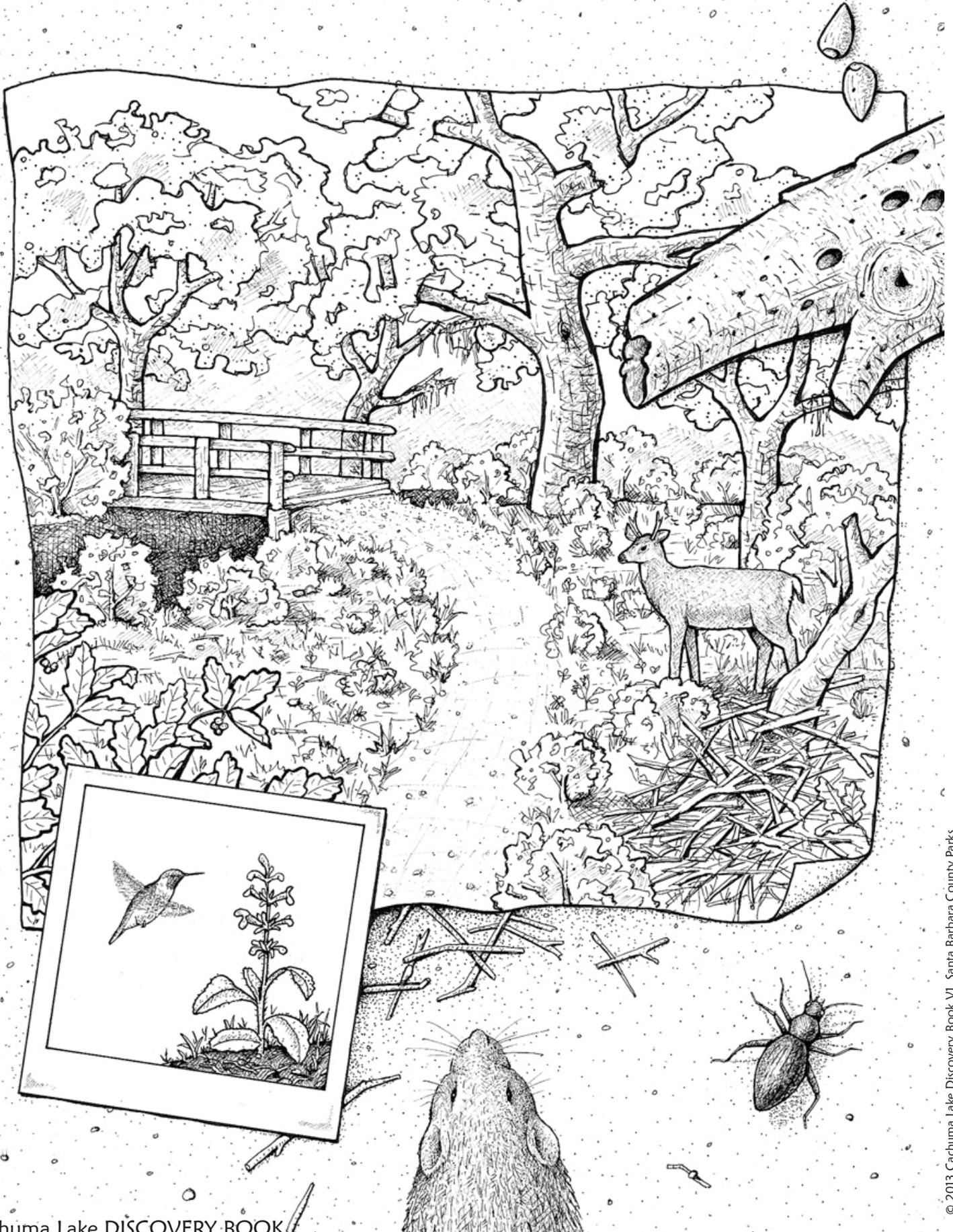


Oak Woodland Habitat



Oak Woodland Habitat

The oak woodland has three layers: the canopy, understory, and woodland floor. These layers create cool and shady places for wildlife.

The canopy layer is made of the leafy tops of trees and tall shrubs, like coast live oak, scrub oak, and valley oak. Leaves on top of the canopy are small but they absorb the brightest sunlight. Their small size keeps them from getting too hot and losing moisture. Red-shouldered hawks hide among the leaves of the canopy, waiting to swoop down on prey. At night, they roost on the branches.

