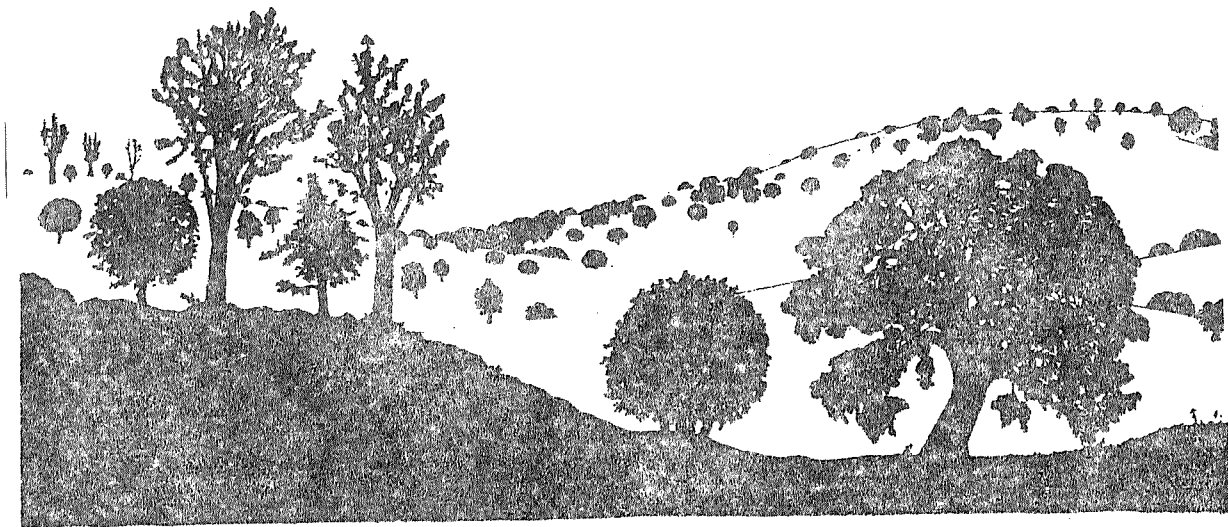
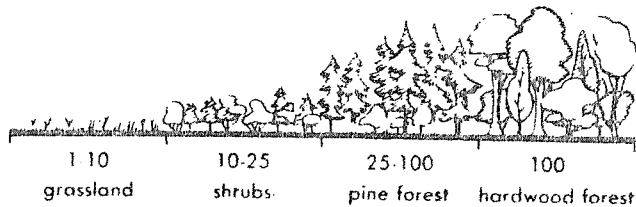


The High Chaparral



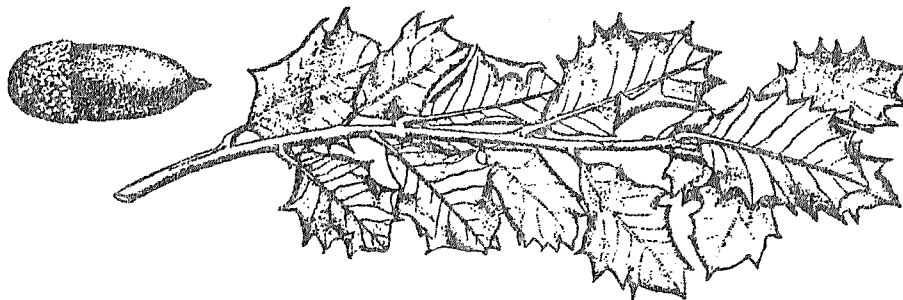


A CHAPARRAL OVERVIEW ✓

The chaparral is the shrub capitol of the camp. As I will cover later, it is the chaparral area that feeds the wildlife. It is an area that can grow back vigorously after a fire. It is also an area that is exciting because it is where the "action" is in the forest.

There are three reasons the chaparral area is not popular to the hiker; (and should be very obvious) 1) the trees aren't "trees", they are bushlike, 2) the area is generally on the hot side of the hills and canyons. This makes days with even a moderate temperature hot in the chaparral, and 3) the shrubs of the chaparral are generally grey-green in color and leathery or tough to the touch.

So all in all the chaparral is not a pleasant place for people. See if you change your mind about the chaparral by the end of your hike!!

