Welcome to El Capitan State Park. My name is Ann Boggess. I’m going to be your guide today on our nature walk. It should take about 45 minutes or so, depending on what we find along the way and any questions you have. Today we are going to be talking about the Chumash people and their plant use in everyday life. They used many things from this area, and I'll be showing you a little bit about how they used these things and the products that they made from them.

What we have to do is pretty much take ourselves on a trip back in time, because today we use our grocery stores, we drive around in cars to get from one place to another, and we live in houses with concrete floors and brick walls. It’s very different than how the Chumash lived, and yet you’re going to find we aren’t so very different from the Chumash at all in their way of life.

So, the Chumash, just to start off with a little idea, we’re talking about people who are still around today, by the way. If you go over to the Santa Ynez Valley, they’re a very prominent part of the valley. In fact, they’re one of the largest employers of the Santa Ynez Valley, in that the Chumash casino is there on the Chumash reservation. I, myself, grew up in this area, and I went to school with the Coroga family and the Martinez family, all who lived on the Chumash reservation, and their lives have changed quite a bit, again, with that casino.

So today they live more of a modern life, but we’re going to be talking about the Chumash from 200 years ago on back to about 5,000 years ago. If we were to look at California at that time, this map kind of shows us, this is Northern California down to Mexico down here. The Chumash are almost in the central areas, the central coast. Carrying some parts of Los Angeles County, Ventura County, Santa Barbara County, San Luis Obispo County, all the way up to a lower part of Monterey County, including the Channel Islands out here. So Chumash carry a large portion of this area, and you’ll find that in this area there’s a lot of topography. In other words, there’s mountains, there’s valleys, there’s plains, there’s creeks, there’s ocean, there’s a lot of different climates with a lot of different plants. So they were able to live pretty well amongst themselves here in this area.

One of the things being, if you were to travel around and come across a Chumash village in their peak, they would look something like this. They would have huts made of tule and willow. The women wore grass skirts, and they’d decorate themselves with shells. They used a variety of baskets and stone bowls for cooking utensils. Back here is the tomol you were talking about, a wonderful plank canoe that they got around on. So you can see it’s a village
that used a lot of the resources of the area. When Juan Rodriguez Cabrillo came around in the 16th century, here’s a picture of it here, he was greeted by tomol canoes. He described the Chumash people as very industrious. They had a lot of beautiful equipment. Tomols are actually decorated with abalone shell and they used red-based rock to cover part of it. So it would be this bright red with this beautiful abalone shell. And they took care of themselves. They were very agile people who lived off the land. Their hair was long and black. They always took very good care of their hair and actually groomed it using oak twigs to singe the ends so they could have bangs and such. So he was very impressed with Chumash people and that was one of the first experiences with Europeans that the Chumash had.

We have an oak tree right above us. If you look at this canopy above us, you’ll notice it’s a holly leaf, and I’m going to go ahead and get one off the ground over here. It’s got sharp, serrated edges, kind of prickly. These are drought-tolerant, and they’re going to grow all over the ranch. This is a live oak, and it will drop acorns like this, in which it creates its seeds. Now the birds love these, and they’ll go around and poke them in the ground, and they’ll create new trees, so we have a lot of oak forests in this area.

The Chumash found the acorn to be a very important part of life. A family would go through about 500 pounds of acorns every year, gathering them, and grinding them up, and producing them. This was a very labor-intensive task. First, you had to go out and gather them, then you had to shell them and if you feel these, they’re very hard, and they’re very difficult to shell. But they would crack them open and shell them, and once they got them shelled, in their stone bowl, we’ve got some crushed acorns here, they’d take out the shells and they have this fine meal. The meal was then taken...now this is very bitter because there’s tannic acid in it, and they’d have to leach that out, using a couple of different techniques. They would dig a hole in sandy ground and line it with big, dark green leaves. And they’d take some water that they warmed in a warming basket near them and they’d pour it down into that and leach out the tannic acid. They’d have to do that several times, and then that would leave them with a paste, and they could either dry the paste or they could cook the paste on rocks. So it was a very important part of their meal.

