

A PARTIAL LIST OF PLANTS FOUND ON NATURE TRAIL

INDIAN GRINDING ROCK STATE HISTORIC PARK

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Soap Plant

Bulb was stripped of its outer fibrous mesh, which was left to dry. These fibers become a fine brush when tied together at one end with more fibers for a handle. The inner mucilaginous layer was scraped and worked into the handle, then put in the sun to dry and harden.

The bulbs were crushed and mixed with water to make a lather (soap). Bulbs could be cut in half and used as bar soap. Bulbs were grated or ground to a powder and used as powdered soap.

Bulbs were crushed and put into pools of water where fish were present. The lather from the soap coated the gills of the fish and prevented the oxygen from entering the fishes blood stream. The fish would float to the surface where they could be scooped up.

The bulbs were cooked over-night to remove the soapy taste and then they were eaten.

Manzanita

Berries were eaten raw, cooked or ground into meal. They ranked next to acorns in food value. Cider was made from berries as well as jelly. Berries were dried and stored for winter use. Berries were crushed, put in water, and left to stand. The seeds and pulp were then strained out through a basket strainer. The dry seeds were beaten to a fine flour and made into mush, or shaped into cakes which were baked in hot ashes. The meal could be eaten dry.

A wash or lotion was made from the leaves and used as a treatment for poison oak.

After the acorns were ground into meal, it was leached to take out the bitterness. A frame was prepared of incense cedar twigs laid overlapping like the shingles on a roof. The acorn meal was spread out on the cedar twigs and water was poured through the meal repeatedly until the meal turned pink, when it was dried and kept until it was used. The cedar twigs gave a spicy taste to the meal.

Incense Cedar

Sugar Pine

The gum was used as chewing gum. It was very sweet. It is a mild laxative. The gum was dried and powdered and used to heal sores. The pitch was used as glue, and chewing gum. The resin is a cathartic.

The sugar pine is the largest of all pines. Some of these pines are over 200 feet tall, with a diameter of 6-8 feet. The wood is light, soft, straight grained and relatively free of knots. It is a valuable wood and commands a high price. It has been called the "king of pines." The cones are up to 21 inches long.

Valley Oak

Indians gathered the large sweet seeds or nuts for food. The valley oak is the largest oak in the world. Some valley oaks attain a height of over 100 feet, and a diameter of up to 8 feet. Acorns were figured very largely in the Indians diet. Black oak was the favorite, tan oak was second and the valley oak last. The acorns from the different oaks were kept separate, but preparation was the same for all. Acorns were soaked over-night, which caused the shell to split open. Old women, even those who were blind picked out the kernals. The nuts were spread on work baskets to dry; then they were ground to flour in a stone mortar. The acorn meal was then leached to take out the bitterness. Then the meal was dried. A soup could be made from the meal.

Bread was made from the meal. It was made into round loaves, and before it was baked, it was a pale brick red color. If baked in ashes, it was wrapped in fern leaves and slowly baked. The heat turned the bread black and with fern prints on it. It looked like coal with marks of fern fossils. Sometimes red clay was added to the meal in a proportion of 1 part clay to 20 parts meal to make a stiff dough. Clay offsets the over amount of protein in the acorns. The bread was remarkably sweet.

A sort of Indian penicillin was made by covering the acorn meal to make it sweat and mold. When the skin of the mold was firm enough to roll up, it was peeled off and kept in a damp place. If anyone had a boil or skin infection, this mold was applied to draw out the inflammation.

Indians dried the moss plant and later made it into a soup.

Gray green lichens were used to wrap around deer brains and made into brick form, then rubbed into animal hides that had been tanned to make the hides soft and pliable.

Lichens have a symbiotic relationship with one celled algae.

Lichens are classified as fruticose or shrublike; foliose or leaf like; and crustose or crustlike. Raindeer moss is not a moss but a fruticose lichen, and it is edible. Foliose lichens look like leaves with edges curled up. Crustose lichens appear as thin flat crusts on rocks or plants, some are green, some are yellow, orange, or red.

Most widely distributed and common pine in North America. The needles are 3 in a bundle and 4 to 8 inches long. The ponderosa pine is a valuable timber tree, is used for window frames, doors, and plywood. Quail and squirrels eat the seeds. Chipmunks store the seeds. Indians crushed the nuts, and the meal was made into bread.