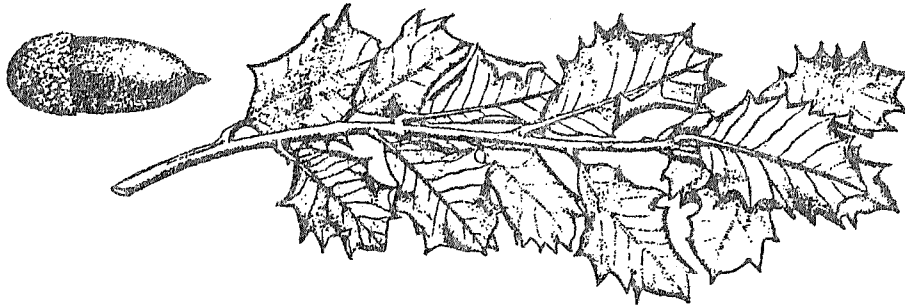


SCRUB OAK
Auercus dumosa

NP

Quercus

This is a little oak, which very seldom grows to tree size. It is generally a small, many branched shrub. The leaves are different in sizes, shapes, and are generally gray-green. The bush resembles holly. It grows back well after fires and is good deer food. Notice that it has many oak characteristics. Can you name some of them? Can you find any acorns on this shrub?

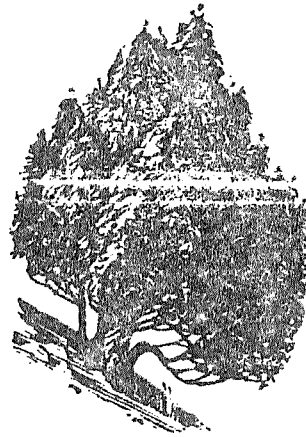


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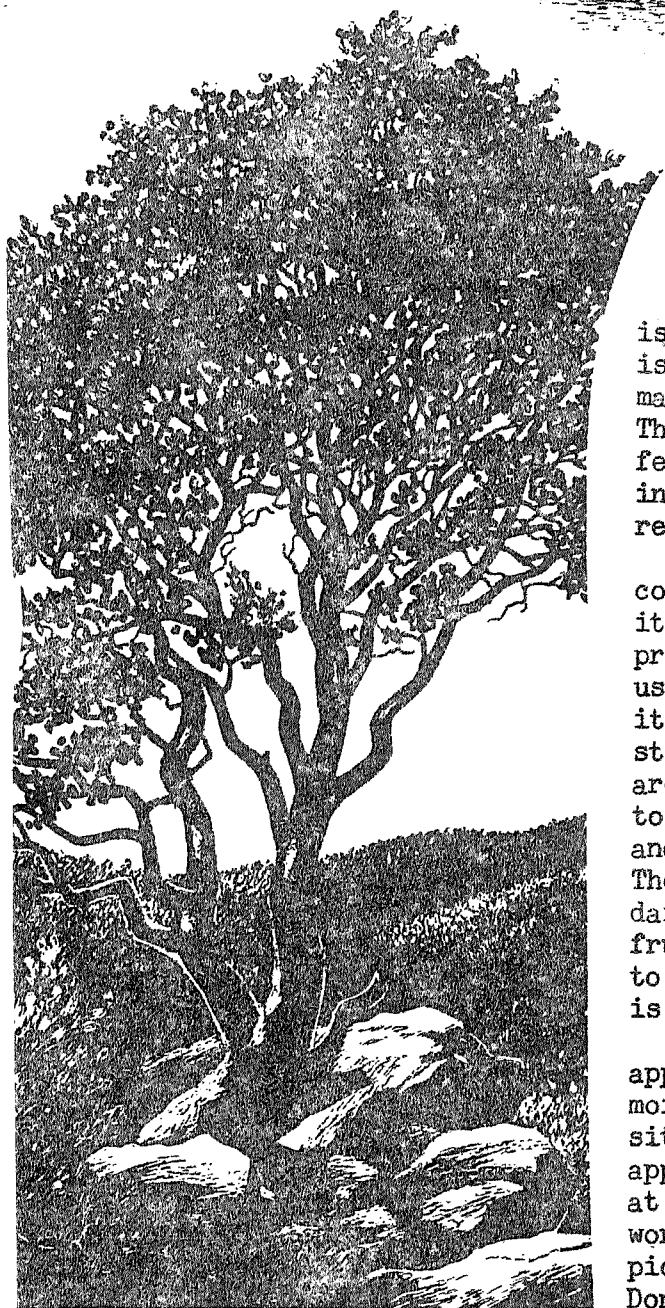
BAY LAUREL and the STRUGGLE FOR SURVIVAL ✓ SP
Umbellularia californica

