



California State Parks

Video Transcript



Wildflowers of the Coastal Headlands at MacKerricher State Park

My name is Rouvaishyana. I'm a park interpreter. We are at a location that's the south end of the Haul Road. Local people call it the Silver Gate. This area of the headlands extends all the way up to the main part of MacKerricher State Park, about three miles north of us, and then there is a narrow coastal strip that includes some sand dunes that extends another three to four miles north of the campgrounds at MacKerricher State Park. So that the entire park here is a coastal strip that in some places is only a few hundred yards wide but it extends for almost eight to eight-and-a-half miles along the coast. What we are going to be doing today is walking out and looking at some of the incredible displays of coastal wildflowers here that we have on the headlands.

There's just an incredible number of flowers out here on the coastal headlands, and some of them are rare and endangered. We'll look at those a little later today. But I really can't walk through these grasses, and some of these even weedy plants, without paying attention to them. So I thought we'd look first at some of the grasses that we see here. Lots of different kinds of wild grasses. This one that I have in my hand is called ripgut. You might want to feel these ends of the grassy seed heads here.

VISITOR: These are the ones that dogs get stuck?

GUIDE: Well these can get stuck in dogs' hair. But also, if you feel the roughness on this seed head here, this can get caught in animals' intestines when they eat this grass. That's why it's called ripgut.

Then this very small grass in here, if you see heads that look like rattlesnake tails, it's called rattlesnake grass. If you shake it and listen carefully, it even sounds like a little rattlesnake. Why don't you try that?

This flower here is a very common flower. It's actually a weed. It's called wild radish. You'll see it in pinkish or purplish colors like we see here—see it in white. There are some more whitish ones back here. And sometimes this flower even will be yellowish. The flower buds will taste a little bit like broccoli but they have a biting taste to them like mustard. Remember this is wild radish so it'll have a hotness to it, if you would like to try one

VISITOR: Is there a bulb? I mean is there a bulb on the bottom of this like the radish or anything like that?

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GUIDE: Well, there isn't a bulb like the radish, but there is a root. Unfortunately, since it's a wild radish, the root is very woody and tough—really not good to eat.

We're looking at a very small flower that we saw by the edge of the trail here. This is the flower right here. It has five petals. It's got a couple of names. One name is scarlet pimpernel. But it has another name, in the old European herbals, name of eyebright. It's called eyebright because traditionally in the herbal medicine in the old country, a lot of the old countries in Europe, people would take this plant and make a tea out of it. They'd boil it and make it into a tea, let that tea cool to room temperature and use it to wash their eyes. It would take care of bloodshot eyes and tired eyes.

I've been asked a question about these trees that we see off in the distance. These are Monterey cypress. You might guess by the name Monterey that they're not native to this area. But they've been planted here extensively by developers and homebuilders as wind breaks, and they're very effective at that. The shape of the trees is real distinctive. They tend to get this condition where the branches on one side of the tree, on the windward side, where the wind comes off the ocean, tends to blow the branches off or blow the needles off the branches. Then on the downwind side the branches get very long. This condition is called flagging. We can see that these trees down here are extensively flagged and shaped by the wind, kind of like wind sculpted. They're almost like living sculptures in a way. So those are Monterey cypress. They are native to the Monterey Peninsula. You'll find them around Pacific Grove and some of the state parks down in that area.

The yellow flowers that we're looking at here are California poppies. These are a slightly different color than what you might be used to—a lot of poppies elsewhere in California are orange. But these are the leaves. If you'll take your hand lens and look down inside the flower, a lot of times you'll see insects down in there. There are two insects inside this flower. You might get down and just take a look—two or three insects inside this flower here. They're in having a good time eating some pollen.

This little purple flower that's right next to the poppies is another plant that's not a native; it's an introduced plant. You could call it a weed. It's wild geranium. These flowers are so tiny that, again, if you want to just crouch down and look closely in each flower with your hand lens and see if you can count the petals. Don't be fooled. Count five that's good. Each petal's divided into two lobes so it looks like ten, but it's actually five petals.

We have a question about this white foamy stuff on plants that I guess there's no polite word for it, it looks like spit. It's from a bug called the spit bug or spittlebug. The bug is down inside here eating the juices of the plant. But it actually spins this saliva-like material, a kind of mucousy material, around it to protect itself from being eaten. If a bird comes along looking for insects to eat and looks at this stuff on the plant, what do you suppose the bird says?

