Exploring South Australia's Marine Parks

Student Inquiry Cards



Australian Government
Parks Australia

Australian Marine Parks

Government of South Australia
Department for Environment and Water

National Parks and Wildlife Service South Australia

Marine Discovery Centre

Ocean Literacy Principles

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2 The Ocean and Life in the Ocean Shape the Features of Earth
3 The Ocean is a Major Influence on Weather and Climate
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5 The Ocean Supports a Great Diversity of Life and Ecosystems
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Cover image: Giant Australian Cuttlefish, Upper Spencer Gulf Marine Park, Carl Charter

Ocean Literacy Principles

The Earth has one Big Ocean

with many Features



Imagine you are a tiny drop of ocean water. You can travel with waves and currents around the world. Where might you go? What might you pass along the way?

Image: Petrel Cove, St Francis Island, Nuyts Archipelago Marine Park, Shelley Paull

The Earth has one Big Ocean
with many features

The ocean covers most of our planet. We give different parts of it names, like the Pacific, Atlantic and Indian oceans, but all this water is connected. Together, it makes one big global ocean with many different features and places.



If all the oceans are connected, where do you think one ocean ends and another begins?



What different ocean places do you know? Think about beaches, bays, reefs, islands, shallow water and the deep ocean. What might be different about each place?



Use fabric, blocks or loose parts to create one big ocean. Add islands, beaches, reefs, deep water and other features. How can you show that all the water is connected?



Dive Deeper – Find the ocean on a globe or world map. Trace a journey through the water around the Earth. How far can you travel without crossing land?



Ocean Literacy Principles

The Ocean and Life in the Ocean Shape

the Features of Earth



Imagine standing on a beach as wave after wave rolls onto the shore. Each wave picks things up, moves them around and puts them somewhere new. Imagine coming back to this same place many years from now. What might have changed?

Image: Petrel Cove, St Francis Island, Nuyts Archipelago Marine Park, Shelley Paull

The Ocean and Life in the Ocean Shape the Features of Earth

The ocean is always moving and changing the Earth. Waves and currents can move sand, rocks and other materials from one place to another. Living things in the ocean can also help create and change reefs, beaches and coastlines. Some changes happen quickly, while others take a very long time.



How could water be strong enough to change rocks, beaches and coastlines?



Have you ever noticed a beach or coastline looking different? What moved, disappeared or appeared?



Build a small mound of sand in a tray. Slowly pour water from the top and watch where it makes its own pathway. What happens if you pour again?



Dive Deeper – Visit or investigate a coastline near you. Use a magnifying glass to investigate what sand is made of. Look closely for tiny pieces of rock, shell, coral or exoskeleton. Where do you think they came from? How long do you think they took to form?



Ocean Literacy Principles

The Ocean is a Major Influence

on Weather and Climate



Imagine standing beside the ocean. The sun is shining, the wind is blowing and clouds are beginning to form above the water. What might the weather do next?

Image: Petrel Cove, St Francis Island, Nuyts Archipelago Marine Park, Shelley Paull

The Ocean is a Major Influence on Weather and Climate

The ocean soaks up heat from the sun and moves this heat around our planet. It also adds water to the air. This means the ocean plays a big part in our weather and helps shape Earth's climate.



How might the ocean affect the weather where you live?



Think about different times you have visited the coast. Was it hot, cold, windy, calm, cloudy or stormy? What did you notice?



Become the ocean and the weather! Use movement and sound to recreate the energy of wind, high seas, rain, clouds and storms. How many different kinds of weather can you reflect in your creations?



Dive Deeper – Keep an eye on the weather at a coastal place for a week. What happens to the temperature, wind and clouds? What patterns do you notice?



Ocean Literacy Principles

The Ocean Makes Earth Habitable



Imagine Take a slow, deep breath. Imagine every second breath being connected to the ocean; nearly half of the oxygen you are breathing began with tiny living things floating in the ocean! You may be far from the sea, but you are connected to it with every breath.

Image: Petrel Cove, St Francis Island, Nuyts Archipelago Marine Park, Shelley Paull

The Ocean Makes Earth Habitable

Life on Earth cannot exist without life in the ocean. The ocean is an important part of the water cycle and helps control our climate. Tiny living plant-like things in the ocean also help make much of the oxygen we breathe. Even when we are far from the sea, we depend on it.



What does the ocean give us that helps us live?



Could we live on Earth without the ocean?
Why or why not?



Become a drop of water travelling through the water cycle. Rise from the ocean, become part of a cloud, fall as rain and make your way back to the sea.
Act out, draw or build your journey.



Dive Deeper – Discover some of the tiny living things that float in the ocean and help make oxygen. What are they called? What can you find out about them?



Ocean Literacy Principles

The Ocean Supports a Great Diversity

of Life and Ecosystems



Imagine dipping below the surface of the ocean and slowly travelling towards the seafloor. Look above you, below you and into every hiding place. How many different kinds of life might be around you?

Image: Petrel Cove, St Francis Island, Nuyts Archipelago Marine Park, Shelley Paull

The Ocean Supports a Great Diversity of Life and Ecosystems

The ocean is full of life. It is home to tiny living things we can barely see, colourful fish, animals without backbones (invertebrates) like crabs and sea snails, seaweed, seagrass, sharks, whales and thousands of other species. Different ocean habitats provide different places for living things to find food, find shelter and grow.



Where might you look if you wanted to find as many different ocean creatures as possible?



What is the strangest, smallest, biggest or most surprising ocean living thing you know? What makes it interesting?



Use newspaper or recycled materials to create an ocean world filled with different kinds of life. Make creatures that swim, crawl, hide, float or stay in one place. Where will they live? What will they need around them?



Dive Deeper – Research a South Australian ocean species you have never heard of before. Find out where it lives, what it needs to survive and what makes it special.



Ocean Literacy Principles

The Oceans and Humans

are Inextricably Connected



Imagine standing quietly beside the ocean. You can hear waves crashing, feel the sand beneath your feet and see shells and seaweed washed up along the shore. How does this make you feel?

Image: Petrel Cove, St Francis Island, Nuyts Archipelago Marine Park, Shelley Paull

The Oceans and Humans are Inextricably Connected

We are all connected to the ocean. It gives us oxygen, food, resources and places to explore, connect and enjoy. The ocean influences our lives, and what we do can influence the ocean too, so we all have a role in caring for it.



What is your strongest memory of the ocean?



Talk with someone about a special ocean place you have visited. What could you see, hear, smell or feel there?



Listen to a piece of music inspired by the ocean. As you listen, use lines, shapes, patterns and colours to sketch what you hear, feel or imagine. Let your pencil move with the sounds.



