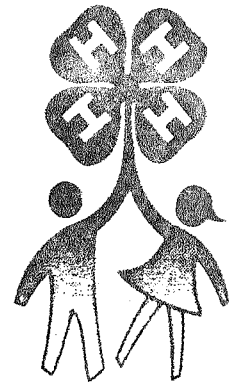


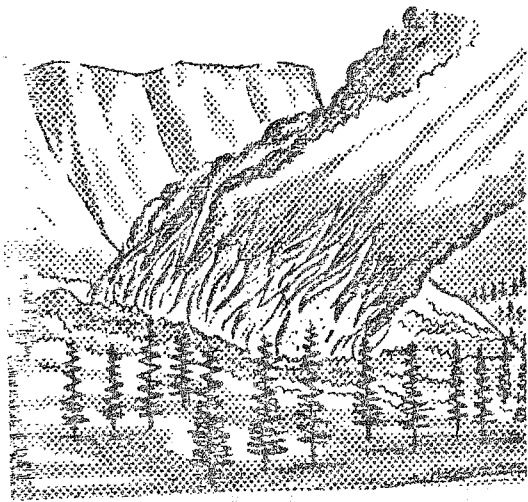
Metcalf

Nature

Trail

Los Posados State Forest
4-H Camp
Napa County, Ca.



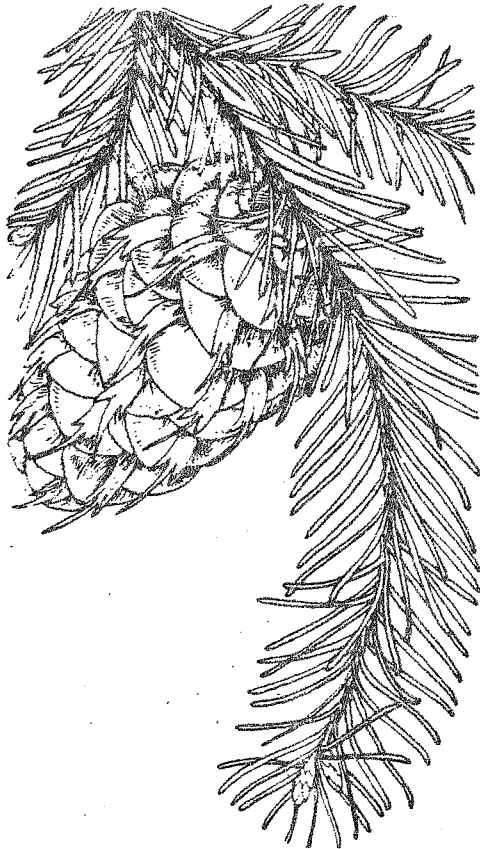


FIRE IN THE FOREST

Fire is important to forest areas. There are some trees whose seeds will grow only after being burned. Some trees like the Redwood, are able to overshadow all other trees because of its ability to withstand fire. Fire cleans out a forest.

This tree is a good example of what fire can do to a strong healthy tree. This tree is deeply scarred. Harvester ants, termites, other insects and diseases attack this scar. The fire of 1932 might not have killed this tree, but it probably shortened its life.





