



California State Parks Video Transcript



Little Butano Creek Trail at Butano State Park

Butano State Park was dedicated in 1961. It was a culmination of over a 60-year effort to save and preserve the redwoods of the Butano Canyon. But its history goes back much further. It has milestones about every 100 years. In 1860 the William Jackson family arrived to homestead the Butano. At the same time, Sheldon Pharis came into the area and lumbered the Butano, becoming known in the area as the “shingle king.” Stepping back another 100 years, Gaspar de Portolá, in his expeditions to explore California in 1769 and 1774, camped outside the Butano with the local Ohlone tribe who had been using it for thousands of years as their winter campground.

Today, Butano is a 4,000-acre collection of wildlife communities for you to explore. Beginning at the entrance station with the grasslands and the oak woodlands, they’re stacked upon one another as you move up the canyon. Near the visitor center you will find the red alder forest. It blends into the mixed Douglas fir and redwood forest, and then we have the redwood forest around the campsites themselves. Beyond that you have the chaparral community of the coastal ridges. Each one of these communities is a collection of different plants and animals for you to explore. My name is Bob, and I am a docent at Butano. Today we are going to take a walk along the Little Butano Creek Trail, where we will visit the redwood forest and look at some of its inhabitants.

Redwood trees can be found back 160 million years in the fossil record. They reached their peak about 65 million years ago when they inhabited most of the northern hemisphere. Cut back and reduced in area by the last ice age, they are now confined to a corridor that stretches along the California coast. Starting just above the Oregon border and stretching south 450 miles in an area five to 25 miles wide, they find the conditions of 65 million years ago. The maritime Mediterranean climate of moderate year-round temperatures, the heavy winter rains, and dense summer fog are the conditions needed to grow and sustain these trees. The first written record of the redwoods can be found in the Portolá expedition’s logs written by Friar Juan Crespi in 1769. He talked of the forested hills and of “palo colorado,” the red tree. The botanical name *Sequoia sempervirens* honors the Indian Cherokee Chief Sequoia, and *sempervirens* translates into “always green.” Here we’ll be able to see that name in action.

Redwood trees have the definite ability to be able to regenerate their growth. As the tree grows, dormant burl tissue grows on the tree, and if it is damaged, this tissue will then begin to sprout. This allows the tree damaged in the wind to regrow a top growth. Or as in this case that you see here, a fallen down tree is able to sprout suckers. These suckers are stronger and heartier than seedlings and will grow faster, enabling them to regenerate the forest. This is one way that the trees are able to reproduce.

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Our habitat here along Little Butano Creek, with the redwood forest, the creek brings in a large portion of moisture and soils to keep the forest going, but the dense overhead growth limits the amount of sunlight that can come down in here and dictates what plants will grow on the forest floor. Trillium, redwood sorrel, clintonia, and other wildflowers are in abundance here. Ferns are attracted into the cool, moist environment and grow throughout the area. In addition to that we get huckleberry and thimbleberry that provides a shrub layer here within the redwood forest.

VISITOR: What is this plant here?

BOB: That little wildflower is called the sugar scoop, and it's one of the latest blooming ones. As you can see, most of our other wildflowers have already bloomed this season, and this is one of the last to bloom and hold itself here during the summer.

In addition to that, the conditions here in the redwood forest allow fungi to thrive. Here on this dead Douglas fir you see a number of artist conk mushrooms growing. These mushrooms are called artist conk mushrooms because if you were to etch a drawing on the white porous underside, wherever you touch it, it would turn brown. And, left to dry, the etching would stay there. These mushrooms grow here year round and are very important to the redwood forest. Artist conks are saprophytic mushrooms; they feed off dead and decaying wood and leaf debris. They take this woody debris and break it down into simpler components that allow the other plants to feed within the forest, thus recycling the forest back into itself.

As we come across this bridge up to our next stop, look off to your left and see one of our water plants along here. On the side of the bank you'll see a very large skunk cabbage. During the months of April and May it'll also form a large yellow blossom within it. It's called skunk cabbage because of the aroma that it puts out; it smells like there's been a skunk within the area.

As we come off the bridge here we'll stop for a moment and look at the cones that the redwood trees produce. Redwood trees produce both male pollen cones and female seed cones, like you can see here with the female cones. The trees will start producing seeds between age five to 15 years. It takes almost a year for the seeds to be fertilized and produce a cone that will hold between 60 and 120 seeds. These small cones will grow out on the tree and produce a seed that is about 1/8 of an inch long. Some of the larger trees are able to produce over 10 million seeds. Most of these will not have a chance to be able to sprout. The conditions on the forest floor, with the deep leaf material and fungi, do not provide a good condition for these seeds to sprout, so very few actually grow up from the seeds. From here we're going to move down the trail and try and find the tallest tree along our trail today.

