

**California State Parks** 

# Video Transcript



## Path of the Padres at San Luis Reservoir State Recreation Area

The Path of the Padres hikes begin at 8 a.m. with a boat ride across the reservoir. Upon disembarking, the participants hike in about two-and-a-half miles before returning. The optional portion of the hike goes up about 700 vertical feet. They return to the boat dock around 3:30 p.m. This all-day hike has been condensed into the following 30-minute video.

Hello, my name is Jennifer Morgan, and I'd like to welcome you here to Los Baños Creek detention reservoir, which is part of San Luis Reservoir State Recreation Area. It's my job to share my love and knowledge of nature, the flora and fauna, as well as the cultural history of the area, with our park visitors. My co-hike leader today is Jessica Jones—Jessica?

JESS: Hi guys, I'd like to welcome you to Los Baños Creek Reservoir. My name is Jess.

JENNIFER: Along the way we'll look at the way Los Baños Creek has drawn life to itself and we'll learn a little about the special plants and the animals in the area, as well as the history of the Native Americans that lived here.

JESS: Today we're going to be talking about a lot of different plants and animal life and a lot of different people that have been drawn to the waters of Los Baños Creek over the years. And right now we're floating on top of a lot of water from Los Baños Creek. The reservoir is fed strictly through the water of Los Baños Creek, no aqueducts or canals or anything flow into it. If you guys turn around and look, you can see the Los Baños Creek dam from here. It's about 160 feet tall and as you can see there's about 30 feet of dam that we can see that's not covered up by water. Before they put the reservoir in they did some excavation and the archeologists worked on it. They estimate that the village had about 50 to 100 people in it, so it was quite a large Yokut village. Also about the water from Los Baños Creek, the Los Baños Reservoir, unlike a lot of reservoirs in California, isn't used for drinking water or irrigation or anything like that. The sole purpose of the Los Baños Creek Reservoir is flood control.

JENNIFER: Here we are in the tule reed section of Los Baños Creek Reservoir. I think to most of the Native Americans in California the most important plant is the oak tree, which provides them with the acorns. They ate acorn meal everyday. For the Indians in the Central Valley, the tule reeds are the second most important plant and they're really an amazing plant. I'm going to pass this around. You can see that it's made up of a lot of hollow tubes, and it's very lightweight, almost like Styrofoam, and that had a lot of important properties for the Native Americans. The hollow tubes serve the function of drawing oxygen from the air and sending it down to the rest of the plant, which is underwater. You can see these brown shoots are last

year's growth and the new shoots are this year's, the green ones. And the Native Americans would actually eat these new shoots raw or cook them. They were supposedly sweet, and they also had many other functions. After the plant blooms it forms seeds that the Native Americans would collect and eat. They also got the pollen and made cakes out of it to eat. And also underneath the water is the large root of the tule reed, which was a staple that they ate like a potato. You could roast it and eat it like a potato and provide a lot of food. And also they did many other things with the tule reeds. They made their houses out of them. Here's a Native American house. And this is the acorn granary, the woman's reaching in to get some acorns for dinner. They would put smelly plants that the insects didn't like around it to keep them out from eating the acorns. They would also make boats out of the tule reeds, taking advantage of how lightweight they are. They would use a willow pole to make the central stability of the boat and then bundle up the reeds and tie them along and make a boat and then go out in the valley and catch fish. They also would even wear the tule plants. This is a picture of a girl and boy and see she has a tule skirt.

VISITOR: So how long would these tule boats actually last? I mean it doesn't look like they're very permanent.

JENNIFER: They'd make them for the season. It would take them a couple days to make one. Some of the Indians would actually make a hole in the boat and line it with clay and they could catch their fish and build a little fire and cook dinner right on the boat. They'd go out for a couple of days and come back with a haul of fish for the family.

That sounds like a crow right there. We had some coots calling a minute ago, maybe some blackbirds. That's the mourning dove. *Hooo hooo hooo.* We've got some western grebes over there. They have the long white necks, and they're beautiful birds. They're fish eaters—they're constantly diving for fish. We also have some little black birds with white beaks and white foreheads called coots.

