THE

OHLONE PEOPLE

OF

CENTRAL CALIFORNIA

AN EDUCATOR’S GUIDE

SANTA CLARA COUNTY PARKS
THE
OHZONE PEOPLE
OF
CENTRAL CALIFORNIA

AN EDUCATOR’S GUIDE

PREPARED BY
DOUGLAS PETERSEN & LINDA YAMANE
2000

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DEDICATION

This work is dedicated to the Ohlone people, who lived here for thousands of years in balance with the land,

and to their descendants, many of whom continue the traditions of their ancestors.
ABOUT THE AUTHORS

DOUGLAS PETERSEN is an anthropologist who has studied and worked with the material culture of Native California for over 25 years. He is a regular guest speaker at schools, colleges, museums, and parks throughout the Bay Area, and works with many museum and park education programs training their staff and docents. He also makes a variety of carefully researched artifact reproductions for museums, schools and private collectors.

LINDA YAMANE, Ohlone basketweaver, singer and storyteller, traces her ancestry to the Rumsien Ohlone, the native people of the Monterey area. She has been active in researching and retrieving Rumsien language, song, folklore and basketry—traditions that were once thought lost. Linda works as a freelance writer, illustrator and graphic designer. She is the newsletter editor for the California Indian Basketweavers Association and a contributing editor to News From Native California magazine. Her thirty years of experience in enrichment education has included workshops for teachers and docents, outdoor and classroom programs, and school assemblies throughout the San Francisco and Monterey Bay areas.
The material within these pages is provided to help you teach about Ohlone people, both past and present, and reflects the most accurate information available at the time of this writing. Early contact with the Spanish missions dramatically changed the Ohlone way of life and many of the old ways were lost, however knowledge of the ways of the past continues to be recovered, and we trust that some of what we have written will need to be revised in the future.

There remain brief accounts of the Ohlone from the writings of the Spanish missionaries as well as the journals and diaries of other early visitors to the area. Much information has also been preserved in Catholic church records. While valuable, these sources often reflect the cultural biases of the writers, which clouds the credibility of the information. Later, the ethnographic studies of anthropologists like Alfred Kroeber, C. Hart Merriam, and John P. Harrington, who worked in the early 1900s, recorded the knowledge of several Ohlone elders who shared what they knew of life before, during and after the missions. Archaeological evidence has also contributed clues to the distant past. Together, these bits and pieces combine to form an ever-expanding, though still incomplete, picture of the Ohlone world.

The early Ohlone were a unique people, different from the hundreds of other tribal groups of North America. Their culture was shaped by their environment and so was perfectly adapted to the world in which they lived.

When you teach your students about the Ohlone, please do so with the care, honesty and respect due a people who have lived here successfully for thousands of years, and whose cultural heritage is an important part of California’s history.
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ORIGINS IN NORTH AMERICA

Contrary to what many books imply, California’s history did not begin when Father Serra and Portola arrived in 1769 and established the first mission in San Diego. The history of people in California reaches back at least 10,000 years, to a time when the last of the mammoths and mastodons still walked the earth and saber-toothed cats stalked the forests.

MIGRATION THEORY

Between about 40,000 and 10,000 years ago, the earth was undergoing an ice age. Snow and ice covered most of Canada and some of the northern United States, in places up to a mile thick. With that much of the earth’s water trapped on land in the form of ice, sea level was lower, at times between 200 and 300 feet lower than it is today.

At that time, there was no San Francisco or Monterey Bay. The Bering Strait, which today separates Asia and North America, was a dry land bridge easily crossed by wandering herds of caribou in search of food.

Several times during this ice age, the weather warmed enough to melt an ice-free corridor through Alaska, western Canada, and into the upper United States. Scientists have long believed that during these warmer periods, waves of people from Asia moved into the Americas and spread to every part of this formerly uninhabited land.

More recent discoveries have suggested that North America’s first settlers may have come by sea as well as overland. It is probable that additional evidence of these early peoples lies beneath water on an ancient shoreline that was once exposed and inhabited.

NATIVE CREATION BELIEFS

In contrast to scientific explanations of Native American origins, Native mythologies typically describe their creation as having occurred in the very places they lived. For example, Monterey area Ohlone stories describe the creation of people from the earth of the Monterey Bay region itself. Please take care not to present Native myths as quaint and unsophisticated. Let them stand as equals to modern scientific theories.
HOW PEOPLE WERE MADE
A RUMSIEN OHLONE STORY
TOLD & ILLUSTRATED BY LINDA YAMANE
from the book
When the World Ended/How Hummingbird Got Fire/How People Were Made
published by Oyate, 1995

Once, a very long time ago, something happened to the world. The ocean rose up higher and higher, covering the land little by little, rising up and up until nearly everything was covered over with water. Eagle, Hummingbird, Crow, Raven and Hawk were together on a mountain top, looking out at the world and seeing how it had been destroyed. After many days, Eagle had an idea and used his magic, and help from Hawk, to dry up the waters. With help from Hummingbird, who stole fire from the Badger People underground, they were able to restore fire to the world, and eat a long-overdue meal.

They had eaten and were feeling contented, and they were talking when Eagle said, "How are we going to gather the people—bring back the people so we won’t be alone? Let’s see what we can do."

He said to Crow, "What do you know?" And Crow answered, "I know one thing we can do."

What’s that?” asked Eagle. “Well, look, we’ll make figures out of wood—a man, a woman, anything we want to make.”

But Eagle said, “No, that won’t look good to make them of wood, and there aren’t even any sticks we can use. Besides, it would be a lot of work. Something out of earth,” he said, “that would be better.”

Crow said, “Yes, I know a kind of earth that we can use to make people.” And Eagle asked, “What type of earth is it? Or is it rock, or what?” I’ll bring some,” said Crow. So he went and brought back a little and formed it like a person.
“No, no,” said Eagle. “This doesn’t look good, and it’s too hard to work with. Which of you knows a type of earth that’s called clay? It’s very sticky, really nice and soft. Go on,” he said, “go over there and ask those uncles of yours, the Badgers. Go over there and see if they know this kind of earth.”

Hummingbird flew over there and asked the Badger People, “Do any of you know the kind of earth that’s called clay—the kind you can make little figures and things with?” And they said, “Sure, let’s go over there. We’ll show you. With this clay you can make things—you can make little figures.”

So they went there and they brought some of this earth to Eagle. And Eagle said, “Yes! This is the kind of earth I want! Bring more.” So they brought a lot. They went and brought back a lot and they began making little figures. They made a little man, a little woman, a little deer—all the things they wanted. Everything they made the same way, with clay, and there the figures lay.

“Good,” said Eagle, “but what are we going to do so that these people can speak or move around or anything? Do you know anything,” he asked Crow, “that can make these people move?” And Crow answered, “Yes, of course.” “Well, what do you know?” “Let’s make a way to color their hair dark, and see how it looks.” So they did that. They colored their hair dark.

“Alright,” said Eagle, “that’s good. They look like people. They’re looking good,” he said. “Let’s watch and see what happens.” They were there watching when the figures began to move a little. And Eagle said, “Well, it seems like they’re getting strong, like they’re gaining strength.”

They were there watching until someone thought, “How are we going to make their eyes?” “Oh, that’s right, their eyes are made of earth!” said Eagle. “That’s not good. Let’s make them of rock.”

“What kind of rock?” someone asked. “White rock,” Eagle answered, “but a certain kind of white rock, not chalk rock.” So they got little white rocks, and made the eyes. They made the eyes of little white—and black rocks.

“Well then,” said Eagle, “in three days their eyes will begin to move.” And so it happened that they began to move and talk, everyone happy and contented.
THE EVOLUTION OF CULTURES

When people arrived on this continent, they found a land of many different environments. Each presented a unique set of resources and physical challenges that had to be met if these people were to survive. Thus, over time, cultures developed in many different ways.

The first people in California are thought to have lived as small bands of hunters and gatherers, moving about the land in search of plants and animals to eat. They would make a camp and stay only until the food or firewood started becoming scarce. Then they would move on a few miles and make another camp.

These very early peoples lived mostly on large game animals, collecting plant foods as they traveled. Without a means of preserving and storing food for future use, they were dependent on what foods they could find in any given season. The winter months were particularly difficult and older people and very young children often didn’t survive.

These first people used round hand-stones on flat milling stones (manos and metates) to grind hard seeds into flour, but they did not know how to process acorns to remove the tannic acid. They hunted a variety of animals, including mammoths, mastodons, giant bison, and the smaller horses and camels that lived here at the time. The men hunted these animals with spear throwers and spears (atlatis and darts).

A spear thrower was most likely made of wood, between 18 and 24 inches long, with a handle at one end for gripping, and a hook at the other that fit into the end of a spear. The spear thrower and spear were fitted together and held in one hand behind the hunter’s head. As his arm came forward, the spear was released and the thrower remained in his hand. By extending the length of the hunter’s arm, the spear thrower added considerable thrust to the spear. It was an ideal weapon for hunting large game animals.

Slowly, things began to change. As large game animals became harder and harder to find, the people began hunting smaller animals. They developed the bow and arrow, which was more effective for hunting elk, deer, and antelope, and a variety of traps, snares, nets and hooks for catching smaller game. They also utilized more resources from the ocean, like fish, shellfish and marine mammals, and learned to leach the tannic acid from acorns, making available an entirely new food source.

Linguistic and archaeological evidence has led some scientists to conclude that about 4,000 years ago the first Ohlone-speaking peoples began moving from the Sierra foothills, down the Sacramento River delta towards the Bay Area. By 1,500 years ago (500 A.D.) they had displaced many of the area’s earlier peoples and dominated the region.

They lived in larger villages of between 50 and 500 people and, while they still made seasonal migrations to gather acorns, fish for salmon, harvest from the seashore, or hunt rabbits, they spent the greater part of the year in one
location.

This was possible because they knew how to dry and store acorns in granaries for use throughout the year. They kept dried seeds, nuts, bulbs and fruits in large storage baskets and they dried fish and meat to preserve it, as well.

With an abundant supply of food available in all seasons, many more people survived the winters and the population began to increase. It has been estimated that when Portola first arrived in San Diego, there were over 300,000 native people living in California, and that perhaps 10,000 of these were Ohlone.

The Ohlone people not only survived, but thrived here in central California for thousands of years. The Ohlone are different from the buffalo-hunting peoples of the great plains, the farmers and shepherders of the southwest, or the totem-carving fisherman of the Pacific northwest. Their culture is unique and arises from the land we call California.

