were abandoned. Some archaeologists believe this was brought on by prolonged drought, and by increased human population competing for limited food resources. This is a problem we see even today in many parts of the world. In California's Great Central Valley big villages remained occupied through this period and new groups began moving into the area. The large Sacramento and San Joaquin rivers provided plenty of food and water, and the area remained vibrant.



**450 years ago** indigenous populations in the Valley were continuing to grow and tribal territories were shifting. The Native population of what is now California probably reached its highest level about this time—just prior to the arrival of the Spanish soldiers and missionaries, who would bring devastating changes.

**Today** we see a Great Central Valley that has been drastically changed by human hands. Many of the rivers that once flowed freely from the Sierra are now dammed and their flows controlled. Rivers and sloughs that once meandered through the Valley and overflowed their banks during winter storms are now contained by levees, man-made channels, and ditches. Marsh lands have been drained to build houses, and desert-dry lands are irrigated for crops. Many of the animals that once roamed the Valley are gone. The grizzly bear has been hunted out in the state, and the large herds of tule elk and pronghorn are now limited to a few small, isolated herds. While environmental change is not new, modern pollution is dramatically affecting the speed at which the climate is warming. We do not know what the long-term affects of this accelerated change will be.



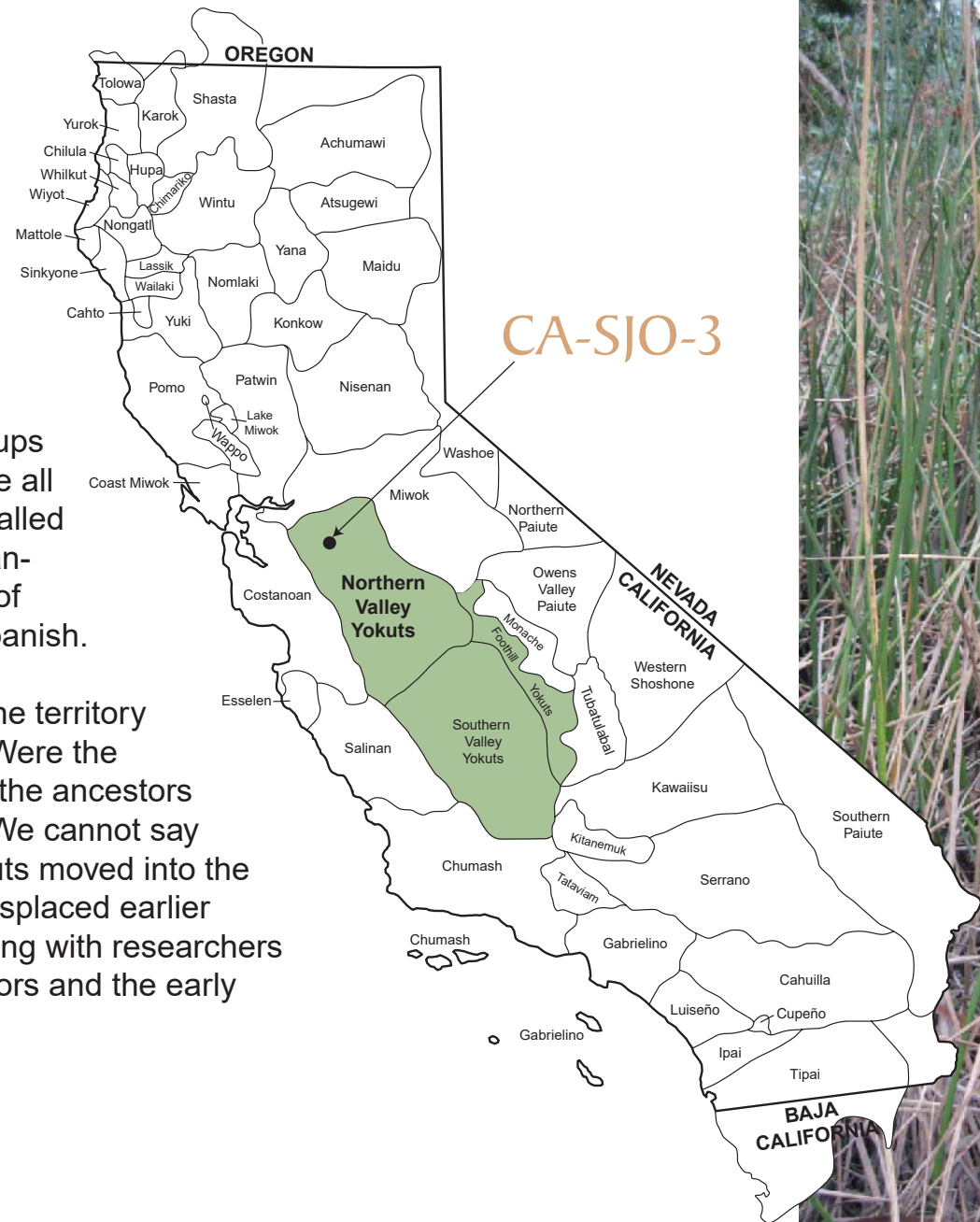
Today the Valley is a Patchwork of Cities and Agricultural Fields.



