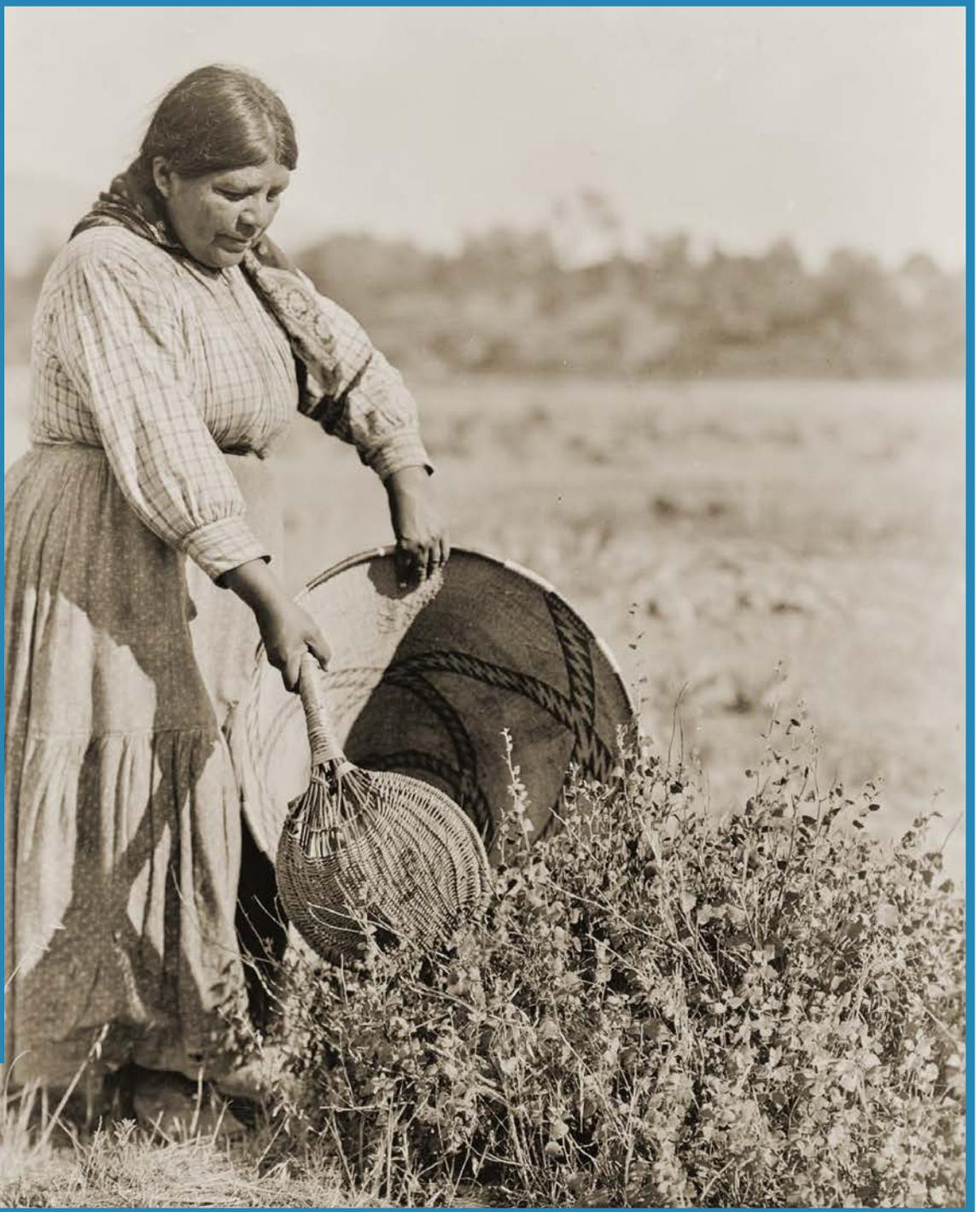


# 3

History-Social  
Science Standard  
3.2.2.

Supports  
ELA Standard:  
Writing 3.2.2.



# California Indian People: Exploring Tribal Regions

## **California Education and the Environment Initiative**

Approved by the California State Board of Education, 2010

### **The Education and the Environment Initiative Curriculum is a cooperative endeavor of the following entities:**

California Environmental Protection Agency  
California Natural Resources Agency  
California State Board of Education  
California Department of Education  
Department of Resources Recycling and Recovery (CalRecycle)

### **Key Partners:**

Special thanks to **Heal the Bay**, sponsor of the EEI law, for their partnership and participation in reviewing portions of the EEI curriculum.

Valuable assistance with maps, photos, videos and design was provided by the **National Geographic Society** under a contract with the State of California.

### **Office of Education and the Environment**

1001 I Street • Sacramento, California 95814 • (916) 341-6769  
<http://www.CaliforniaEEI.org>

© Copyright 2011 by the California Environmental Protection Agency  
© 2013 Second Edition  
All rights reserved.

This publication, or parts thereof, may not be used or reproduced without permission from the Office of Education and the Environment.

These materials may be reproduced by teachers for educational purposes.



## **Lesson 1**    Introducing the Local Tribal Region

*California Connections: Exploring Tribal Regions* ..... 2

## **Lesson 2**    The Local Landscape Long Ago

None required for this lesson.

## **Lesson 3**    Making Use of the Local Region's Resources

Tools made by California Indians of the Local Tribal Region ..... 16

Important Resources for California Indians in the Local Tribal Region ..... 30

## **Lesson 4**    Living in the Local Region Long Ago

Using a Paiute Winnowing Tray ..... 37

## **Lesson 5**    Changing the California Landscape

None required for this lesson.

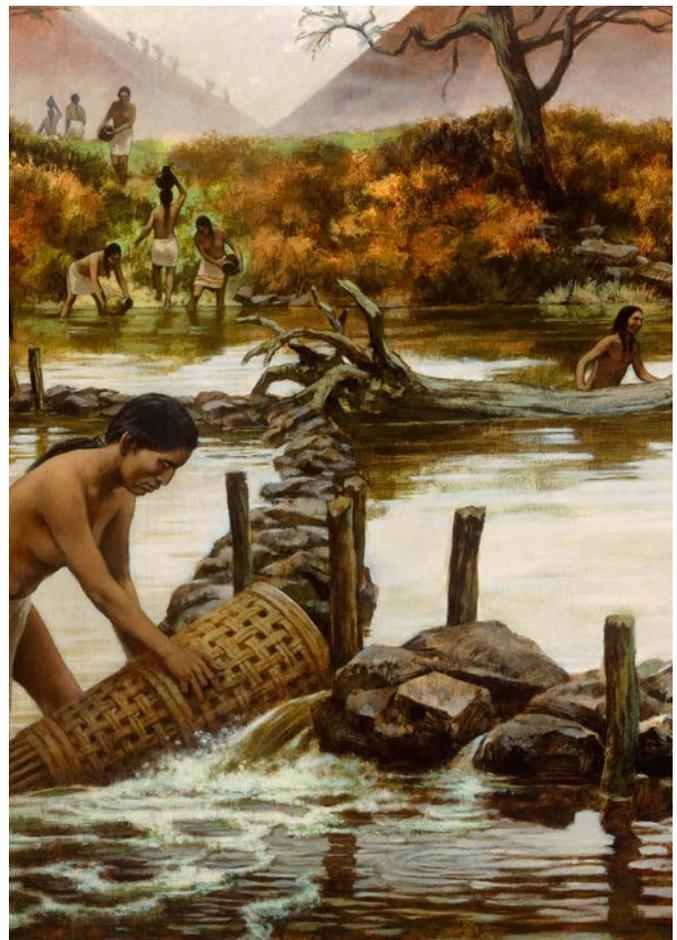
# Northwest Tribal Region: Towering Forests and Rushing Rivers



Northwestern California is cool and wet. Here, the mountains are covered with forests of pines and redwoods. Rivers rush between these mountains. Plants, such as hazelnuts and huckleberries, grow in the dark forests.