Dive Deeper – Find your closest beach, coastline or marine park on a map. What animals, plants or habitats might live there? What makes this place special to the people and animals who depend on it?



Ocean Literacy Principles

The Ocean
is Largely Unexplored



Imagine you are the first person to explore a part of the ocean that no one has ever seen before. What might be hiding beneath the water? What could you discover? What would you name a new species?

Image: Petrel Cove, St Francis Island, Nuyts Archipelago Marine Park, Shelley Paull

The Ocean is Largely Unexplored

Only a small part of our ocean has been explored. There are still many places we know very little about and many mysteries waiting to be discovered. Every year, scientists are making new ocean discoveries. What might future ocean explorers find?



What would you most like to discover in the ocean?



Why do you think some parts of the ocean are so difficult to explore? What might scientists need to help them?



Become an ocean explorer. Create, draw or build something that could help you explore an unknown part of the ocean. Where will you go and what will you look for?



Dive Deeper – Find out about something that has been discovered in the ocean. What was found? Where was it found? What would you like ocean explorers to discover next?



Threats to Our Ocean



Imagine the ocean could speak. What might it tell us?

Image: Sponge Garden on Shipwreck, HMAS Hobart Shipwreck – Encounter Bay Marine Park, Stefan Andrews courtesy Great Southern Reef Foundation

Threats to Our Ocean

A threat or pressure is something that can cause harm or make it harder for plants, animals and habitats to stay healthy.

Our ocean faces many different threats and pressures. Pollution, rubbish, fishing, mining, building and development, introduced marine pests and a changing climate can all affect ocean habitats and the living things that depend on them.

There are many ways we can help protect our ocean. Marine parks are one important way. They help reduce or manage some threats and pressures and activities, giving marine plants, animals and habitats places where they can be protected.



When you hear the words 'threat to our ocean' or 'pressure to our ocean', what comes to mind?



What does a healthy place in nature look, sound and feel like? What does a place that is under stress and pressure look, sound and feel like?



Use a range of materials to create an image or model showing a threat or pressure to our ocean. What is happening? What might be affected? Share your thinking with a small group.



Dive deeper – Choose one threat or pressure to our ocean to investigate. What causes it? What can be done to reduce its impact?

Quote from Porci's Ocean Patrol: Porci explores Marine Parks (and where it appears)

"Our marine environments can face a lot of pressure. Things like fishing pressure, pollution, coastal development, and climate change can all impact marine ecosystems." **2:40**



What is a Marine Park?



Imagine an underwater world filled with swaying seaweed, colourful fish, rocky reefs and hidden creatures. Imagine that this special place is protected so the life within it has a safe place to grow and thrive.

Image: Sponge Garden on Shipwreck, HMAS Hobart Shipwreck – Encounter Bay Marine Park, Stefan Andrews courtesy Great Southern Reef Foundation

What is a Marine Park?

Marine parks are special places in the ocean that help protect animals, plants and the habitats they depend on. They have different zones within them where different activities are allowed. Examples of these are high conservation zones including Sanctuary Zones (state marine parks) and National Park Zones (commonwealth marine parks).

Sanctuary zones or National Park Zones are a bit like an underwater national park, protecting the animals and plants within them from threats and pressures. Marine Parks, Sanctuary Zones and National Park Zones help ocean life stay healthy and give living things safe places to live, grow and thrive.



Why do ocean plants and animals need safe places to live and grow?



What do you think might happen if special ocean places were not protected and pressures were not managed?



Use a variety of mediums such a crayons, watercolour, Sharpies, textas and pencil to create an underwater world poster. Label your poster with words to describe key features.



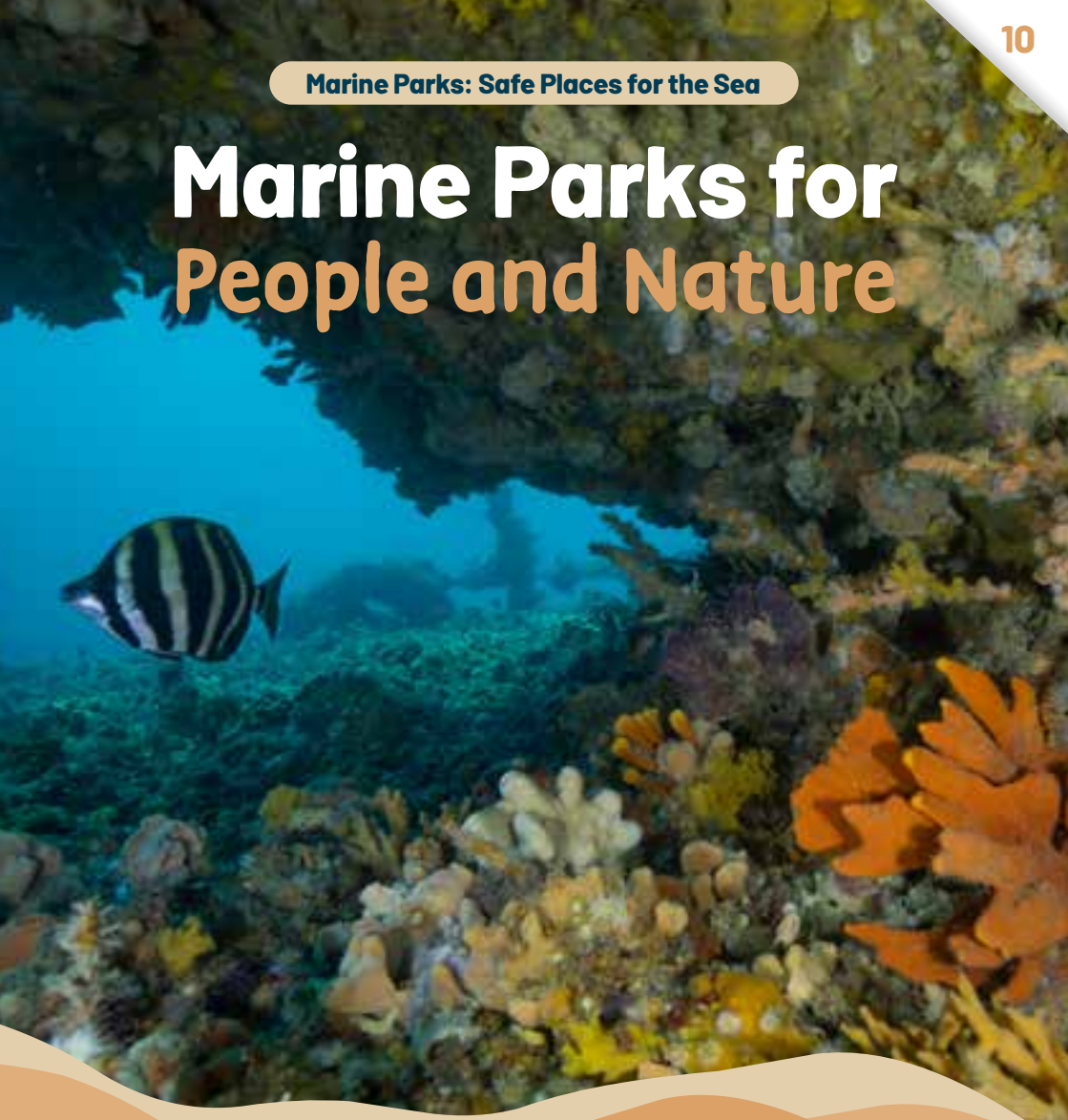
Dive deeper – Find a marine park near where you live. What animals, plants and habitats are protected there?