This has a lot of oil in it. In fact, the coast live oak, even though there are several types of oaks in California and in this central coast area, this was their favorite because it was the most oily of all the acorns. That was important because they were eating wild game. If you look at wild game, these are animals that run around a lot, they’re equivalent to an Olympic athlete, there’s not a lot of fat on them. So they needed more oil in their diet. This is one of the ways they helped supplement that was to get the acorns that were a little bit oilier. Probably tasted better than some that were drier. They were needing that oil for their bodies.

What I have here is a mortar and pestle, and this is for grinding. You can still buy these in some food stores today so you can grind your mustard seeds and whatever else you’re going to make your salad dressings with or whatever you want to use it for. But it’s used very much by grinding, and the women would sit down with this between, this one I think shows a picture of it here, this woman here is using a mortar and pestle to grind her acorns. This was a very important part of their life, was the acorn, and so gathering acorns was very important and keeping them dry in granaries. We’re going to learn as we walk along the trail that basket weaving was hugely important to the Chumash. And I want you to think about that as we head over to our first stop on the trail. You guys ready?
So come on in here, and we’re going to stand again under our oak tree, but I’m going to have
you stand over in this section here. I’m going to be talking about something on this side that
you’re not going to want to get that cozy with.

So behind me is something campers today definitely try to stay away from as much as
possible. But as the Chumash lived in the area, this was a very important part of their life. It
was very important for them in many ways: medicinally, for dyeing basketry, for using the twigs
within their basketry as well.

VISITOR: Poison Oak.

ANN: So we’re talking about poison oak and its name is actually *toxicodendrum diversilobum*.
It means toxic plant with diverse leaves. If we look here, and I’m going to hold up a little safety
card, if you will, of poison oak that I made myself one year. You’ll see that this has the three
leaves, “Leave it be,” definitely on all of them. You’ll notice if you look in some of the leaves
here, here we have what we call a very lobe-y leaf. It’s like your ear lobes, there’s three lobes
coming off of it. If you look at this one, it’s a little bit different than that one and if you look at
some of them on some plants, let me see if I can find one over here, this one in particular is
very smooth around almost like a football. So they’re very diverse in leaves, but you will
always have your leaflets, which this entire thing here is your leaf, these are your leaflets.
Your leaflets will always come in three; these two with the short stem attached to them, this
one with the long stem attached to them. If you look around on the plant you’ll see three
leaves, three leaves, three leaves, and of course this time of year, its gorgeous, it’s this bright
green, waxy oil just ready to jump out on your skin and make you itch.

So like I said, we want to stay away from it, but if we were Chumash we’d actually look for
some of the straight stems. If you look behind me here, you’ll notice that the poison oak that’s
jutting upward actually has a nice straight, flexible stem perfect for structuring a basket. If we
were to crush the plant and use the oils from it, we could actually dye our grasses black. Let
me show you a picture of some of the basketry I’m talking about. Like I was saying, Cabrillo
was fascinated with the Chumash people, he said they were beautiful people and they were
very industrious. They had a lot of amazing products that they could make. One of them
being their basketry—it’s world famous. These people didn’t just try to gather food and
survive. They survived very well here. This is an amazing culture. It takes a long time to
make a basket, let alone one that can hold water. A basket that can hold water takes a long
time, and then they did beautiful decorations on their baskets as well.

The rash from the poison oak is something we’re all familiar with and we have all kinds of
ointments today to cure that. The Chumash were thought, and again there’s many theories on
this, but if you were a full blooded Chumash, you had less likely a problem with this, if at all a
problem, a very slight problem. So it wasn’t as infectious to them. If there was other blood
mixed in, if you had an Anglo-Saxon and a Chumash and they had a baby, that baby would
have more likelihood to have the problems with the poison oak as we do today. And yet I just
have to go back to that people are diverse, and it depends on what you’re allergic to, and we’re
all a little different. I know people who are not Chumash who are not allergic to it. They did
use poison oak though to cure things like ringworm and warts, but the cure sounded more
painful, than the problem. But they actually did use it in some medicinal cases.
If there’s no other questions, we’re going to talk a little bit more about the materials they used for holding things, which was a very important part of their culture, as we get down to a really neat part of our trail. You guys ready?