The California Indians that lived here had access to rivers and lakes, as well as the north coastal and conifer forest natural regions. They used the redwood trees for many things. Some people built large houses from redwood boards. They made canoes from redwood logs. They split the largest logs down the middle and used sharpened elk antlers to carve them out.

Elk are large relatives of deer that were very useful to California Indians. The people made their antlers into spoons, purses, and tools. They ate elk meat and made blankets and clothes from the skins. To help them hunt elk, the California Indians burned open areas. Those places grew patches of grass that attracted elk. Once the elk were in the open



Salmon weir (dam) for catching fish



Salmon

area, they were easy to hunt. Also, plants, such as salmonberry and thimbleberry, grew at the edge of the patches. Salmonberry and thimbleberry plants produce sweet, red berries. The people would gather and eat these berries when they were ripe.

Rivers were very important to people of the Northwest tribal region. They were the easiest way to travel. Rivers also provided fish and other foods. One of the most important fish to the people living here was salmon.

The Yurok people lived along the Klamath River. Every spring, they looked for the first salmon to swim upstream. When they spotted the salmon, they built a weir (dam) across

the river. While the weirs were being built, no one was allowed to catch or eat salmon. This allowed the salmon to swim upstream to lay eggs. When they finished the weirs, the Yurok left holes in them. They put their nets in these holes and caught almost every salmon that passed through the weir as they swam back downstream to the ocean.

The Yurok people would only fish like this for 10 days. During those 10 days, people gathered enough salmon to last all year. They dried and smoked the fish so that it would not spoil. By following these rules, the Yurok caught the salmon they needed, and made sure that there would be salmon to catch next spring.

# Northeast Tribal Region: Volcanoes and Blooming Meadows



The volcanoes of the Cascade Mountain Range tower above this region of California. The highest one is Mount Shasta, which wears a permanent cap of white ice. A rock called obsidian is found in this region. It is a kind of natural glass found near volcanoes.



Achumawi woman, South Fork Pit River, 1926

Obsidian can be made into sharp knives and arrowheads. It was an important item collected and traded by the California Indians living here.

The Northeast region of California is cool and dry. Most of the water falls as snow in the winter. The mountains are covered with mixed evergreen forests. The drier Modoc Plateau is covered with sagebrush scrub and pinyon-juniper woodlands.

The California Indians living here hunted deer, rabbits, and other animals. Each spring, people set many small fires in the forest. These burned only low plants. They did not hurt the bigger trees. The fires encouraged fresh grass to grow. Burning also made it easier for people to see and hunt animals.



Mount Shasta

People also used fires to make the animals move into traps. The Achumawi people from this region dug deep holes in the ground and covered them with branches. They then used fires to make animals, like deer, run to the areas where the holes were. The deer would fall into the holes. Then the Achumawi would catch them. The Pit River got its

name from the “pits” the Achumawi dug over the years. Some people call the Achumawi the “Pit River” people.

People ate deer meat fresh or dried it for later use. They prepared skins that were made into clothing or blankets. They used the deer tendons to make a strong string called *sinew*. Bones and antlers were used for needles, knives, and other tools. Deer hooves were made into rattles used in ceremonies and as toys.

Another important food for the California Indians in this region was a plant called *camas*. It grows in open fields. During spring, meadows burst with its beautiful flowers. Underground, it grows a round bulb that tastes like a sweet potato. The people of the Northeast tribal region used hard sticks to dig up the bulbs. But they had a rule to only take the largest bulbs. They replanted small bulbs which allowed them to continue to grow. By following this rule, the people got enough camas to eat and made sure there would be camas bulbs to harvest next year. The people also burned fields where the camas plant grows. Burning helped make the soil better for camas plants. It also kept these areas from becoming forests.

# North Central Tribal Region: Hills, Valleys, and Coasts



This large region has many different natural regions in it. North coastal forests grow near the cool and wet coast. Grasslands cover the dry Sacramento Valley. Oak woodlands, scrublands, chaparral, and mixed evergreen forests grow on the hills and mountains here.

The California Indians living in this region used the ocean, coast, rivers, and lakes, as well as the land areas. These people are called the “Pomo,” but they know themselves by many other names. The Kashaya people are one group of the Pomo from this region.

The people in this region gathered many resources. They hunted animals, such as deer, rabbits, quail, and ground squirrels. They gathered grass seeds, pine nuts, and acorns. They fished in fresh and salt water. They ate shellfish, such as abalone, mussels, and clams. The people traded dried meat and shells with California Indians from other areas.

Some of the finest baskets in the world were made by the California Indians in this region. One of the



Pomo woman cooking, Russian River, 1905

most famous types is called a gift basket. A Pomo gift basket is made of many different materials. The base of the basket is made from willow.



Russian River

Willow trees grow along rivers. Normally, they have many small branches. People cut these trees at their base in the winter. In spring, the branches grew long and straight. The next year, the branches were ready to be harvested and woven into baskets.

The Pomo wound roots from a plant called sedge around the willow branches. Sedge plants grow along rivers. They usually have many small roots. Pomo basket makers tended the plants so that they grew long, straight roots. Sometimes, it took many years of care for the roots to grow as people wanted. Growing sedge plants in this way not only helped basket makers, it also allowed the roots of the plants to hold the soil together. This kept the

banks of rivers that flooded, like the Russian River, from washing away.

Pomo gift baskets were decorated with many things. Some had red feathers from acorn woodpeckers. Other baskets had green feathers from mallard ducks. Yellow feathers came from meadowlarks or orioles. Basket makers also used curly feathers from the heads of California quail.

The baskets made by the California Indians of the North Central tribal region were often decorated with shells. Abalone shells from the coast were made into shiny beads. White disks made from clamshells were sewn onto the baskets. Pomo basket weavers still create these beautiful works of art today.

# South Central Tribal Region: Oaks, Grasses, and Pines



This large region has many different natural regions in it. The temperature ranges from cool near the coast to hot and dry in the Central Valley. The California Indians living in this tribal region gathered clams, abalone, and mussels along the coast.

Oak woodlands and coastal forests grew in the Coast Ranges. Mixed evergreen forests grew in the Sierra foothills. These woodlands and forests offered the people abundant food. Scrubland and chaparral grow above the dry grasslands of the Central Valley.

Many different kinds of animals lived in the scrubland and grasslands and provided people with meat and skins. These animals included deer, rabbits, and ground squirrels.

One of the most important and useful plants to the people living in this region was the tule reed. It grows wherever there is slow-moving fresh water. People, such as the Southern Valley Yokuts, twisted its leaves into ropes and wove them into mats and baskets. Tule reed was made into



Yokut woman, Madera County, 1902

toys and duck decoys. It was laid on top of willow branches to create dome-shaped homes. Tule reed was also tied in large bundles to make boats. The Yokut people used tule boats to fish and move from place to place on the lakes and in the ocean.



## Tule

There was a large lake in the southern San Joaquin Valley when Europeans arrived in California. It was called Tulare Lake because many tule reeds grew around it. The Southern Valley Yokuts hunted ducks and gathered eggs there. They also fished in the shallow lake. Tulare Lake is much smaller today, and may one day disappear completely.