## The Village of CA-SJO-3

When early European explorers first came to California they found many Native cultures, made up of perhaps 300,000 people speaking 90 different languages. When Spanish soldiers and missionaries first rode into the San Joaquin Valley in the 1770s, about 50 different tribal groups (or tribelets) called the area home. These people all spoke similar languages and were collectively called Yokuts by early linguists (scientists who study language). The Yokuts may have had a population of about 41,000 people before the arrival of the Spanish.

The village now called CA-SJO-3 is located in the territory of the Coybos, a Northern Valley Yokuts group. Were the people who lived at the village 1,600 years ago the ancestors of the Yokuts, or members of an earlier group? We cannot say for sure, but some linguists believe that the Yokuts moved into the area from the south about 450 years ago and displaced earlier peoples. Today, Yokuts tribal members are working with researchers to help shed light on the lifeways of their ancestors and the early inhabitants of CA-SJO-3.



## What was life like for the people who lived at CA-SJO-3?

The village was situated on a small rise above the San Joaquin River and surrounding marshlands and probably was inhabited by 30 or 40 people from several intermarried families. It was likely occupied most of the year, but the villagers may have left for a time during sweltering summer days or when winter flood waters threatened. The houses had packed-earth floors and were made of wooden pole frames covered with mats woven of tule. Tule can grow to be 12 feet in height and an inch or more in diameter. The people of the Valley used these hollow reeds to make many of the things they needed, weaving tules into mats to sit on, binding them into bundles and lashing them together to make rafts and boats. They wove tules into baskets and made them into skirts; they also ate the seeds and roots.



*Photos of Tule Gathered into Bundles and Formed into a Traditional Boat. Courtesy Dino Labiste.*



*Photo of a Tachi Yokuts Woman with a Bundle of Tule. Courtesy Kings County Library.*

*Archaeologists found the tiny shells of three types of snails that live on tule—pond snails, rams horn snails, and pebble snails. These were brought to CA-SJO-3 on the plants the residents collected to make their mats, houses, boats, and baskets.*



The river and marsh environment provided an abundance of other foods as well. The archaeological remains found at CA-SJO-3 show that the villagers were hunting ducks, grebes, geese, and other waterfowl, and probably collected their eggs. Pond turtles were also caught and eaten. The village men fished using nets, weirs, and hook-and-line; women collected freshwater mussels and other shellfish.



