(GUITAR INSTRUMENTAL MUSIC PLAYS)

NAOMI WELLS:  
Hi, I'm Naomi Wells from Bellarine Catchment Network and we're here today at Queenscliff in Victoria. I'm filming this video for Summer by the Sea, an initiative of Coastcare Victoria that attracts thousands of people to activities along the coast each January.

Coastcare Victoria is part of the Department of Environment, Land, Water and Planning. Victoria has a range of coastal habitats from mangrove forests, rocky reefs, bay beaches, and dune systems like this one. Despite these differences, some plants can be found right across the Victorian coastline. Learning about plants is a really good way to connect to your local environment, find out more about cultural heritage, and enjoy being on the coast.

Today, I will be showing you how to identify some common coastal plants that you might find along your coastline. But before we begin our adventure, there are some things to consider. First, make sure that you only walk along designated pathways as we want to reduce as much disturbance as we can. Second, leave only your footprints, and take any litter or rubbish home with you. And third, consider your personal safety. You can do this by keeping sun smart by wearing a hat, a long sleeve top, and reef safe sunscreen. Also take into consideration uneven ground and sharp objects or things like insects and snakes. You can avoid these animals and these hazards by wearing enclosed sturdy shoes.

While all plants have common names, they vary from region to region. But one thing that never changes is a scientific name. And that's why in this video, I'll be using both.

This plant here is called Bower Spinach, or Tetragonia implexicoma. It's a creeper and a climber, liking to grow on top of existing plants or structures. It has fleshy triangle to diamond shaped leaves, small beautiful yellow flowers, that give rise to bright red berries.

This plant is called Karkalla, or Carpobrotus rossii. It's a ground cover, meaning that it tends to grow outwards not upwards. It has angled fleshy leaves and is excellent at binding soil and sand. It has beautiful light purple flowers, that give rise to fleshy and juicy fruits, like this one here.

This here is another ground cover called Hairy Spinifex or Spinifex sericeus. It's named after the fine white hairs that coat the leaves and it is a sand binding pro, using its horizontal runners to stop erosion. Over to my left, we actually have a female version of the plant, and I can tell that because they have those tumbleweed seeds at the top.

This plant here is called Coast Beard-heath, or Leucopogon parviflorus. It's named after the beard-like hairs that cover the flower's petals. It has really dense leaves with a pointed tip, as you can see here, and we actually can see some berries forming right here. And in summer, they turn bright white when they're ripe.

This shrub here is called Seaberry Saltbush or Rhagodia candolleana. It has semi-succulent leaves that are green to reddish and very distinctive dark red berries that form a dense cluster. They're also highly favoured by birds.

This plant here is called Sea Box, or Alyxia buxifolia. It's a slow growing shrub with leathery oval shaped leaves. It has beautiful white flowers that develop into bright red berries that, like coast beard-heath, are favoured by birds.

So there you go. We found some amazing and beautiful plants that you might be able to find in your local area. If you would like to protect these plants and their habitats, consider joining a local environment, or friends-of group. You can do this by contacting your local Coastcare Victoria facilitator.

We all like to visit the beach to surf, snorkel, swim, walk, play, or just relax. But another thing that you can do, is a beach comb. The best place to do a beach comb is within the intertidal zone. This starts from low tide all the way up to high tide and is full of a diverse array of plants and animals. These animals are highly adapted to their environment being constantly bombarded with wind, salt spray, waves, and sunshine.

Before we start, there are two venomous animals that we need to look out for. The first is the Blue-ringed Octopus, and they can sometimes look like white blobs, as they are camouflaged. The other one is the Cone Snail. The best way to avoid touching these animals is to always make sure you can see your hands. If you really want to avoid them, try doing your beach comb with your eyes, and not your hands. So today, I'm gonna show you four different types of animals and tell you a little bit about their lives. So let's go.

So I'm looking for different things in the intertidal zone, from shells, or different other artefacts. They can sometimes be small, so just keep an eye out. You might also see that I'm wearing protective footwear and I'm doing so to keep my feet safe from sharp objects.

(GASPS) Oh, here we go. This is something very interesting. This artefact is from an animal called a mollusc. It's actually within a subgroup called cephalopods and cephalopods include squid, cuttlefish, octopuses, and nautilus. It's very rare to find cephalopods on the intertidal zone alive, but it's more common to find a cuttlefish bone, which is what this is.

So cuttlefish look like squid, but they have a hard, internal shell, that helps them float. When they're complete, they look like a surfboard and they can actually tell you how large the animal was when it was alive. What I love about beachcombing is that I never know what I'm going to find, so every time, it's a special adventure.

Oh, here's something interesting. This is another type of mollusc called a gastropod. Gastropods are commonly known as slugs or snails and look very similar to the ones on land, having a single shell like this. You can find gastropods either as empty shells like this one or living attached to rocks or seaweed. This particular gastropod is called a Moon Snail. It's very common to find moon snails shells on the beach but you can also find their egg masses. These masses are clear, horse-shoe-shaped jelly-like masses that are often confused with jellyfish.

Another really special thing about gastropods is that they can sometimes be predators. Gastropods like the Moon Snail have a specialised tongue called a radula, which is a conveyor belt with spikes on it. When they find their prey such as this one here, they attach themselves to the top and they use their radula to drill a hole into the shell and eat the flesh inside. If you ever find a shell with a perfectly spherical hole like this one, you know that it has been predated on by something like a Moon Snail. So, let's see what else we can find.

This is a good one to find. This is also a mollusc but it's called a Bivalve. They're named that way because they generally have two shells with a hinge at the bottom that open and close like this. Bivalves are not predators like gastropods but instead are filter feeders, using gill-like appendages that come from the top here to find little bits of prey through the water. They're very important in bay environments like Port Phillip Bay as they help clean the water.

Now I'm gonna go near the water to look at the lower part of the intertidal zone and see what we have here.

Wow, this is a great find. So this is actually a shark egg. Sharks can lay eggs like this or they can lay live young. This one is from the Port Jackson Shark. Adults can reach up to 1.65 metres and predate upon things like crustaceans and molluscs using plate-like teeth to crush them. It takes 8 to 10 years for the adults to reach maturity where they lay eight pairs of eggs per year.

What's really special about this is its unique design. So firstly, it's highly camouflaged to blend in with the natural environment and look just like seaweed. Another thing is this screw shape. So this is really cool because the mum will actually grab the egg in her mouth and screw it into a rock crevice to stop it washing away with tides. And that's what gives it the spiral shape.

So there you go, we found evidence of amazing and beautiful marine animals including cephalopods, gastropods, bivalves, and shark eggs. If you would like to see these artefacts well into the future, here are some simple steps that we can all follow.

First, leave only your footprints. Even though these artefacts are beautiful, they need to remain in the living, working intertidal zone.

Another simple step that you can take is to take your rubbish home with you or pick up litter if safe to do so. By reducing the amount of litter, we may reduce the chances of animals ingesting this litter or becoming entangled by it.

Most importantly, take your friends and family out with you on your next beachcomb and share what you learnt today with them.

We hope that you can find all the animals that we did today on your next beachcomb and start your journey to becoming an intertidal zone expert.