THE EARLY ENVIRONMENT

When the first people arrived here, the environment was much wetter than it is today. Greater rainfall caused rivers and streams to flow freely, forming ponds, lakes and wetlands. Marshes stretched for miles along the coastal lowlands and valleys throughout Ohlone territory, bordered by thick stands of tules and cattails.

The meadows supported dense bunch grasses. Hillsides were covered with oak, madrone and bay trees, and huge redwoods grew along the moist coastal slopes. Stream beds were filled with willows, cottonwoods and sycamores, while higher hills bore chaparral plants such as manzanita, ceanothus and chamise.

Each of these habitats contained its own unique assortment of plants that the Ohlone could use for food and medicine, and for making baskets, hunting equipment and other necessities.

Animal life was also rich and varied. Wetlands were home to millions of ducks, geese and other birds that migrated through California each year. Great herds of deer, antelope and elk roamed the hillsides. Rabbits and quail ran freely through the brush. The rivers were swollen with salmon and trout, and coastal shores were teeming with shellfish. The ocean itself provided a variety of fish, as well as otters, seals, sea lions and whales.

With this abundance of plant and animal life, and the relatively mild climate, people have been making California their home for a very long time. Evidence of this can been seen in the linguistic map of California (see following page). Notice the number of different language stocks, and hundreds of languages that were spoken here.
Major Language Groups & Families of California

P  Penutian Family
H  Hokan Family
S  Shoshonean Family
A  Athabaskan Family
AL  Algonkin Family
Y  Yukian Family

From The Ohlone Way by Malcolm Margolin, Heyday Books, 1978
Many different languages have been spoken in Native California. Some estimates are as high as three hundred, not including the hundreds of subdialects that also evolved.

The Ohlone people were actually several independent tribal groups distinguished by anthropologists because they shared a common root language distinct from the languages of their neighbors. However, within their territory, the Ohlone spoke perhaps eight separate languages, currently called Karkin, Chochenyo, Ramaytush, Awaswas, Tamyen, Mutsun, Rumsien and Chalon.

While each of these derived from a common root language, the speaker of one language might not have readily understood the speaker of another, especially if they lived a great distance apart. Some words would have been familiar, but communication was probably difficult, except among those of neighboring groups.

The Spanish called them “costeños,” meaning “people of the coast.” This later became Americanized to Costanoan. Today, they are known as Ohlone, or Costanoan/Ohlone. Ohlone is variously said to have been derived from “Oljon,” a village and tribe name from the coast of San Mateo County, or from a Miwok word meaning “people of the west.” Whatever its origin, most modern descendants prefer to be called Ohlone.

from The Snake That Lived in the Santa Cruz Mountains & Other Ohlone Stories by Linda Yamane. Oyate, 1998
Tribes of California

From Grass Games & Moon Races—California Indian Games & Toys by Jeannine Gendar, Heyday Books, 1995
THE PEOPLE

The Ohlone people have been described by many early visitors to this area. While Sebastian Vizcaino, who visited Monterey in 1602, described the native people as “strong-bodied with light complexion,” in 1786, Jean Francois de la Perouse described their color as “nearly approach[ing] that of the Negroes.” In general, though, they were described as being fairly short in stature, with dark skin, broad noses, dark brown eyes, and dark hair. An exception to this seems to have been East Bay Ohlone people, whom Juan Crespi described as “very fair-haired.” Pedro Fages described Indian men in the vicinity of present-day Martinez as “tall in stature” and “the whitest and fairest-haired of any that we have seen in these lands.”

Their hair was worn long, unless it had been cut short in mourning for the death of a relative. Women often cut bangs in the front with the rest of the hair hanging free or braided. Men with long hair either braided it or tied it in a bunch on the top of their heads.

Some of the men wore long beards and mustaches, but many removed their facial hair with “tweezers.” La Perouse wrote: “Many of them have beards, while others, according to the missionaries, have never had any. ... The governor...assured us that those who appeared without beards had plucked them out with bivalve shells, which they used as tweezers.”

Because of California’s relatively mild weather, little clothing was worn. The men and young children usually wore no clothing at all. Women wore a two-part skirt made of soft deerskin in the back and a front apron, made of strands of fiber. When the weather was cold, Ohlone people wore robes of woven rabbit fur or sea otter fur for warmth. There are also accounts of men smearing themselves with a layer of mud to keep warm. They normally went barefoot, and although there is a word for hat in the Monterey Ohlone language, there is no documentation that Ohlone women wore basketry hats.

While there was some tattooing of the face, forehead and arms, this practice varied considerably among groups, and was not necessarily common among the Ohlone people.

Ears were pierced to hold pendants of shell, feathers or flowers, or short reed sticks. Some people, possibly men of high social rank, wore disks carved of soapstone in their ear lobes, and some men wore a bone ornament through the nasal septum. Necklaces of olivella shells and pendants shaped from abalone shell were also worn.
VILLAGES

Villages are believed to have varied in size from about 50 to 500 people. They were located near fresh water and often in an area that divided two habitats, such as oak woodland and meadow, or river mouth and tide pool. This gave easy access to the plants and animals of both environments.

A small group of villages usually comprised a political unit, each with its own chief and shamans, and conducting their own business. The chief, either a man or a woman, maintained their power by the consent of the people. They were responsible for seeing that guests were fed and entertained. But most importantly, they acted as advisors to their community and spoke on behalf of the village when necessary.

Most of the people in a village were related to each other either by blood or through marriage. Because of this, marriage partners were often sought from nearby villages, and these bonds served to link neighboring villages.

Villages consisted of several structures. The most common was the tule house. These were built in different sizes, but many were large enough to house an extended family of 10 to 15 people. The doorway was rectangular and was "closed" by covering it with a tule mat. A fireplace was in the center of the house.

These dome-shaped or conical houses were built by constructing a circular framework of willow saplings into the ground, then bending them in order to tie them together at the top. These were supported by several horizontal rows of willow poles secured to the framework with strips of willow bark. The resulting frame was then covered with a thick layer of tules that was held in place with another set of horizontal willow poles attached to the outside. Other brush thatching was sometimes used. In some areas, houses were made from slabs of redwood bark leaned together to form a large inverted cone.

In 1929, shortly before her death, Mutsun Ohlone elder, Ascencia Solorsano Cervantes, told ethnologist John P. Harrington: "They spent the winter in the tule thatched houses; they did not leak at all. They knew how to live."
These houses were warm and dry places where baskets, weapons, dried foods, ceremonial equipment and other precious things could be stored, and where the people could sleep on cold nights. Most of the day's work, however, was done outside, under a shade shelter if needed.

By the end of a rainy season, tule houses needed to be repaired. During this time, the tules would absorb rainwater and become mildewed from the dampness. Smoke from the fire turned the ceiling black, and fleas and ticks from deer and other animals might also infest the house. As soon as new tules were available for harvesting, the old thatching was removed and burned, and new material attached to the framework.

While visiting Santa Clara Valley, Pedro Fages wrote: "They have their hemispherical houses of about four yards in diameter, and live very sociably, fixing their residences in large villages which, since they become infested with fleas in the springtime, they abandon for the purpose of passing this uncomfortable season in little brush houses which they construct at a short distance from their villages."

Sun shelters (ramadas) were simple four-legged structures, covered with tules, bracken fern fronds, or brush, to keep the sun off of those working below. This is where much of a village's daily work was done.

Granaries were built to store acorns and other foods. These large containers were designed to keep foods dry, free from insects and safe from marauding animals. Southern Ohlone granaries have been described as square or rectangular in shape, with a base that sat above the ground, and a flat roof made of tules. In other areas, the granaries may have been different in shape. In Monterey, a family stored their acorn meats in a large willow basket, 3 to 4 feet high, which they kept in their house.

Many tribes in central California added strongly scented leaves to their acorns, like those of the California Bay Laurel (Umbellularia californica), to deter insects. It is very likely that the Ohlone did so as well.

In each village there was a dance enclosure. It was either oval or round in shape, with one main entrance and a smaller one at the opposite end. It was made of boughs that were either woven or piled to make a fence about four to five feet high. This enclosure served as a gathering place for ceremonies and celebrations.

Although sparsely documented, some villages also had a large assembly house, a dome-shaped structure with a central fireplace and an opening in the roof to vent the smoke. This was a place where people could meet. One such house, along the coast north of Santa Cruz, was described as large enough to hold the entire village of 200 people!

Outside the village, near the river or lake, was a sweathouse (temescal). This structure was often partially dug into the bank of a stream and finished with a simple brush structure built around it. They were small, holding only six to eight people. A small fire heated the interior, and when those
inside were sweating profusely and could stand the heat no longer, they would run from the sweathouse and jump into the cold water nearby. The sweathouse was used daily, but only by Ohlone men.

Ohlone people spent most of their time living in their village. But several times during the year many would leave for a few weeks to gather food resources that were ready to harvest. In the fall, when the acorns were ready to be collected, they would go to gather this important food. In the late spring when salmon were running in the rivers, they camped nearby in order to catch these rich and delicious fish. These temporary campsites were used year after year as the Ohlone moved throughout their territory gathering foods and other materials.

THE VILLAGE AT CHITACTAC

The Uvas Creek/Little Arthur Creek area had been the site of Ohlone Indian villages for thousands of years prior to the arrival of the Spanish missionaries.

Archaeological evidence indicates that Mutsun Ohlones had inhabited this site for over 3,000 years. Radio carbon dating of site materials have yielded habitation dates of between 1,700 and 2,700 b.p. (before present). The four acre park site is part of a larger area of pre-contact habitation extending across Uvas and Little Arthur Creeks. The village was called Chitactac by the local Mutsun speaking people.

The site also contains a number of petroglyphs and over 75 bedrock mortars. Petroglyphs are markings picked, abraded, grooved or incised onto a rock surface. Two types of petroglyphs are found at this site: cupules and cup-and-ring (concentric circles with center depression). Their meaning and age are unknown, however, similar motifs found in other areas of Northern California have been associated with rain-making, fertility enhancement, puberty rites or shamanic ritual.

Throughout the site are numerous bedrock mortars. Mortars are stone bowls with which a pestle was used to process nuts, seeds, meat and fish. Bedrock mortars are stone bowls that are part of the existing rock outcroppings and may be found throughout the Chitactac site.