The California Laurel is marked by three characteristics; 1) the odor of its leaves, 2) the olive shaped fruit and 3) the numerous leaves on a branch. This tree was in the Madobe Bog nature walk.

In the forest, the Bay looks very different; it is much bigger. In this area, it grows almost as a shrub. Growing conditions have a lot to do with how plants grow. On the Transition Trail, the Manzanita grows to 15 or 20 feet tall, (almost a small tree) but there are few of them. On this trail there are many Manzanita, but all are in bush form. This is due to the available light.

3
Something to think about is how much light is available in a forest. On Metcalf the redwoods are so tall there is hardly any light so trees have to grow tall just to get some. On this trail all the bushes are short so none have to grow tall to get light. See if you can find other trees that are different in other places.

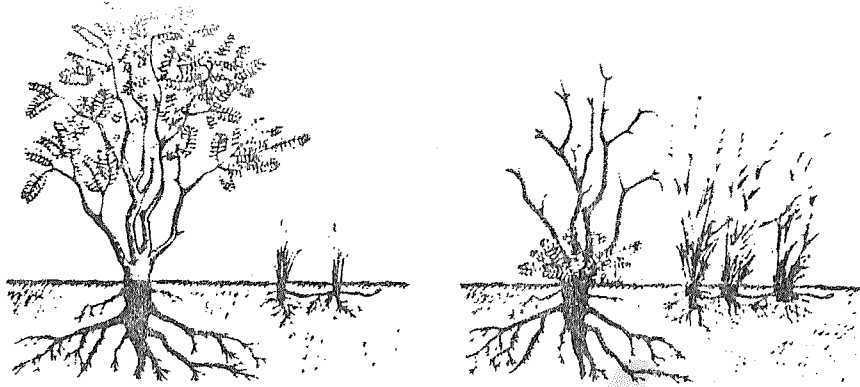
MANZANITA ✓ P
Arctostophylos
starfordiana



In Napa when chaparral is mentioned, Manzanita is thought of. There are many forms of Manzanita. There are at least 25 different forms of Manzanita in the San Francisco Bay region.

In this chaparral community, Manzanita in its various forms is the predominant plant. It can usually be recognized by its smooth, red bark on stout stems. The leaves are generally small, up to an inch across, leathery and gray to green in color. The flowers are generally dainty white bells. The fruit is a little apple, up to a half inch across, which is nearly 50% seed.

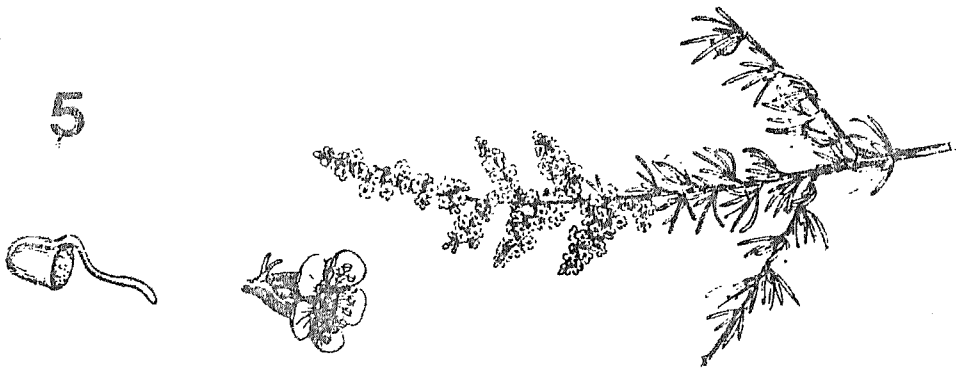
When I eat Manzanita apples, I put them in my moist mouth and let them sit for 30 seconds. The apples are dull and dry at first, but as the saliva works on the sugars they pick up a subtle sweetness. Don't swallow the seeds!