Quote from Porci's Ocean Patrol: Porci explores Marine Parks (and where it appears)

"Did you know there are special places in the ocean where marine life gets a little extra protection?" **0:08**



Marine Parks for People and Nature



Imagine floating above a rocky reef where fish weave through seaweed forests below, while nearby families explore the beach, surfers ride waves and snorkellers discover life beneath the water. Everyone is sharing, connecting, learning about and caring for the same special place.

Image: Sponge Garden on Shipwreck, HMAS Hobart Shipwreck – Encounter Bay Marine Park, Stefan Andrews courtesy Great Southern Reef Foundation

Marine Parks for People and Nature

Marine parks protect ocean plants, animals and habitats, but they are also places for people to enjoy. Different parts of a marine park can have different rules. People might swim, surf, kayak, snorkel, dive or fish in some places, while other areas give marine life extra protection by not allowing certain activities.



Why do you think some ocean places need more protection than others?



What activities do people enjoy doing in the ocean? Can these activities be pressures on the ocean? How can people enjoy the ocean while also helping protect it?



In small groups or pairs, model a conversation between ocean creatures and humans. Discuss why marine parks are important to each of you.



Dive deeper – Look at a map of a marine park near you. How close is it to you? Can you find different zones? What can people do in each one?

Quote from Porci's Ocean Patrol: Porci explores Marine Parks (and where it appears)

"There are special places where fish can grow, explore, and just be fish. They're like national parks but underwater. They're called marine parks." **1:06**



Why Marine Parks Matter



Imagine swimming through a giant underwater seaweed forest where a leafy sea dragon drifts past, and tiny creatures are tucked into spaces all around you. Imagine if this was one of the only places in the world where some of these creatures could be found. How special is it that you can experience that?

Image: Sponge Garden on Shipwreck, HMAS Hobart Shipwreck – Encounter Bay Marine Park, Stefan Andrews courtesy Great Southern Reef Foundation

Why Marine Parks Matter

South Australia's ocean is part of the Great Southern Reef and is home to thousands of different species. Many are found nowhere else in the world. Leafy sea dragons, Australian sea lions, blue devils, sea snails, crabs, sponges and many other living things all rely on healthy habitats to survive. Marine parks help protect these special places and the life within them.



Why is it important to protect animals and plants that are found in very few other places?



What does an ocean animal need from its habitat to stay healthy and survive?



Choose a South Australian ocean creature and create the habitat it needs. What will you need to include so your creature can find food, shelter, space and everything else it needs to survive?



Dive deeper – Meet one of the amazing species of the Great Southern Reef. Find out what makes it special and what it needs to survive.

Quote from Porci's Ocean Patrol: Porci explores Marine Parks (and where it appears)

"Marine parks help protect not just the animals but the habitats they depend on like reef, seagrass, and coastal waters." **0:57**



Marine Parks in South Australia



Imagine travelling all the way along South Australia's coastline. You pass sandy beaches, rocky shores, islands, reefs and deep blue water. Along the way, you discover marine parks protecting special places above and below the water.

Image: Sponge Garden on Shipwreck, HMAS Hobart Shipwreck – Encounter Bay Marine Park, Stefan Andrews courtesy Great Southern Reef Foundation

Marine Parks in South Australia

South Australia has 26 marine parks. Nineteen are along our coastal waters (state marine parks) and another seven are further offshore in deeper Commonwealth waters (commonwealth marine parks). This means that wherever you live in South Australia, there may be a marine park closer than you think.



Where do you think your closest marine park might be?



Who benefits from having marine parks?
Think about life below the water and above it.



Explore a map of South Australia and go on a marine park hunt. Find as many marine parks as you can. Which one is closest to you? Which is the furthest away?



Dive deeper – Choose one South Australian marine park and uncover its story. Where is it? What is special about it? What lives there? How could you share its story with someone else?

Quote from Porci's Ocean Patrol: Porci explores Marine Parks (and where it appears)

"Here in South Australia, we've got 19 state marine parks along the coast and seven more offshore in Commonwealth waters. That's 26 marine parks in total." **1:20**



Marine Park Managers, Rangers and Scientists



Imagine you are a marine scientist exploring beneath the water. You have a mask, an underwater camera and an important job to do. You need to find out what lives here and whether this ocean habitat is changing. What will you look for?

Image: Sponge Garden on Shipwreck, HMAS Hobart Shipwreck – Encounter Bay Marine Park, Stefan Andrews courtesy Great Southern Reef Foundation

Marine Park
Managers, Rangers and Scientists

Lots of people help look after marine parks. Marine park managers and Rangers help people understand marine parks and make sure their rules are followed. Marine scientists also study what is happening underwater and watch how habitats and species change over time.



How could we find out if a marine park is helping ocean life?



What different jobs might people need to do to look after a marine park?



Become a marine scientist. Look closely at an image of a real underwater habitat and carry out your own survey. Count and record what you can see: fish, plants, animals and other signs of life. What do you notice about this habitat?