The understory layer of an oak woodland is made up of plants that grow beneath the trees, like poison oak, goldback ferns, and elderberry. Most of these plants have large leaves that catch the small amount of light that passes through the canopy. California mule deer feed on understory plants while staying cool in the shade of the canopy.

The woodland floor layer is scattered with acorns, smaller plants, and leaf litter. Very little light passes through the canopy and understory, making the woodland floor shady, cool, and damp. Mushrooms, beetles, and other decomposers thrive in this type of environment. They feed on the organic matter that lies on the woodland floor.

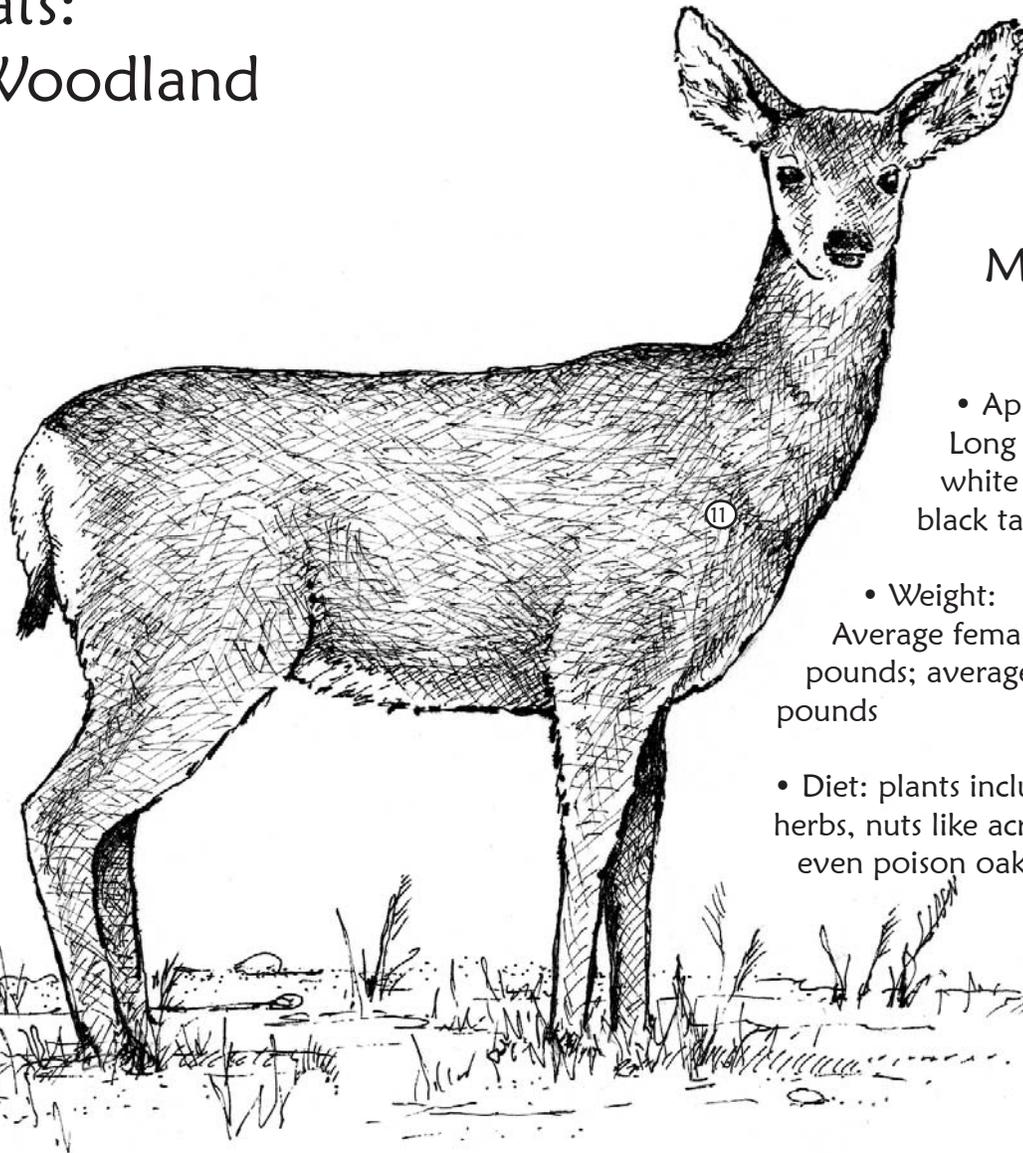


Oak Woodland subjects in this book:

- Coast live oak
- Dusky-footed woodrat
- Mule deer
- Hummingbirds
- Hummingbird sage
- Poison oak

Habitats:

Oak Woodland



Mule Deer Facts

- Appearance: Long ears, tan fur, white rumps, & black tails
- Weight: Average female 150 pounds; average male 200 pounds
- Diet: plants including bushes, herbs, nuts like acorns, and even poison oak.
- Parenthood: Does give birth to 1 or 2 fawns; the female raises the young

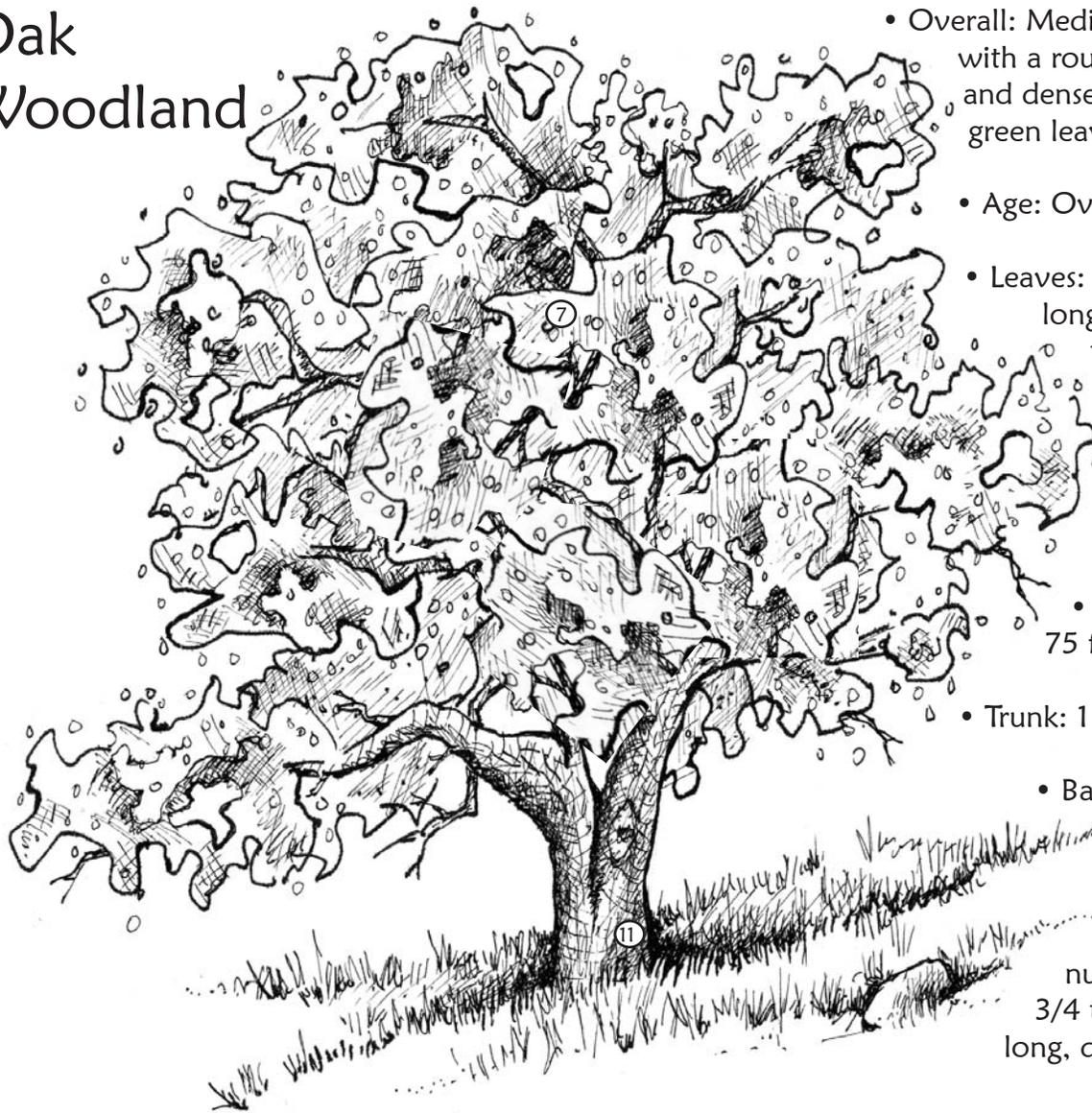
California Mule Deer

Odocoileus hemionus

Mule deer are herbivores. They eat only plants. At Cachuma Lake, you might see deer eating plants by the shore or lying in the shade of oaks.