Evergreen, sheds its leaves gradually during the summer. Indians used the acorns for food. Many consider the live oaks as the most beautiful of the California oaks. Another similar species, the canyon live oak, was used for wagon wheels and axles, and for the heads of mauls, and wedges for splitting softer wood. The acorns of the canyon oak were used by the Indians for food. Tea was used for skin eruptions, for coughs, and colds by Indians. It is a tar weed.

Evergreen, sheds its leaves during the summer. One of the most beautiful broadleaf flowering evergreens. Belongs to the heath family. This is the same family as the Manzanita. Flowers are urn shaped like the Manzanita.

The fruit is 3/8 " in diameter; berrylike, orange red; maturing in the autumn. The fruit on many trees will be 1/2" in diameter.

Indians made a tea from the roots, bark, or leaves and used it for colds. Indians ate the fruit raw and cooked. Over eating caused cramps. Berries were cooked, dried, and stored to be soaked in warm water when eaten.

Flowers are white and a source of honey. Deer and birds eat the fruit.

An oak gall wasp stings the branch and lays her eggs. Excretions from the developing larva stimulates the branch to produce these light weight galls. (nature's styrofoam) These can eventually cut off the flow of nutrients and kill the tree. Look for holes in the gall where adult wasps escaped.

Young shoots (fiddleheads) were eaten raw by the Indians. Indian hunters would eat fiddleheads so their scent would not scare the deer who fed on the same fern plant.

In the midrib or backbone of the huge fronds are two tough fibers suitable for basketry. These are stripped and used much as yarn would be. They are dyed with alder. Indians also steeped the roots in water and used for pains and bruises.

Indians made a tea from the tender root shoots for colds; seeds were cooked and eaten for muscular pains. Leaves were made into tea and drunk for pains.

The old straight wood was used for arrow-shafts. A yellow dye was made from the bark.

Indians dried the berries for preservation, to be eaten like raisins, or soaked in water when ready for use. Fresh berries were pounded to make cakes, or mixed with dried deer meat and fat to make pemmican. Tea from the roots was a remedy for diarrhea. Blackberry vines were used in basket making. Birds eat the berries. Animals hide in the thickets. Deer browse on the leaves and stems. Birds use the thickets for nesting.

Used to dye basket grass orange which fades to brown. The inner bark was cut into inch strips and cooked until soft, then chewed and chewed

Moss  
Lichen

Ponderosa  
Pine

Canyon  
Live Oak

Mountain  
Misery  
Madrone

Oak Galls

Bracken Fern

Giant Chain  
Fern

Wild Rose

Blackberry

Alder, White  
& Mountain

until all the dye was chewed out of it. This dye was ejected from the mouth into a soapstone dish and the grass soaked in it. Indians used tea from the bark for diarrhea, stomach ache, and mixed with tobacco to induce vomiting. Young shoots were made into arrows.

Alders grow near water, pond or stream where their roots get wet.

Birds eat the seeds and insects feed on its leaves.

Rush Grow in clumps in wet or moist places. Stems are round and may be hollow or pithy. Indians used rushes for binding material.

Douglas Fir Ranks first in the United States in total volume in lumber production, in production of veneer, and for plywood. One of the tallest trees. Popular Christmas tree. The foliage is eaten by deer. Birds and mammals eat the seeds. Indians used the needles as a substitute for coffee. The cambium layer was used for food.

Big Leaf Maple Very large leaves. Handsome shade tree. Showy in autumn. Wood is used for veneer, furniture, and handles.

Indians made canoe paddles from the wood. Maple sugar can be obtained from the sap.

Snowberry\* Indians made a decoction for colds and stomach ache by pounding and steeping the roots. The fruit acts as an emetic and cathartic. As a honey plant it produces white honey. The fruit is edible raw.

Toyon Evergreen shrub 6' to 10' tall. Is found in the foothills below 4000 feet. Indians boiled the berries and baked them in their ground ovens. Hot stones were placed in the ovens and the berries were baked for two to three days. They also stored the berries for a few months, then parched them and made them into meal. Berries are edible raw. Cider was made from the berries. Cooking takes away the bitter taste. Indians made a tea from the bark and leaves and used it as a cure for stomach ache and other aches and pains.

Yugwort Indians thought highly of this plant. It was a symbol of peace as the olive branch is to us. The juice was used to soothe skin irritations. A leaf was placed in each nostril as a remedy for headaches, and a stuffy nose. Tea from the leaves as a cure for bronchitis. Leaves were chewed for a sore throat. Steamed leaves were placed on baby's skin to reduce fever. Packets of steamed plants were placed on arms and legs for rheumatism and a sweat bath given.