JESS: At our last stop we were talking about the tule reeds, which is a very important plant to the Yokuts, the first Native Americans that were here in the Central Valley. As we're looking over here we can see another plant that's also very common in a lot of wetlands and that would be the cattail. The cattail was also pretty useful to the Yokuts as well because—can anyone tell me what their very first piece of clothing was when they were a little baby?

### VISITOR: Diaper.

JESS: Diapers, yes. Well, the Yokuts didn't have diapers, but they did have the cattails. And if you look at the cattails, on the top of them you can see some fuzz coming out there at the top. They could use that to line the cradles and then at the end of the day or periodically throughout the day they would clean that out and then they could get some new cattails and take the fuzz out and line the cradles again with the fuzz.

JENNIFER: Okay here we are, the start of our hike. Let's go.

This is a brand new bridge this year—to make our hike easier.

We'll be discovering today many important plants that the Native Americans used for eating and medicines. And right here is one of the most important. This is called blue dicks and it's important. It's in the amaryllis family and underneath the ground it has a bulb, which is very delicious. The Indians would gather them in large quantities and some of them are so good they could just eat them raw.

JESS: So far today on both of the stops we've made we've been talking about the Yokuts, which were the first people to inhabit the Central Valley. Right about now we're going to stop and talk about the second group of people that came here along the Los Baños Creek Reservoir. Well, before it was a reservoir, it was just known as Los Baños Creek. The second group of people that came over to the area is actually where this hike—The Path of the Padres—got its name. San Juan Bautista Mission is about thirty miles west over through the Diablo Range. The padres from over at San Juan Bautista Mission would come down from the San Juan Bautista Mission, hike along here, and they would follow the Los Baños Creek into the Central Valley to preach their religion to the Yokut Indians that lived there. Now when the padres were traveling over here they usually were coming over with the help of mules, and the plant that is directly behind you is very important to the padres and feeding their mules. It has skinny green leaves on it. It also gets little purple buds up on the top of it. The mule fat got its name because the padres would let their mules graze on it and it would get their mules fat and sleek and keep their mules healthy for the long trip from the San Juan Bautista Mission over into the Central Valley here.

Another plant we're talking about on the stop here today that you also might have noticed is this shrub here that we're looking at now. It's known as the saltbush. The saltbush was very useful to the Yokuts, the Native Americans that lived here in the Central Valley, because unlike you and me today, they didn't have table salt like we have. So the saltbush was one of the ways they could season their food because it had sodium content to it.

The next plant we're going to talk about is a non-native plant that's right here. This was a plant brought in by the Europeans from South America, and it's known as the wild tobacco plant. It's also got some interesting flowers on it. You can see here they're a long, yellow, trumpet-shaped sort of flower. They're a favorite of the hummingbirds. They like to feed on the nectar inside the flower. So we have two native plants, the mule fat and the saltbush here. The mule fat was useful to the padres. The saltbush was useful to the Yokuts. And the wild tobacco here, the non-native plant, was useful to both, and it was introduced by the Spanish and the Europeans.

JENNIFER: Now the reason we stopped here is this is the wild cucumber plant, and it's a perfect example of all the different ways Native Americans used plants. Right here we've got the flowers and the long vine. They'd use these long vines to tie the tule reeds together. Like I mentioned earlier, they'd bundle up the tule reeds and tie them together for their boats or for their houses. The flowers turn into these big seed pods. Now, we can't eat the seed pods themselves, but they did learn that they could take the seeds and make a tea out of them to help kidney disorders or you could extract an oil from the seeds and it would help if your hair was falling out. Another name they call the wild cucumber is the manroot. The Native Americans learned that they could take the root and mash it up and put it in a pond and it would stupefy the fish, which means they would stop moving and float to the surface, whereupon the Native Americans could gather them easily to cook them and eat them.