CHAMISE ✓ NP
Adenostema fasciculatum

Chamise is one of those plants where the harder the conditions, the more it thrives. It can grow where most other shrubs and trees can't; on hot, dry, sterile soil. Chamise sprouts heavily after fires. It develops a growth called a root crown gall. The root crown gall is a ball type thing just under the ground, and it sends up the sprouts after a fire. See if you can find one.

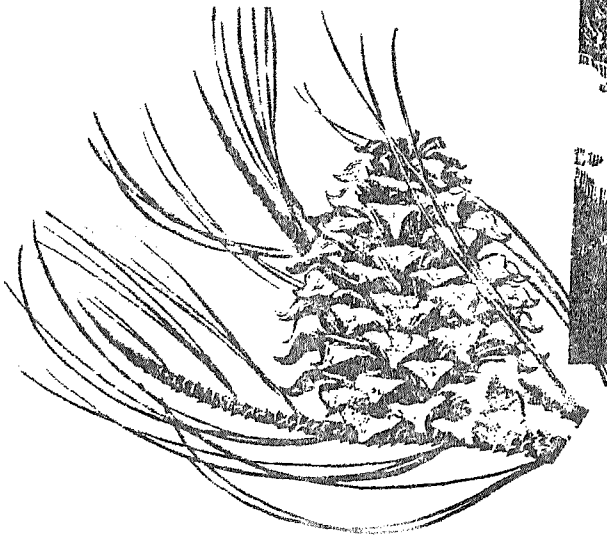
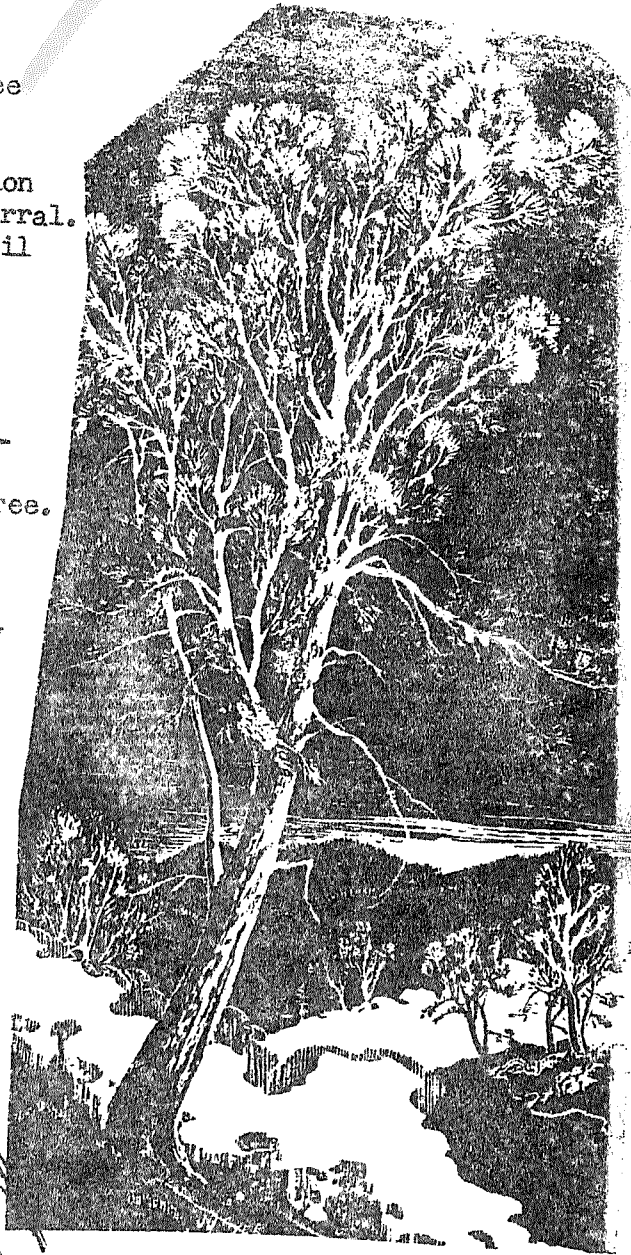
Chamise isn't a popular plant because it often covers an area so well, other types of plants can't grow. Chamise isn't a valuable food source for wildlife and cattle. Its leaves are tiny narrow spikes and its flowers are cream colored. The shrub doesn't generally grow beyond 4 feet tall.