The park includes a self-guided interpretive walk and an interpretive shelter focusing on Ohlone Indian culture and the Adams school-house which was sited on the property from the 1850s until 1956.
Tules

Tules are tall, grass-like plants that grow in wet, marshy areas—the same freshwater habitat in which we find cattails. They are found throughout the world and are common in California from the Oregon border to Mexico, wherever there is a freshwater marsh.

Tules, sometimes called bulrushes, are members of the sedge family. They grow from 6 to 9 feet tall, rising as single stems from thick rootstocks and rhizomes under the water. They can form large and dense thickets along the edges of lakes, ponds, and marshes.

Two of the more common tule species found in California are the California Bulrush (*Scirpus californicus*), with a triangular-shaped stem, and the Common Tule (*Scirpus acutus*), with a round stem. The outer surface of the tule is tough, fibrous and water repellent. This tough outer skin helps the plant stand tall. Moisture and nutrients travel up the stem just beneath this outer surface, leaving the inside of the plant dry.

The middle of the tule plant is filled with thousands of individual air pockets, each dry and sealed to keep the air trapped inside. It is this unique structure that gives the tule its lightweight strength, allowing it to stand tall, yet be flexible enough to bend and not break in a strong wind.

Because the Ohlone built their villages near a source of fresh water, it is no surprise that over the centuries they developed many different ways to use this versatile plant.

Their water repellence and abundance made them perfect for making dome-shaped tule houses. A framework of willow poles covered with a thick layer of tules made a warm and dry house for sleeping and for storing things away from the elements.

They may have been used to cover granaries filled with acorns or other food supplies, keeping them dry until they were needed. Long mats or bundles of tules could be tied to upright poles to make windbreaks in front of a house, or used to cover the roof of a sun shelter.

Because of their spongy interior air pockets, tules made soft mats for sitting on while working on a basket or straightening an arrow shaft. The air trapped inside also worked as an excellent insulator against the chill of the
ground, and it is possible that thick mats or bundles of tules were used as mattresses under bedding.

The long and fibrous outer surface of the tule plant allowed it to be twisted into twine or rope. Rope, either from tule or cattail leaves, was likely used to tie bundles of dry tules together to form canoe-shaped boats. These air-filled tule boats were used on lakes, rivers, and estuaries throughout Ohlone territory, as well as on the quieter waters of San Francisco and Monterey bays.

In some parts of Ohlone territory, simple tule baskets were made for holding berries, and women's front aprons were sometimes made of tules. Tules were cut with a serrated knife or saw made from the flat shoulder blade of a deer. The plants were cut green and usually allowed to dry or cure for a few weeks before being used.

"Sawiy"—a simple basket made of tules, used by Mutsun and Santa Cruz area Ohlones for gathering blackberries.
COLLECTING & PREPARING TULES

TULES ARE BEST COLLECTED in the early summer, when they’re as tall as they’re going to grow but haven’t started turning brown yet. Tules must be cut while still green. A short, serrated steak knife works especially well for cutting tules. You may want to tie a small loop of twine to the handle and around your wrist so you won’t accidentally drop the knife and lose it in the marsh. Be very careful. It is easy to trip in the dense thicket, so move slowly and be cautious of the knife in your hand.

CUT THE TULE STEMS just above the waterline, and cut tunnels through the thicket rather than cutting everything in one area. Remember that many birds make their homes in the marsh, using the tules for nesting, feeding and hiding places. If you encounter a nest or bird of any kind leave it alone and move in another direction.

LAY THE CUT TULES in a pile, all facing the same direction. Try not to bend them during collecting, because every bend creates a weak spot that could cause problems later when working with it.

TULES SHOULD BE DRIED SLOWLY for a week or two before use. They can be spread in the shade of a tree, for example, and should be turned daily so they’ll dry evenly. They’ll fade in color as they dry, retaining a pale greenish color if dried in the shade or turning beige if dried in the sun. Once cured, the tules can be bundled and stored for many months.

BEFORE USE, TULES SHOULD BE SOAKED in water to soften them, making them flexible to work with. If dry, they will crack and break when bent. You can soak them in a pond or stream, bathtub, outdoor wading pool, or wet them thoroughly with a hose and wrap them in plastic for several hours.

NOTE: Tules may not be gathered in national, state, county or local parks or preserves without a special permit. Get permission from the owner if gathering on private property.
MAKING TULE TWINE

THE OHLONE PEOPLE used several different materials to make string, twine and rope for use in their daily lives. Tules and the leaves of the cattail are thought to have been used to make coarse twine and rope. Finer cordage was made from fibers of the milkweed, dogbane, and stinging nettle plants.

ALL STRING, TWINE AND ROPE is made in the same way. Once you have mastered this technique with tules, you’ll be able to make string from any long-fibered material.

TO BEGIN, select a long, unbent, damp piece of tule. Flatten it between your thumb and fingers to get the air and water out of its entire length. This will make it easier to twist.

FOLD THE PIECE IN TWO, leaving one end about 6 inches longer than the other. Now straighten the piece out and hold it, with one hand on either side of the fold and about 4 inches apart. Twist the tule as tightly as you can. At some point, a small loop will "flip" over near the center of your twisting. This is the beginning of your twine.

TAKE THE SMALL LOOP in one hand and, with the other hand, continue twisting the two ends, separately and in the same direction, until they are very tightly wound for a length of 2 to 3 inches. Holding the two ends so they won’t untwist, let the loop end go and the twine will twist back on itself, locking the newly twisted length into place. Adjust the twisted tule to make the ply smooth and even. Continue this process until you get about 6 inches from your shortest end.

TO LENGTHEN YOUR TWINE, you can splice in another piece of tule by laying it over the last 6 inches of your shortest end and twisting the two pieces together as one. The ends are offset so two splices won’t occur at the same place in your twine. Rope is made in the same way, by twisting a bundle of several tules instead of a single one.
MAKING A TULE MAT

TO MAKE A 1-FOOT SQUARE MAT, cut tules into 18-inch lengths, enough to cover a 1-foot area in a single layer. The extra length gives you room to trim the edges when finished. Lay them on a flat surface and alternate every other piece so that the thick ends are not all on the same side. This will help to keep your mat square.

CUT TWO PIECES of heavy twine, each about 3 feet long. Fold one piece in half and loop it over the first piece of tule, about 5 inches in from the end. Give the two ends of twine a half twist and set another piece of tule between them. Repeat the half twist and adding pieces until you come to the last piece. Tie the two ends of twine together with a simple square knot and this completes one side of your mat.

REPEAT THE PROCESS with the other piece of twine, about 5 inches in from the other side. Try to keep your two lines of twining parallel. When you reach the end, tie off the two ends of twine as you did before. You can tighten your mat by starting at the beginning end and pulling each piece of tule tight against its neighbor. Retie the knot at the end to take up the excess twine.

TO FINISH YOUR MAT, trim off both sides, about 2 inches from the twine, to make them even. Another technique is to roll the mat up and saw through the bundle with your tule-gathering knife.

TO MAKE THICKER MATS, or when tules are of small diameter, use several tules between each twist of twine. For wider mats, put a row of twining approximately every 8 to 12 inches to give it support.
SOCIAL ROLES

The Ohlone people were hunters and gatherers, which means that everything they needed had to be obtained from the environment around them. Even though central California was a land of great abundance, this took a lot of time and effort and everyone in the community who was able had to contribute.

As with all hunting and gathering societies, there was a division of labor between men and women. In general, the men hunted and the women gathered. This division evolved over the centuries, not because men are better hunters than women, but because women have the capacity to feed and care for infant children.

With crying and fussing children at their sides, women were only able to collect foods that wouldn’t be frightened away by the noise—like nuts, seeds, berries, bulbs, and shellfish. Without children to tend, the men were able to quietly and patiently stalk game animals like deer, elk and antelope.

A child’s training for adulthood began very early in life. Since boys and girls were expected to fill the traditional roles of men and women when they grew older, they were only taught the things they needed to know to fulfill that role. While it was possible for men and women to switch roles, it was uncommon and not readily accepted among the Ohlone.

MARRIAGE

Marriage among the Ohlone was a relatively informal process. If a man and a woman wanted to marry, the man would approach the woman’s parents for their consent. If the marriage was agreed, he then gave her (and in some cases her parents) a gift, such as a rabbit skin blanket or shell beads, after which they were considered married. Divorce was an equally informal process and, if it happened, the children stayed with their mother.

Since most people in a village were related to one another, either by blood or through marriage, young people had to look outside their village for potential mates. There were opportunities for them to meet when people from several villages joined together to celebrate a harvest season or other special event. These celebrations were times of great feasting, singing and dancing, when families were reunited and potential mates were sought. Marriages between neighboring villages helped to strengthen the bonds between them and made for a more peaceful life.
INFANTS & CHILDREN

As soon as a child was born the umbilical cord was tied and cut and the baby washed in warm water. For the next several days it lay quietly with its mother in a specially made bed, a pit that was dug into the floor of the house, lined with hot stones and covered with a thick layer of soft leaves and scented plants. The afterbirth and umbilical cord were burned.

For the next few weeks the child’s mother followed a very careful diet, eating no meat or fish and avoiding salt and cold water. Infants nursed for close to two years, during which time their parents abstained from intercourse.

Babies were carried securely bound into cradle baskets. These were carried by the mother, but the exact method is not known. She may have worn a strap over her forehead or across her chest and shoulders. Or she may have carried it lashed so that it rested on her hip.

We know very little about the specific style of cradle basket used by the Ohlone, but throughout California babies were typically wrapped in a soft leather blanket padded with absorbent diaper material such as grass or moss. In some California tribes, a small piece of soapstone was attached to the cradle. When scraped, it produced talcum powder to help keep the child dry.

Parents, relatives, and other community members provided the child’s education. A boy might have received his first bow and arrows from his uncle, and a girl might have been taught to weave baskets by her grandmother or aunt.

When they reached puberty, both boys and girls took part in special ceremonies to signify their entry into adulthood. There is some indication that boys may have undergone a vision quest that involved the hallucinogenic plant jimson weed. Special ceremonies were held for girls, as well, when they had their first menstruation. During this time they stayed inside their houses and avoided meat, fish, salt and drinking cold water.

BASKETRY

Ohlone people used many types of baskets in their daily lives, especially for collecting, processing, storing, and cooking foods. There were paddle-shaped seed beaters, used to knock seeds from grasses and other plants into larger collecting baskets. Shallow winnowing baskets were used to remove

"Walaheen," a southern Ohlone winnowing & roasting basket.
the husks from seeds and nuts, or to toss the seeds and nuts with hot coals to parch them. A variety of other baskets were made for storing dried foods. A shallow, open-weave basket served the same purpose as a sieve or colander of today.