JESS: If everybody wants to take a bit of this plant and pass it around, and make sure you get a really good smell of it while I pass it around, and see if you can guess what it's called. While everybody is getting a smell of that, I'd like you to look back here at the tree I'm standing in front of. I don't know if you guys can notice from back there, but it has an outer sort of roughcolored, rougher bark. It also has this inner fibrous bark. They could use this as an emergency food source, they could pound it down into a meal and make a meal or sort of a cake or bread out of it. They also could use it in the summertime for clothing, because, as you guys might have noticed, here in the Central Valley it gets a little bit warm in the summertime so they didn't need a whole lot of heavy clothes. So the women could make a sort of skirt out of a whole bunch of the inner bark of the cottonwood.

Did everybody get a chance to smell the little green plant I passed around? Okay. Well, it's from the bush that you can see down over here behind me, and does anybody know what it's called? Yes, it is sage. It has a very strong sort of fresh-smelling scent to it. The sage helped them, because it is a very strong scent and if they smelled like the sage, a plant, instead of a human, they could get up closer to the deer or the antelope they were hunting. So this was very helpful for them while hunting, because they could get within the range they needed to be in order for their arrows to hit the animal they were hunting. They could get a lot closer to them. If they didn't do that, they wouldn't be able to hunt, because they would never be able to get close enough to the animals they were hunting.

JENNIFER: The reason we've stopped here is because it's a really good place to look again at how the creek has drawn life to itself. We have the barren hills up there and all these trees down here with the water. And the trees right here, they're kind of light green, are willow trees, and they're interesting in a number of ways. The Native Americans would use them for arrow shafts or they also found out that the inner bark of the willow tree, they would take that and if they had a headache, they would chew on it and it would make their headache feel better. We know today that that's salicylic acid and that's the component of aspirin that modern man uses. So it's a case of how, about 40% of the medicines that we use have actually come from the natural world, and aspirin is one of them. It comes from the willow plant. Another interesting thing about willows and the cottonwoods is that those trees have both male and female trees and they have kind of an unusual type of pollination. They have catkins instead of the usual flowers that we're used to. They have male and female catkins and the pollen blows from one tree to the next, it's wind pollinated. And right now they are in full bloom, that's the really lighter part of the willows that we're looking at.

Further in the distance there is one unusual plant here, it's the dark green one that you can see on the other side of the creek. There's a light green one to the right of it and then the dark green one. And that's a very special plant to the Native Americans here. It's called the elderberry. What the natives really liked about the elderberry is they called it the tree of music. It can grow really straight branches and this is an example of an elderberry branch. The funny thing about it is the center or pith, it's really soft, and they found out they could gouge it out with your fingertip or, if they had a long one, the men would take a hot stick and heat it and poke it to gouge it out. When they did that, they had a hollow core and then they sliced it down part way like this, and this would become a clapper stick.

JENNIFER: You've really got to whack it.

VISITOR: Ouch.

[Laughter]

JENNIFER: While we're here in this beautiful field we've noticed a lot of little yellow flowers. These tiny yellow flowers are called gold fields. Here we have our California state flower, the California poppy. The Indians used them in a couple of ways, they could eat the petals or the leaves in a salad, but more importantly if they had a toothache, they would take the root of the poppy and put it next to their toothache and they noticed that helped it. Today we know that all poppies have a narcotic property and that it would make their tooth feel better. And these adorable white flowers that actually have a blue tint on the underside of their petals are called bird's eye gilia.

This is so exciting. We see here, on the other side of the creek bank, two reptiles that have been drawn to the waters. That's the western pond turtle. Now unfortunately a lot of people would make pets of those and their numbers are really declining due to people taking them and loss of habitat. So it's really exciting today that we could see those western pond turtles.

Can you smell the fragrance from these beautiful flowers? These are called lupines. These are obviously large lupines, and the Native Americans used them. They could eat the flowers or the little leaves. They wouldn't want to eat the seeds because they have dangerous alkaloids in them.