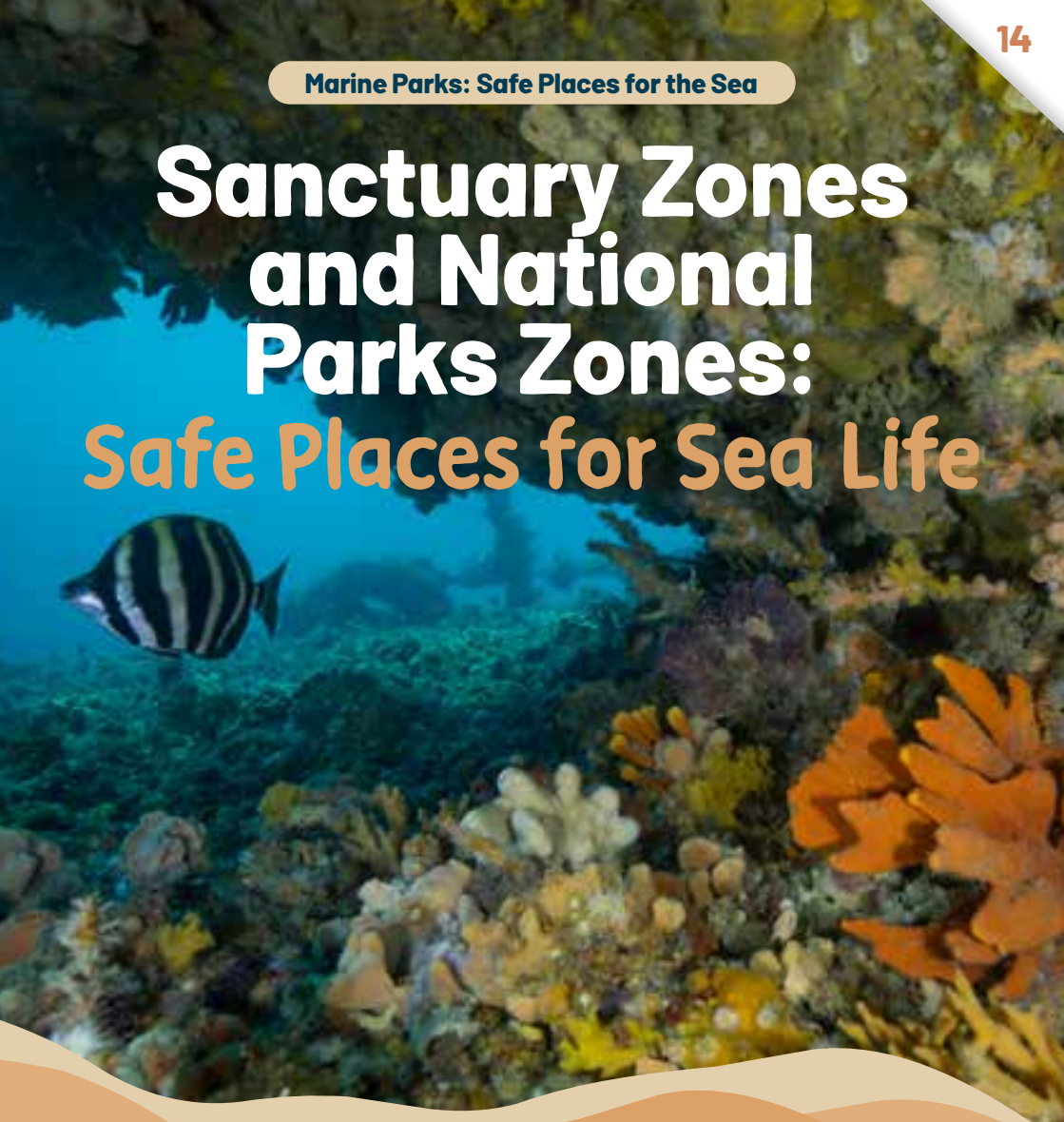
Dive deeper – Discover how real marine scientists study South Australia's marine parks. What tools do they use? What are they looking for? What can their discoveries tell us?

Quote from Porci's Ocean Patrol: Porci explores Marine Parks (and where it appears)

"We monitor marine parks using diver surveys and underwater cameras to track changes in species and habitats over time." **4:08**



Sanctuary Zones and National Parks Zones: Safe Places for Sea Life



Imagine an underwater place where fish can grow bigger, animals can have young and habitats have time to recover. Year after year, the place slowly becomes healthier and full of life. Nature has been given time and space.

Image: Sponge Garden on Shipwreck, HMAS Hobart Shipwreck – Encounter Bay Marine Park, Stefan Andrews courtesy Great Southern Reef Foundation

Sanctuary Zones and National Park Zones: Safe Places for Sea Life

Some parts of South Australia's state marine parks are called Sanctuary Zones. In commonwealth marine parks these are called National Park Zones. These places give marine life extra protection. People can still enjoy Sanctuary or National Park Zones by doing low-impact things like swimming and snorkelling, but fishing and other extractive activities are not allowed. With fewer pressures, habitats and living things have a chance to grow, recover and become healthier.



What might happen when ocean animals are given a safe place to grow and have young?



Why do you think people can swim and snorkel in a Sanctuary Zone or National Park Zone, but cannot fish there?



Create the same underwater habitat twice. In one, imagine lots of pressures on the plants and animals. In the other, give marine life a safe place with fewer pressures. What might change over time?



Dive deeper – Find a Sanctuary Zone or a National Park Zone in a marine park near you. What is protected there? What can people do when they visit? What can't they do and why?

Quote from Porci's Ocean Patrol: Porci explores Marine Parks (and where it appears)

"Sanctuary zones are safe places where marine life can grow, have babies, and bounce back." **3:05**



What is a Habitat?



Imagine you are a tiny ocean creature looking for somewhere to live. Do you hide amongst swaying seagrass, squeeze between rocks, burrow into the sand or shelter beneath seaweed? What would make the perfect home for you?

Image: Diver and Leafy Seadragons, Rapid Bay Jetty – Encounter Marine Park, Carl Charter

What is a Habitat?

A habitat is a home for living things. Beneath the water, habitats can include seagrass meadows, seaweed forests on rocky reefs, sandy seafloors, estuaries and shellfish reefs. Each habitat provides different places for marine life to live and grow.



What does an ocean animal need from its habitat to survive?



How might living in a seagrass meadow be different from living on a rocky reef or sandy seafloor?



Choose an ocean creature and create the habitat it needs. Think about food, shelter, space and places to hide. How will your creature use its home?



Dive deeper – Explore a marine habitat found in South Australia. Who lives there? What makes this habitat a good home?