VISITOR: "Eeew!"

GUIDE: Yeah, exactly. The bird says, "Eeew." It's not interested; it's going to go somewhere else.

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We're looking at a little plant right here. These little red things are its flowers. I know they don't look like flowers. But many plants have flowers with no petals or without other typical flower parts, and this one has no real petals. The plant is called sheep sorrel. Since it's a weed, again, we'll take a leaf off to sample if you like. This is another edible plant, and sorrels taste a little bit sour or lemony. See what you think. If you go to a grocery store you can buy specialty greens, sometimes called French sorrel. It's related to this plant, except the leaves are five to six inches long instead of just a fraction of an inch or two long.

Wild iris or Douglas iris is one of the more showy plants out here—beautiful purple flower that we see right in front of us, long narrow leaves. This is a poisonous plant to eat. But if you look closely at it with the hand lens, you can see not only this wonderful purple color, but a beautiful pattern that almost looks like runway lights on the inside of the petal. And these are in fact like runway lights to the insects. These are basically telling the insect pollinators, "Come on in here—there's pollen in here and nectar for you to drink." And when the insect goes inside—let me pull this up for you, this is actually the petal here—the insect comes down this colored part, which is the sepal on this flower, it gets rubbed with pollen. I don't have any on my finger, but that's what happens to the insect. It's eating its nectar and it gets covered with pollen.

The Native American people of this area—Northern Pomo and Coast Yuki—would take the dry leaves of iris, and other plants as well but iris is a plant that was used often, and make string. The process is really very simple. They would split the leaf along its length like this. In order to make this work one has to select a leaf that's dead but not completely dried out; it still has to have some moisture in it. The process is one of starting to twist the leaf in the middle, and when it begins to form a kink, we'll go ahead and allow that kink to form. I now have two sections of leaf that I'm going to work from. I'm going to take this section and then this section and work back and forth, and the movement is like this. Twist away from me, wrap toward me, twist away, wrap toward. You can see that process just beginning to happen here, making this leaf into a piece of string. If we were to continue this, we could make a long strand of string. This process was used to make everything from ropes to fishing nets, rope ladders, all kinds of things. Other plants, such as the cattail, were used in addition to wild iris, but iris is one of the common plants that was used for string by Native American people here in this area.

We're looking at a plant here that's called paintbrush. Sometimes people call this plant Indian paintbrush. There are actually two varieties here on the coast. There's just the regular coast paintbrush and then there's Mendocino paintbrush, which is rare and endangered. It's a little bit hard to tell these two apart. One tends to be more orange; one tends to be more red. But as we look around us here, we can see that there's a gradation between orange and red. A little bit hard to pick these two flowers apart. But it's one reason that we really ask people not to pick flowers in a state park because there's a chance you might pick something that's rare and endangered.

Let's take a close look at this flower, and I want to point out that these colored portions of the flower that we see here are not the petals. If we look closely at the flower, we can see that at the top of the plant there are a series of leaves, and these parts that are orange that appear to be petals are actually the colored tips of leaves at the ends of the plant. The petals are down inside this sheath, encased in what appear to be colorful orange petals, and the petals themselves are green and inconspicuous. They look like any other plant part. So these are

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the flowers sticking out, and these bright orange things that appear to be flowers are really just leaves. It's kind of like ornamental cabbage—it has these colorful leaves.

Many plants in the coastal environment are fuzzy, and they're fuzzy to keep the leaves from drying out. What fuzziness does is it actually breaks up the wind patterns as wind blows across the leaves. Fuzziness on a leaf serves the same purpose to a leaf that trees do in a landscape. If you're out on open grasslands like we are, and it's windy, we'd feel the wind very intensely. If we were in a forest, the forest would break the wind up and we wouldn't feel it as much, unless you're climbing up to the tops of the trees.

This is sea pink or sea thrift, often find it out here on the headlands. In many cases last year's flower heads, well these are this year's, but last year's flower heads are often still on the plant, dried out. So in a sense they're like nature's straw flowers. If you go to a plant nursery, you'll find this plant sold as *Armeria*, where it's often quite a bit bigger, and you'll see the *Armeria* flower heads maybe two or three times this size. This is a real common flower out here, and there's another patch just right next to us over there.