California Indians in this region gathered grass seeds in late summer and fall. They placed baskets on the ground in a field of grass. Then they hit the grasses with a tool called a seed beater. The seed beater was shaped like a paddle. Most of the grass seeds would fall into the baskets. People stored the seeds to eat throughout the year.

After harvesting the seeds from a field of grass, the people would set those areas on fire. Burning stopped bushes from growing in the fields. It also helped the grass plants sprout and make seeds the next year. The grassy fields also attracted many animals to graze, making the grasslands the best place to hunt.

The California Indians who lived in the South Central tribal region moved around the region as the season changed. They moved up and down the mountains when the weather warmed or cooled. In the summer, they moved up the mountains to hunt food and collect berries and bulbs. In the winter, they moved to valleys where there was no snow.

# Eastern Tribal Region: Cold Winds and Scents of Sagebrush



The Eastern tribal region has some of the most extreme weather in the state. It is freezing cold in the winter. In the summer, the temperature can reach more than 100° F (38° C). Very little rain falls here. Much of this region is covered by sagebrush scrub and pinyon-juniper woodland. There are also high and low deserts in which California Indians lived.



Paiute Indian wearing rabbit skin blanket

The people who lived here knew the best places and times of year to gather resources. They moved over large distances. They followed animals and gathered many different plants. People in this region enjoyed a food called *kutsavi*. These were crunchy snacks made from insects that lived in salty water. They were gathered from the Owens and Mono lakes at just the right time of year.

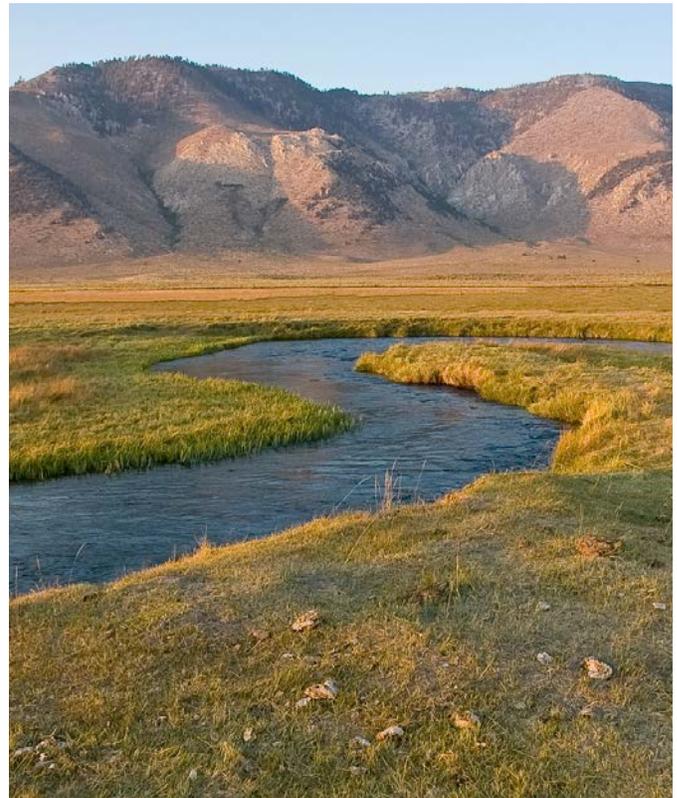
The Paiute people lived in the Eastern tribal region. They used nets to catch large numbers of rabbits. The Paiute hunted rabbits in November, when the animals would have a lot of meat from eating all summer. This was also the time when the rabbits had the longest fur.

The people made rabbit skins into warm blankets.

The pinyon pines that grow in the Eastern tribal region have delicious seeds. The Paiute gathered the seeds in the late summer, before the cones opened naturally. They opened the cones by toasting them over a fire. This allowed the people to gather the seeds before animals, such as squirrels and pinyon jays, could eat them.

The Paiute who lived in the Owens Valley grew crops. They dug channels along the Owens River to water other plants growing in the area that they used. Two of these plants were yellow nut grass and wild hyacinth. The people grew yellow nut grass for its seeds and grew the hyacinth for its bulb that grew underground. Both the seeds and bulbs were popular foods.

People in this region made bows and arrows from juniper wood. The process of making a juniper bow started with selecting a special tree. Then, the bark was removed from the trunk. If the wood underneath the bark was strong and straight, long cuts were made into the trunk to stop the wood from growing on that part of the tree. Then the tree was left alone for several years. When it was time,



Owens River

the parts of the tree that had been cut would be removed. After several years, new wood would grow back in that place on the tree. The people visited some of the best trees again and again to get wood for their bows and arrows. Some trees were used by the people for hundreds of years!

The Paiute used the bow and arrow to hunt large animals, such as bighorn sheep. The people of the Eastern tribal region also traded the bows and arrows they made with people from other tribal regions.

# Southwest Tribal Region: Sunny Beaches and Burning Bushes

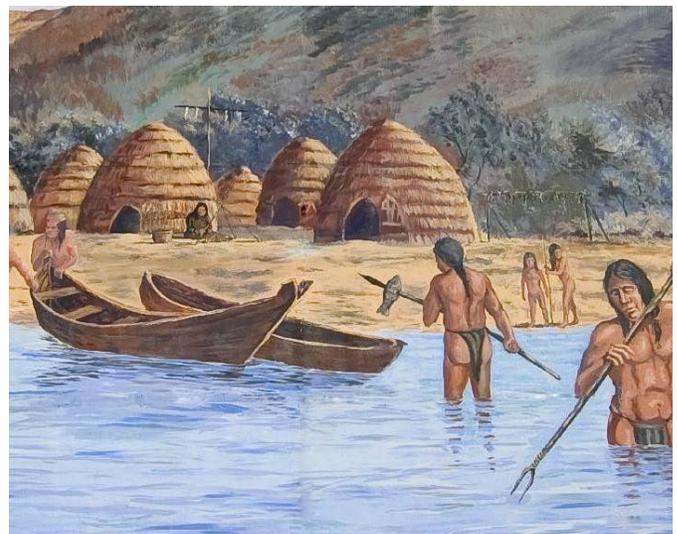


This region has some of the best weather in the state. It is cool and wet in the winter and warm in the summer. Ocean breezes keep the weather mild near the coast. The California Indians living here found many resources in this region.

They gathered acorns in oak woodlands. They collected seeds and bulbs in grasslands. They hunted animals and gathered plants in scrubland and chaparral. The people gathered goods from ocean, coastal, and freshwater habitats.

California Indians in this tribal region made strong boats. They carved boards from wood that washed up on the beaches. The people sewed the boards together with ropes. Then they coated the boats with tar to make them waterproof. The boats, a type of canoe called *tomol*, helped the people to travel to and settle on the Channel Islands.

The Chumash lived in this tribal region. They were excellent fishermen. They caught sardines, sharks, black



Chumash Indians fishing

sea bass, rockfish, and halibut. They baked and ate kelp and made it into flexible ropes. The Chumash gathered small gray shells from the *Olivella* snail. They cut disks made from the shells and used them as beads. These beads were one of the most



Brush fire

widely traded items among California Indians. The Chumash hunted sea lions for their meat and hides. They also used the hard sea lion whiskers to drill holes in shell beads.

The people also made use of the scrubland and chaparral plants. Strong-smelling herbs, such as yarrow and black sage, were used as medicine. They used the wood from manzanita and chamise as firewood

or torches. They ate seeds from red maids, chia, and tarweed.