*Bone and Shell Remains found at CA-SJO-3*





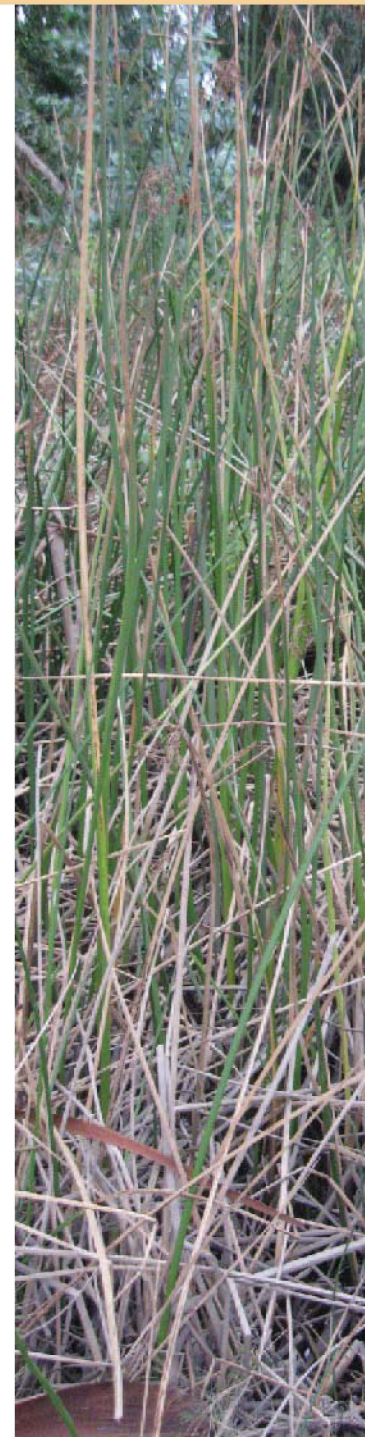
The men hunted with darts and atlatls (throwing sticks) and used snares and traps to catch birds and small animals. Women and children gathered wild grapes, blackberries, elderberries, and acorns. They also collected small seeds in the grassland areas of the Valley, including red-maid and clarkia seeds in the spring and wild sunflower seeds in the summer. Food was cooked over open fires, and the smoke probably helped keep mosquitoes away.



*Wild Grape*

Women spent a large part of their time collecting basketry materials and weaving baskets. These were used for gathering, storing, and preparing food, and were valuable trade items. Women wore skirts of plant fibers and occasionally deer skins. Men often wore no clothing at all except during cold weather, when both men and women wore capes made of skins. The people of CA-SJO-3 probably gathered for ceremonies and dances and wore special costumes that included fur, feathers, and ornaments made of ocean shells obtained through trade with coastal groups.

*Shell Beads  
From CA-SJO-3*



## Hunting Tule Elk, Pronghorn, and Deer

Large herds of tule elk once lived on the marsh and grasslands of the Central Valley, and pronghorn herds roamed the dryer areas. Deer did not gather in herds, but were plentiful in the riparian forests along the rivers and into the foothills. The people living at CA-SJO-3 hunted all three animals for their meat, hides, bones, and antlers. Although elk and pronghorn were much more abundant in the Valley than deer, deer bone is more common in most archaeological sites—including CA-SJO-3. It could be that the people preferred deer meat, or perhaps it is because deer move alone or in small groups and probably were easier to kill.



While prehistoric hunters could approach and kill a few members of an elk or pronghorn herd, it would not take long for the rest of the animals to be frightened and move out of the area. Hunters on foot could not pursue the herd without expending a great deal of time and energy and possibly crossing into neighboring tribal territory. It was not until European and American trappers and hunters came into the Valley with horses and guns that the great herds of elk and pronghorn were decimated. It is estimated that at one time half a million animals roamed the region, but by 1895 only about 28 tule elk survived. Their recent recovery has been due in large part to protection of the animals by one wealthy landowner near Bakersfield. Today there are perhaps 2,500 tule elk in a few small groups in various parts of the state; pronghorn are now found only in the northeastern corner of the state and on the east side of the Sierra Nevada.

*The adult male tule elk weighs 450-500 pounds, and a female can weigh 375-425 pounds.*

*Tule Elk Photo by John Pelafigue*





*Pronghorn Photo by John Pelafique*



*Pronghorn Bone  
from CA-SJO-3*

## A Land of Little Stone: Obsidian and Greenstone Trade

The villagers of CA-SJO-3—like other indigenous Californians—made their tools from stone, animal bone, shell, wood, and plant fibers. Stone was rare in the Valley, so local people acquired most of their tool stone through trade with neighboring groups.

Obsidian was a favored type of stone. It is a volcanic glass that is only found in a few places in California. It is very sharp when chipped and makes very good tools for piercing, cutting, and scraping. The obsidian found at CA-SJO-3 came from the Napa Valley and from sources on the east side of the Sierra Nevada. These materials were traded over great distances and probably changed hands again and again between the quarry and the tool maker. By tracking how obsidian from different sources moved across the landscape, archaeologists can learn much about trade and interaction between tribal groups.

