



California State Parks

Video Transcript



Fern Canyon: The Real “Lost World” at Prairie Creek Redwoods State Park

Hello, my name is Phil Rovai. I'm a park ranger here at Prairie Creek Redwoods State Park and Gold Bluffs Beach. We're now at the trailhead to Fern Canyon. Let's go ahead and start down the trail.

You see the elk out here—the bull male that's alone. He's now wading into the water—it's something you don't see very often. The elk are something that many people come here just to see in this park, and he's crossing. It's pretty neat to see. I have seen the whole herd at times in these ponds on the warmer days, but it's not a real common occurrence. Sometimes it takes a keen eye to find the elk. They can be right next to the road or the trail and you may not even see them, although they're watching you walk by. We might see some others as we walk up along farther down the trail here.

Well, we're just about to enter Fern Canyon, right around the corner, but before we do I wanted you to know about the trees that grow here, especially this tree, the tree that's all around me here. It's the Sitka spruce, and the reason it's an important tree is because you won't find any redwoods in this area, but you'll find an awful lot of Sitka spruce. It's the one dominant conifer on the coastline of not just California, British Columbia, Washington, the whole Northwest. In fact, it replaces the redwood in this area because it's able to tolerate the salt spray that comes off the ocean, so this is where you'll find some of the biggest Sitka spruce trees. One way to tell, if you're just walking along, is to look for the bark on the tree that looks like potato chips, or some people say corn flakes. It actually looks like they could flake off. Well, here's one that's already loose. So potato chip-like bark is what we call the Sitka spruce tree. Farther on today we're going to see some huge examples of this tree, so stay tuned.

We're here in the lower end of the canyon, and the Sitka spruce tree that we were talking about a minute ago is growing here on the hill. In its crotch is a leather leaf fern—one of the more interesting ferns in this part of the park. Interesting in that it only grows up in these parts of the trees, in those narrow crotches. This year we had a tree come down—I'm standing in it right now—and what's unique about it is that leather leaf fern is growing all along it. This fern, as I mentioned, is not found on the forest floor or in the canyon walls, but in the trees, so it's kind of unique when it comes down and you can actually find a piece that's broken off.

This particular fern's a good example of how they reproduce. The spores are on the back of the fern leaf, the leaflets. Although they reproduce by spores, they can also spread and grow from what's like a root. It's called a rhizome, and if you look close at this tree, in the moss that's mixed in with it are these long runners or roots or rhizomes. So they spread, and these

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mats of ferns can actually form as deep as 40 feet up in some of the taller redwoods. They've just done recent studies, and found that that's some of the biggest mats of ferns they've ever found. So—a pretty unique fern. But just one of the many that are in this canyon.

As we move into the narrower parts of the canyon here, we're starting to see more ferns and more walls of ferns. One of the most common ferns in this whole Fern Canyon area is the five-finger fern. Some people call it maidenhair. Five-finger is more what I like to call it, and it's this lacy looking fern. Looks like a palm with more than five fingers, obviously.

Just to the right of it is a larger fern. It's sort of this typical fern a lot of people think of. This is a lady fern. One way to tell the difference between that fern and several others is it actually is narrow, gets wide in the middle, and then narrow again at the base, sort of shapely like a lady.

Above it is the sword fern—the most common fern in the redwood forest—usually growing on the forest floor, but here it's growing on the wall of the canyon. A little farther on I'll show you why it's called sword fern when we get a good close-up.

Well, we're right now in the narrowest part of Fern Canyon. It's about 30 feet wide and at this point about 45-50 feet high. But as you can see up the canyon, it gets to be at least 100 feet in places. And these walls are vertical, as you can see, which is what's so amazing about this canyon. We'll see a little farther on that it's just solid. It's rock that's cemented together, round rocks, river rocks, because this actually was an old river bed that's been eroded. Let's go on ahead and see what's up around the corner.

As you can see, the rocks here in Fern Canyon are well rounded like most river rocks, creek rocks, are. There's something unique about this place. If you look to the side at the canyon itself, you'll notice that the rocks embedded in the canyon walls are also rounded. What that tells us is that this was once a huge deposit of river sediments. About 4 million years ago the ancestral Klamath River ran through this area, many miles wide, and it dropped river rock and sediment, and it layered it as you see on the canyon walls here. So this is actually an old riverbed that's been now cut down with the small streams that run through here, forming a canyon that we're in today.