I do want to mention here that it's normally best when looking at flowers like this to stay on the trail, to just look at the flowers from the trail. It might be very tempting to go wandering out across the meadows to get close up to the flowers, but if everyone did that, pretty soon there would be trails all over the place in the park. Looking around we can just see what a wonderful panorama this is, probably two dozen species of flowers just right here that we're looking at. Then we're going to turn right on this little spur right over here.

Here we are heading into late May, and here's one of the first flowers that generally appears on the coastal headlands during the spring wildflower display. The flower is baby blue eyes—five petals, five stamens.

Growing with the baby blue eyes, and often appearing just shortly after that plant, which again would be March or April and in this case lingering well into May, is a flower called cream cups. As we see here, it's a mixture of white and yellow on the petal, the flower with six petals. If we look inside to try to count the stamens, we find that there are way more than ten so we'll just say many stamens. But there's an insect in here, and it's happily digging away at its meal of nectar. Just getting completely covered with pollen.

This flower is a buttercup. There are many flowers in the buttercup family. This one happens to be poisonous. Legend has it that if you put your face down next to the flower, if this yellow flower causes your chin to glow yellow, it means you like butter. That's why it's called buttercup. Now I never could figure that test out, cause I always figured I could tell if I liked butter just by eating it. What about you, do you know if you like butter? You need a flower to test that? I don't know. I'm not sure why they called it that. That's the name of the plant.

Right here is another yellowish flower in the sunflower family. This is called goldfields. In a moment we're going to be going to the goldfields—not to pan for gold but to see places where this flower is growing in profusion. This one's in the sunflower family, as you noticed earlier. You can see an insect crawling around in here feeding on pollen or actually feeding on nectar, getting pollen on it, standing on its head. This is a little fly. There aren't too many flies that pollinate flowers but this is one of them.

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I've selected just one leaf from this plant that we were just looking at. This is plantain. It's also a weedy plant, or a plant that's not native to the area. But it has a medicinal property. It's a useful plant for us to know. If you've ever been stung by stinging nettle, you know how unpleasant that can be for your skin. If you just take a leaf off this plantain plant and wad it up into a little ball and then squeeze it until it becomes juicy, this juice is an antidote. This green juice that we see here is an antidote to stinging nettle. You just rub it on the part of your skin where you got stinging nettle, and in a half-a-minute or so it'll take the sting away.

We're going to be heading out on this far point over here next, and those coastal headlands are just covered with goldfields. Just like a carpet of yellow, and there are other flowers in there, too. But at some point, if you like, you can lie down on your stomachs and just look out over that, and it will just be like a sea of yellow. It's really a wonderful spot.

In this ordinary looking sandy soil at our feet we see shell fragments and bits of broken stone. But this is actually a Native American midden site. Midden—M-I-D-D-E-N, not to be confused with mitten—refers to an area where there probably was a coastal Native American village close by here in the past. When people had finished eating, the shells from shellfish and so forth, they threw the shells in a certain place that became their dump. That's what we're looking at here. I've found a piece of terracotta stone here that's so smooth and perfectly rounded that it's obviously worked by human hands. This would have been some kind of a grinding tool of some sort, maybe a pestle that would go with a grinding bowl. If we were to spend some time looking through this spot here, we might find pieces of chert, which is a type of metamorphic rock. We may also find arrowhead fragments and things like that, just because this is a place where people put not only the shells of animals they had eaten but also the remains of tools that they were making.

This is ice plant that we're looking at here, probably familiar to a lot of people who've tried to get it out of their gardens or keep it from encroaching on their yards. It's planted by the highway department. There are actually two different species in California that are native to West Africa and to Chile. The highway department likes it because it holds the road banks in place. But from our perspective at State Parks, it kind of takes over and crowds out all the native flowers, native wildflowers. So we have efforts going on in some parts of the park to remove ice plant. At the same time the highway department is planting more. Motel owners are planting it. So it's kind of an ongoing battle with this plant. The seeds aren't transported by the wind but the plant produces a fruit. Ground squirrels and other animals eat those fruits, then they spread the seeds in their droppings all over the place.