Large conical burden baskets were used to carry almost everything, from acorns to firewood. Some were closely-woven, while others were open-weave. These were carried by a strap which looped around the basket and over the carrier's forehead or across their shoulders. Large, bulky loads were also carried in big hammock-like nets.

In some Ohlone areas, simple baskets were made of tule or other material for collecting soft, ripe berries. Basket traps were used to catch fish and birds. There were even water baskets for storing or carrying water.

Hopper baskets (baskets without bottoms) were used to contain acorn flour as it was pounded in bedrock or portable mortars. Flat, tightly woven baskets were used for sifting acorn flour, and shallow loosely woven baskets served as leaching basins. In the Monterey area, acorn was sometimes leached, and even cooked, in the cone-shaped burden basket. Watertight baskets were used for boiling acorn or brewing tea, and smaller bowls were used as dippers, eating bowls, and drinking cups.

Very special baskets were made for storing trinkets and other valuable items, like jewelry or sewing materials. These beautiful baskets were elaborately decorated with colorful feathers such as red acorn woodpecker, green mallard, redwing blackbird, and quail topknot feathers, along with little shell beads and abalone pendants. Sometimes these baskets were burned as an offering or sacrifice when someone died.

For the Ohlone, there are two basic techniques for constructing a basket—twining and coiling. Twined baskets begin with a series of sticks that provide the framework. These sticks are
attached together by twisting pairs of moistened weaving material around them. More sticks must be added to shape the width and depth of the basket.

Coiling is quite different from twining. Coiled baskets start out with a tight coil of flexible plant material. This becomes the center bottom of the basket. Later, when the basket has grown a bit, willow sticks are added as the foundation. As each dampened weaving strand is wrapped around the willow rod, the weaver pokes a small hole into the row below it with a sharp awl. In the past, the awl was made of sharpened bone. Before the hole closes up, the strand is pushed through and the stitch is pulled tight. In this way, the basket grows very slowly, stitch by stitch.

The Ohlone used several different plant materials to make their baskets. Among these were willow (Salix hindsiana or Salix lasiolepis) and hazel (Corylus cornuta or Corylus californica) shoots, sedge (Carex barbara) and bracken fern (Pteridium aquilinum) rhizomes, bulrush (Scirpus robustus or Scirpus maritimus) and horsetail (Equisetum spp.) runners, and tule (Scirpus acutus). Willow and hazel provided the foundation material. Hazel was used for baskets that needed to be extra strong. Sedge is the cream or beige colored material that makes up the majority of the basket’s surface. For patterns, the weaver used bracken fern, bulrush or horsetail runners. All of these are naturally very dark, ranging from dark brown to black. Sometimes they are blackened further by soaking in rich, black mud or some other dye solution.

There are only two to three dozen old Ohlone baskets known to be left in the world. One is at the San Jose Historical Museum at Kelley Park in San Jose, another is on exhibit at the Santa Cruz City Museum of Natural History. There are two at the Pacific Grove Museum of Natural History, two at the Carmel Mission, and one at the Pacific House, Monterey State Historic Parks, near Fisherman’s Wharf in Monterey. Others are housed in public or private collections within California, or scattered throughout the world, in places as far away as Washington, D.C., Paris, France and St. Petersburg, Russia.
Many different plant foods were gathered by Ohlone women, including a variety of nuts, seeds, berries, roots, bulbs and greens. They also gathered plants used for making medicines. At the shoreline, they gathered mussels, clams, abalone and other sea foods, as well as seaweeds and salt. They gathered the materials they needed for making baskets and other household items, and they gathered firewood.

Large, cone-shaped burden baskets were used for much of the collecting and carrying. As described earlier, these baskets were carried by a strap that ran around the basket and over the forehead, or across the chest and shoulders of the carrier. Very large loads of acorns, mussels or firewood could be carried this way.

A pointed digging stick was used to work roots or bulbs out of the ground.

It was an inch or two in diameter and 2 or 3 feet long. The end was hardened by heating it in a fire and then sharpened to a point or a narrow bevel.

Special paddle-shaped baskets, called seed beaters, were used to knock grass seeds from the heads of plants into a larger collecting basket. In some parts of Ohlone territory, blackberries and other berries were collected in special narrow baskets that kept the berries from crushing under their own weight.

Many plants were available only in certain locations, and could be collected only during certain seasons. A young girl learned these things from the other women in the village, who intimately knew the territory in which they lived.
OHLONE PLANT FOODS

NUTS
ACORNS
BUCKEYE NUTS
BAY NUTS
HAZELNUTS
BLACK WALNUTS

ROOTS & BULBS
WILD ONIONS
CATTAI ROOTS
BRODEIA BULBS
SOAP ROOT BULBS
WILD CARROTS

SEEDS
PINE NUTS
REDMAID SEEDS
TARWEED SEEDS
CHIA SEEDS

GREENS
CLOVER
MINER'S LETTUCE
BALSAM SHOOTS
THISTLE SHOOTS

BERRIES
BLACKBERRIES
ELDERBERRIES
STRAWBERRIES
MANZANITA BERRIES
GOOSEBERRIES
HUCKLEBERRIES
WILD GRAPES

MISCELLANEOUS
YERBA BUENA
TULE POLLEN
SEAWEED

YERBA BUENA, LINDA YAMANE
MAKING MANZANITA CIDER

THERE ARE SEVERAL SPECIES OF MANZANITA (Arctostaphylos spp.) that grow in the hot, dry, chaparral areas of Ohlone territory. They are evergreen shrubs, 2 to 12 feet high, with small elliptical leaves and a distinctive reddish wood.

THEY PRODUCE SMALL RED BERRIES in the summertime that look very much like tiny apples (thus the name “manzanita,” which means “little apple” in Spanish). Collect the berries when they are red or orange and dry them for awhile before storing for future use. The berries have a dry, grainy texture with hard seeds inside. They were most commonly made into a cool and refreshing cider drink. To make manzanita berry cider:

1) SORT THE BERRIES, removing the majority of leaves, stems and other debris that falls along with the berries when harvesting.

2) CRUSH THE BERRIES to pulverize them into a meal or powder. Many species have a large, hard seed inside that cannot be crushed. Don’t worry about it. They will be filtered out of the cider as it is brewed.

3) PLACE THE MANZANITA MEAL into a cloth-lined colander. Place the colander over a pan or bowl and pour cold water over the berries, letting the water drain through into the catch-basin.

4) POUR THE SAME LIQUID repeatedly over the mash. It will pick up more flavor from the berries each time it passes through. Tasting it after each pouring will help you decide when the cider is ready to drink.

NOTE: The exact ratio of manzanita berries to water is difficult to determine because the flavor of the berries varies greatly from species to species. You can use one part manzanita to one or two parts water. The less water used, the stronger the flavor, and the more positive the message to your students. Watery cider leaves the impression that Native people liked things that don’t taste good.
ACORNS

There are eight different species of oak trees native to California. The most common oaks in central California include the Coast Live Oak (Quercus agrifolia), the Interior Live Oak (Quercus wislizenii), the Valley Oak (Quercus lobata), and the Black Oak (Quercus kelloggii).

The Tanbark Oak (Lithocarpus densiflora), which also produces an acorn, is not a true oak. The leaves have parallel veining, unlike the leaves of true oaks, and the caps are "fuzzy," unlike the caps of other acorns. However, the tanbark acorn was not only used by the Ohlone people, but in some areas was preferred by them over many of the other species.

Acorns are eaten by a number of different animals, including deer, squirrels, jays and acorn woodpeckers. But acorns contain high levels of tannic acid that make them toxic to humans. Fortunately, tannic acid has an extremely bitter taste so it would be very difficult to eat enough to cause any serious problems.

Thousands of years ago, native peoples devised a way to leach, or wash out, the tannic acid from the acorns. This resulted in a highly nutritious and incredibly abundant food supply. Acorns are a good source of protein and are high in fat, vitamins and minerals. They are also a good source of fiber.

Acorns mature and begin dropping from the trees in the fall. At this time, people from villages all around an area would gather together among the oaks to harvest the valuable nuts. This was probably a time of great excitement and celebration as family members were reunited, young people met and courted, and everyone celebrated with feasting, singing, and dancing.

However, this was also a time of work. First, the ground beneath the trees was likely cleared of any acorns that had fallen earlier. Acorns that fall before the main crop are usually ones that have not formed properly or are infested by insects.

People would then climb the trees and shake the branches or use long poles to carefully knock the acorns from the trees. Below, everyone helped to gather the nuts. They were loaded into large, cone-shaped burden baskets that, when full, were carried back to the village for drying and storage.

Before the acorns could be stored away, they had to be dried carefully. Reducing the moisture content made them less likely to mildew in storage, so they were spread out in the sun to dry.

Once dried, the acorns were stored, most often in the shell, in granar-
ries throughout the village. These granaries were specially made structures that kept the acorns dry, free from insects and away from marauding animals.

When needed, a supply of acorns was taken from the granary. The acorns were cracked open between two stones and the shells discarded. The thin papery husk was removed, or loosened and the acorns tossed in a winnowing basket to separate the nuts from the husks. As they were tossed in the air, the breeze would blow away the lighter husks while the heavier nutmeats fell back into the basket. On windless days, a gentle breath from the woman doing the winnowing completed the job.

The cleaned acorns were pounded into a coarse flour using a mortar and pestle. These could be large portable mortars, chipped and shaped from round boulders or wood, or bedrock mortars chipped directly into an outcropping of bedrock. Shallow mortars, either bedrock or portable, were often surrounded with a bottomless “hopper basket” to help keep the flour contained in the bowl. The pestles were long, narrow stones that were carefully shaped and highly prized by their owners.

The coarse flour was then sifted to remove any of the larger particles. It was placed on a flat, closely woven basket and spread by hand. The basket was then tapped and shaken to loosen any of the larger pieces. These were dumped back into the mortar for more pounding. The remaining fine flour, which was trapped within the weave of the basket, was swept out with a soap root brush and saved until all the flour was pounded and sifted.