Mule deer are prey animals. Their main predators are mountain lions, bobcats, and coyotes. They have several adaptations to help them escape predators. They are strong swimmers and jumpers. Adults are camouflaged to blend in with the brush. Fawns are born with white spots that help them blend in with the sun-flecked woodland floor. They often browse (nibble here and there) in open areas as a group, or herd. The adults look and listen for predators as they eat. If a predator is detected, they will chase it away as a group.

Habitat:
Oak
Woodland



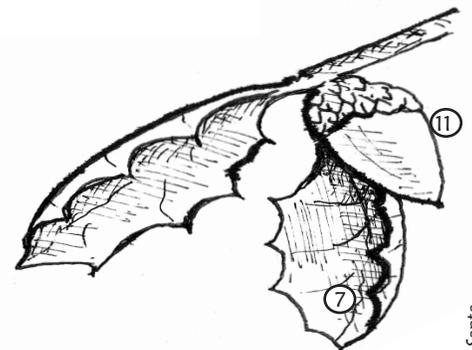
Live Oak Facts

- Overall: Medium sized trees with a round canopy and densely-packed dark green leaves
- Age: Over 250 years
- Leaves: 1 to 3 inches long, dark green, tough, edges with spikes
- Evergreen: Leaves stay all year.
- Height: 20 to 75 feet
- Trunk: 1 to 4 feet across
- Bark: gray outside and red on the inside.
- Seeds: Acorn nuts tan colored, 3/4 to 1½ inches long, drop in fall.

Coast Live Oak

Quercus agrifolia

Coast live oaks are the only California oak trees found on the coast. They thrive in a mild and sometimes foggy climate.



Acorns were traditionally very valuable to the Chumash and other California Native Americans. Acorns are very nutritious and keep well in storage. They were one of the most popular items traded between coastal and inland Chumash villages and among tribes. Much of traditional Chumash daily life was devoted to harvesting, storing, and preparing acorns for food. Acorns were also used as jewelry and toys. Acorns are a very important food for acorn woodpeckers and other birds, bears, deer, squirrels, and other animals. They ripen in the fall and are available into the winter.

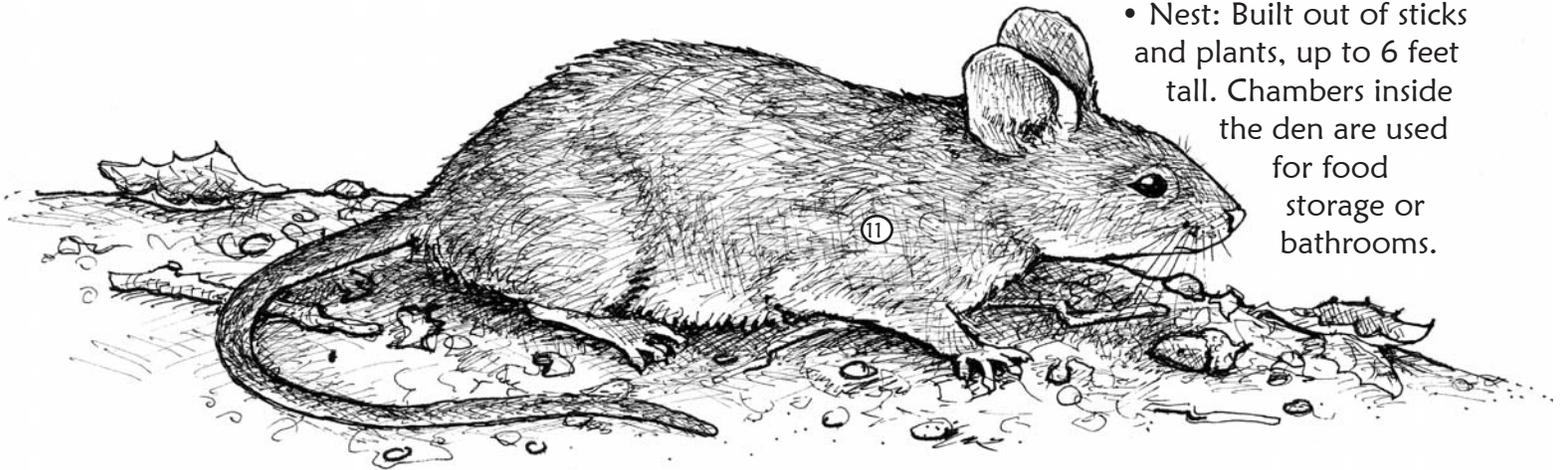
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Habitat:

Oak Woodland

Woodrat Facts

- Appearance: grayish-brown body, white underneath, brown feet and ankles, white toes and claws, large round ears, slightly hairy tail
- Size: 13 - 19 inches long from nose to the tip of tail, weighs 8 - 10 ounces
- Diet: leaves, acorns, woody plants, nuts, fruit, flowers, and fungi



- Nest: Built out of sticks and plants, up to 6 feet tall. Chambers inside the den are used for food storage or bathrooms.

Dusky-footed Woodrat

Neotoma fuscipes

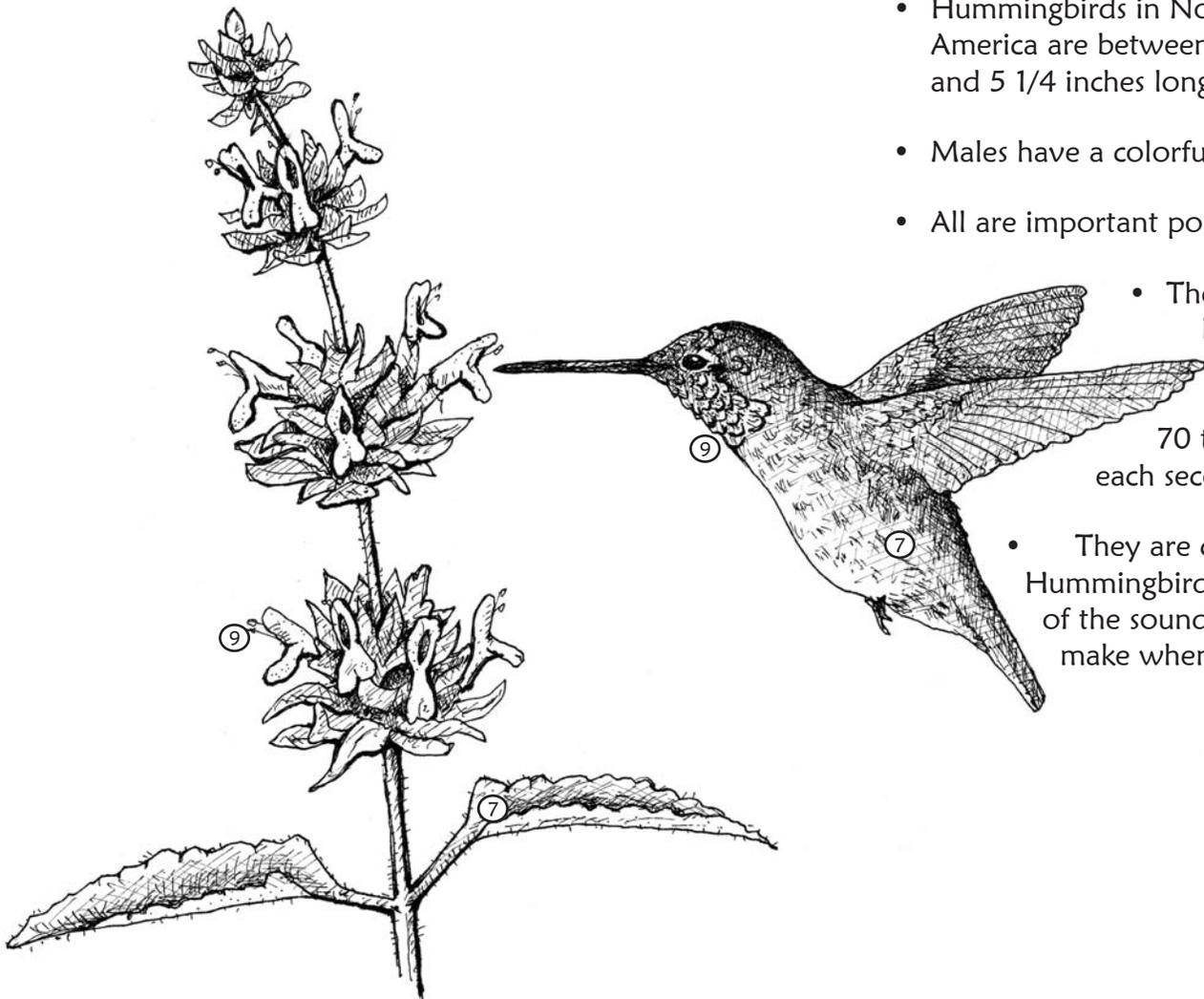
A woodrat's nest is made up of sticks, leaves, and other material found on the woodland floor. The outside is decorated with bits of trash and fresh plants.