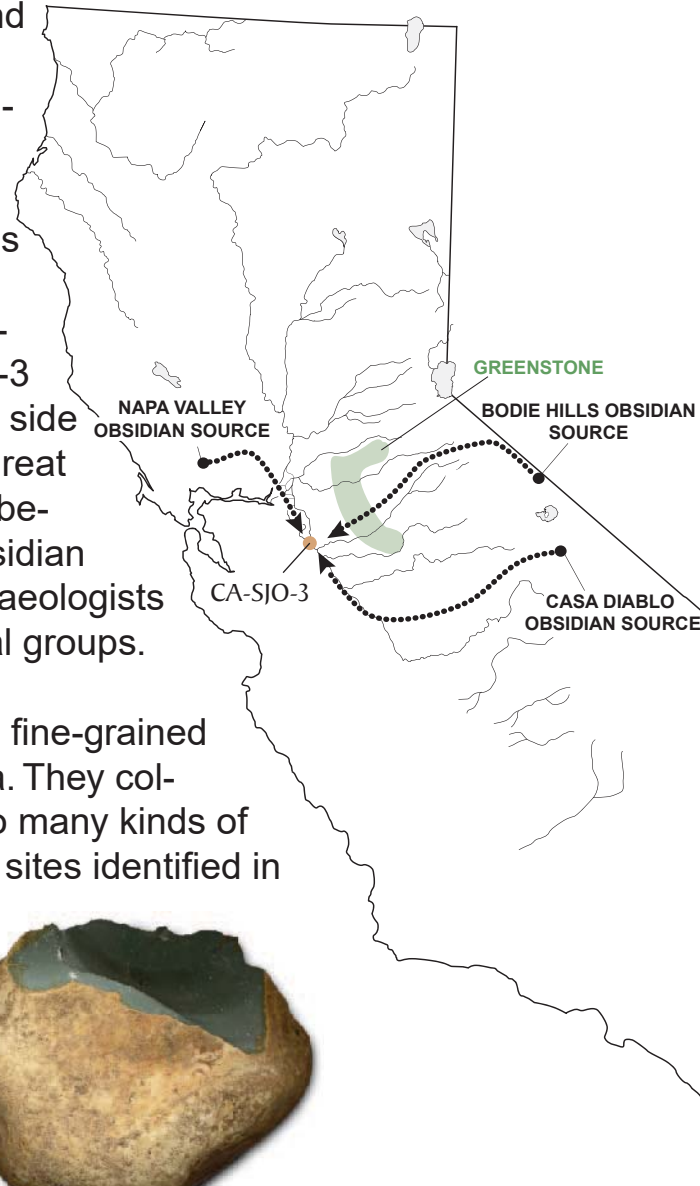
The villagers at CA-SJO-3 were also using greenstone, a fine-grained material found in the foothills of the central Sierra Nevada. They collected it from gravel bars along the rivers and made it into many kinds of cutting, chopping, and scraping tools. Some of the oldest sites identified in northern California contain tools made of greenstone.



*Obsidian*



*Greenstone*



# The Yokuts

The first known Europeans to enter the San Joaquin Valley were a group of Spanish explorers led by Captain Pedro Fages in 1772. His diary and reports provide a wealth of information on the Yokuts and how they lived at the time of contact. The following are excerpts from Fages' writings as they appear in the *Handbook of Yokuts Indians* by Frank F. Latta.

*The common Indians wear a small cloak which reaches to the waist; in their hair they inter-weave cords or bands with beads...*

*They have stone mortars very like the metates of this kingdom [Spain], jars of the same material, and trays of all sizes made of...reeds artistically decorated with fibrous roots of grass which always keep their natural color...*

*Among the land animals there are many antelope, which is very good to eat. In the mountains are wild sheep, which are also eaten, and entire herds of elks. These animals are a kind of deer, their heads being furnished with branching horns with many prongs... There are also deer of the ordinary kind...bears, wildcats, wolves, squirrels, coyotes, ferrets, and foxes...*



*Acorns from the Valley Oak*

*The acorns are treated in this manner: After they have been skinned and dried in the sun, they are beaten in stone mortars similar to almireces [Spanish mortars for kitchen use] until they are reduced to powder or flour. This is mixed with a suitable quantity of water in close-woven baskets, washed repeatedly, and the sediment or coarse flour allowed to settle. This done, it is now put on the sand and sprinkled with more water until the mass begins to harden and break up, and become filled with cracks. It is now ready to eat, uncooked, and is called pinole or bread. A part may be boiled in a suitable quantity of water, when it is called atole or gruel.*

***Captian Pedro Fages - 1772***



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## Disease, Missionaries, and Miners

Much of what we know about prehistoric life in California comes from combining archaeological information with the diaries and journals of early trappers and explorers and the written records from Spanish missionaries, but the very people who recorded the traditional life of the Native Californians were also responsible, in large part, for their destruction. The Yokuts of the San Joaquin River and Delta area were moved to Mission San Jose between 1809 and 1824. While the intent of the missionaries was to convert the natives to Catholicism, the reality was that the Indians were removed from their land and homes, their traditional way of life was destroyed, and they were exposed to numerous diseases from which they had no immunity.