This finely processed flour was then taken to the leaching area, often at the edge of the nearby water, where a large, shallow basin was formed in the sand. This basin was lined with leaves and the acorn flour was spread on top. Water was then carefully poured over the flour, using a bundle of twigs or other plant material to break the flow of water. A basket was sometimes used instead of the sand basin for leaching acorns.

As the water slowly drained from the basin through the sand, it removed some of the water-soluble tannic acid from the flour. This process was repeated several more times until the bitter-tasting tannic acid was completely removed and the flour tasted “sweet.”

Acorn flour was most often boiled into mush in water-tight baskets, using hot stones to cook the meal inside the basket. More water could be added to make a thinner soup, or the flour could be baked into a dense bread. Acorn “biscuits” were made from very thick mush that was congealed into hand-sized pieces.
GATHERING & STORING ACORNS

SELECT ONLY ACORNS that show no sign of insect infestation (small holes in the shell). It is a good idea to put the acorns in a freezer overnight to eliminate any insects you might have missed.

ACORNS MUST BE THOROUGHLY DRIED before they can be reduced to flour, and before they can be stored away for future use. If not dried before storage, they will mildew and rot. You can spread the acorns on the ground outside for a week or two (watch that jays, raccoons and deer don’t steal your entire harvest!) or you can spread them out in a garage or other shelter. The nutmeat will rattle in the shell when it is dry.

STORE YOUR ACORNS in breathable containers, like baskets or onion sacks. Plastic bags or garbage cans don’t allow enough air to circulate and the acorns will mildew. Check them periodically, and if you notice small white grubs or tiny moths in your supply, put them in the freezer again overnight to stop the infestation. Also, store them where mice and other rodents can’t get to them.

ACORNS ARE STORED IN THE SHELL because of the added protection the shell provides. They are stored unleached because tannins in the nutmeat keep away some insects. Also, once acorns have been leached, they are subject to rapid spoilage if not refrigerated. When carefully dried and stored, acorns will last for several years.

A REMINDER: Acorns should not be gathered in any national, state, county, or local parks or preserves with a special permit. On private property, be sure to get permission from the owner. It is safest to collect acorns that have already fallen to the ground because it can be dangerous to climb into trees, and you could damage the tree by accidentally breaking branches.
COOKING ACORN MUSH

BEGIN BY CRACKING open enough acorns to measure about 2 cups. This is most easily done between two stones. Remove any papery husks that cling to the nutmeats. You can winnow this material away by tossing the nutmeats in a wide, shallow basket or bowl. When the acorns are tossed the air, the lighter husks will blow away in the breeze and the heavier nuts will fall back into the basket.

THE ACORNS MUST BE GROUND into a fine flour before they can be leached. This can be done by putting small amounts of acorns and water into a blender and running the machine until the mixture is smooth. Be careful not to put too many acorns into your blender, or you may damage your motor. You can also put the dry acorns into a food processor. If the acorns are hard, this will make a lot of noise at first and may cause tiny cracks to develop in the container. Process only small amounts of acorns at a time. Whichever method you use, run the acorn flour through a sieve to remove any large particles.

TO LEACH THE TANNINS from the acorns, line a colander with 1 or 2 cotton kitchen towels and spread the flour evenly over the bottom of the colander. Put the colander into the sink and turn on the tap to form a small stream of water (warm or cold). A large spoon placed over the flour will help disperse the water and keep holes from forming in the flour. Keep the water flowing just enough to match the rate at which it percolates through the flour and down the drain.

BEGIN TASTING THE FLOUR to see if the bitter taste of the tannic acid has been removed. The amount of time will vary according to the species of acorn. Tanoak or black oak will take a short time, live oak the longest. When the bitterness is gone, so is the tannic acid. You should end up with about one cup of leached flour. It is important to take the time to do this well. If not, the acorn mush will be bitter, sending a negative message to the children.

COOK THE ACORN in a non-aluminum pot on the stove. Like oatmeal or cornmeal, acorn thickens as it cooks. Adjust the amount of water to produce a light mush. Acorn mush is traditionally eaten plain.
Cooking

Boiling was done in special cooking baskets that were woven so tightly that they held water. The food was heated by placing hot fist-sized cooking stones inside the basket, one at a time, with a pair of wooden tongs. The hot stones were first dipped quickly into a basket of water to remove any ashes. Then they were stirred around in the cooking basket with a wooden paddle to evenly distribute the heat. When the stone cooled, it was replaced with another, and then another. It only took a few minutes to get a large basket of acorn mush to a rolling boil.

Baking was done in a pit oven. A hole was dug into the ground and lined with stones. Then a fire was lit inside the pit and allowed to burn down completely. When the ashes were removed, foods like meats, root vegetables and acorn bread were wrapped in leaves and placed inside. The oven was then covered with plant material and a capping of soil and left to bake for several hours.

Fish and meat were skewered on sharp sticks or spread on flat boards and propped near a fire to roast in the heat. Thin strips of meat might be placed on racks over a smoky fire to dry and cure into jerky that could be used throughout the year. Fish was also smoked in this way to preserve it for future use.

Seeds and nuts were parched by tossing them with hot coals in a shallow winnowing basket. The tossing kept the coals from burning the basket. After the coals were removed, the parched seeds could be ground and eaten dry (pinole), formed into seed cakes, or boiled into a soup (atole).
OH LONE FOODS SAMPLER

ACORN MUSH   This was a major staple food of the Ohlone and other native people of central California. See "Cooking Acorn Mush" for instructions on how to prepare it. It tastes best when served warm.

PINE NUTS   Pine nuts grew in some parts of Ohlone territory and were also imported through trade. The small, white nut meats can be purchased from most grocery stores; they are best eaten as-is and can be served from a bowl or basket.

CHIA SEEDS   These tiny, nutritious seeds were collected and eaten raw, or parched and mixed with other seeds to form pinole. Today they can be found in health food stores. At first the seeds crunch in your mouth, like poppy seeds, but then they begin to develop a gel-like coating. It is this gelatinous material that allows them to adhere to the outside of the famous "Chia Pet."

MANZANITA BERRY CIDER   These small red berries made a refreshing cider for the Ohlone people. See "Making Manzanita Cider" for instructions on how to prepare it. The cider is best served cold.

YERBA BUENA TEA   This low-growing member of the mint family may be found in open woodlands and along roadsides. The leaves can be used fresh or dried. Steep them in hot water to make a wonderful minty tea. Serve it hot.

SMOKED SALMON   Salmon were caught when they returned to the rivers each year to spawn and were smoked for use throughout the year. You can buy commercially prepared smoked salmon from most grocery stores. Serve bite-sized pieces with toothpicks.

DEER JERKY   Deer meat was cut into long thin strips and hung on poles to dry in the sun. Smoky fires beneath the meat helped to keep insects away. You may be able to find it commercially prepared, or check with local butcher shops who deal with deer hunters. This can be served cut into small pieces.
HUNTING

The earliest people to live in California used a spear thrower and spears to hunt large game animals like mammoths and mastodons. These were powerful weapons that were quite effective against very large animals. But, as these animals died out with the last ice age, hunters had to seek smaller game such as elk, deer, and antelope in order to survive. The spear thrower and spears became outmoded and were eventually replaced by the bow and arrows.

Unlike a spear, which had to be thrown standing up, bows and arrows could be used from a concealed position. This meant hunters could get much closer to the game and hence be far more accurate with their weapons.

Hunters spent time before each hunt in the sweat house, preparing themselves for the task ahead. It gave them time to focus on the hunt and think about the prey they were seeking. The sweating also helped reduce their human scent and made it somewhat easier to sneak up close to the animal.

The Ohlone used dogs to help them hunt larger and more dangerous animals like bears or mountain lions. But more skittish animals like deer required a totally different approach.

Deer hunters were masters of mimicry. They dressed in deerskin, wearing a stuffed deer head on top of their heads. Then they carefully approached a herd of deer from down wind, moving slowly and behaving exactly as the deer around them. It took years of training, but a good hunter could get within a few feet of his prey before he fired his bow.

Bow wood was carefully carved into shape, 3 to 3-1/2 feet long, about 1-1/2 inches wide, and with a relatively thin cross-section. To add strength to the bow, strips of pounded deer sinew were glued to the outside, or back surface, of the bow. When this dried, it pulled the bow into a forward arch. The bow was then bent back against this arch when it was strung, creating a short, lightweight, yet extremely powerful bow. Bowstrings were made of twisted sinew or plant fiber.

California bows were often painted in patterns of black, red or white. This paint may have helped to waterproof the sinew-backing on the bow and provided a form of camouflage by breaking up the bow’s pattern.

Hunting arrows were made in two parts. The main shaft was made of light cane or other straight, narrow wood, with three feathers attached to the end.
to stabilize its flight. The shorter foreshaft was made of hardwood with the point attached. It fit into the main shaft and could easily be removed from the arrow. This short, hardwood foreshaft kept the lighter arrow shaft from splitting when it made contact with an animal. Also, when an animal was struck, the back half of the arrow would fall away from the foreshaft and could be easily retrieved by the hunter, leaving the point in the animal.

Another advantage of this removable foreshaft was that points could be changed on the arrow to match whatever game was encountered. For animals like elk, deer and antelope, sharp points of bone, obsidian or chert were needed to cut through the thick hide. But for smaller animals, a simple sharpened wooden point would often be enough.

Small birds could be shot with a “bird blunt,” a rounded knob-like tip that killed the bird but caused no damage to its feathers, which might be needed to decorate a basket or for dance regalia. Birds are also thought to have been caught with light bolas, made with two bones tied to a cord, that were thrown to entangle the bird’s legs and wings.

Rabbits were caught by driving them into long nets strung along one side of a meadow. Villagers would make noise and beat the grass and shrubs with sticks, or sometimes set fires to drive the rabbits towards the net. Once entangled in the net, the rabbits were struck with wooden clubs.

Fire was also used to drive woodrats from their nests, and smoke was blown into ground squirrel holes to bring them out into the open. Fire is thought to have been used to capture grasshoppers, as people encircled a meadow and drove the grasshoppers toward the center where a fire had been lit. Freshly roasted grasshoppers were then picked from the coals and eaten.

Decoys, formed from buoyant tules and covered with duck or goose skins, were used to entice ducks and geese to a hunter’s location where bows and arrows, nets or slings were used to capture the birds.

Slings were made, presumably of a small patch of leather held between two long cords. A stone was placed on the patch of leather and was swung around the hunter’s head until he released one of the cords and sent the stone flying. With practice, hunters became very accurate and slings were used to catch birds and a number of small animals.