This nocturnal rodent is also known as a "pack rat." It's known for looting from nearby campsites. Look carefully for unusual objects like plastic lids, bottle caps, and colorful string woven into tall tepee-like dens along the Don Wimpres Nature Trail. Usually just one woodrat occupies a den, but many generations use the same one for over 20 years or more. Each resident adds to the den. A woodrat stores food in its den and often shares its living space with insects, mice, lizards, and other organisms. Funny fact: Wood rats chatter their teeth and rattle their tails against branches as a warning to others who might want to steal their home.

Habitat: Oak Woodland

Hummer Tales

- Hummingbirds in North America are between 3 1/4 and 5 1/4 inches long.
- Males have a colorful throat.
- All are important pollinators.
- They can beat their wings about 70 times each second.
- They are called Hummingbirds because of the sound they make when they fly.



Hummingbirds and Hummingbird Sage

Calypte and other Hummingbird species, *Salvia spathecea*

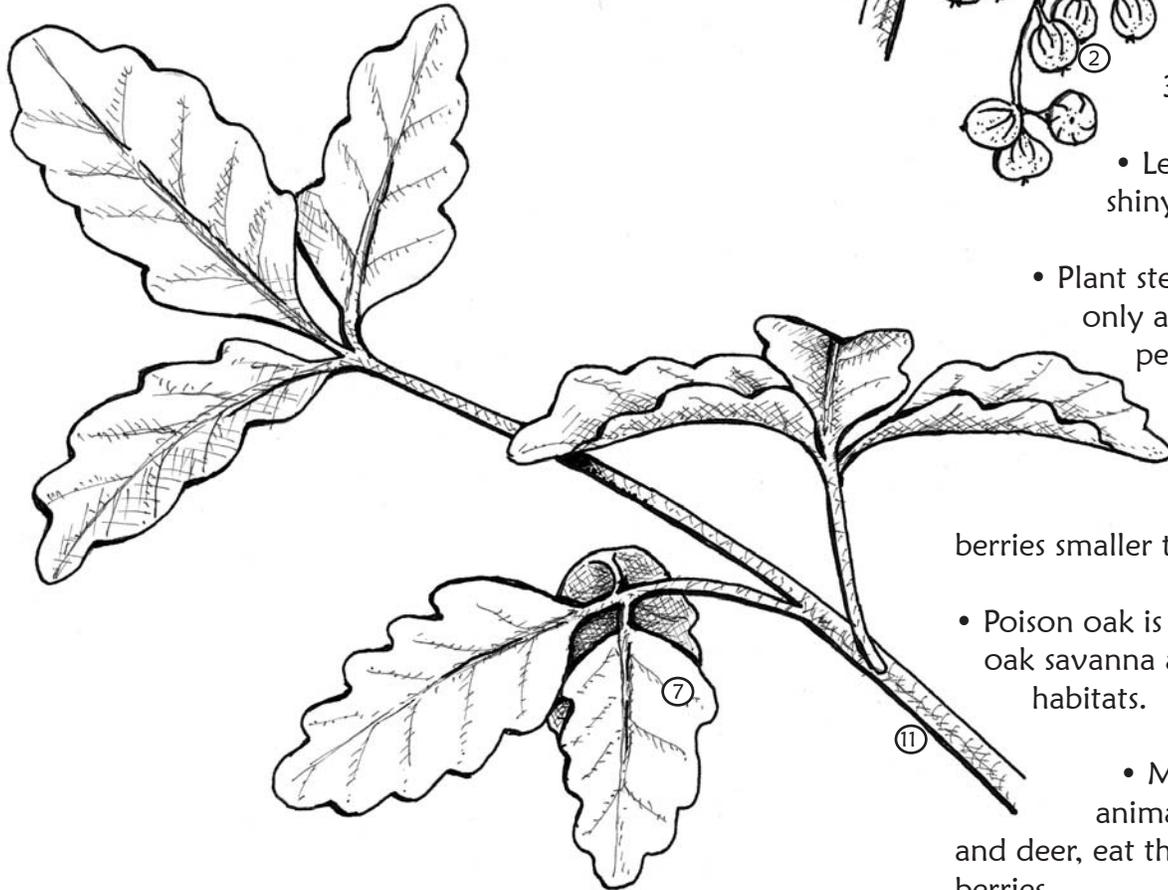
Hummingbirds are some of the smallest birds in the world. They love to drink the nectar of the pink flowers of hummingbird sage. That is why the plant is named after the bird.