The California Indians of the Southwest tribal region burned chaparral and scrubland sometimes. When plants were still moist in the early winter, people chose places to be burned. Holding torches, they formed a circle in the brush. Then they set plants on fire and drove the fire inward. Once the fire went out, the people cleared away the ash, and an open space was left behind. After rain fell in the winter, fresh grass would grow in the open space. The grass attracted animals, such as deer, rabbits, and quail. The people hid in the bushes around the open space and hunted the animals with arrows or nets.

The people only burned brush when there was no chance that fires would get out of control. They burned different areas every year. This allowed plants of many different ages to grow in the Southwest. The mix of young and old plants provided food and shelter for more kinds of animals. It also kept the area from getting too many dry leaves and branches that could lead to large, dangerous fires.

# Southeast Tribal Region: River Farms and Palm Oases



This region is hot and dry in the summer and cold and dry in the winter. Most of it is made up of high and low desert. There is very little rain. There are many freshwater springs and oases, though. The California Indians in this tribal region settled around these water sources, using the water and the living things that came to the water, too.

The Cahuilla people lived in the Southeast tribal region. One of the most important plants to the Cahuilla people was the mesquite tree. It was so important that the people based their calendar on the growth of the mesquite tree. It grows where water flows underground. Wherever the Cahuilla saw mesquite, they knew there was water there. Mesquite seeds grow in pods that look like long beans. The Cahuilla ate the sweet outer covering of the seeds. They also ground the seeds into flour which they made into bread and soup.

The people took care of mesquite trees. They cut branches off the trees to encourage seeds to grow. Cutting also made seeds easier to gather. People regularly burned the areas under the mesquite trees. Burning

helped get rid of pests that would eat the beans or the wood of the trees.

Another tree that was important to the people was the California fan palm. These trees grew better when people burned around them, too. Besides



Cahuilla woman under palm tree



Mesquite tree

getting rid of pests, the burning caused the palms to make more seeds and fruit. The Cahuilla ate the palm fruits but saved the seeds.

People planted palm and mesquite seeds so that they would always have the trees to use. They used mesquite wood for making tools. The fibers of palm fronds were made into sandals and baskets. People also used the palm fronds to cover the walls and ceilings of their houses, making them shaded and cool.

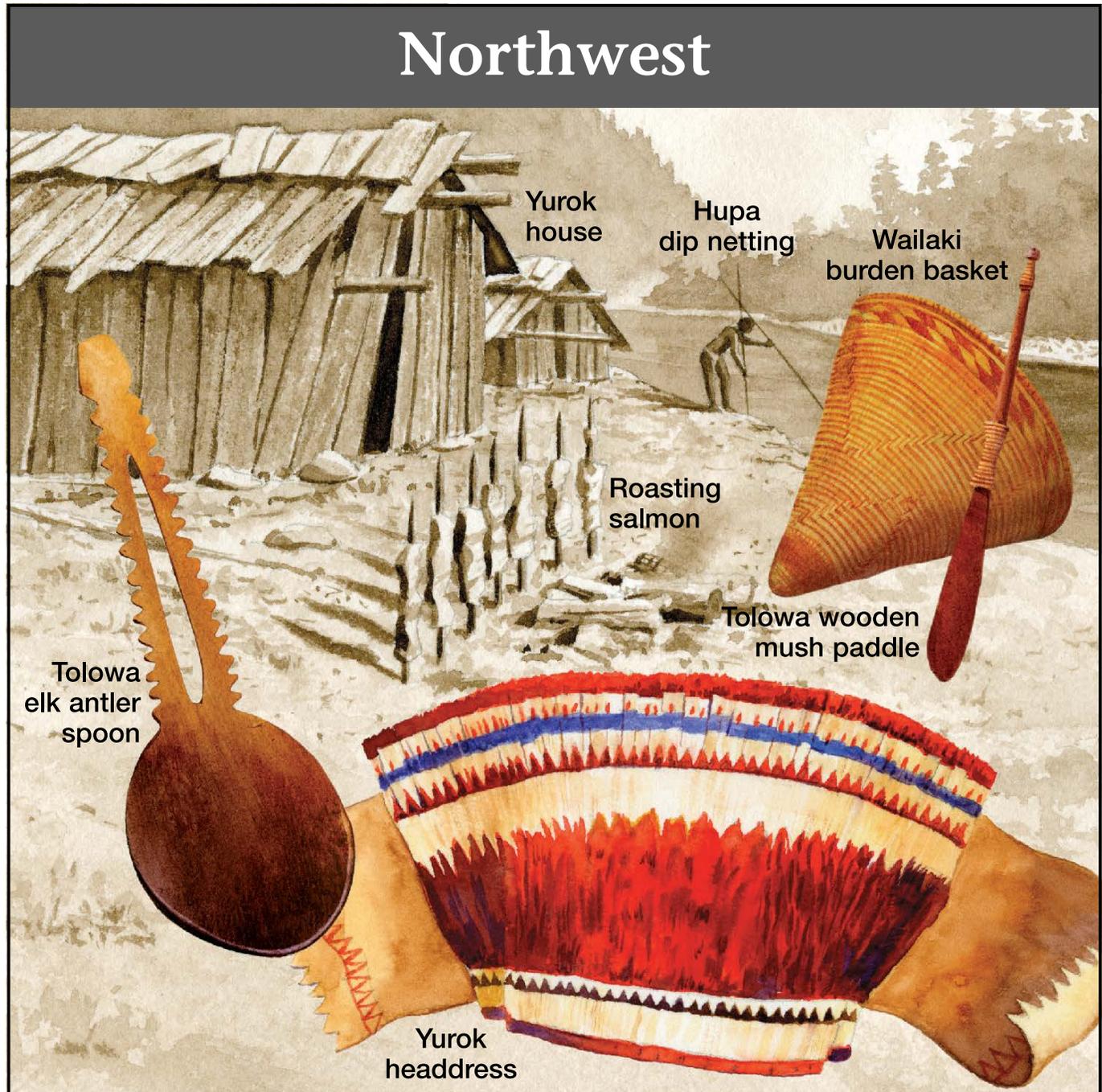
The people hunted animals that came to the fresh water and trees. The animals included woodrats, chuckwallas (large lizards), and desert

tortoises. The meat was dried and stored for long periods of time before being eaten.

The Quechan, Halchidoma, and Mojave people grew crops along the Colorado River. These included corn, beans, and squash. Every year, the river would flood and bring rich soil to its banks. The people would plant the soil with the seeds of the plants they wanted to grow there.

The California Indians in this tribal region used pottery more than people in other parts of the state did. Baskets were often used for gathering food. Clay pots were used for cooking, serving food, and storing food and water.

# Northwest Tribal Region



### Redwood Plank House

This house was made from flattened boards made from **coast redwood** trees. Fires were burned around the trees to help cut them down. They were then made into flat boards using wedges made from elk antlers. The boards were fastened to a frame made of **spruce trees** with **wild grape** vines.

### Hupa Dip Net

People used this net to catch **salmon** and other fish in rivers. A long **willow** or **hazelnut** branch was bent for the frame. A net made from strong fibers of **wild iris** leaves was attached to it.

### Wailaki Burden Basket

This basket was used like a backpack. It helped people carry **hazelnuts** and acorns from **oak trees**. Strong branches of **willow** were used for the frame. In between these branches people wove roots from **spruce trees**. Designs in the basket were made with **beargrass** leaves.

### Yurok Headdress

This fancy hat was used for something called the jump dance. It is made from a decorated white **deerskin**. The red designs were made with feathers. They came from the head of **acorn woodpeckers**. The blue designs were made with the feathers of **Steller's jay**.