As we pass along, you'll see a very unusual tree that we have here in the park. You'll notice that growing from one base we have three trees that are split off from it. It still continues to grow and survive today in the park, but forming up with three trees.

Here you see a good example of a redwood burl. Redwood burl just consists of dormant bud tissue that has grown on the side of the tree and is waiting there to sprout if the tree is damaged, to regenerate its growth. This is the tallest tree along our walk today. Redwood trees, as they mature, can reach a height of between 300 and 360 feet, be between 12 and 16

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feet in diameter, and reach an age of 800 to 1,500 years. Its height is its greatest asset. The trees can literally grow up and drink from the clouds. What they're able to do, as researchers found, is that they get 30 to 40 percent of their summer moisture needs by trapping and holding the fog layer and either absorbing it through their leaves or collecting it and allowing it to drip down around their base. In this way the trees are able to take the summer heat along the coast. If you look up, you've got a real good view, there's a nice spider web right there collecting all the sun as it comes right on through it.

As you pass the railing here, you'll be able to see some of the plants that grow underneath the redwood forest. Here we have our thimbleberry. If you get a chance, you can touch it. It's a very soft leaf, sometimes called "Charmin of the woods." Behind it you have the huckleberry growing, and then a number of ferns that have formed up down along the creek bed where the moisture is higher. On your other side of the trail you'll be able to see the clintonia and the trillium—some of our wildflowers that do bloom along the Redwood Trail here. As we pass across this bridge here, on the side you'll notice this plant in bloom. This is our elk clover, and it's come up into a berry form as a food source for the birds in our forest.

Normally I wouldn't try to eat anything here that we aren't certain about.

As you approach up here on our left, we come upon a very unique environment here in the redwood forest along our trail. This is a vernal wetland. Now "vernal" is defined as belonging to or appearing in spring, and that is just what happens here. Sometime in the past a landslide developed a basin here. Now the bedrock underneath will hold the seasonal rainfall and collect it and allows a marsh then to develop in this area. Water-loving plants like you see back up in here, like the skunk cabbage, wild ginger, the ferns, and cattails, will thrive in this area. It also does one more thing here in Butano, it supplies a nursery for the California newts and the Pacific green tree frogs that allows them to survive safely because the pools are not deep enough to sustain fish life, and then the eggs and larvae can grow up and into adults. As we come across this bridge, we'll come down to the side of the creek here.

Redwood trees do not have a taproot, instead the trees put out lateral roots that can go down about 12 feet. The trees will send these roots out in a large fan around them, sometimes reaching 100 feet in length. Here they intertwine with the roots of the other trees, sending out short fibrous roots that will collect moisture and nutrients to supply to the tree and creating large mats that help stabilize the tall trees. Now we're going to go ahead and move on down the trail, and we'll see another view of the redwood trees being able to reproduce by stump-sprouted suckers.

As we move into the side of the creek here, fire, wind, and lumbering have not been able to hold back the redwoods. If a tree is damaged, oftentimes it'll send out sprouts from the stumps. These stump-sprouted suckers will come up and be very hearty and able to grow faster than seedlings of the same age. Sometimes 100 or more will sprout from a stump. As they grow up, they will thin out, and we'll be left with a fairy ring, as you can see today, with the old adult tree in the middle and all the new ones circled around it. As we move on, we'll go ahead and find an area where we can see the effects of fire on the redwood forest.

Fire has always played a very important part in the redwood forest. It will come down and burn the understory, then it will deposit the ash, will enrich the soil with nutrients and minerals, and

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clear it out so that the seedlings then have a good place to reproduce. Many times the adult trees will survive the fire because the bark is up to 12 inches thick and fire-resistant. But sometimes what happens, as you can see here with the scars on this tree, the downfall will build up at the base of the tree, where it will burn hotter and longer. It is able to then burn through the bark and into the dead heartwood. But the tree still survives because the cambian layer between the bark and the heartwood, which supplies the nutrients to the tree, is still intact. These have become known as goosepens because settlers used to use them to store their geese and chickens in. The last fire that occurred in this area, we believe, was back in the 1920s.

This plant here is called hedgenettle. You can see it's still in bloom. It grows often here in the coniferous forest, and the natives used to use it for a cure for wounds. They would steep the leaves in water and then put them on there to help cure their wounds and sores. Many knew the resources that the natives were able to retrieve here from the forest.

Today, we were able to visit just one of the many wildlife communities here at Butano State Park. There are many more here for you to explore. John Muir wrote once, "Climb the mountains and get their glad tidings. Nature's peace will flow into you as sunshine flows into the trees. The winds will blow their own freshness into you and the storms their energies, while cares will drop like autumn leaves." Butano, situated just 50 miles south of San Francisco, is such a place. With over 20 miles of hiking trails and 39 family campsites you, too, can come and behold the beauty that is Butano. Thank you for coming today.

Running Time: 17:23
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