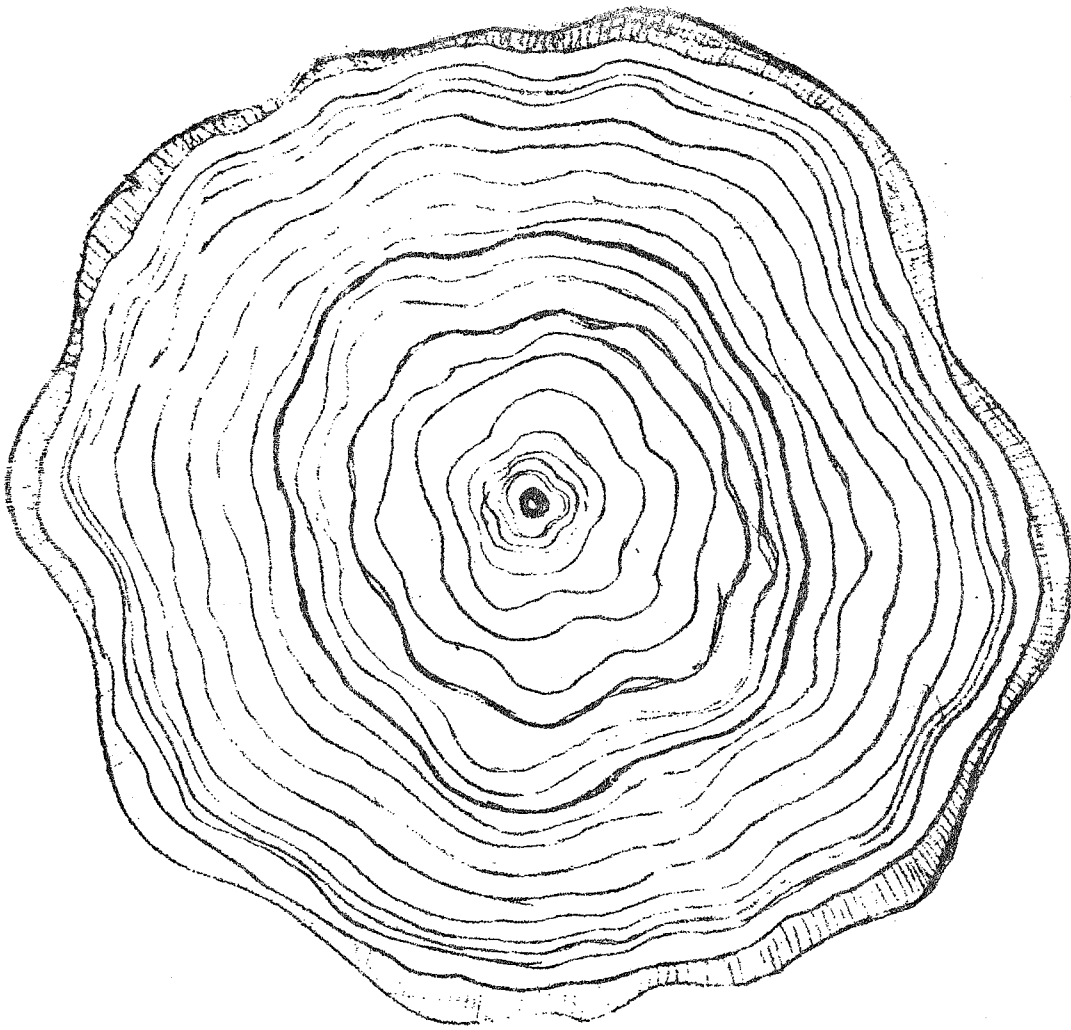
Douglas Fir

DOUGLAS FIR
Psuedotsuga menziesii

This is one of the biggest trees in this forest. It can be 8 to 10 feet in diameter and 275 to 300 feet tall. This is the most important lumber tree in the west.

Its needles are $1\frac{1}{2}$ to 2 inches long, are dark green and soft to the touch. The cones are 2 to 3 inches long with scales and little mouse tails sticking out. Douglas Fir is a popular Christmas tree.





THE TREE'S RINGS

How can you tell how old a tree was when it was cut down? Count the rings. Every ring you count means the tree is another year older. Some Redwood trees can live to be several hundred years old.

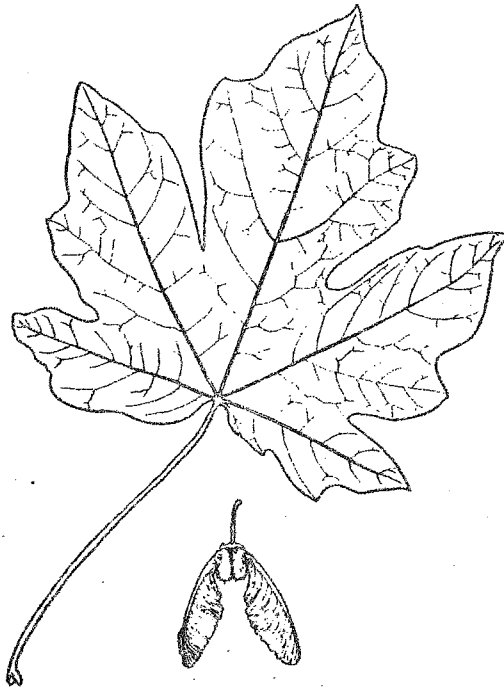
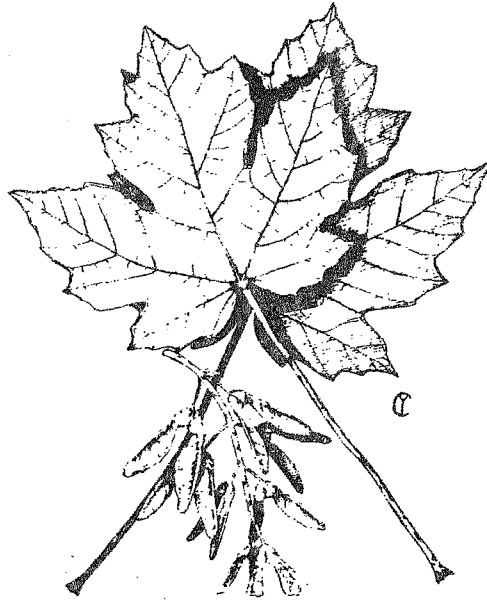
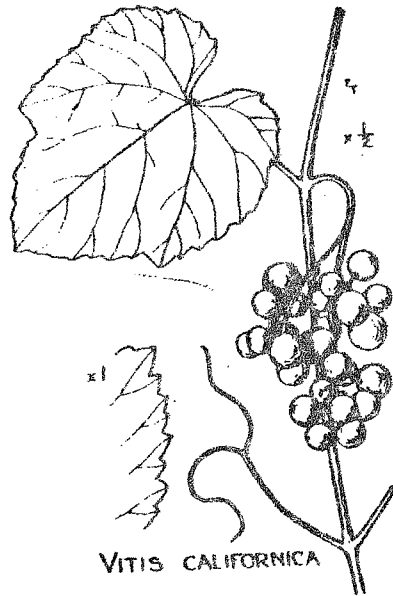