### Spoon

This spoon was used to eat **hazelnut** or acorn soup. It was made from an **elk** antler. The antler was carved and heated over a fire to make the spoon smooth.

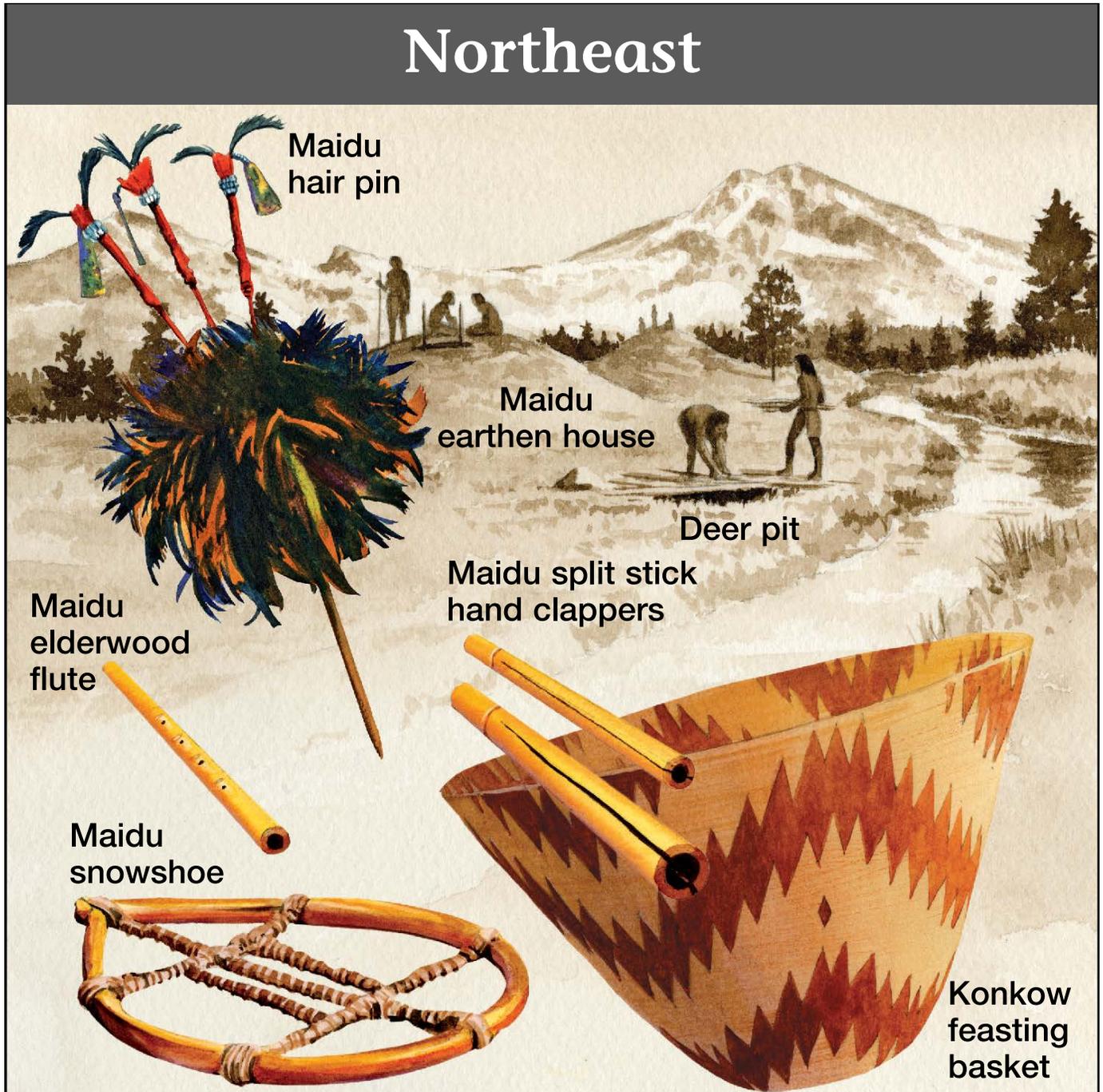
### Salmon

**Salmon** was an important source of protein. It could be roasted on **hazelnut** sticks by a fire. It was also smoked and dried for later use.

### Mush Paddle

People in this region cooked in baskets. They heated rocks in a fire. They used sticks to drop rocks into a basket of cold soup and move the rocks. This stick was made from a branch of **big leaf maple**. They added hot rocks until the soup was cooked.

# Northeast Tribal Region



### Maidu Hairpin

The main part of this hairpin was a branch from the **dogwood** tree. The feathers came from many different birds. Some were from a **red-shafted flicker**. There were also feathers from **Canada Geese**. Others came from **California quail**. The small white beads were made from the shell of a **clam**.

### Elderwood Flute / Split-Stick Hand Clappers

This flute and clapper sticks were made from hollow branches. They came from the **elderberry** tree. Some people called this the tree of music.

### Maidu Snowshoe

This helped people stay on top of deep winter snow. The bent frame was made from a **willow** branch. The other pieces were made of something called rawhide. Rawhide is strong material that comes from the skin of a **deer**.