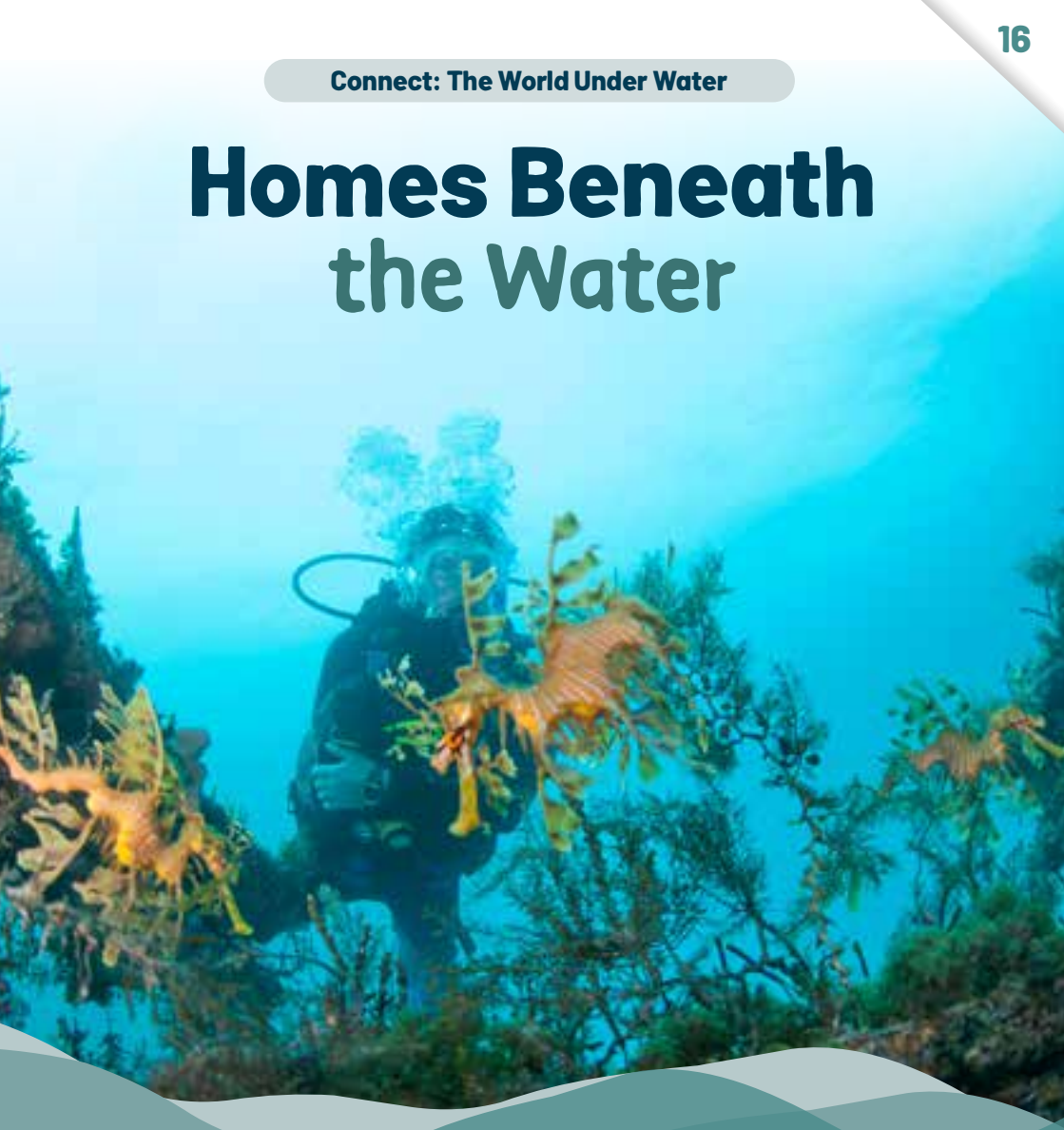
Quote from Porci's Ocean Patrol: Porci explores Marine Parks (and where it appears)

"Every animal here needs a place to live. A cozy little corner of the ocean to call home. That place is called a habitat. And just like us, it's their home." **1:51**





Homes Beneath the Water



Imagine travelling across the seafloor. First you pass through a waving seagrass meadow, then a rocky reef covered in seaweed, and finally a wide sandy seafloor. Look closely. Who might be living in each place? Are they above, within or below the habitat – even buried under the sand?

Image: Diver and Leafy Seadragons, Rapid Bay Jetty – Encounter Marine Park, Carl Charter

Homes Beneath the Water

The ocean is filled with very different kinds of homes. Some are bright and shallow, while others are deep and dark. Some are covered in seaweed or seagrass, while others are rocky, sandy or muddy. Different homes support different communities of marine life.



Why don't all ocean animals live in the same habitat?



Choose two ocean habitats. What is different about them? What kinds of animals might choose to live in each one?



Create a journey through several underwater homes. Use loose parts, fabric, natural materials or construction pieces to make each habitat different. Which species will you add to each one?



Dive deeper – Find photographs of different habitats in a South Australian marine park. What clues can you find about the animals and plants that might live there?

Quote from Porci's Ocean Patrol: Porci explores Marine Parks (and where it appears)

"Some live in seagrass. Some cruise around rocky reefs covered in seaweed. Others hang out in sandy areas or estuaries." **1:51**





Food Chains and Food Webs





Imagine a tiny creature floating in the ocean. Along comes something that eats it. Then something bigger arrives looking for its next meal! Follow the connections. Where might this food chain lead?

Image: Diver and Leafy Seadragons, Rapid Bay Jetty – Encounter Marine Park, Carl Charter

Food Chains and Food Webs

Ocean life is connected through food chains and food webs. Tiny organisms can become food for larger animals, which can then become food for something else. Most animals are connected to many other living things, creating a web of relationships. Healthy habitats help provide the food and shelter that keep these connections going.



What might happen if one part of a food chain disappears?



Can one animal be both a hunter and somebody else's food? What examples can you think of?



Become part of an ocean food web. Choose different marine species and use string or wool to make connections between them. What happens to your web if one connection changes?



Dive deeper – Choose a South Australian marine species and investigate what it eats and what might eat it. How many connections can you discover?

