Oak Savanna Habitat
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Open grassland with scattered oak trees is called an oak savanna.

Oak trees in a savanna stand alone, separate from each other, in a vast carpet of grasses. We have beautiful oak savannas in the Santa Ynez Valley and the Santa Maria Valley. Can you spot oak savannas on your way to Cachuma Lake?

The savanna looks open and empty, but many different plants grow there.
Grasses are the easiest to see in the savanna, beside oaks. Also, spring wildflowers bloom in the savanna. Monarch butterflies lay their eggs on milkweed. amole, also called soap plant, was dug up and eaten by native people. Fiddleneck has yellow flowers and roots that were used to make a red dye.

A savanna is like a mall.
In California, oak habitats have 13 kinds of amphibians, 14 kinds of reptiles, 60 kinds of birds, 39 kinds of mammals, and over 5000 different insects.

Our sweeping oak savannas are threatened habitat.
We are in danger of losing our oak savannas to agriculture and development. We need food, buildings, and homes for our growing populations. But we must plan our growth wisely to conserve oak savannas and all the life in them for generations to come.

Savanna subjects in this book:
- Acorn woodpecker
- Ground squirrel
- Insects
- Kingsnake
- Mountain lion
- Valley oak
Habitat:
Oak Savanna

Acorn Woodpecker
Melanerpes formicivorus

Acorn woodpeckers depend on oak trees. Their families live around a single oak tree, which provides food and housing for one acorn woodpecker family.

Acorn woodpecker families can be large, with up to 15 related birds. They work together in a cooperative breeding system. All the birds help to gather food, feed and protect the young, and guard the food and shelter resources they depend on. Acorn woodpeckers eat acorns, of course. All birds in the family group gather acorns from oak trees in the fall, and store them in holes they drill in their family granary tree. The tree is also shelter—they chisel a cavity for roosting and nesting. Acorn woodpeckers are habitat specialists—without oaks, they could not survive.

Acorn Woodpecker Facts

- Overall: black and white bird with a bright red cap
- Age: Up to 15 years
- Size: Length, 9 inches; wingspan, 17.5 inches
- Diet: Acorns, fruit, insects
- Nest: A tree cavity with a thin layer of wood chips
- Clutch: 4 to 6 white eggs
- Voice: Waka! Waka! Waka! especially when greeting each other

Colors: 1/Black, 2/White, 3/Gray, 4/Red, 5/Orange, 6/Yellow, 7/Green, 8/Blue, 9/Pink, 10/Purple, 11/Brown
Habitat:
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Ground Squirrel Facts

- Appearance: Brown, speckled fur and long, bushy tail
- Length: 15 to 20 inches
- Diet: Leaves, seeds, roots, berries, flowers, & insects
- Parenthood: litter of 5 to 8 young
- Sign: Mounds of soil around entrance holes into burrow
- Burrow: Several squirrels share the same burrow, but each squirrel has its own entrance

California Ground Squirrel
*Spermophilus beecheyi*

California ground squirrels are easy to see at Cachuma Lake. They have brown, speckled fur and long, bushy tails. When they eat, they sit up straight and hold the food in their paws.

California Ground Squirrels live together in small colonies in burrows under ground. If you could go into a Ground Squirrel burrow with a flashlight, you could get lost! Their burrow is like a maze, with several entrances and many tunnels. Some tunnels lead to food caches, others lead to living chambers, still others lead to nowhere. Squirrel burrows are a great benefit to the soil. The tunnels help bring air underground. All the digging squirrels do helps aerate and mix nutrients in the soil which plants and trees need to grow.
Insects are amazing animals. They may be small, but we can’t live without them. Insects help the planet in many ways. Insects are in every habitat at Cachuma Lake.

There are more insects on the planet than any other animal! Insects have many important purposes. Here are some examples: Butterflies help pollinate flowers when they drink nectar. Dragonflies eat other insects, some of which can be harmful. Katydids eat plants and help recycle nutrients into the soil. Beetles also help recycle nutrients by eating dead leaves and wood, and many beetles eat carrion and animal waste.