One of the things that they would use, actually, to help heal their poison oak, so there were cures for poison oak, was this plant here and if you see it, it’s what we call mugwart, which sounds like an insult to somebody: “You old mugwart.” It’s also called silverback, because you can see it has two sides to its leaves. This is a drought tolerant plant. And drought tolerant plants have special ways of going through a hot summer day without losing their water. So how that works is, you’ve got a beautiful dark green lush color on the front. On a day like today you’re going to see them nice and wide open, soaking up as much sun as they can. On a hot blazing day, when there is no moisture and they’re really needing some, they’ll close up and reflect the light off of them using their silver backs. So that is why it is called a silverback and one of the tricks it uses to live through the drought.

The Chumash used the mugwart for medicinal reasons. As we were talking about earlier, you know sometimes the remedy is worse than the thing that’s ailing you. But in some cases they needed to mix a potion for easing the itch and everything else. So what they would do is they’d crush up the leaves in some water and boil it like tea. Then they would make a little lotion out of it and put that on their poison oak, and it seemed to help remedy the itch. This product is actually used and something you can buy at the store now. You’ll find mugwart as part of the ingredients for many of those poison oak cures.

So what is this here? It looks kind of like bamboo. This is actually giant rye grass and it was used for making arrows. The stalks are nice and straight, and you can break off the leaves. They would be hardened and shaped and used as arrows, and sometimes used as tubes because they’re hollow inside. They were actually used for holding the cigarettes, because you know they smoked tobacco. So they would put tobacco in the tubes and wear them behind their ear.

What we have here is our creek bed, and as you can imagine, as all humans need water, that the Chumash used the creek beds for many things, one of them being catching fish. As you can imagine, it’s a great resource for your protein. They had a special way of doing that using a plant. This is a really interesting plant, and if you were to use it today on a commercial, I like to call it the vegomatic. You can slice with it, you can dice with it, and you can cook a pot roast with it. This plant did so many things for the Chumash; it was a really important part of their life. As you can see, you can feel the ends of this, this is a very fibrous outside, and feel that. Like a tough straw, like a bristle broom, isn’t it?

Here is a picture of an amole brush. We call this plant amole, or soap plant, and you can see it’s got an asphaltum handle. It’s twined with a little sinew, or maybe some hemp vine, and then the bristles here creating a nice stiff brush. That was used by the Chumash for various things; they’d clean out their bowls with it, they’d use it in their tents or whatever and you could use your brush anywhere. But that was an important part of this, was its bristles. So that’s just one character that was important.
The other character is that when you break this, if you look here, you can see there’s almost like a resin that comes out of this and it’s dried very hard right now almost like a plastic. It’s like shellac, it’s a very stiff resin, and when you cut an amole bulb open fresh it has a very thick goopy substance that comes out of it, and when that substance dries, it’s like a resin. So sometimes instead of asphaltum or tar for a handle, they’d actually dip it in the goo that came out of the bulb. Using the goo wet, fresh out of the bulb, you could shampoo your hair and wash up very well. It had lathering qualities, and so that’s why it got its name—the soap plant.

Now if you wanted to fish with this plant, you’d gather the people in your village and say, “Let’s go down to the stream, everybody get some rocks, we’re going to dam up a corner and make a pond.” Then you’d take some of this and you’d crush it on a rock and put it in the water, and it would paralyze the fish gills. It’s kind of goopy and it would actually coagulate in their gills causing them to float to the surface and you could pick up your fish and go home and have a nice grill. Are you ready to see some more of our trail? Okay, let’s head on down.

We’re underneath a canopy of a beautiful native tree. This is called a western sycamore, and if we were to try and identify this, one of its identifying features is its bark. It’s a very beautiful bark. If you look at the bark, you’ll see it looks like pieces of a puzzle or maybe a leopard type of a look, but it’s spotted and it’s mottled and what this tree does is, as it grows, it sheds its bark. But the reason we care about it today, as we’re talking about the Chumash plant use—and Chumash loved this wood, too—as you can see, looking at these amazing shapes it makes, it’s a bunch of elbows we call them, the bent elbow of the branch. You can see them everywhere. The Chumash liked to take the elbow and carve it out and make bowls from it for containers.