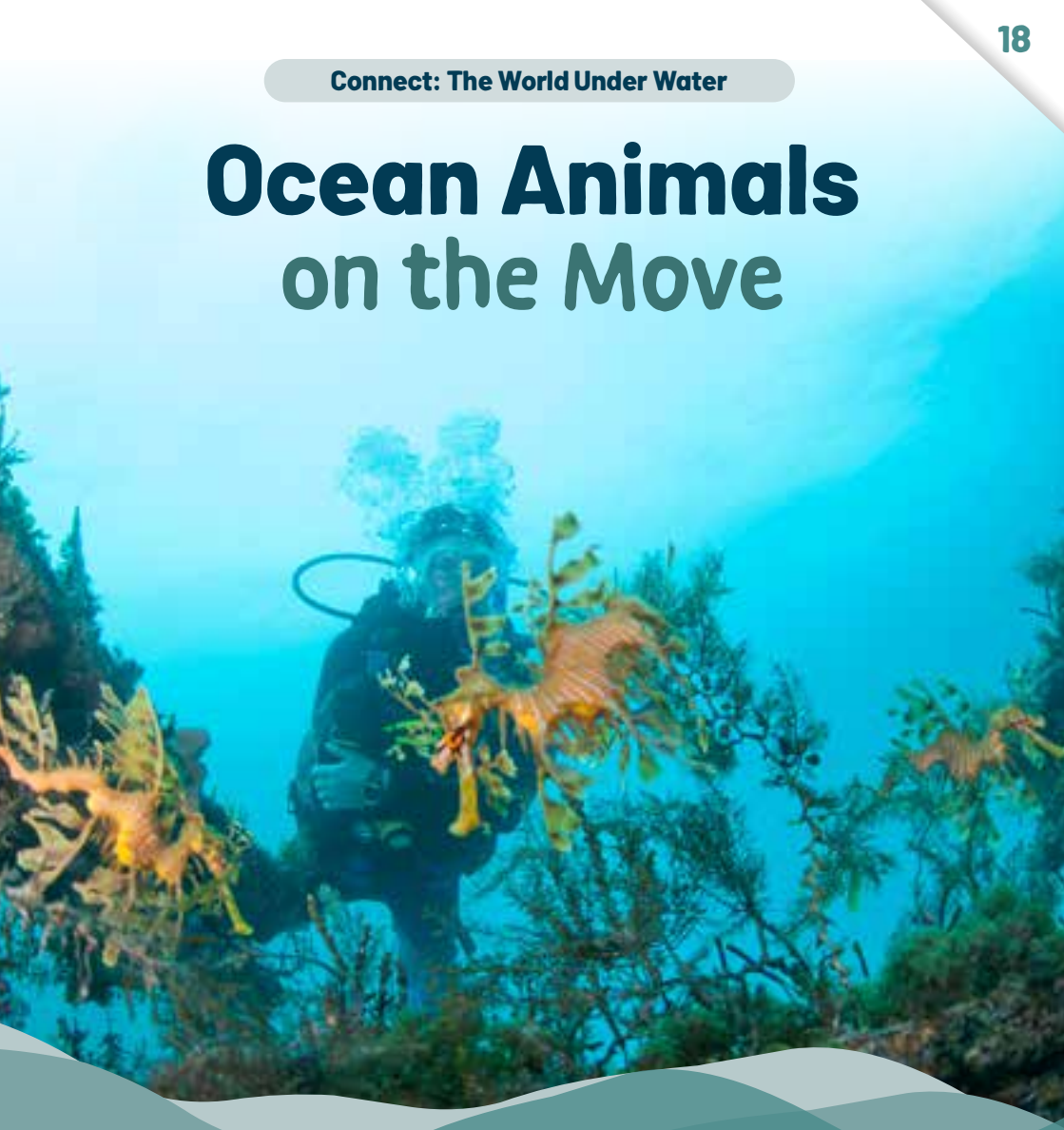
Quote from Porci's Ocean Patrol: Porci explores Marine Parks (and where it appears)

"Different habitats support different species. A whopping 7,500 species to be exact. And they're all connected through food webs and ecosystems." **2:11**





Ocean Animals on the Move



Imagine you are a whale beginning an enormous ocean journey. You travel past beaches and cliffs, through deep water and across marine parks. What might you see along the way? What do you need to survive?

Image: Diver and Leafy Seadragons, Rapid Bay Jetty – Encounter Marine Park, Carl Charter

Ocean Animals on the Move

Not all ocean animals stay in one place. Whales, sharks, fish, birds and other migratory species can travel enormous distances through the ocean to find food, have young or move between important habitats. Their journeys can take them through many different ocean places and protected areas.



Why might an ocean animal need to travel hundreds or even thousands of kilometres?



If an animal travels through many different places, what might it need to stay safe along its journey?

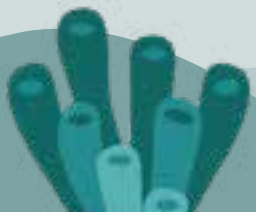


Map the journey of a migrating ocean animal. Use a map, floor space, loose parts or movement to create its route. Add places to rest, feed or have young and any challenges it might meet along the way.