DIGGER PINE ✓ P
Pinus sabiniana

This is the large tree of the dry forest areas. The Digger Pine is a tree that grows in the Transition Trail as well as the chaparral. Can you remember which trail it grows the biggest?

This tree can grow to be a hundred feet tall. In this area it generally doesn't grow past 40 feet. The needles are 6 to 12 inches long, gray-green in color and in bundles of three. The Digger looks less like a tree and more like an overgrown shrub. The cones of the tree are heavy and up to 12 inches long. The seeds from the pine cones are hard, but once cracked are nutty tasting. These seeds were popular with the Indians for food.





MULE DEER

about 20" →
between tracks



MOUNTAIN LION



THE ANIMALS

✓

NP

This fine dust shows animal tracks clearly. Everytime I've been on this trail I've found at least two or three different types of animal tracks. How many can you find?

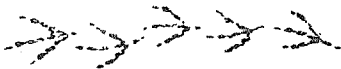
7

When I think of the forest I like to think of areas such as Metcalf. I think of big trees, cool shade, a little creek, ferns, and a deer running around. That type of forest is good for some animals but most would starve. The majority of the animals including the deer, need more than that type of forest to survive.

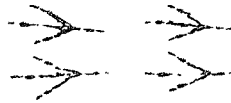
The scrubby, hot, stickery forest you see around you is more important as a food source to wildlife in general. So next time you see these "ugly shrubs" you'll appreciate it as an important wildlife food source.



COYOTE



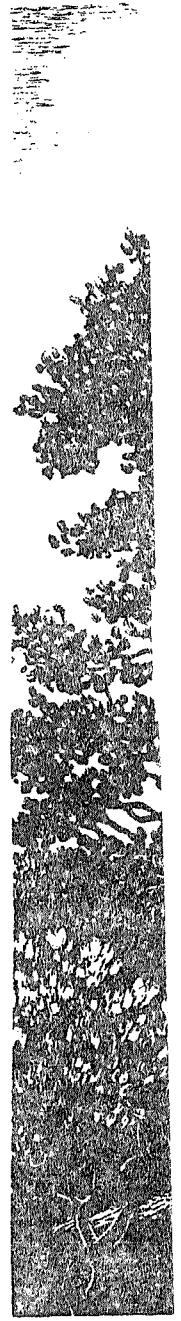
QUAIL - walking

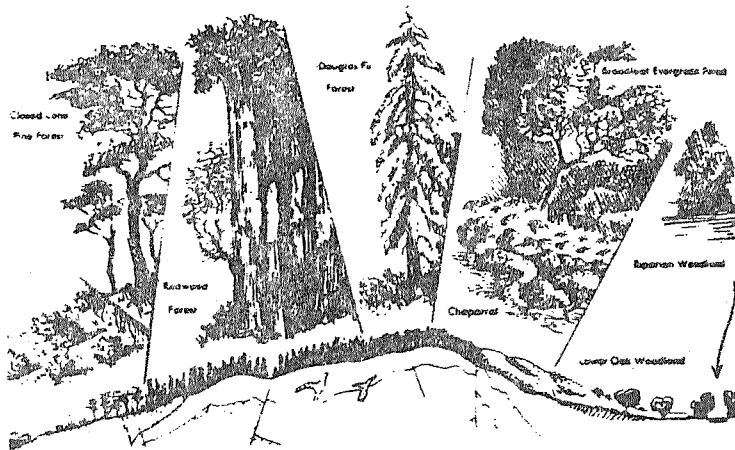


- hopping



PACIFIC RATTLE SNAKE





VIEW OF THE PLANT COMMUNITIES ✓ 21P

As you look out over the 4-H camp, there is a wide variety of plant communities. The colors of the areas are one indication of the types of plants who live in these communities. Here is a small matching test.