Fig. 319. *Acer macrophyllum* Pursh.
Leaf, fruit, $\times \frac{1}{2}$.

BIG LEAF MAPLE
Acer macrophyllum

This tree is usually found as the under story with other trees. It can grow from 30 to 100 feet tall. The leaves are large, 4 to 10 inches long, with deep cut lobes. The seeds have wings and are covered with stiff hair. Maple wood is used to make furniature.

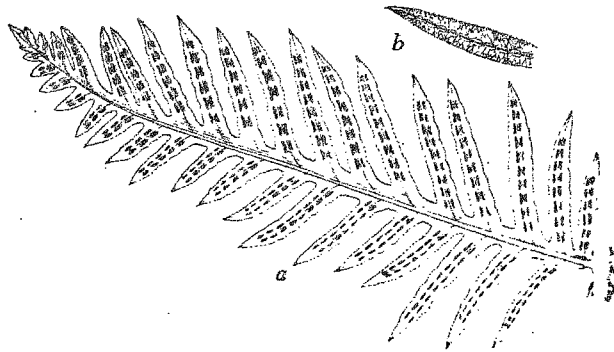




CALIFORNIA GRAPE
Vitis californica

This is a vine that can grow to 60 feet long. It is generally found climbing over trees and shrubs along streams. The small grapes are eaten by birds.



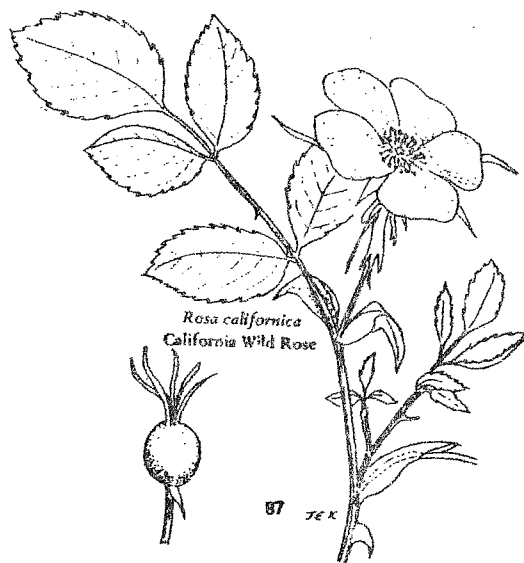


Giant Chain Fern
a, pinna with sori; b, pinnule showing venation.

CHAIN FERN
Woodwardia radicans

This is a beautiful, lush green fern. It grows in moist locations. It can grow to 5 feet tall.

This creek is the drainage from the camp water supply. There hasn't always been a creek here. As you look up the creek you can see a whole trail of ferns. You can also see a few dead trees. When this turned from dry ground to a creek, it killed some plants, i.e. Douglas Fir, etc., while making it a good place for other plants to live. (ferns, not grass)



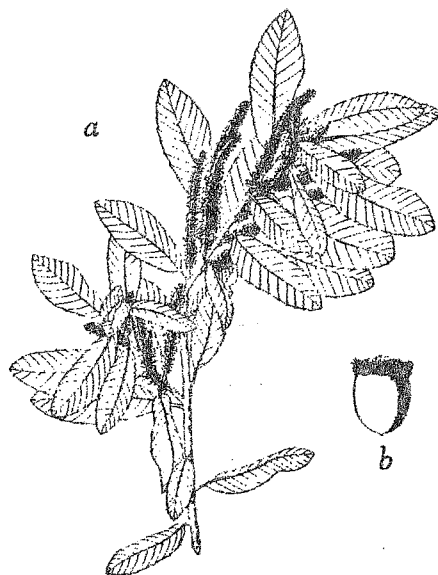
WOOD ROSE
Rosa gymnocarpa

Believe it or not this little plant is a cousin to the black-berry. It grows from 3 to 6 feet tall. It has a stickery stem, and white or pink flowers.