Traps and snares were also used. A variety of basket traps were made for catching fish and birds, and deadfall traps were used for capturing small mammals. Deadfall traps were made by propping up a heavy stone or log with a baited stick. When the bait was taken, the heavy weight would drop and catch the animal. Snares were made of thin cords that were looped across regular animal runs. As the animal passed through, the loop closed around its head and held it until the hunter returned.
OH'LONE ANIMAL FOODS

MAMMALS

DEER
ELK
ANTELOPE
GRIZZLY BEAR
MOUNTAIN LION
DOG
BOBCAT
SKUNK
RACCOON
BRUSH RABBIT
COTTONTAIL RABBIT
JACKRABBIT
TREE SQUIRREL
GROUND SQUIRREL
WOODRAT
MOUSE
MOLE

REPTILES

SNAKES
LIZARDS
TURTLES

BIRDS

CANADA GOOSE
SNOW GOOSE
WHITE-FRONTED GOOSE
AMERICAN WIDGEON
PINTAIL DUCK
MALLARD DUCK
GREEN-WINGED TEAL
SHOVELER DUCK
AMERICAN COOT
MOURNING DOVE
ROBIN
CALIFORNIA QUAIL
HAWK

INSECTS

YELLOW JACKET LARVAE
GRASSHOPPERS
CATERPILLARS

CALIFORNIA QUAIL, LINDA YAMANE
FISHING

California was a much wetter environment several hundred years ago and there were many more rivers, streams, lakes, ponds, marshes, and estuaries, each thriving with fish. The Ohlone took advantage of this abundant food supply and used a number of different techniques to catch fish.

Hooks were made from pieces of deer bone or carved from abalone or mussel shell. Some were made by tying two pieces of bone together at an angle to form a sharpened hook. Others, called gorge hooks, were simple straight pieces of bone tied to a cord, that turned sideways and caught in the fish’s mouth when pulled.

Spears were also used to catch fish. Those used by the Ohlone were made with one or two barbed points carved from bone. Nets, either weighted with small stone weights, or suspended by long poles to form a dip net, may also have been used.

Basketry fish traps were woven with a cone-shaped entrance that allowed fish to swim in, but prevented them from getting out. Weirs (underwa-

The Ohlone also used the soap plant (Clorogalum pomeridianum) as a fish poison. The starchy bulb of the plant was crushed and spread on the surface of a still pond or quiet eddy in a river or stream. The soapy material in the plant dispersed in the water and made the fish unable to breathe. The fish then died and floated to the surface where they were easily collected. Fishweed or Doveweed (Eremocarpus setigerus) and buck-eye nuts (Aesculus californica) were used in much the same way. This practice is illegal today because it is not selective and kills all the fish in the area, as well as other aquatic life.

Shellfish were also collected where available, including abalone mussels, clams, oysters, chitons and snails. Villages near these resources were often built on huge shellmounds, large hills made of shell and other debris deposited by countless generations of people.
MISCELLANEOUS TECHNOLOGY

CORDAGE

The Ohlone made string, twine and rope from a number of different plant materials. String and twine for making hunting and fishing nets, and other uses, was made from the long fibers of the stinging nettle (Urtica spp.), dogbane (Apocynum cannabinum) or milkweed (Asclepias fascicularis). A coarser twine or rope is thought to have been made from tules (Scirpus spp.) or cattails leaves (Typha latifolia).

See “Making Tule Twine” for more information.

FIRE MAKING

The Ohlone firemaking kit consisted of three parts—a hearth, a drill, and some dry tinder. The hearth board was a flat piece of soft wood with several shallow holes carved along one side edge. Each of these shallow holes had a notch cut into it that would allow charred sawdust and ash to fall from the hole. The drill itself was a long, thin stick of soft wood that was placed in the hole and spun rapidly, with great downward force, between the palms of the hands. This action produced a finely
ground sawdust and sufficient heat to create a glowing ember. An elderberry drill and buckeye hearth work very well for making fire this way.

Dry tinder placed beneath the notch caught the charred sawdust and when the tinder began smoldering, it was carefully picked up and blown until it burst into flame. This burning tinder was then placed beneath a carefully constructed pile of sticks to produce a larger fire. Tinder had to be dry, light, and easily flammable material such as cattail fluff, soap root fibers, shredded bark or old bird’s nests.

Unless traveling, the Ohlone did not have to build a fire from scratch every day. They could simply pile ashes over the fire each night then blow the hot embers to life again in the morning.

**FLINTKNAPPING**

Stones like chert (a metamorphic rock) and obsidian (a volcanic glass) have a molecular structure that causes them to break in specific and predictable ways when pressure is applied. Native craftspeople used this knowledge to produce a variety of items, all with very sharp edges.

Arrowheads are the first thing most people envision when they think of flintknapping. Arrowheads were an important item for the Ohlone and required much skill to produce. Larger points were used for hand-held spears and arrows intended for game like elk or deer. Smaller points were used for birds.

Large blades could be attached to wooden handles to make knives. A deer antler tine might be used to flake off the edges and re-sharpen the knife when needed. Simple large flakes of stone with very sharp edges were easily produced for cutting things like meat, leather, or tough plant fibers, and for scraping leather or wood. Pieces of chert or obsidian were also worked into points and used as drills.

**DRILLS**

The Ohlone used drills for making many things, among which were shell beads. Each piece of shell was drilled so they could all be strung together on a cord. The whole string of “blanks” was then ground into a uniform circular shape on a rough surface such as sandstone.

Their drill was a hand drill consisting of a long, narrow stick with a sharpened stone point attached to the end. It was spun between the palms of the hand, just like the firemaking drill.

The pump drill that is so often seen today, with its suspended handle, flywheel and metal bit, was used by Native Californian’s for drilling shell beads as well. However, this device was introduced by the Spanish missionaries in the late 1700’s. This new instrument worked well and pretty much replaced the older hand drill.
MAKING A FIRE KIT

A FIREMAKING KIT consists of three parts—a hearth, a drill and some dry tinder. The hearth is the base wood, and while the Ohlone probably used elderberry or buckeye wood for this, old cedar roof shakes also work very well, and are sometimes easier to find.

THE HEARTH should be 3/4 to 1 inch thick, approximately 2 inches wide, and at least a foot long so it can be supported under the foot or knee while drilling. Gouge out 2 or 3 shallow holes at one end along the edge. These should be just deep enough to keep the drill in place while it is spun. Cut a notch into the side of each hole that will allow any heated ash that is produced to fall onto the dry tinder.

THE DRILL is a straight stick 1-1/2 to 2 feet long and approximately 1/2 inch in diameter. Elderberry or buckeye work very well. The tinder can be any loose, dry plant material that will readily catch and hold a smoldering ember. Good materials include cattail fluff, soap root fibers, shredded bark, or unraveled sisal or jute rope.

TO MAKE A FIRE, place the hearth in front of you and place a small “bird’s nest” of tinder beneath the notch of one of the holes. Anchor the hearth beneath your foot or knee to keep it from moving around.

PLACE THE DRILL into the hole and begin rotating it back and forth quickly between the palms of your hands. When your hands work their way to the bottom of the drill, quickly move them back to the top and continue spinning the drill, without letting it come out of the hole.

PUSH DOWN as hard as possible while spinning the drill to create maximum friction. This will grind the hearth wood into a fine powder and create enough heat to cause smoke and, eventually, a live, glowing ember in the powder on the tinder.

WHEN THIS HAPPENS, put down the drill and carefully lift the smoldering nest of tinder. Blow, gently at first, on the ember until it bursts into flame, then place it under a prepared pile of sticks.
In their leisure time, Ohlone people enjoyed a number of games. These fall into two basic categories—games of skill and games of chance. Games of skill include things like running, throwing, shooting, swimming, and various ball games, where the physical abilities of the players are tested. Games of chance, such as dice games or guessing games, involve a different factor, thought of as either luck or personal power. The spiritual world becomes involved when one seeks supernatural intervention in order to win.

We know of two “field games” that were played by the Ohlone. One was a race between two teams, each kicking a wooden ball, a little larger than a baseball, along a course and then back again. These courses were sometimes several miles long. There were one or two players per side, and wagers were placed on the outcome of the game. In the Monterey area, it was called “tomash” (pronounce “toe-mawsh”).

Another game was shinny, which is similar to field hockey. A wooden ball was moved towards the opponent’s goal by teams of players with curved sticks. Both men and women played this game. The number of players on each side varied, but the sides were always even. This game often got rough, as wrestling was allowed. Southern Ohlone people called it “ils” or “hils” (pronounce “eels” or “heels” with a sharp “s” sound.)

A hoop and pole game called “tikiri” (pronounce “tih-KEER-sih”) was played by men, one against another. A small hoop of approximately 3 inches in diameter was rolled on a cleared playing field surrounded by stakes. While the hoop was in motion, each man threw his 5-foot-long pole at the rolling target, attempting to strike it through the small hoop. If they succeeded, they earned 2 points, unless the hoop was lying on the stick. If that happened, one point was earned. Three points won the game.

“Wunnuk” (pronounce WUN-uck”) was a guessing game played by hiding pieces of bone or shells in the hands. In English, this game is commonly called the “hand game.” Some areas played with one game piece per player, and others with two. If playing with two, one piece was marked in some way to distinguish it from the other. Under the cover of a pile of grassy material or, later, a blanket, a player hid the game piece(s) in their hands and the opponent had to guess which hand held the piece (or marked piece). A correct guess won the privilege of doing the hiding. An incorrect guess won a point for the hider. The game continued, often for
many, many hours, until one team had
won a set number of points (usually 12,
15 or 24). This game was very popular,
and involved more people than just the
players. Bets were placed, and special
songs were sung—it made for a lively
time!

A dice-like game called “tralliik”
(pronounce “TRAWL-ick”) in the south-
ern Ohlone languages, is called the
“staves game” in English. It was played
using 6 (or sometimes more) split sticks
about 8 inches in length and 3/4 inch
wide. These game sticks were deco-
rated with marks or solid coloring on
one side, the other side being left plain.
These were tossed on the ground and
scored according to how they landed.
Smaller point sticks were used to keep
the score, as described above. The win-
ner won the game, and any “prizes” that
had been wagered on the contest.