Match the community with its color

- | | | |
|---------------------------|---|--------------------|
| 1. Chaparral | ← | A. Yellow |
| 2. Ball diamond Meadow | ↗ | B. Green |
| 3. Metcalf Trail Redwoods | ↘ | C. Lush blue green |
| 4. Transition Trail Oaks | ↖ | D. Gray-green |

Answers: 1-D, 2-A, 3-C, 4-B

A = Chaparral - Gray Green
 B = Ball Dia - Yellow
 C = Metcalf Red - Lush blue green
 D = Tran Trail Oaks - Green

8

1-A
2-C
3-D
4-B

Look at this picture and identify the areas that would be hot or cool.

ANSWERS

Hot—1,4 Cool—2,3,5

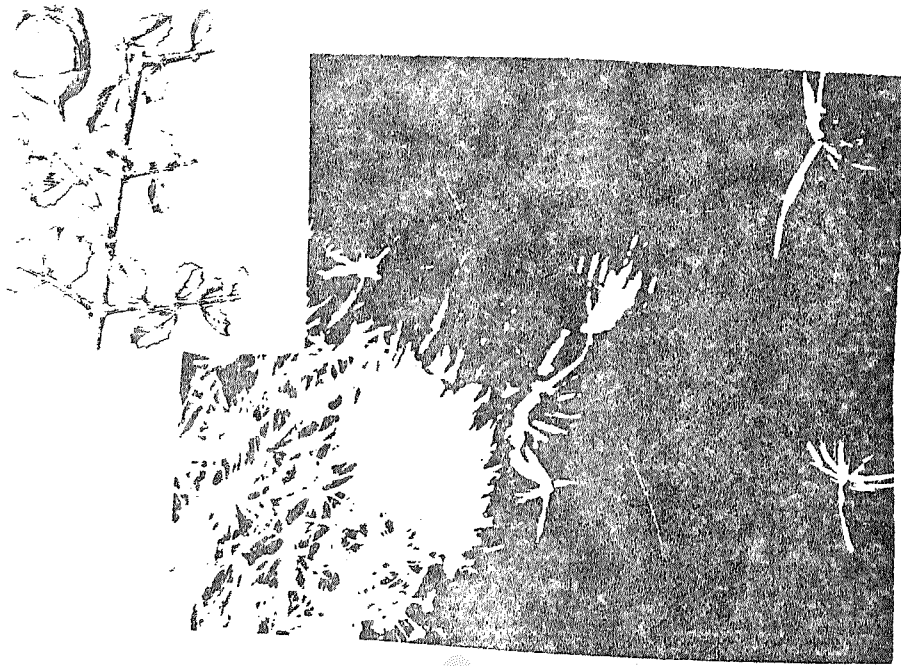


COMPARE THE TEMPERATURE ✓ *ap*

One of the reasons plants live in different places is the temperature. Temperature in a small area, such as the campground, can vary greatly. Some factors that can make differences in temperature are:

- 1) The sun is usually to the south, so generally the north side of a hill or canyon is cooler.
- 2) Shade of any kind—if there are trees, mountains, buildings blocking the sun for large parts of the day, the area is cooler.
- 3) Water nearby—The water in creeks and lakes is cooler than the outside air so it can help cool an area.
- 4) A wind can change the temperature, but it doesn't always make an area cooler. Sometimes wind dries out an area faster.

You might be able to think of other ways temperatures can vary in a small region. As you walk towards Metcalf Trail try to notice the temperature changes.



COYOTE BRUSH ✓ P
Baccharis pilularis

This is a common shrub along the coast where it is more often found than in the inland areas. It grows to 4 or 5 feet tall, and the trunk can be up to 3 inches across.

Its leaves are small, evergreen and have serrate margins. It blooms heavily in mid-summer. The flowers develop into great quantities of cottony-winged seeds which, is the reason Coyote Brush gets its other name, Fuzzy Wuzzy. These seeds resemble millions of Dandelion tops and they fly everywhere in the wind. This is why after a fire, Coyote Brush can pop up everywhere!

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11. The 1981 Farmer Extension Work in Agriculture and Home Economics, United States Department of Agriculture, University of California and County of Napa Cooperative.