Well we've finally reached our first break point, and this is one of my favorite parts along this tour because this is the one place where we can guarantee you that Native Americans spent a lot of time. These are Indian bedrock mortar holes. Now as I mentioned earlier the most important plant to Native Californians is the acorns from the oak trees, and they would gather some acorns here in the Central Valley and a lot of them right up the sides of the hill more towards the west. The way that Native Americans processed them is first they'd send the kids up into the trees and they'd knock down the acorns, and then the parents would collect them in these baskets. They actually had special baskets designed just for collecting acorns. And then they'd bring them back. We can't eat acorns like the turkey and deer that love to eat them. We have to process them first. Acorns are really high in tannic acid, and the way the Native Americans learned to get rid of the acids evolved over time where they pounded them out. They used different types of pestles, this is an example of a rock. Different tribes had different styles of pestles they would use. So the women would sit here on this rock and pound their acorns. We can see one hole here, another one here, and there's a few more that have been covered by the flood debris. And you can see all the women here, just imagine six or ten women sitting on this rock pounding the acorns. And what do you think they'd be doing while they were pounding? Talking, so modern people have kind of nicknamed them Gossip Rocks, because it was a lot of work to pound the acorns.

After they had the acorn meal, they had to flush the tannic acid out. Then after they had them all washed free and tasting good, they would cook them. The Native Americans here didn't have pots and pans. They actually developed a way of weaving baskets that the weave would be so tight that when you put water in them, it would swell and actually hold water. So they'd put the acorn meal in the basket with some water, and someone would heat up rocks on a fire

and pass them with two big sticks to the woman who was cooking the acorn mush. She had another long stick that she'd keep stirring the rocks, because if the rocks just settled to the bottom, it would burn the basket. After they boiled it for a while, then it was time to eat. They often seasoned the acorn meal with some of the wild onion or the saltbush or other herbs, maybe lupine flowers, and have dinner.

People are always asking us on this hike, which we call Path of the Padres, "Well, exactly where did the padres bathe?" And the answer is, we're not certain because if you know anything about rivers, when they flood, the water really changes in its course every year depending upon conditions. But I certainly think we can guarantee right here. When the water comes in, it hits this big rock and will be forced down and out, so this is a pretty deep pool here. I think we can safely say the fathers stopped here.

Today we're lucky, besides seeing the suckerfish, which we usually see, which are about this long, we also actually saw three or four black bass, too, which have the black on the outer part of their fins. So we were lucky, and I'm sure those fish are attracted to this deep pool here, too.

People are always amazed at the bright orange color on these rocks and over here we have kind of natural chartreuse. This is a very interesting organism. These are called lichens, and lichens are an example of a symbiosis between a plant, the algae specifically, and a fungus, which are two different kingdoms. And I'm going to show you on this next rock what comes after that. We've got the lichens and here we have a new plant, these are the mosses. They're the second thing to invade bare rock, and this is called primary succession. You have the lichens and then the mosses and over time a little more dirt is built up, maybe some mosses have died, and look now we've got plants. If we came back maybe in a couple thousand years this rock might just be covered with mosses and plants. There's a really interesting thing with this moss, here it's living on a hot dry day. Let's try a little experiment. Let's give it some water and see what happens. If you look closely, it's absorbing the water right away, and if we just wait about a minute we'll be able to tell exactly where the water has flowed. See the moss is starting to open up, soften a little, see a little green happening here? You can definitely tell the difference between the watered and the non-watered mosses.

Everybody marvels at this type of rock. It is a type of sedimentary rock or conglomerate where originally the rocks were pounded by the river. Then at some point in time they settled to the bottom, and through pressure and time compacted into rock. Today we just call it pudding stone, because it reminds people of puddings that had little bits of food in them.

JESS: As we're hiking along the creek bed, I want you guys to take notice of all the different shapes in the rock that we're looking at. The rock that we're looking at here is known as sandstone, and the sandstone, unlike the conglomerate rock that we saw earlier, is a pretty soft rock, and the water has actually eroded it into all these different shapes that we're seeing. Los Baños Creek changes from time to time on which side of this canyon that it flows on.