Insect Facts

- Insects are food for reptiles, amphibians, fish, birds, mammals, people, and other insects.
- Some insects are helpful to humans, some are harmful.
- Insects are called invertebrates—animals without internal skeletons.
- Insects do not have vertebrae (backbones), or any bones at all.
- They have exoskeletons—“outer skeletons” on the outside of their bodies.
Common Kingsnake
* Lampropeltis getula *

Common kingsnakes are shy and try to stay hidden under logs, leaves, or rocks. They are not poisonous. Their most common color pattern is dark and light banding, which help to camouflage them.

The California kingsnake grows two to four feet long and weighs up to one pound. It usually hunts in the morning and late afternoon. It kills its prey by constriction—squeezing to death. Kingsnakes help with population control of rodents by eating gophers, ground squirrels, voles, and other small mammals. There is a kingsnake skin on display in the animal room at the Neal Taylor Nature Center.
Habitat: Oak Savanna

Mountain Lion
*Felis concolor*

Mountain Lions are large, beautiful, and very shy cats. They live in wild areas. They are afraid of humans. Most people have never seen a mountain lion. Lions like to hide.

Mountain lions are carnivores and one of the largest mammals in California. They are predators, and they prey upon many different animals, including deer, raccoons, skunks, rabbits, and birds. If they can’t finish their dinner, they hide it under bushes, sticks, or dirt. They are nocturnal, meaning they are most active at night, but they also hunt during the day. A lion can roam 20 miles overnight in search of food. Lions are usually alone, except during mating season. A female lion can have a territory of 60 square miles; a male’s territory can be more than twice that.
Habitat: Oak Savanna

Valley Oak Facts

- Overall: Large trees with long, twisting branches and an open crown
- Age: can live over 400 years
- Leaves: 3 to 5 inches, deeply lobed
- Deciduous: leaves fall in winter
- Height: up to 100 feet
- Roots: up to 60 feet
- Trunk: up to 6 feet around
- Bark: like an alligator
- Seeds: Acorn nuts 1 ½ inches long, drop in fall

Valley Oak
Quercus lobata

You can see valley oaks growing in the open savannas in Santa Barbara county. Valley oak trees often stand alone, but they are never quite alone. A valley oak is like the mall for wildlife.

Many kinds of wildlife depend on valley oaks. Acorn woodpeckers, raccoons, gophers, oak titmice, oak moths—bald eagles and other birds of prey use the high, spreading branches as hunting perches. Gall wasps lay eggs on the trees. Arboreal salamanders hunt for insects in the trees and hibernate in cracks in the summer. In the past, Chumash people ate the acorns. So did grizzly bears. Valley oaks grow best on flat river floodplains where the soil is deep and fertile. They have long roots that reach into the water table.

Colors: 1/Black, 2/White, 3/Gray, 4/Red, 5/Orange, 6/Yellow, 7/Green, 8/Blue, 9/Pink, 10/Purple, 11/Brown
Oak Savanna Habitat:
Think About It

Acorn Woodpecker
• How many holes can acorn woodpeckers drill in a single tree?
• Can you “guesstimate” by counting them within a square foot, and multiplying?
• What effect do you think the holes have on the tree?
• How might other organisms benefit from the holes?

California Ground Squirrel
Red-tailed hawks eat ground squirrels. They also avoid people.
• Why do you think there are so many ground squirrels at Cachuma Lake?
• Is it okay to feed ground squirrels? Why?
• Can ground squirrels be dangerous? How?

Insects
• Some insects go through different stages of life that are very different from each other. For example, caterpillars becoming butterflies. How do you think scientists figured this out?
• Have you ever eaten an insect? Would you try it? Why do you think people in other parts of the world eat them?
• Can you name one insect that is beneficial and another that is harmful? Can you name some ways harmful insects can be beneficial? And some ways beneficial insects can be harmful?

Common Kingsnake
• Where can animals with legs go that a snake can’t?
• How would the absence of snakes change the balance of nature?
• Why might farmers want kingsnakes around?
• How might people poison kingsnakes by accident?

Mountain Lion
Mountain lions are predators with a large territories, and their favorite prey is mule deer.
• What would happen if mule deer had no predators?
• Why do you think mountain lions stay hidden?
• How can growing towns affect mountain lions?

Valley Oak
Valley oak trees are spread out in the open grasslands. How do you think pollen gets from tree to tree? If lots of valley oaks are cut down, what might happen to the ones that are left?
• Can you find a valley oak in your town? During your ride to Cachuma Lake? At Cachuma Lake?