Hummingbird sage grows in patchy shade of oak woodlands. It has big minty-smelling leaves that are shaped like giant arrowheads. Its pink flowers are shaped like a straw and have sweet nectar at their base. When hummingbirds visit the flowers to drink the nectar, their foreheads get dusted with pollen. When the birds visit the next sage flower, they leave the pollen behind and pick up new pollen. This way, pollen is spread around among many Hummingbird sage flowers. Hummingbirds and hummingbird sage have a symbiotic relationship. This means they each benefit from the other. The hummingbird gets food, and the plant gets its pollen spread around.

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

Habitat:
Oak Woodland

Poison Oak Facts



- Poison oak leaves grow in groups of three.

- Each leaf is 1 to 5 inches long and 1/2 to 3 inches wide.

- Leaves can be shiny or dull.

- Plant stems are often only as thick as a pencil.

- The seeds are protected within white berries smaller than peas.

- Poison oak is also found in oak savanna and chaparral habitats.

- Many birds and animals, like flickers and deer, eat the leaves and berries.

Poison Oak

Toxicodendron diversilobum

Watch out for this plant! If you touch it, it can cause an itchy rash. Be wise and follow the saying, "Leaves of three, let them be." All parts of poison oak—the leaves, berries, and stems—can cause a skin rash.

Poison oak can grow in several ways, making it difficult to identify. It can grow as a single plant, a bush, and sometimes it climbs like a vine. Poison oak is lush and green in the spring. Its leaves turn red in the summer and fall, then they drop off, making it leafless in winter. Poison oak is a close relative of poison ivy which grows in the eastern and central United States. Poison oak is not related to oak trees. Its leaves simply look like oak leaves. You can help to avoid a rash by washing your skin and clothes.

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

Oak Woodland Habitat: Think About It!

Oak Woodland Habitat

Plants absorb and hold heat from the sun. The layers of plants in the oak woodland make it cooler in the summer and warmer in the winter than other more open habitats.

- How does the oak woodland provide shelter for animals from sun, wind, rain, and cold?
- Using the list of subjects in the oak woodland in this book, decide whether each animal or plant belongs in the canopy, understory or woodland floor.

California Mule Deer

How do the following situations reduce the coastal mule deer's food supply?

- Large brush fires
- Elimination of predators
- Growing towns & cities

Coast Live Oak

Oaks sometimes have years when they produce massive amounts of acorns and years when they produce very few.

- How do you think this affected the Chumash people in the past?
- What do you think they did during years of few acorns?
- How might wildlife and birds be affected?

Dusky-footed Woodrats

Woodrats store coast live oak leaves and acorns in their den until the toxins are leached out and the foods are safe to eat.

- What are these toxins called?
- What method did the Chumash use to leach these toxins out of the acorns they ate?
- Besides leaching toxins, what is another reason why the wood rats need to store acorns?

Poison Oak

Poison oak's scientific name, *Toxicodendron diversilobum*, means "toxic branch, different leaf."

Compare the leaves of different poison oak plants found in the sun and in the shade.

- What are the differences in size and shape?
- Are they dull or shiny?
- How do you think poison oak benefits from giving a rash?