Ohlone children played “jacks”
with small stones, tossing one stone in
the air and seeing how many could be
picked up off the ground before the
stone was caught again. They also made
“buzzers” from acorns and twine, and
used twine for playing various forms of
“cat’s cradle.”
PLAYING THE HAND GAME

THIS GUESSING GAME can be played with two matching pieces of doweling (1/2-inch diameter, 2 inches long), two short strings of beads, or small sea shells. Mark one dowel with some twine, or use one different colored bead to distinguish the two pieces from each other. (In the Monterey area, the game was played with a single game piece, so you might also use a single dowel, string of beads or sea shell.)

The first player puts their hands beneath a scarf or blanket, or behind their back, and hides one piece in each hand, switching the pieces back and forth for a short time. When ready, their hands are then extended in front of the second player who has to guess which hand holds the marked playing piece.

IF THE SECOND PLAYER guesses incorrectly, the first player gets one counting stick and a chance to hide the game pieces again. If the second player guesses correctly, he or she gets to hide the pieces during the next turn. Only the player hiding the pieces can score a point.

SCORE IS KEPT with 6 to 12 counting sticks, depending on how long you want the game to last. The sticks begin in one pile and are taken by each player as earned. After the pile is gone, the sticks are exchanged between players. The first player to win all the counting sticks wins the game.
PLAYING THE STAVE GAME

This game is played with six split sticks of elderberry or willow, or with 1-inch half-round molding pieces, each about 8 inches long. The flat side should be left plain, and the rounded side should be decorated.

After performing some ritual to bring about good luck (such as “thinking winning thoughts”), the first player tosses the playing sticks on the ground. They are scored by how they fall:

All up or all down = two points and another turn
Half up and half down = one point and another turn
Any other combination = no points and turn is lost

Score is kept with 6 to 12 counting sticks, depending on how long you want the game to last. The sticks begin in one pile and are taken by each player as they are earned. After the pile is gone, the sticks are exchanged between players. The first player to win all the counting sticks wins the game. You might want to use stick pretzels as the counting sticks—that way, when you win a point, you can eat it!

In a classroom setting, the person with the most points at the end of the allotted time could be considered the winner.
**MUSIC**

Ohlone people used a variety of musical instruments when singing or dancing together for ceremonial purposes, celebrations, or just plain fun. The “drum” of central California was the split stick rattle, or clapper stick. The Ohlone did not use a rawhide or foot drum. This split piece of wood, such as Elderberry or California Bay Laurel, makes a loud “clapping” sound when struck against the palm of the hand. It is used like a drum to help keep rhythm.

A rattle made of dried deer hooves was common among California native people and may have been used by the Ohlone. However, there is no documentation of its use and so we cannot be certain.

Another type of rattle was made by tying stone-filled cocoons of the ceanothus moth onto a wooden handle. In some California tribes, this rattle was associated with shamans. In post-mission times, it is known to have been used as a baby rattle in one Ohlone family. It is not clear whether it was traditionally used as a dance rattle, ceremonially, or for amusement.

A small whistle made of bird bone was worn around a dancer’s neck and blown in rhythm while they danced. Sometimes these whistles were tied together in pairs to create dual tones when used.

A lesser known instrument is the musical bow, which was held near the mouth and plucked with the fingers. The player’s mouth acted as a sounding hole, similar to the way a jaw harp is played today. Some tribes used their hunting bows, but Ohlone people made a special musical bow. They also used a wooden flute with holes drilled in the side to produce different notes. Sound was produced by blowing across the end. This flute is often called a “courting” flute.

The bullroarer is a short piece of wood that has been shaped with a slight curve on one side and is suspended from a heavy cord that is several feet long. When swung around and around above the user’s head, the wood spins, creating an eerie buzzing sound. This is not a true musical instrument, and was used by some tribes in a ceremonial context. The Ohlone used it as a means of entertainment.
MAKING A SPLIT STICK RATTLE

THE SPLIT STICK RATTLE, or clapper stick, was used in place of a drum in most of central California. This simple instrument was struck against the palm of the hand to make a loud clapping sound as an accompaniment to singing and dancing.

THE BEST MATERIAL to make this instrument from is elderberry (but bamboo can be used as a substitute material). Look for straight branches about 1 inch in diameter and between 18 and 24 inches long. Peel the bark and sand it smooth.

TIE A PIECE OF LEATHER OR CORD around the stick about 4 inches from the thicker end. This will keep the split from continuing through the entire length, and marks the handle of the instrument.

CENTER A KNIFE BLADE such as a cleaver, or a chisel, across the untied end and carefully split the wood down to the cord. Elderberry usually splits along a relatively even line. But sometimes the split will twist or be uneven. If you see this happening, stop and score the wood deeply along the line you want it to follow. Then, working carefully, you may be able to straighten the direction of the split.

OPEN THE SPLIT as wide as you can without the breaking the wood, and remove as much of the soft inner pith as you can. A long drill bit used by hand can speed this process.

YOUR CLAPPER STICK can be left plain or can be decorated with stripes or other patterns. These can be painted on or burned into the wood with a wood burner. White, black and red ochre were the paint colors used by Ohlones in the past.
THE SPIRITUAL WORLD

Prayers and offerings were an important part of Ohlone religious life. Prayers to the sun were accompanied by smoke blown into the sky. Offerings of seeds, tobacco or shell beads were made, and poles, sometimes quite tall, were decorated with feathers, tobacco and foods and planted in the ground. In 1776, the De Anza expedition traveled along the banks of Llagas Creek northwest of San Martin. Pedro Font wrote: “At this place we found...that the Indians had made a fence of little poles around them, and in the middle had sent up a thick post about three spans long, decorated with many feathers tied in something like a net, as if dressed, and with an arrow stuck through them. On one pole many arrows were tied and from another were hung three or four balls of grass like tamales, filled with pinole made of their seeds and of acorns.... In the middle of a long stake there was hung a tuft of several goose feathers, but we were not able to understand what mystery this decoration concealed.”

Smaller feathered sticks were used as good luck charms for hunting and fishing.

Shamans, who were usually men but sometimes women, were spiritually powerful people. They brought good food crops, game animals and fish, could foretell the future, and find lost objects. One of their jobs was to cure the sick. They first diagnosed the illness by singing or dancing, then removed the disease or contamination by sucking an offending object out of the patient’s body.

Weather shamans could make rain start and stop, and grizzly bear doctors could transform themselves into a bear and back into a man. Some shamans used their powers for witchcraft. They sometimes, for example, would blow a sickness on their breath to harm their enemies.

The Spanish missionaries worked diligently to obliterate these traditional practices, and so there is much we do not know about these ancient Ohlone spiritual beliefs.

DEATH & BURIAL

When an Ohlone person died, they were either cremated or buried on the day of death. If they were buried, the body was flexed into a fetal position, then wrapped in skins and tied before interment. A net with some of their possessions was part of the burial, along with a container holding a good supply of edible seeds to serve them as food on their journey west to a place across the ocean. When a person died, his or her possessions were burned. This is one reason why so few things have survived into the modern world.

In 1814, Fray Juan Amoros, of Mission San Carlos at Carmel, wrote: “…All
the relatives throw beads and seeds upon the dead in token of their love for
the deceased. ...As a sign of mourning the father, mother, child, husband or
wife, or brother or sister cut off their hair...or burn it bit by bit. Moreover
they throw ashes over their entire bod-
ies, weep bitterly, abstain from food,
and the old women smear their faces
with pitch...the effects of this remains
for months....It is also their habit to go
to the woods to drown their sorrow.”

Annual mourning ceremonies are
thought to have been held for all the
members of a village who had died
during that year. Cemeteries were out-
side but near the village. Pedro Font
described what appeared to be a cem-
etery just south of present-day Gilroy:

“On passing near the village...we
saw on the edge of it something like a
cemetery. It was made of several small
poles.... On the poles were hung some
things like snails and some tule skirts
which the women wear. Some arrows
were stuck in the ground, and there
were some feathers which perhaps were
treasures of the persons buried there.”

THE MISSION PERIOD

E
uropeans first discovered California
when Juan Rodriguez Cabrillo sailed
up the coast in 1542. He went as far as
Mendocino but recorded nothing of the
Ohlone people or their territory.

In 1602, Sebastian Vizcaino sailed
the coast in search of suitable ports for
Spanish ships returning from the Phil-
ippine Islands. He sited Monterey Bay
and described it as a wonderful port
with tall pines that could be used for
ship’s masts. “The land is well popu-
lated and the people gentle, affable and
intelligent,” he wrote.

These Spanish ships, known as
the “Manila Galleons” followed the
winds and currents of a southerly route
when sailing to the Philippines. But
when they sailed eastward again, the
currents carried them in a more northerly route to the coast of California.
Spain wanted to establish ports that
could provide fresh water, fruits, veg-
etables, and meat for their ships, and a
safe place to make repairs.

By 1760, Sir Francis Drake had
sailed up the coast and claimed Califor-
ia for England, the Russians had be-
gun moving down the west coast in
search of seal and sea otter pelts, and
the English and French were talking
about dividing the entire “new world”
between themselves. So Spain decided
to take action to secure their claim to
Alta California.

The Spanish government felt that
if they could establish a series of mis-
sions in Alta California, they could con-
vert the native people to Catholicism,
and “teach” them to become Spanish-
speaking farmers and herdsmen. These
new Spanish colonies would then help
to solidify Spain’s claim to this part of
the world.

In 1769, Gaspar de Portola led the
first land expedition into California, and
traveled as far north as San Francisco. In 1770, the first mission was established in Ohlone territory at Monterey, then moved in 1771 to Carmel. By 1797, a total of seven missions had been founded within Ohlone territory and by 1810 there does not appear to have been any Ohlone people still living the "old way."

Mission San Carlos Borromeo de Carmelo (1770)
Mission San Francisco de Asis (1776)
Mission Santa Clara de Asis (1777)
Mission Santa Cruz (1791)
Mission Nuestra Señora de la Soledad (1791)
Mission San Jose (1797)
Mission San Juan Bautista (1797)

The Ohlone were first attracted to the missions by the new things the Spanish brought with them, like glass beads, mirrors, fabrics and metal. But they were soon put to work building the mission itself, the outbuildings, waterworks, and more. They tended fields, herded cattle and sheep, wove cloth, and made pottery. The missions needed these native people as a labor force to maintain themselves and support the priests and military personnel. When there were not enough local native people to do the work, more were brought in from the surrounding areas by force. If they left the mission without permission, they were chased down, returned, and severely punished. They were also punished, by whipping and being locked in stocks, for other more minor infractions.