As we're moving up through the canyon, we're finding unique features all the way through, and one of the most interesting areas is this narrow spot where trees have come down, and some trees are laying in the actual drainage. A few years back, this was not just an interesting spot for us as visitors, but people like Steven Spielberg thought it was pretty interesting, too, because he decided to film part of his movie, "Lost World: Jurassic Park" here. The particular log ahead of me here that's in the creek is the one that was used exclusively, because if any of you saw the movie you saw a guy being chased by little dinosaurs. He went running up the canyon, this was the canyon he ran up, and he jumped over that log at one point, and the dinosaurs, of course, followed him over the log and that's all you saw of him.

There's also some interesting plants up ahead. Let's move up and see what those might be. Here we are in the floor of the canyon, looking at some plants that are pretty well widespread throughout canyon but they're not ferns. The reason I like to point them out is because a couple of them are pretty unique. They're pretty unique.

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First one I'd like to point out is this one that's down here on the lower part of the log, this is a moss-y log, but this plant right here is called a giant liverwort. It's actually real primitive, just like the ferns, and very much like them because it reproduces by spores, not seeds.

Right above it here, there's several of them, is another unique one—the mimulus, or monkey flower. I'm not sure why the name, but some people say the flower looks like the face of a monkey. Also, something interesting about it is it has little red dots leading right down into it, and that's a runway, by the way. That's a runway for the—here comes an insect in right now. The insects know how to get right to the flower by following that. At least that's what they say. And, of course, that helps to pollinate the flower, the insects.

The third interesting plant right here in this group is this one, and you'll find it all throughout the canyon. It's got a couple names. The common name some people call it is piggyback plant, because the young plants will sometimes sprout right out of the top. And there's an example of that right over here we'll look at in just a minute. Piggyback or tolmeia, T-O-L-M-E-I-A. Here's an example of that piggyback plant with the young sprouts coming right out of the top. You can find similar plants in nurseries, and that's where the name piggyback actually comes from, the nursery plant that's related.

Along the canyon wall here you'll find water coming down year round. Summertime, winter especially, but summertime, too. A shower like this is kind of refreshing on a hot day, although it's never hot in Fern Canyon. You might notice that there's no ferns here where most of the water's coming down. Well, ferns like water but they don't like a lot of water, or too much, and in this case, it's too much. They just like the optimum amount. But you do see a lot of mosses. Moss does well. Ah, refreshing.

What I wanted to point out, couple of those more common ferns here in the canyon. I may have mentioned, or not, there's about eight species in the canyon. Again, one of the most common, which we looked at briefly earlier is the sword fern. The reason it's called sword fern, we can look close at one leaflet, it has a hilt on the bottom of it. A little spot like a sword would protect the hand. So that's where the name comes from, like the swords of old. And, again, it grows mostly on the forest floor of the redwood forest, but here it's growing on a rotting log.

Right in front of me here is a couple more ferns that we haven't talked about or shown yet. The deer fern, right here—all throughout here, actually—comes up with some interesting patterns. You can pretty much see that it's different, real broad at the base. It's a lot smaller fern than the sword fern. One unique thing about it is, although ferns have spores they have to reproduce with, most of these leaves do not have spores on the back of the fronds of the fern, but this one does right here. This one tall one, and that's where all the spores are in a long line along the leaflet. And I'm told that the deer don't like to eat this particular frond. They do like to eat the others.

There's one other fern we already talked about, and a smaller version of it right here is the lady fern. You can see up close here that it tapers, narrow, wide, narrow, which not too many other ferns do.

One other common redwood plant that I don't want to overlook since it's right here and it's actually in bloom is redwood sorrel, or some people call it oxalis, also known as sourgrass

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because the stems are very sour. It has an interesting purplish tint underneath. When the sun hits this, which it probably will in a little while, it will close up because it doesn't like direct sunlight. In fact, here's one right here that's closed. But it doesn't look like it's because of sunlight, it's just closed.

Well, we talked a little about the five-finger fern earlier. This is a good close-up of one. It's a very lacy and soft fern, except for its stem, which is dark, shiny and very strong—so strong that the Native Americans used it to weave into their baskets. Usually it was woven in just for decoration, but it also added strength to the baskets, too.

Well, we found one of the creatures that lives in the canyon, and they live all throughout the redwood region, right here. You don't have to worry about him running off because he's a slow mover. This, of course, is our banana slug. He's actually resting right now, he's not in motion, but you have to look close to tell that. You can see his slime trail, which they do move on, laying down a layer of mucus and moving along as they go. Eating a leaf litter. Sometimes they eat live leaves, sometimes dead ones on the forest floor, but they do help break it down and create soil as they pass it through. In fact, here's a little bit right here on his tail, or the back end, actually. They don't have a tail. Little bit of leaf litter that's been recycled.