Well, even though we're here primarily to look at coastal wildflowers today I can't resist the opportunity to point out some sea birds because they're right here feeding. We have some birds called surf scooters that are right down here in the water, feeding in the surf so they're true to their name. The darker black birds with the white bands on their necks will be the males, and the more brown and tan birds will be the females. There's just a group of them out here feeding in the surf. They'll dive under the water and catch little bits of plankton, or sometimes they'll eat small fishes in the water or larvae of tidepool animals—very common out here right next to the rocks. There's one male in this group that's fairly close to the shore. It looks like he's asleep. He's got his head tucked into his wing. Oh, he just woke up.

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We're looking at the goldfields right now, and we're going to get right up next to it and into it. We've been seeing goldfields on the trail as we walk, but there are just more of them there than anywhere else. This is almost like goldfield capital of MacKerricher State Park. You can really see how this flower gets its name here. Besides looking at the individual goldfields, as we look across this field, you can see that it's just painted yellow, and there are some other flowers in here. There's a few cream cups. I can see some leaves of the lupine. But primarily what we're looking at here is just these yellow goldfield flowers growing as a carpet. A good place to take a picture. As we smell them, we see they smell nice.

VISITOR: Oh they do, they do.

GUIDE: These flowers are in the sunflower family, so they're related to sunflowers and dandelions and lettuce, other plants in that family. One of the characteristics of the plants in that family is that what looks like a flower is actually a head of many flowers. If you look closely at the flower here—look at the outside ring of the things that look like petals—each one of those petals is a flower. Then as we look at the inside of the flower, those things on the inside that appear to be stamens (what we've been looking for inside the flowers all afternoon) are actually separate flowers. So the closer we look, the more complex this actually becomes. So the thing that appears to be a single flower is really a head of flowers.

VISITOR: Now will they get any larger than that or will they stay that tiny all the time?

GUIDE: They stay tiny. They don't get much bigger than this.

Down on the sides of the cliff here we see more of this paintbrush plant, and from here I'm not sure if it's the rare and endangered Mendocino paintbrush or the other one. But either one of them could be there. They could be both growing together. Without really looking at it closer and maybe even doing some microscope work, it's a little bit hard to tell for sure. But definitely more paintbrush. Some sea pink growing down on the sides there, right next to it. A great place for wildflowers here.

As we look down into this little crevice here at the edge of the ocean, at the edge of the cliffs, we can see that there's some kelp that's been washed in by the wave action. And it's being ground up into particles at the base of the cliff here. You see some long stems of bull kelp. On the left side of this cove you see a patch of white particles, and I believe those would be by-the-wind-sailors, which are related to jellyfish, just washing up in large numbers here at this time of the year.

We have a question about this plant here. This is angelica. These are actually last year's dried flower heads, but within the next few weeks to a month or so this plant will send up fresh flower heads for the year and they'll be large dense flower heads that actually look like cauliflower, much like a head of cauliflower for all the world. This plant's related to cow parsnip and to carrots and to other plants in that family. There's actually an old recipe in Europe for making candied angelica stems, and that used to be sold in candy shops throughout Europe. But apparently it takes so long to boil the stuff in sugar syrup that basically what you end up with is just sugar.

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We're watching a seal that's body surfing out here. What the seal will try to do is get just in front of a wave as it breaks, and it'll move its flippers just so that it catches the energy of the wave and gets a little ride in toward the beach. Then it'll come back out and do it again just like a human body surfer.

We get a little bonus at the end of our wildflower tour here. We have this giant tide pool down at the base of the cliffs. We can see the waves crashing over the rocks, filling this pool with water. And on a warm, sunny summer day sometimes this water will warm up enough that it'll feel almost like a bathtub. So this really will be the end of our flower tour.

As you think back on all the flowers we've seen, remember the grasses, the ripgut, the rattlesnake grass, the wild radish, which we tasted, California poppy, wild iris, and most of all the goldfields, which is where we're standing just right above this tide pool. Lots of goldfields all around us out on this grassy bluff.

One of the thoughts that I want to leave you with is that the flowers are really abundant here on the Mendocino coast, but some of these places where flowers live are not so abundant in California anymore, and they're protected in places like state parks and national parks. And we have to do everything we can to protect these flowers because once they're gone from here, they may not ever regenerate anywhere else.

Running Time: 27:10

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