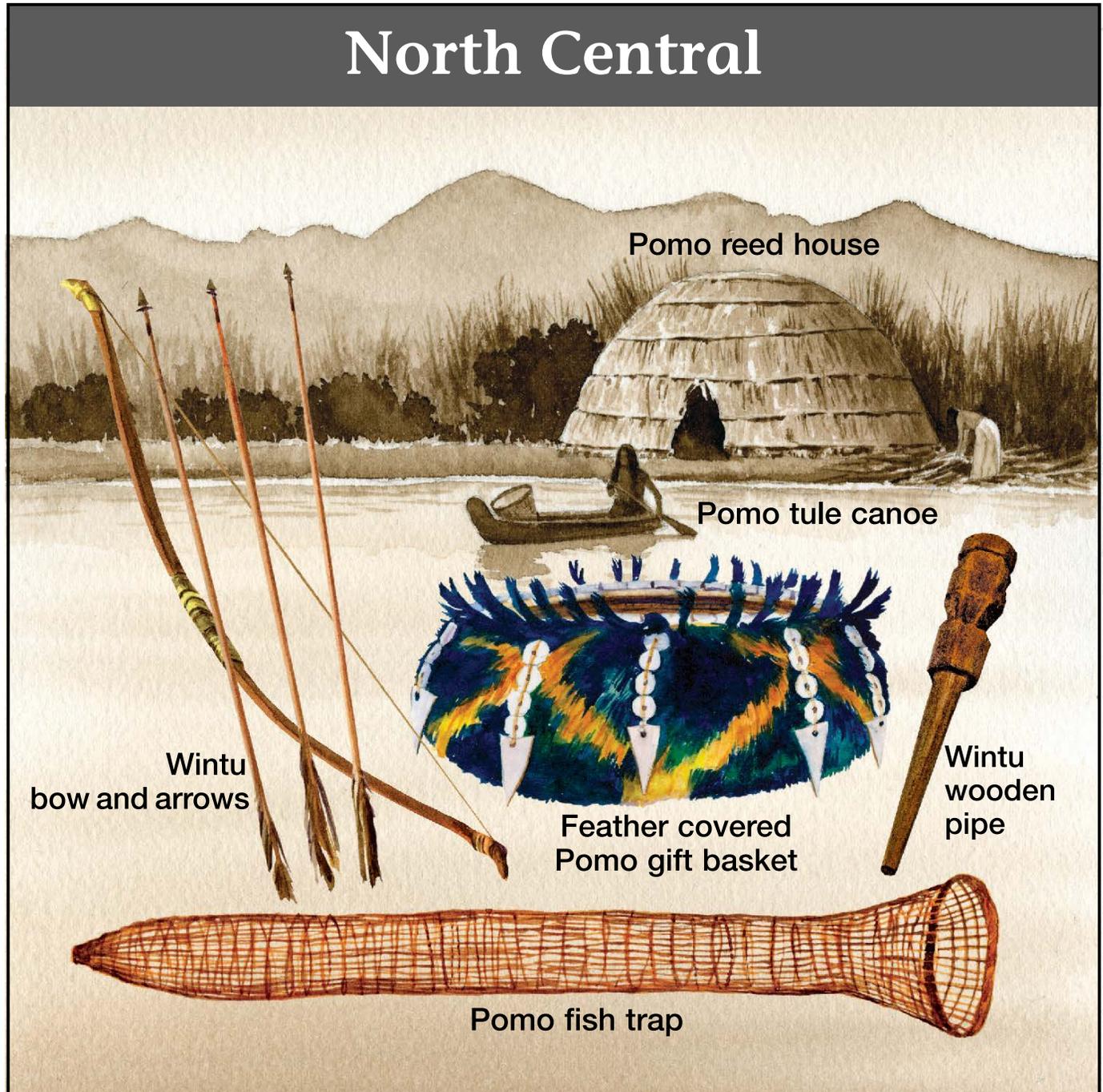
### Konkow Feasting Basket

Baskets like this were used to serve food like acorn from **oak trees**. It was made from branches of **willow**. Pieces of **redbud** were woven with the willow to make the designs.

### Maidu Earthen House

Houses like this stayed warm in winter and cool in summer. There was a frame inside to keep the earth from caving in. They were made from straight trees like **lodgepole pine**.

# North Central Tribal Region



### Pomo Reed House

The frame for this house was made from bent **willow** branches. This frame was covered with **tule reeds**. These would keep rain out but still allow fresh air to come in.

### Pomo Tule Canoe

This canoe was made of bundles of hollow **tule reeds**. Canoes were tied together using rope made from other tules or **cattail**.

### Wintu Bow and Arrows

The Wintu bow was made from **cedar** wood. The bowstring was made from sinew. This is a very strong string made from **deer** tendons. The arrows were made from **common reed**. They had tips made of **obsidian**. The feathers at the ends of the arrows came from **Canada geese**. They helped the arrow fly straight.

### Wintu Wooden Pipe

People smoked **California Indian tobacco** in pipes made of hardwood. One hardwood that was used was **mountain mahogany**.

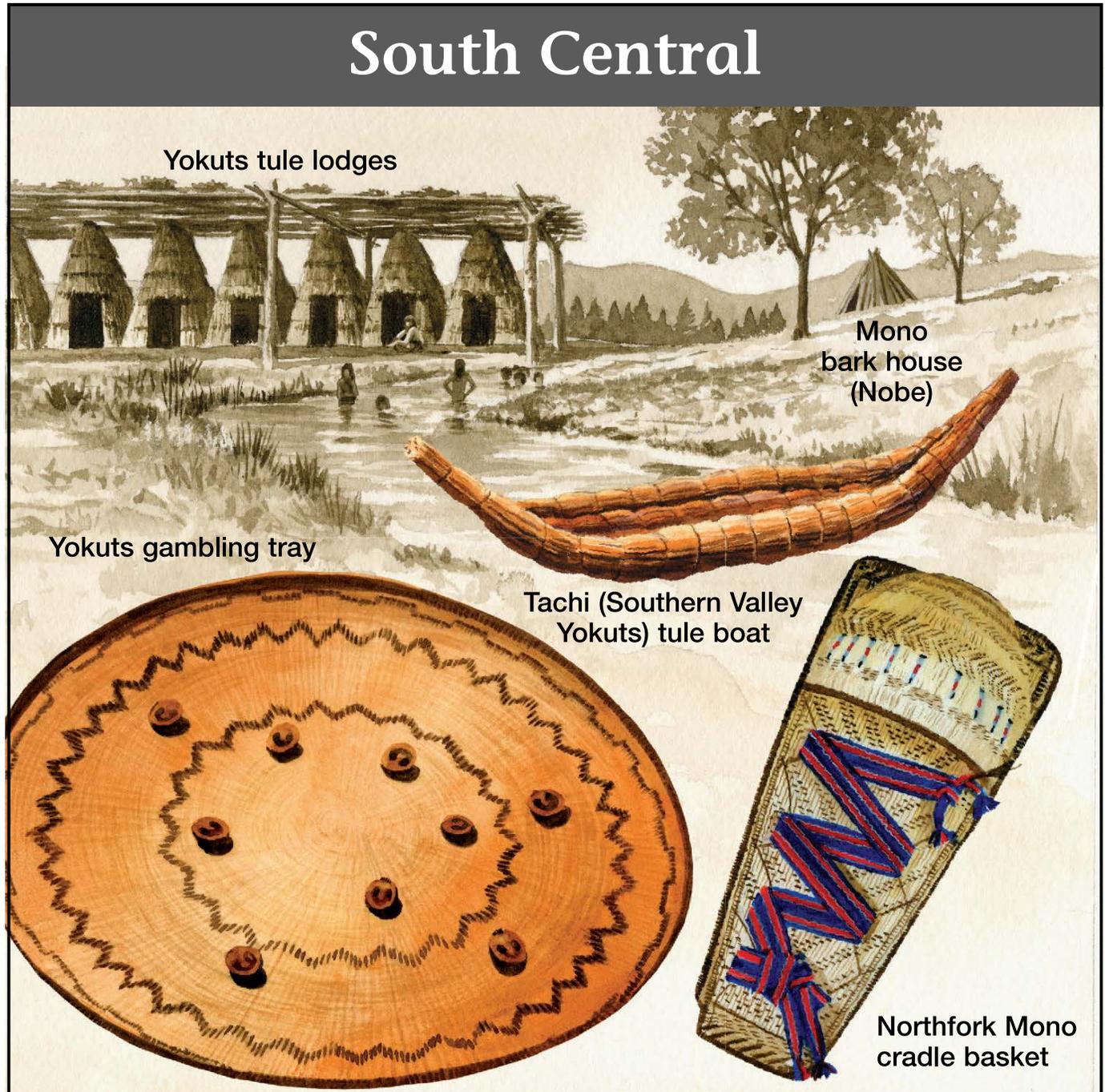
### Pomo gift basket

The base of these baskets was made of tiny **willow** branches. Small white **sedge** roots were wrapped around them. The basket was decorated with small white beads made from the shell of a **clam**. It also had shiny **abalone** beads. The green feathers were from a **mallard duck**. The yellow feathers were from a **western meadowlark**. The small black feathers on the edge of the basket were from a **quail**.

### Pomo Fish Trap

This long fish trap was made of **willow** branches. It was used to catch fish like **catfish** that live at the bottom of rivers and lakes.

# South Central Tribal Region



### Yokuts Tule Boat

This canoe was made of bundles of hollow **tule reeds**. The boat was tied together using rope made from other tules or **cattail**.

### Yokuts Tule Lodges

The frame for these houses was made from bent **willow** branches. This frame was covered with **tule reeds**. These would keep rain out, but still allow fresh air to come in.

### Mono Bark House

The frame for this house was made from straight **pine** branches. This frame was covered with **cedar** bark. It was tied together with **wild grape** vines.