The canyon is constantly in a state of change, and we're standing now in front of something that happened just a few years ago—a very dramatic something that happened. This was one of the largest Sitka spruce trees in the forest until it fell into the canyon here. I always like to ask people if they can tell which side of the canyon it might have come from. Half will say the right, half will say the left, but it actually came from the way that it's facing. A heavy, heavy rain winter, high record rainfall came, created a lot of moisture in the soil and weakened its roots, and they broke loose and slid down. Until last year there was another part sticking straight up like a tree where it had broken, it would be the middle part of the tree. Well, we're going to walk through here to the other side and take a look at that. Let's go.

Now we're on the other side and you can see where the tree broke. In fact, it was vertical for three years until last summer. About August it broke off and fell down into the canyon floor. Actually, some people witnessed it. Fortunately, they weren't close enough to be in danger, but it's now resting in a safe place. Just another part of the many facets of Fern Canyon. The tree that it originally was on, I'm standing under the roots right now, and it's just amazing to me how large these roots really are. If you remember the tree that I first showed you, the Sitka spruce out in the beginning, it wasn't even as big a diameter as this root is right now, so this tree of 6 feet plus diameter, has a massive root system, but, of course, they didn't hold, they didn't survive that one particular heavy wet winter. Of course, the position it was growing in didn't have a lot of support. But it did survive for many years before. Amazing.

Well, we're stopped here by a little pond, a little pool that's just off the side of Home Creek running through Fern Canyon, and in it are a couple of pretty nice fish. They're great fish because they're something that's affiliated with the redwood. It's a coastal cutthroat trout. One way to tell is the little dark dots on its side tell it's a trout, or the salmon family, but it's also pretty interesting in that it spends a couple years here. The ones we're seeing right now are actually very recently hatched—spring hatched—and they may, in a few years, go to the sea.

One thing unique about fish like this, the cutthroat trout being one, along with salmon and

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steelhead, they run to the sea, or they're anadromous. Now, not all cutthroat trout will do that, but some do after a couple of years, two to four years, in the creek. Of course, they grow much larger when they go to sea. They can come back more than one time to spawn in the same streams that they started their lives. These little guys, if they can survive all the hazards of being a young fish and don't become food for something else, they may be able to grow big and do well and return.

We're up above the canyon now, about 100 feet higher, and we're coming to the area known as the Spruce Forest, I like to call it. Also all around us here is exclusively spruce trees—the Sitka spruce again. But, as you'll notice, these trees are not as big as some of the others. They've actually been logged. Back around the turn of the century and even later into the 1920s and 30s, much of this area was logged. And what's come back are these trees.

We're at the top of the Spruce Forest here where we just saw, and we're about to head down to Lincoln Prairie as it's known now. But back in the 1890s it was actually known as a mining camp—the Upper Camp they called it—and it's just above Fern Canyon. Well, I'm going to go on down. Why don't you follow me?

Well, we're standing now in Lincoln Prairie at the site of the old mining camp—the Upper Camp. This particular spot I'm probably standing about where the bunkhouse was. Off to my right here there was a schoolhouse, corrals. In this whole area there were over 300 people living here, if you can imagine that. There was a cookhouse, bunkhouse, of course, and they were here for the mining, the gold mining.

It wasn't really as profitable as they thought back around 1890 when this was at its peak. Gold was discovered here about 1850, but they found that the gold was hard to extract from the sands, which is where it actually was found, mixed in with the black sands of the beach, and only at certain tides could they find it. But after several years, one account said that there was about \$25,000 taken out of here in the best year that they have recorded. As you can tell, it wasn't that profitable, but it did, in fact, last until about the turn of the century in this particular camp. There were others working also in this area, two other main ones.

Well, here we are at the end of the trail. We've gone up through Fern Canyon and now we're back down at the beginning. We've looped all the way around. We've talked about some of the plants here. Of course, there's many more. Little bit about the water life, and a little bit about the history. Of course, there's much more to find out, and hopefully you'll read up on it and learn more on your own.

I want to thank you for coming along today—it's been great. I enjoyed doing the tour. It's always different and always an enjoyable place to be. I just want to add one thing—if it weren't for people back at the turn of the century when the mining was winding down, logging was on an upsurge, people that thought about protecting these places, people like Save-the-Redwoods-League and their founders, without people like that we probably wouldn't have these wild places today, so we can be thankful for that, thankful that it still is continuing.

Running Time: 24:14
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