\*Snowberry Small bird arrows were made from the long shoots. The wood is very light and has a very large pith.

Coffeeberry Indians used bark as a laxative. It is a relative of Cascara.

Mistletoe Poisonous. Berries eaten raw or made into tea has caused fatalities.

Blue Elderberry Indians called it the "tree of music." They made flutes and clapper sticks from the branches. Berries are a valuable food source for birds and other wildlife. Indians used them as a relish for dried meats. The plant is poisonous except for blossoms and berries. Inner bark yields a strong emetic.

Long shoots used as arrow shafts.

Berries were used for a drink; also dried and stored for winter.

Flowers were used fresh, externally in a decoction, used as an antiseptic wash for skin diseases.

One of nature's richest sources of vitamin C.

Dye made from berries was used in basket making.

After drying or cooking the berries can be made into jellies, wines and syrups with a flavor similar to Boysenberry. Wine is also made from the flowers.

ilkweed Monarch butterfly caterpillars eat the leaves.

Unopened flowers, leaves and fruit though often reported as poisonous are fine vegetables when cooked. They should be placed in boiling water and cooked for one minute, this process should be repeated 3 times, while changing the water in between each boiling.

Generally the narrow leafed milkweeds have been shown to be toxic, and caution should be used when approaching any new species. Indians made chewing gum from the white milky juice which was slightly heated, stirred until it became solid and then mixed with deer grease.

A more important use for milkweed was to supply tough fibers for making cords and rope, and for weaving a coarse cloth. The fibers were taken from the stems after the bark was removed. The fibers were released by rubbing between the hands. The fibers were then rolled on the thigh.

The sticky juice was used as a cleansing and healing agent for sores and cuts, also as a cure for warts and ringworm. The mashed root moistened with water was used as a poultice to reduce swellings.

Indians made rope from the fiber which was stripped from the leaves. The Iris has threads on the outside edge of the leaf. These threads were stripped by the women wearing a long thumb nail and a muscle shell over it. The men made ropes and fishing nets from these threads.

#### Yellow Iris

Mariposa Tulip

Bulbs were eaten.

Pussy Ears

Bulbs were eaten.

Giant Trillium

Bulbs were eaten.

Elegant Brodiaea

Bulbs were eaten.

Yellow Monkey

Leaves were eaten.

Flower

Dandelion

Leaves were eaten.

Buttercup

Seeds were eaten.

Yarrow

Leaves as a tea for colds.

Poison Oak

Juice for a black dye. Basketry. Berries for food.

Nettle, Stinging

A decoction was made from the root to treat rheumatism by bathing the rheumatic area. The powdered leaves were rubbed on the affected area which produced a fiery itching. To relieve certain pains the affected area was struck with a branch of the nettle.

Honeysuckle

Stems used for basketry. Berries were eaten.

Hazelnut

Nut for food. Branches for basketry and for arrow shafts.

Horsetail

Used for sanding and polishing arrow shafts.

Columbine

Leaves cooked and eaten. Roots as a tea for diarrhea. Seeds mashed and rubbed into the hair to discourage head lice.

Dogwood

Arrow shafts. Basketry. Berries were eaten.

Mule Ears

Roots as a decoction for poison oak. Leaves and roots are poisonous.

Indian Hemp,

Rope was made from the stems.

Dogbane

Vetch.

Leaves and stems were eaten.

Puffball

Eaten fresh. Spores applied to a wound to hasten blood clotting.

Gooseberry

Berries were ground in a mortar to pulverize the spines and then eaten. Berries were also used in the making of pemican.

Spearmint

Tea for diarrhea and also as a beverage.

Shooting Star

Leaves and roots cooked and eaten.

Miners Lettuce

Stems, leaves, and flowers eaten fresh or cooked.

Goldenrod

A small quantity of a decoction was held in the mouth to alleviate toothache. It was expectorated, never swallowed.

Wormwood,

Symbol of peace. Juice for skin irritations. Leaves were placed

Mugwort

nostrils for a stuffy nose, and headache. Leaves were chewed for a sore throat. Leaves were used to line acorn granaries to keep insects away.

Big Leaf

Young branches used for arrow shafts.

Maple

Thimbleberry

Berries eaten.

Tiger Lily

Bulbs eaten after roasting in ground oven

Black Oak

Refer to information on Valley Oak. Dye from bark. Mortars were made from the wood.

Deer Brush

Seeds for food. Blossoms as a lather (soap). Leaves for tobacco.

Roots as a red dye.

Common Madia,

Tarweed Seeds ground into meal and eaten dry.