### Yokuts Gambling Tray and Dice

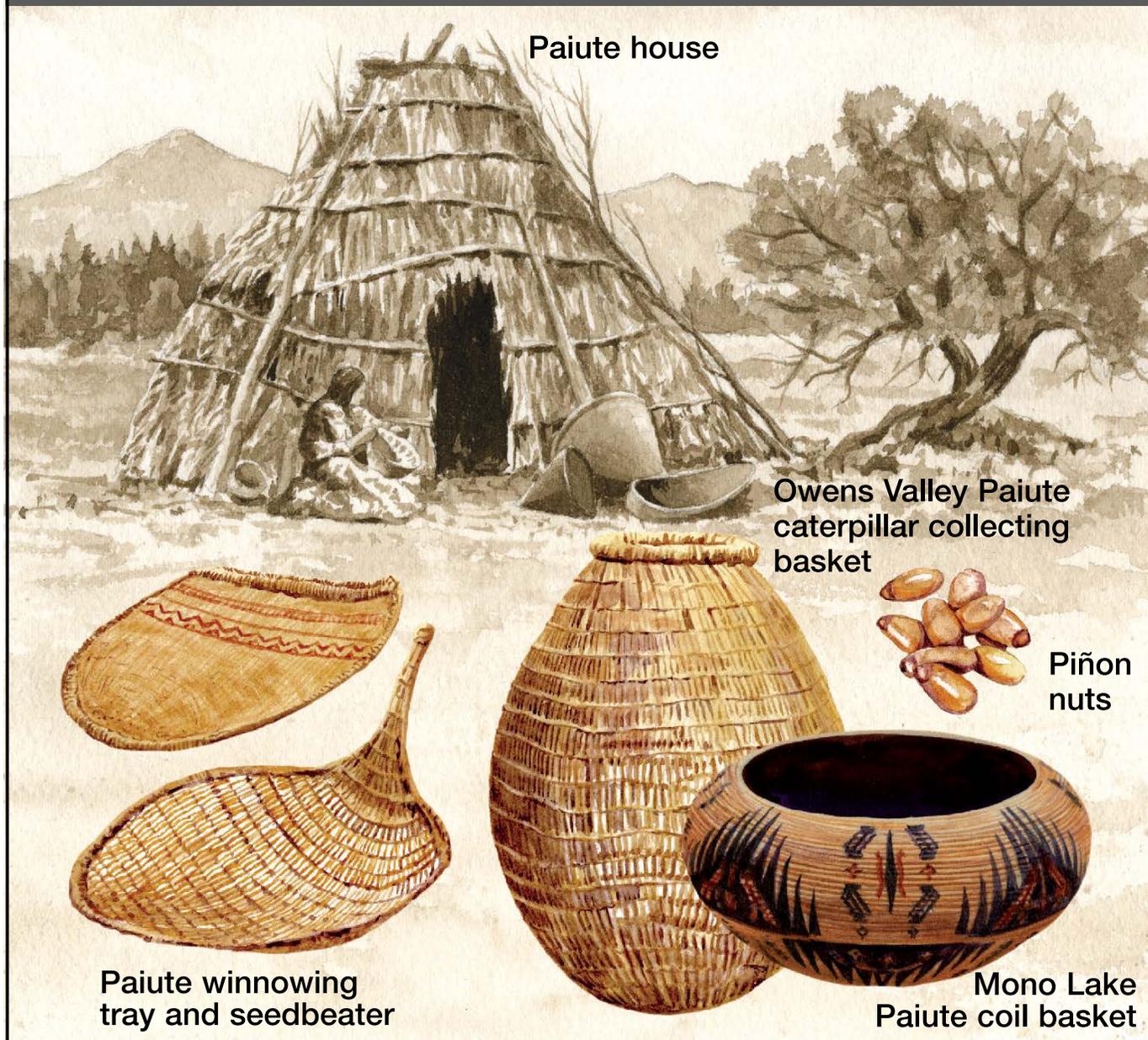
This base of this basket was made of bent **deergrass**. Small white **sedge** roots were wrapped around it. It was decorated with woven black designs made from **bracken fern** roots. The dice were made from the shells of **black walnut**. These baskets were decorated with **abalone** shells.

### Northfork Mono Cradle Basket

This was made from strong **sourberry** sticks. It was decorated with reddish shoots of **redbud** and white roots from **sedge**. This basket was used to carry a baby on a mother's back. She could keep the baby with her while she worked.

# East Tribal Region

## East



Paiute house

Owens Valley Paiute caterpillar collecting basket

Piñon nuts

Paiute winnowing tray and seedbeater

Mono Lake Paiute coil basket

### Paiute House

The frame for this house was made from bent **willow** branches. This frame was covered with **Great Basin wild rye**. It helped protect people from the hot Sun and cold wind of this area.

### Paiute Winnowing Tray

This tray was used to help remove shells from acorns from **oak** trees and shells of **pinyon pine** nuts. It was made of **willow** branches. Decorations were made from **redbud**.

### Seedbeater

This tool was used to hit **grasses** to remove seeds. It could also help collect berries from plants like **wolfberry**. It was made of bent **willow** branches.

### Mono Lake Paiute Caterpillar Collecting Basket

This basket was made from bent **willow** branches. It was used to collect **Pandora moth caterpillars**. These caterpillars eat the needles of **pine** trees. The black designs were made from the roots of the **bracken fern**.

### Mono Lake Paiute Coil Basket

The main part of the basket was made from bent **willow** branches. The black designs were made from the roots of the **bracken fern**. These baskets were used to carry items like pinyon pine nuts and grasses with seeds.

# Southwest Tribal Region



### Chumash Plank Canoe

This canoe was made from boards cut from **redwood** logs that washed up on beaches. **Kelp** ropes were used to attach the boards to each other. The holes between them were sealed with tar called **asphaltum**.

### Carrizo Arrows

These arrows were made from **common reed**. The tips were made from hardwood like **mountain mahogany** or **manzanita**. The feathers on the end came from a **red-tailed hawk**. They helped the arrow to fly straight. A strong string called sinew was used to tie the feathers and tip to the arrow. It comes from a **deer**.

### Yucca Stalk Quiver

This arrow holder was made from a hollow flower stalk. It comes from a plant called **Spanish Bayonet**.

### Chumash Pendant and Beads

The pendants were made from abalone and the beads on this necklace were made from **clam** shells. Holes were drilled in them using the hard whiskers of a **sea lion**. The string holding the beads together was sometimes made from Mojave **yucca** leaves.