If you try to think about your life without containers, it becomes a really hard thing to do as far as feeding, storing, and preparing food. That’s why I keep saying basketry and containers, because that’s so important to us today; well it was really important to them. Being a hunting and gathering society they needed things to gather their acorns in and keep them airtight or maybe they needed to keep the water in, because they needed to prepare them. When they gathered seeds, they needed really finely woven baskets to hold those little tiny seeds, which carried so much nutrition for them. So bowls were great. They work for grinding just like you have a mortar and pestle. You could use a sycamore bowl for that or for holding your tea, because it’s a non-toxic wood.

We’re talking about artisans who could do amazing things given the right fiber. So they could finely weave a basket so that it’s watertight. They might line it with asphaltum using tar, because tar would also help do that and then they would have a watertight basket. Some of them used tar, some of them were just really good and could get it really tight. If you use the right fibers, they swell when they’re wet, creating that watertight basket.

Tar was an important part; in fact tar was a good part of money as far as Chumash along the coast. Trading was huge in their lives. When we look at our mountains today, we’ve got the 101 and we’ve got a road called Refugio Pass, which is just outside Refugio Beach and that goes up and over the hill into the Santa Ynez Mountains. Well, that’s a really good path that’s been used by the Chumash for centuries. So it was used for trading, and many villages traded amongst each other, and tar was really big for trading when it was a bad year for the plants.
they ate down here—“Let’s go inland and see what we can get with our tar, because tar’s always abundant.”

It’s not a spill. We don’t have the spills unless somebody goes and dumps the oil off here. It’s a natural seepage that comes from the shale. So tar’s really an interesting thing. A lot of people say, “Those darn oil tankers out there, they’re causing all this tar to leak” Yes and no. There is a lot of natural seepage. In fact about three years ago, there was an earthquake off the Channel Islands, and it released a tar blob about the size of a football field. So it was a natural oil spill, but that does happen. So the tar around here is just part of the ecosystem and it was very useful when you needed to glue something together.

They’re beautiful. You’ve got the calla lillies like this one here, the vinca and it’s just a beautiful, this is vinca here, that’s vinca.

This was a very important part of the Chumash culture as well [referring to willow].

VISITOR: Why?

ANN: If you look at the wood, you’ve got a strong wood here, and I’m going to point to this one over here, because it’s a really good specimen of it. You’ve got a nice strong stock here, and when they made their homes, let’s see if I can find that picture of the home again. You’ve got a dome that needs to be built. You need a frame for that, and then you’re going to need flexible wood in order to create—let me see if I can find a better picture of it—so it would bend, and it would create all kinds of shapes with it. So basketry, again we talked about the basketry being so important. Well here’s a picture, you can see the dome shapes, you can see they’ve got a center hole and they’ve got a doorway to the front. These would be anywhere from ten to fifteen feet across in diameter, anywhere from about ten feet high, so nice big rooms. They’d take the willow and they’d create the dome frame. They’d use the thinner pieces to make the rounds, and they’d tie it all together with sinew that you would get from your deer kill. Then they’d take the tule that grew in the marsh and weave a mat, like a shingle if you will, and lay it in each section. It created a watertight home. Then inside you had usually a sand floor with rocks in the center providing a small fire pit. So it’s a really comfortable home to live in. Willow was an important part of creating that home.

Also, with their basketry, when you look at willow twigs, you’re looking at something incredibly flexible. These are just beautifully flexible. Depending on the time of year, there’s a whole system to basket making. What time of year were you going to gather your fibers was really important. They had to be the right consistency. Some of them had to be dried, buried for a year, brought out, boiled, and then worked with. Willow was an important part of basketry. They could use the flexible twigs to provide frames.