CALIFORNIA HAZELNUT
Corylus californica

The California Hazelnut is usually a large shrub, but occasionally may reach tree size. It grows mainly in moist wooded canyons. It is recognized by its soft fuzzy leaves. The nuts are very popular with squirrels, so the nuts are very hard to find.

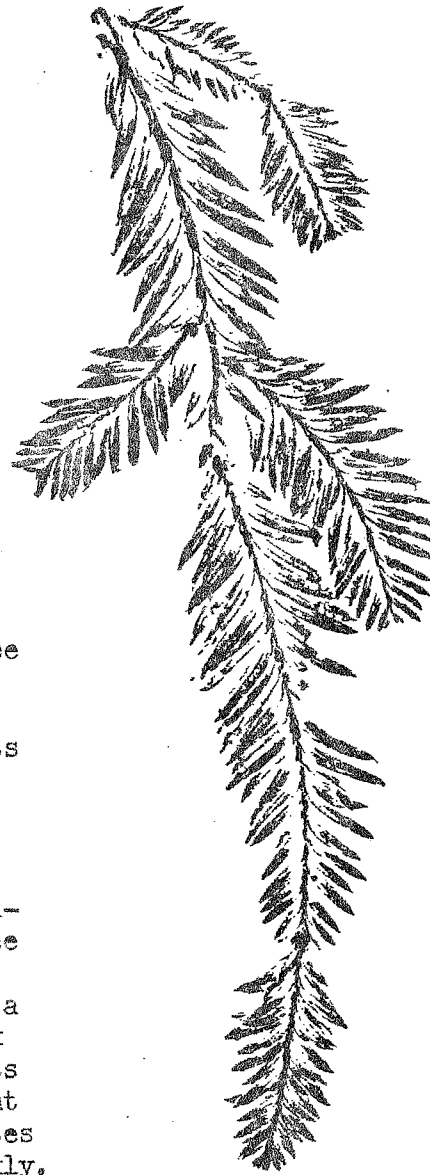
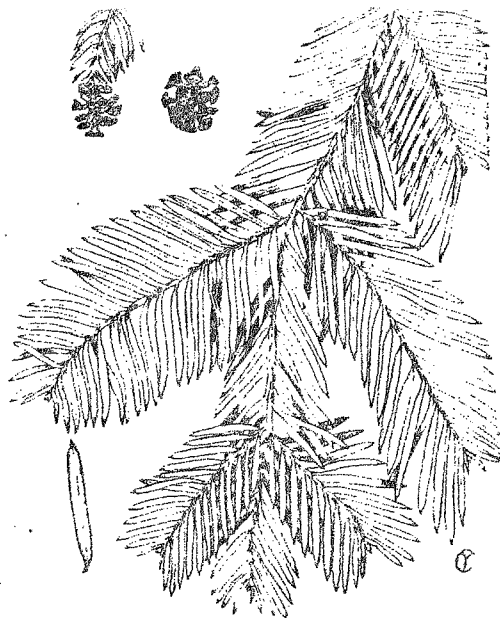


Tan Oak (*Lithocarpus densiflora*). a. flowering branchlet, $\frac{1}{4}$ size; b. acorn, $\frac{1}{3}$ actual size.



TANBARK OAK
Lithocarpus densiflora

One of the most common hardwood trees in the redwood region. It can grow from 50 to 150 feet tall. The leaves are large (4 to 5 inches) with parallel veins and a fuzzy underside. The acorns are 2 to 3 inches long and have a frilly cap. When the tree is cut or burned, it sends up clumps of sprouts from the base. The bark from this tree is high in Tannin and was used for tanning leather.



COAST REDWOOD
Sequoia sempervirens

This is the most important tree in this section of the forest. It can grow to be 350 feet tall. Its bark is soft, fibrous and red. Its needles are 1 to 2 inches long and are dark green on top and light green underneath. The cones are 1 to 2 inches long.

Fire is important in the development of Redwoods. The redwood tree bark is hard to burn so fires that kill most other trees may not kill a Redwood. Another way Redwoods work with fire is that when the tree gets cut or burned, many sprouts come out at the base of the tree. This causes a killed Redwood to grow back quickly. When you see a group of Redwoods growing together they are usually sprouts. Redwood is an important wood to build with.