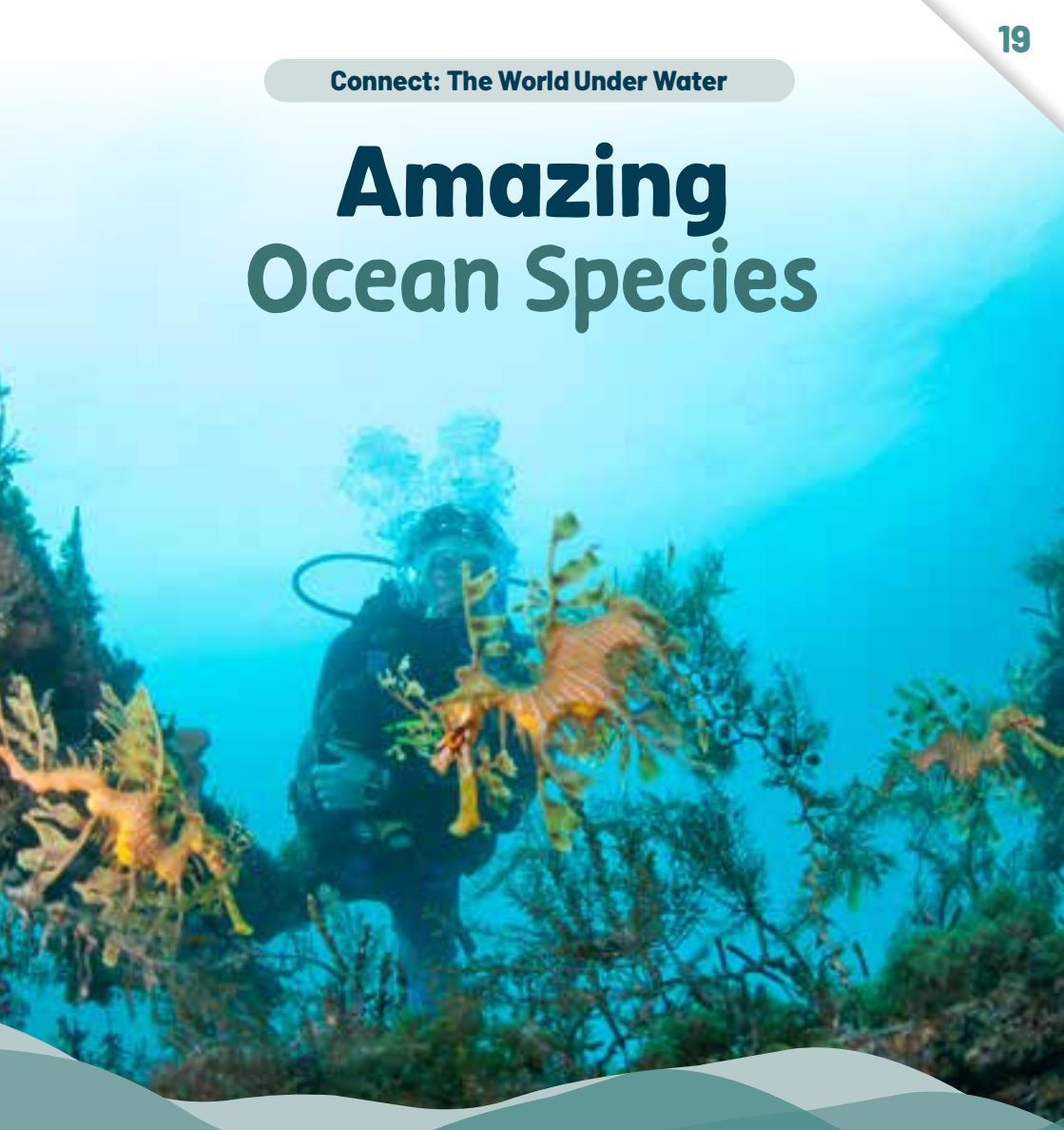


Dive deeper – Choose a migratory species that visits South Australian waters. Where does it come from? Where does it go? How far does it travel?





Amazing Ocean Species



Imagine exploring a rocky reef when something catches your eye. Is it a piece of seaweed moving in the current or a leafy sea dragon hiding in plain sight? Look again. What other amazing creatures could be hiding nearby? Are they colourful or camouflaged? Why?

Image: Diver and Leafy Seadragons, Rapid Bay Jetty – Encounter Marine Park, Carl Charter

Amazing Ocean Species

South Australia's ocean is home to thousands of different species. Some are colourful, some are camouflaged, some are tiny and some are enormous. Many have unusual features that help them find food, stay safe, move or survive in their habitat. Some South Australian marine species are found nowhere else in the world.



What makes an ocean animal amazing to you?



Ocean animals come in extraordinary shapes, sizes and colours. Why might an animal look the way it does?



Choose an amazing ocean species and explore how it moves. Does it slither, glide, crawl, float, dart or drift? How does its body shape, colour and behaviour help it survive?



Dive deeper – Meet an amazing South Australian ocean species you've never heard of before. Find out where it lives, what it eats and what makes it special.

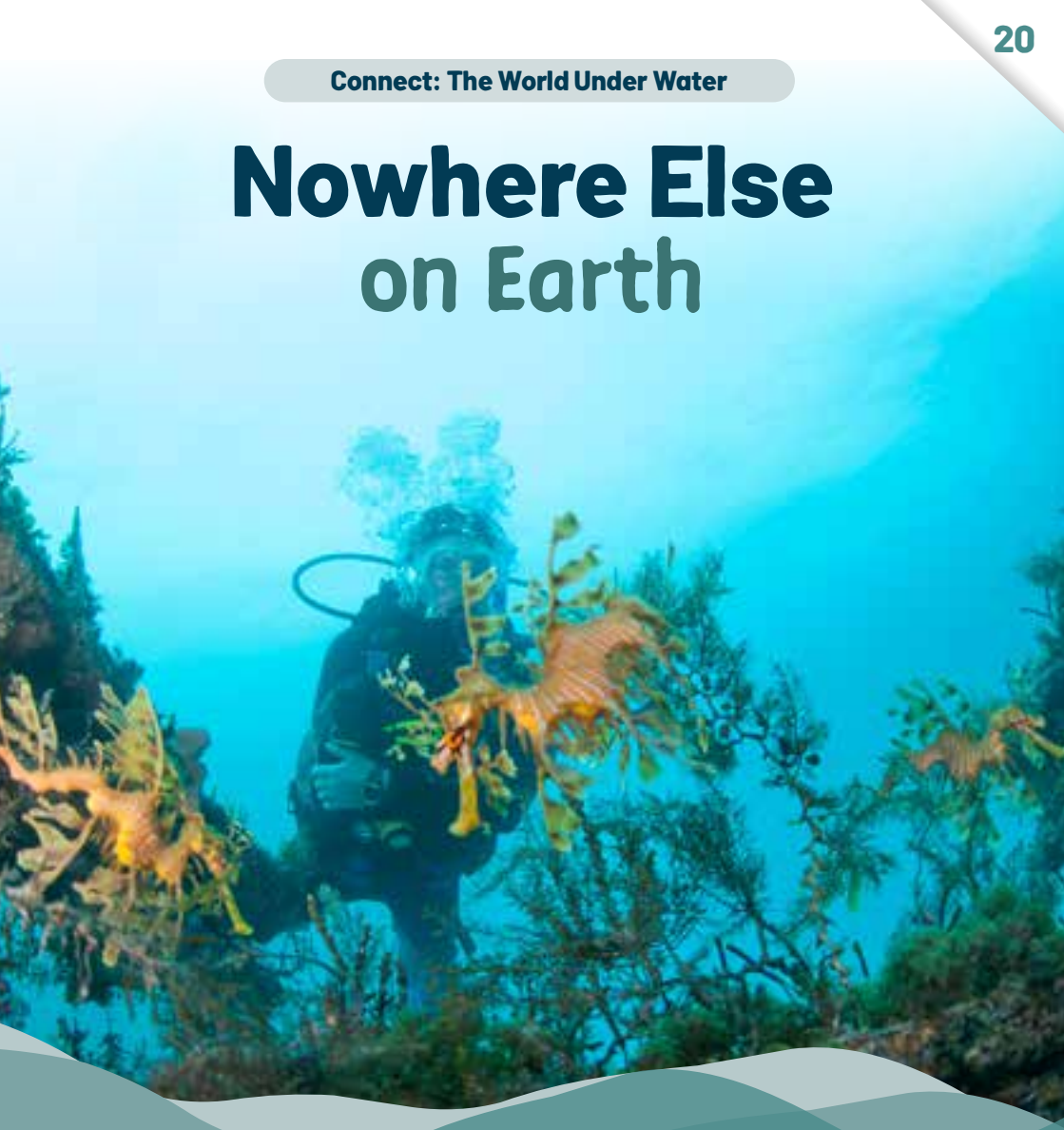
Quote from Porci's Ocean Patrol: Porci explores Marine Parks (and where it appears)

"We're part of the Great Southern Reef; a fantastic underwater world packed with thousands of amazing species. And get this, heaps of them live nowhere else on Earth." **0:08**





Nowhere Else on Earth



Imagine discovering an animal and finding out that it is found almost nowhere else in the world. And it has been living just beneath the water near your home!