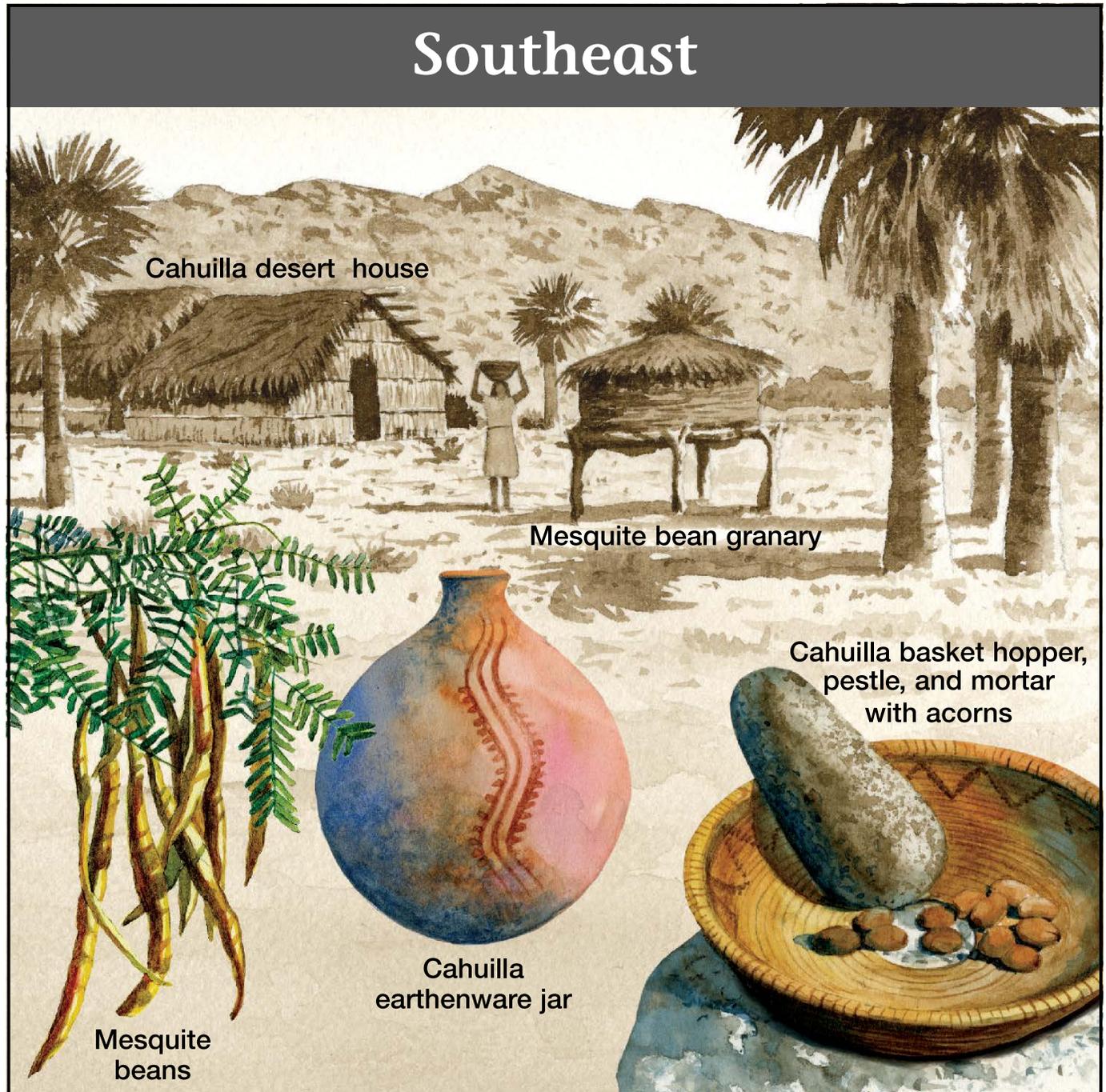
### Chumash Village

The frames for these houses were made from bent **willow** branches. The frames were covered with **tule reeds**. These would keep the rain out but still allow fresh air to come in.

### Santa Catalina Island Steatite Vessels

These containers were made from a soft rock called **steatite**. This comes from Catalina Island. The containers were used to crush and store seeds for later use as food. These seeds came from plants like **red maids** and **chia**.

# Southeast Tribal Region



## Cahuilla House

The frame for this house was made from **desert willow** branches. This frame was covered with leaves from the **desert fan palm**. This house stayed cool and shady during hot days.

## Granary

This was used to store **mesquite** beans, acorns from **oaks**, and other kinds of food. A platform was made from **willow** branches. On top of this, willow branches with leaves were tied in a circle. A roof was made with leaves from a **desert fan palm**.

## Cahuilla Basket Hopper

This basket was used when people were grinding acorns from **oak trees**. It helped catch pieces of acorn so that no flour was lost. The base of this basket was made of bent **deergrass**. **Juncus** leaves were wrapped around the deergrass to weave the basket.

## Cahuilla Earthenware Jar

This jar was made from **clay** that came from broad riverbeds. It was used to store **corn**, **beans**, **desert palm** fruit, and other foods. It was also used to store water.

## Northwest Tribal Region



Coast redwood



Wild grape



Wild iris



Willow



Bear grass



Spruce



Acorn woodpecker



Deer



Steller's jay



Roosevelt elk



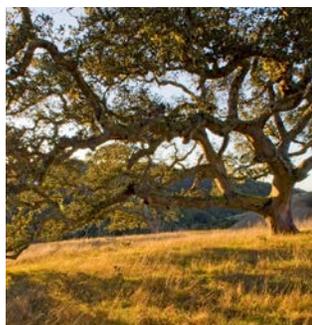
Salmon



Big-leaf maple



California hazelnut



Oak

## Northeast Tribal Region



Dogwood



Red-shafted flicker



Canada goose



California quail



Washington clam



Elderberry



Willow



Deer



Redbud



Lodgepole pine



Oak

## North Central Tribal Region



Tule



Willow



Cattail



Cedar



Deer



Common reed



Canada goose



California Indian tobacco



Mountain mahogany



Washington clam



Abalone



California quail



Western meadowlark



Mallard duck



Sedge



Catfish

## South Central Tribal Region



Tule



Cattail



Willow



Lodgepole pine



Wild grape



Cedar



Deergrass



Sedge



Bracken fern



Black walnut



Asphaltum



Abalone



Sourberry



Redbud

## East Tribal Region



Willow



Great Basin wild rye



Redbud



Bracken fern



Pinyon pine



Oak



Pandora moth caterpillar



Wolfberry



California grasses

## Southwest Tribal Region



Coast redwood



Kelp



Asphaltum



Common reed



Red-tailed hawk



Deer



Spanish bayonet



Pismo clam



California sea lion



Mojave yucca



Tule



Willow



Steatite



Red maids



Chia

## Southeast Tribal Region



Willow



Desert fan palm



Deergrass



Juncus



Clay



Mesquite



Mesquite beans



Chuckwalla



Oak

## Using a Paiute Winnowing Tray

More than a month ago, the headman of our village went to the mountains. He looked for the trees that will have the most pine nuts this year.

We were excited to see him return with large cones full of nuts. Last week, the first frost covered the ground. The time had arrived for us to follow him into the mountains.

As we walked, the smell of the trees got stronger. Soon, we arrived in groves of pines heavy with round cones. Boys climbed up to help shake them down. They got sticky black pinesap all over their bodies. My grandson rubbed himself with dust so his blanket would not stick to him. Men used long hooks made of willow branches to knock down cones. There are many nuts this year. We will have plenty of food through the winter.

My daughters, granddaughters, and I gathered the cones in baskets and brought them back to camp. We made a delicious soup for everyone who worked all day. I used my favorite basket tray to toast the nuts. I took



Woman winnowing pine nuts

them out of the cones and removed any sap. Then, I added hot coals from the fire. I quickly tossed them so the basket would not burn.

After the nuts were toasted, I used a stone to crack the shells. Then, I put the nuts back into my basket and tossed them in the air. The wind blew small shells away. We call this winnowing. We call my basket a winnowing tray.

After winnowing the nuts, I used a stone to grind them into sticky flour. I put this into a basket and added water. With a round stick, I lifted a hot stone into the basket. I used the stick to move the rock. This kept it from burning a hole in the basket. I kept adding hot rocks until the pine nut mush was hot and ready to eat. My family and I used our fingers like spoons to eat this hot, delicious meal.











California STATE BOARD OF  
EDUCATION

---

## California Education and the Environment Initiative