Life in the missions was very different from the one they had known for thousands of years before. They now awoke, prayed, ate, worked, and rested by the priests’ schedules. For the most part, they were not allowed to speak their languages, practice their ceremonies, or gather the plentiful foods that had sustained them for so many generations.

It was not a happy way to live, and it wasn’t long before overwork, malnutrition, abuse, depression, and severe culture shock began to take their toll. Introduced diseases like measles, mumps, small pox, influenza, and syphilis killed thousands of native people. In the years between 1770 and 1832—the mission period—it is believed that the Ohlone population declined from over 10,000 to less than 2,000 people.

Although Spain succeeded in settling coastal California, it wasn’t long before the missions could no longer find enough labor to sustain themselves and seriously deteriorated.
SECULARIZATION

In 1821, Mexico gained its independence from Spain. It soon became apparent that the mission system wasn’t self-sufficient and was costing too much money to maintain. The mission’s vast land holdings were attractive to the increasing numbers of people settling coastal California and so, in 1834, the missions were secularized, or turned over to civilian control.

When the missions closed, some land allotments were given by the priests to the native people who had labored throughout their lives for the mission establishments. In fact, according to the secularization decree, half the mission lands were to have been reserved for Indian people who wished to remain. But most of the former mission lands were in fact granted to private citizens by the new Mexican government. Ohlone people had little or no social or political clout, and even those with land allotments were eventually swindled, intimidated, or even killed to get them off their land.

Their former means of living, by hunting and gathering, was now difficult if not impossible. Introduced plants and animals had changed the land they had depended upon for countless generations. The land was now claimed by others, and there were few places they were welcome.

Some groups, formed of survivors from different tribes, established new villages in an attempt to build lives for themselves and their families. But their world was changed forever, and these settlements eventually disappeared. Most Ohlone people went to work as ranch and farm hands or as domestic servants, cleaning and cooking for the people who had taken their land.

THE GOLD RUSH & CALIFORNIA STATEHOOD

The discovery of gold in 1848, and the massive immigration of thousands of new people into the state, led to even further abuses of Ohlone and other native California people. Some Ohlone people were taken to work in the Sierra gold fields. San Jose’s sheriff, Harry Bee, took ten Indian men from jail in order to work his mines. The Murphy brothers of Santa Clara Valley are reported to have returned home from the gold fields with 16 burros loaded with gold—gold pulled from the earth by the 150 Indians from Mission Santa Clara they had taken with them.

Under Spanish and Mexican rule, California Indians were considered citizens, although voting privileges were reserved only for land-owning citizens. At the time of California’s constitutional convention in 1849, it was decided that citizenship was open only to whites and that only white males could vote.

On April 22, 1850, the California State Assembly and Senate passed “An Act for the Government and Protection
of Indians.” The law mandated humane treatment of minor Indian children, but in spite of its title, this new law was little more than legalized slavery. It outlines the means by which a person could obtain a minor Indian child, complete with certificate entitling the holder to the “care, custody, control, and earnings” of the minor until he or she reached “the age of majority,” which was 18 for a male, and 15 for a female.

This same document stated that, “Complaints may be made before a Justice of the Peace, by white persons or Indians; but in no case shall a white man be convicted of any offense upon the testimony of an Indian.”

In addition, any Indian person found “loitering and strolling about” could be arrested on the complaint of any citizen of the county, then hired out within 24 hours to the highest bidder, for a period of up to four months.

In 1860, the Act of 1850 was amended so that Indian children could be legally indentured for longer periods. If under age 15, a male could be indentured until age 25, and a female until age 21. If over age 14, a male could be kept enslaved until 30 years of age, and a female until age 25.

Even though California was a non-slavery state, there was no limit to the number of Indian people that could be indentured in this manner, creating a free and abundant source of labor which many people took advantage of. In fact, in many cases the men who profited most from this law were the very ones who helped to create and implement it.

An 1861 San Francisco newspaper article proclaimed: “This law works beautifully. A few days ago V.E. Geiger, formerly Indian Agent, had some eighty apprenticed to him. We hear of many others who are having them bound in numbers to suit. What a pity the provisions of the law are not extended to greasers, Kanakas, and Asiatics. It would be so convenient to carry on a farm or mine, when all the hard and dirty work is performed by apprentices!”

Soon after California’s admission to the union, three federal Indian commissioners paid a visit. These three commissioners negotiated 18 treaties involving approximately 25,000 California Indians. In these treaties, the native people acknowledged the jurisdiction of the United States, agreed to refrain from hostilities, and relinquished claims to the territory they had held. At least one of these treaties appears to have involved Ohlone people, although it is impossible to know who they represented or on whose authority they had entered this agreement. In return, they were promised food and supplies, cattle, and tracts of land to be set aside as reservations.

These eighteen treaties were rejected by the United States Senate because of opposition by California’s congressional delegation. Simply put, Californians did not want to “give” valuable land over to the exclusive jurisdiction of Indian people.
THE OHLONE PEOPLE OF TODAY

Although no reliable population figures are available, there are certainly thousands of Ohlone descendants living today. Many still live within their traditional ancestral territory, while others live elsewhere throughout California, or in other states. There are no federally recognized Ohlone tribes, but several groups are formally seeking federal acknowledgment through a process established by the Bureau of Indian Affairs.

Many descendants have become active in the monitoring of construction activity on cultural sites, especially those containing Native American burials. California state law has established a process whereby "most likely descendants" are notified upon the discovery of these burials, and can then make recommendations as to their proper treatment. It is a positive step that Ohlone people are included in making decisions on the treatment of these ancestral remains.

Language, songs, folklore, basketry, and other traditional skills are being revived through the efforts and participation of many contemporary Ohlone people. Several public events take place annually that celebrate Ohlone people and culture. These events are an opportunity for modern Ohlone people to deepen their connections to their cultural heritage, and to share their knowledge and these very special connections with the public. Above all, Ohlone people want you to know that

"WE ARE STILL HERE."
RESOURCES

The following is a listing of resources within the San Francisco and Monterey Bay areas that you may wish to visit for further enrichment in Ohlone culture.

CHITACTAC ADAMS HERITAGE COUNTY PARK
Located in South Santa Clara County on Watsonville Road between Morgan Hill & Gilroy, open daily from 8:00 a.m.- sunset
408/842-2341
Visitor Center; Interpretive Trail; Bedrock Mortars; Rock Art; Educational Programming by reservation 408/323-0107

HENRY COWELL STATE PARK
525 N. Big Trees Park Road
Felton, CA 95018
831/335-3174
Annual public event, “Ohlone Day,” in late September; Books

COYOTE HILLS REGIONAL PARK
8000 Patterson Ranch Road
Fremont, CA 94555
510/795-9285
Visitor Center; mural; “shellmound” site with some reconstructed traditional structures; annual public event, “A Gathering of Ohlone Peoples,” in early October; Educational Programming; Books

PACIFIC GROVE MUSEUM OF NATURAL HISTORY
165 Forest Avenue
Pacific Grove, CA 93950
831/648-3116
Two Ohlone Baskets on Display

SAN JOSE HISTORICAL MUSEUM
1650 Senter Road
San Jose, CA 95112-2599
408/918-1047
Ohlone Exhibit; Educational Programming; Ohlone Basket
SANTA CRUZ CITY MUSEUM OF NATURAL HISTORY
1305 East Cliff Drive
Santa Cruz, CA 95062
831/420-6115
Ohlone exhibit, including mural; Books; Educational Programming

SANTA CRUZ MISSION STATE HISTORIC PARK
144 School Street
Santa Cruz, CA 95060
831/425-5849
Mission Period Exhibit

SUNOL REGIONAL PARK
End of Geary Road
Sunol, CA 94586
925/862-2600
Visitor Center; Educational Programming

YOUTH SCIENCE INSTITUTE
ALUM ROCK NATURE CENTER
16260 Alum Rock Avenue
San Jose, CA 95127
408/258-4322
Educational Programming

YOUTH SCIENCE INSTITUTE
SANBORN NATURE CENTER
16055 Sanborn Road
Saratoga, CA 95070
408/867-6940
Educational Programming

YOUTH SCIENCE INSTITUTE
VASONA NATURE CENTER
296 Garden Hill Drive
Los Gatos, CA 95032
408/356-4945
Educational Programming
SUGGESTED READING

FOR KIDS & ADULTS

WHEN THE WORLD ENDED/HOW HUMMINGBIRD GOT FIRE/HOW
PEOPLE WERE MADE
Rumsien Ohlone Stories told & illustrated by Linda Yamane
1995 $10
Oyate, 2702 Mathews St., Berkeley, CA 94702
510/848-6700, Fax: 510/848-4815

THE SNAKE THAT LIVED IN THE SANTA CRUZ MOUNTAINS &
OTHER OHLONE STORIES
Told & Illustrated by Linda Yamane
1998 $10
Oyate, 2702 Mathews St., Berkeley, CA 94702
510/848-6700, Fax: 510/848-4815

TJATJAKIYMATCHAN (COYOTE)—A LEGEND FROM CARMEL VAL-
LEY
by Alex O. Ramirez
1991 $6
Oyate, 2702 Mathews St., Berkeley, CA 94702
510/848-6700, Fax: 510/848-4815

WEAVING A CALIFORNIA TRADITION
by Linda Yamane with photographs by Dugan Aguilar
1997 $14.95
Lerner Publications, 241 First Avenue North, Minneapolis, MN 55401
800/328-4929

NATIVE WAYS
Edited by Malcolm Margolin and Yolanda Montijo
1995 $7.95
Heyday Books, PO Box 9145, Berkeley, CA 94709
510/549-3564
GRASS GAMES & MOON RACES—CALIFORNIA INDIAN GAMES & TOYS
by Jeannine Gendar
1995 $12.95
Heyday Books, PO Box 9145, Berkeley, CA 94709
510/549-3564

THE WAY WE LIVED—CALIFORNIA INDIAN STORIES, SONGS & REMINISCENCES
Edited with Commentary by Malcolm Margolin
1981, 1993 $14.95
Heyday Books, PO Box 9145, Berkeley, CA 94709
510/549-3564

INDIAN SUMMER—TRADITIONAL LIFE AMONG THE CHOJNUMNE INDIANS OF CALIFORNIA'S SAN JOAQUIN VALLEY
Thomas Jefferson Mayfield
1993 $16
Heyday Books, PO Box 9145, Berkeley, CA 94709
510/549-3564

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