I want everybody to look down here. In the pool we have a very interesting little creature down here. Everybody see this little piece here that looks like a piece of hair? He's known as a horsehair worm. They actually got their name because if you look at them, they look just like a

horse hair, and they are often found in the troughs that the horses would drink out of, so a lot of people mistake them for just regular horse hairs, and it's actually a living creature.

There's a Jerusalem cricket.

VISITOR: That's a small one.

JESS: Yeah, this actually is a small one. They do get much bigger than that. They can be larger.

VISITOR: And do you think it was killed by the worm?

JESS: Yeah, it was probably killed by one of the horsehair worms as it emerged because it's a parasite. The eggs of the larvae will live in the Jerusalem cricket until they're large enough that they actually burst out of the cricket, and when they burst out of the cricket, the cricket unfortunately dies. There's quite a few horsehair worms living in there actually. It's an amazing puddle.

VISITOR: I see a lot more.

JESS: Yeah I see three.

VISITOR: I see four.

JESS: The fern-like plant that we're looking at here is the poison hemlock. The way you can tell a poison hemlock every time from a couple of other ferns is if you look down on the inside of the stems here, you can see there are these tiny little purple spots that are always on the bottom of the stems of the poison hemlock.

JENNIFER: Well we've had our nice lunch and have started to head back. Here we are in a beautiful section of the canyon. I just wanted to mention that they've had a proposal to put a dam in this beautiful canyon to hold back water for a huge storage reservoir, just like San Luis Reservoir, and it would flood the sycamore grove that we're going to be looking at. It's also the start of our optional hike. We'll be hiking up about 700 vertical feet. I'm going to grab my water bottle and camera and head up that path.

We made it! Hooray! As we look out westwards we can see the full extent of the Los Baños Valley and the crest of the Diablo Range beyond. In the distance you can see the two distinctive rocky mountains known as Twin Peaks. To the right of Twin Peaks, the high peak in the far distance is Mariposa Peak. The dip on the skyline between Twin Peaks and Mariposa Peak is Frenchs Pass, and this is the one used by the padres as they came over from Mission San Juan Bautista down into the Los Baños Valley. To the northwest through the gap in the distant horizon is Pacheco Pass, and if you've got binoculars, on a clear day you can make out the wind turbines at the top of the pass. Now as we pull back and down from the Twin Peaks we're looking at the largest riparian sycamore grove in California, and it extends for about six to eight miles. This is the whole valley that would be flooded if they put that dam in. All the sycamores would be underwater. I can see a falcon hunting down there, and we just saw that golden eagle a minute ago. Now we've turned around and we're looking eastward into the

Central Valley, which, of course, was the destination that the mission fathers were taking when they came down to the creek. Now before modern man came and put all his farms and houses in there this time of year it would be a carpet of gold. John Muir wrote that when he came to the top of the pass and looked down there, it was gold as far as he could see with the Sierra Nevada Mountains a white sparkling crest in the distance. But today all we see is smog.

Well we made it back from the ancient sycamore grove. Here we are back at the boat and we've really seen today how Los Baños Creek draws life to itself. The Central Valley only receives six to eight inches of rain a year, and scientists classify that as a desert. So Los Baños Creek really is an oasis in the desert. It supports a lush vegetation, and the animals in turn have been drawn to drink the water, eat the plants, and find shelter for their homes and from predators. In turn the Native Americans have come for the water supply and the useful plants and animals that are drawn to the water.

We're so glad you could come with us today on the Path of the Padres. We picked a beautiful day, a beautiful month, and I'm glad you could join us. Thank you so much.

Because there are many different species of plants that look similar, and because human immune systems vary, do not pick and eat any plants just because we mention in this video that the Native Americans ate them. They may make you sick. Remember that all wildlife and plants are protected in state parks. When you visit our parks, please don't pick the flowers so that others may enjoy them as well. Thank you.

> Running Time: 30:26 © California State Parks, 2004