In 1821, Mexico gained its independence from Spain and took control of central and southern California. The Mexican government began to take mission lands away from the Catholic Church and grant them to prominent Mexican citizens—despite the fact that the Church had promised the lands to the Native people. Many Natives left the missions at this time to return to their homelands, join members of other tribes, or find work on the new Mexican ranchos.


In 1833 an epidemic hit the few remaining Yokuts, as well as tribes up and down the Valley. This probably was malaria, introduced by members of the John Work/Hudson's Bay Company expedition. Work traveled south from Vancouver, Washington in 1832 with a large group of men, women, and children. At one point during the trip as many as 61 members of his group were sick with symptoms of malaria. The disease (which is transmitted by mosquitoes) resulted in the deaths of an estimated three-quarters of the local Native people.



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In 1846 the United States declared war on Mexico, and by the spring of 1847 the US military controlled all of central California. The discovery of gold in 1848 brought Hispanic and White miners to the gold fields. The near annihilation of the remaining Indians in the state came as a result of the rush of 1849—and the influx of thousands of miners and the settlers who followed. The Native people were pushed off their lands or murdered by the newcomers. Indians retaliated, and this created a cycle of atrocities by each group against the other.

In 1852 the Superintendent of Indian Affairs for the new state—Edward Beale—proposed a series of reservations, and all Indians from the northern San Joaquin Valley were moved to the Fresno Indian Farm. Some Yokuts were moved from the farm to the Tule River Reservation during the 1870s or perhaps earlier. During the 1870s and 1880s the US government established Indian schools and often removed children from their families in an attempt to assimilate them into the new dominant culture.



*In 1850 the first governor of the new American state of California, Peter Burnett, made a speech to the legislature in which he said that a war of extermination would be waged “...until the Indian race should become extinct.”*

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# Protecting Native American Rights and California's Cultural Heritage

By 1909 California Indians were fighting for civil rights and the restoration of their lands. Full citizenship for all Native Americans was not recognized by Congress until 1924. From 1927 to 1972 Indian groups fought numerous legal battles to regain land and be compensated for their losses. In 1972 a meager settlement of \$660 each was sent to more than 55,000 California Indians.

Growing environmental and social awareness beginning in the 1960s led to the enactment of numerous state and federal laws to preserve and protect archaeological sites, traditional cultural places, and other important cultural resources:

- National Historic Preservation Act, 1966
- National Environmental Policy Act, 1969
- California Environmental Quality Act, 1970
- Archaeological and Historical Preservation Act, 1974
- American Indian Religious Freedom Act, 1978
- Archaeological Resources Protection Act, 1979
- Native American Graves Protection and Repatriation Act, 1990

These laws added to the earlier Antiquities Act of 1906 and the Historic Sites Act of 1935 help to protect and preserve the nation's cultural heritage. Today archaeologists work side-by-side with Native people to identify, evaluate, and interpret California's ancient past.

The Northern Valley Yokuts Nototomne Cultural Preservation Group (a nonprofit Native American 501(c)3 group) contracts with developers after they inadvertently encounter buried archaeological sites. The Cultural Preservation Group also work with local and state governments on Native American burial and sacred sites issues, cultural preservation, and public education.







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Kim Tanksley, Office of Cultural Resource Studies, Caltrans District 10, administered the production of this web piece, which was written and designed by Tammara Ekness Norton of Far Western Anthropological Research Group, Inc., Davis, California. 2009

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John Pelafigue - Tule Elk and Pronghorn Photographs

### Recommended Reading

*Handbook of Yokuts Indians* by Frank F. Latta  
*Indian Summer Traditional Life Among the Choinumne Indians of California's San Joaquin Valley* by Thomas Jefferson Mayfield