They could use the bark for medicinal purposes. They would chew on the bark of the willow to relieve their toothaches, and to reduce their fevers they would make a tea from the bark. Very similar qualities to aspirin. In fact, aspirin has some of the same qualities you’d find in this bark. Scientists have actually linked it to willow bark, because it’s the same type of product that comes out of the willow bark that comes out of aspirin. So it’s a very important part to them and their lives. Like the acorns were, the willows were another huge part of their lives as far as being part of their productivity.
This is our next stop right here at this Chumash crafted picnic table. I’m just kidding. These are brought in by State Parks. These are not Chumash made, but we’ll talk a little bit about what’s so important to this area. Remember we talked about the Chumash having so many different climates that they lived in? They lived in the hot dry valleys. They lived back by Carrizo Plains, which was very hot and dry, very arid. They came over here and they’ve got this moist, temperate little coastline, and here’s the ocean behind us, a huge resource for food and for materials and food and transportation. We talked about the tomol canoe earlier and here was a perfect place to use it to get out to the islands and do some trading with those Chumash. The ocean also provided money, of all things. So here we go—some products of the ocean that the Chumash used. They had abalone shell. Shells were very important to the Chumash people. We have pismo clam, abalone shell, and in this little case you’ll find the olivella shell, and the olivella shell is commonly found. You’re going to find those when you walk along the beach here on low tide. But if you look at this strand of beads here, it’s what they used for money. It was thought that this amount would equal about a dollar or so.

It was the quality of the craftsmanship: What was this made out of, how did they do it, why was it important? Remember we’re working with people who aren’t just surviving now. They’re living a good life. There’s time for them to weave their baskets and become artists with them. As we saw, they put designs on their baskets. They didn’t just throw them together so they could go out and go hunting and gather their food, because they were desperate. They were doing very well, and money became an important part.

They could trade their shell money with the inland people for some things, like obsidian, which was important for hunting, although there are rocks around here they could use. Obsidian is a sharp glass-like rock. It’s a sharp glassy black rock that comes from volcanoes. You would find it near Mono Lake and Mammoth Mountain, that area. So it’s a far hike, you’d have to walk a long way. So you’d trade it, you’d trade it, trade it, trade it. It was very rare, but it was nice to have.

But anyway, they used money for various things, and how they would do it is they’d get a piece of shale and there would be holes drilled into it, as well as a little divot to keep the shell in place. As you can see, they’d cut a circle out of the shell and grind it down using sanding, you know using a stone. They’d sand it down and then they’d drill, using a bone awl, a hole in it, like so. Then they’d drill a little hole in it, and they’d come up with a strand. They’d use something like hemp or some sinew and they’d put their beads together.

Let me show you a picture of a Chumash gentleman who was actually part of the antap cult, and you’ll see he’s beautifully decorated. Here is Rafael Solaris. Rafael Solaris is wearing magpie feathers for a headdress, and he’s got some eagle feathers along his head here. His grass skirt is made from some type of fiber decorated with shells on the bottom usually attached with the tar.

There’s a very special place about twenty miles north of here. It’s Point Conception, and it’s out of our view but you can see as we look up the coastline how it juts out. That is west of us, so the most western point of North America is actually Point Conception twenty miles north. That was a really special spot. It was a sacred spot for the Chumash. They believed when you departed this world, you departed from Point Conception.
Our next stop is this shrub right here, you'll notice it’s got a yellow flower going on over here. I was going to show you the leaves on it. They're usually a little larger than this, and if you look at the flowers, there’s one up here or if we look over here, we've got new ones coming on. Spring has sprung. These are going to be flowering, later turning into berries, and they smell delicious if you want to take a smell of one. All these little flowers will eventually ripen, become berries, and they’re very delicious. They’re kind of a white powdery on a purple berry, and it’s an elderberry. It’s an elderberry tree. We've been talking about the Chumash and plant use all day, and you can’t go by an elderberry tree without talking about the Chumash and plant use, because not only was it edible, the wood on this elderberry tree is actually what they call pith in the center. It’s got a very soft center, very easy to scrape out and hollow around the hard wood.

I’m really glad you guys could come along and I hope you enjoy your stay here. Thanks a lot.