Image: Diver and Leafy Seadragons, Rapid Bay Jetty – Encounter Marine Park, Carl Charter

Nowhere Else on Earth

South Australia's ocean is home to more than 7,500 species, and many of them are found nowhere else on Earth. Our cool southern waters, influenced by large currents from the west and the east have helped create an unusual mix of marine life. This means some of the creatures living just off our coastline are truly one of a kind.



What other things that are found 'nowhere else on Earth' can you think of?



How would you feel if your local ocean was one of the only places in the world where a particular animal could live?



Choose some South Australian marine species and create a picture, model, label or mini museum display that helps someone else discover just how unusual our underwater neighbours are.



Dive deeper – Find a South Australian marine species that is naturally found only in a particular place or region (this means it is 'endemic'). Where does it live, and what makes it unusual?

Quote from Porci's Ocean Patrol: Porci explores Marine Parks (and where it appears)

"We're part of the Great Southern Reef; a fantastic underwater world packed with thousands of amazing species. And get this, heaps of them live nowhere else on Earth." **0:08**





Threats to the Environment



Imagine a healthy seagrass meadow full of life. Tiny creatures shelter between the leaves; fish arrive to feed and larger animals move through looking for food. Now imagine something changes in the seagrass. A fish is removed, or pollution or a harmful algal bloom arrives. What else might be affected?

Image: Diver and Leafy Seadragons, Rapid Bay Jetty – Encounter Marine Park, Carl Charter

Threats to the Environment

Everything in the ocean is connected. When one part of an ecosystem changes, the effects can flow through to other living things and habitats. Changes such as pollution, fishing pressure, marine heatwaves and harmful algal blooms can put pressure on marine environments.



A small change in nature can have a big impact. Where have you noticed changes in nature and what has been the impact of these changes?



What changes make life harder for ocean plants and animals? How could one change lead to another?



Build a web of ocean connections using species, habitats and string. Now make one change — remove a habitat, species or food source. Follow the strings. What else is affected?



Dive deeper – Investigate a change that has affected South Australia's marine environment. What happened? What was affected? What connections can you find?

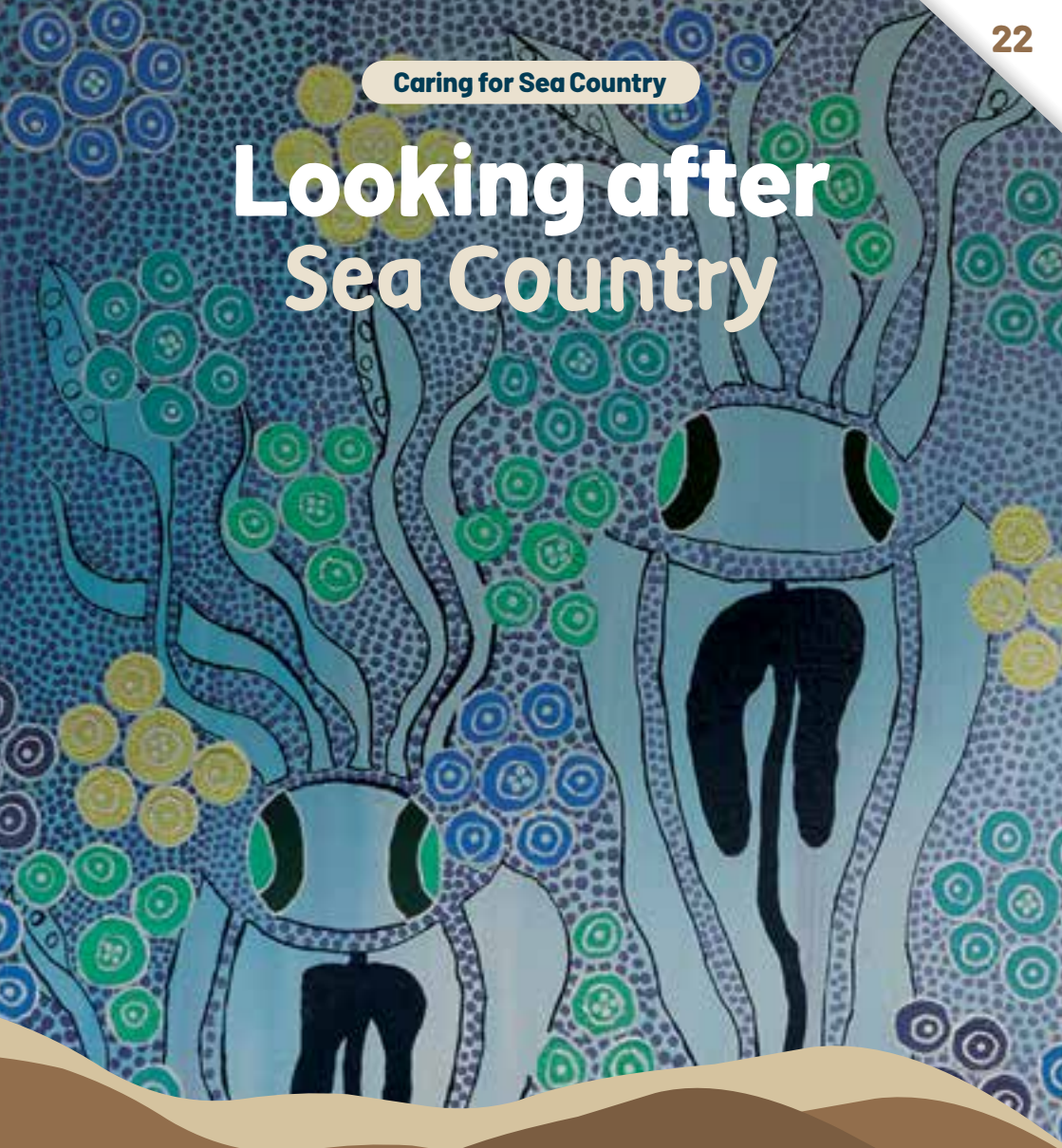
Quote from Porci's Ocean Patrol: Porci explores Marine Parks (and where it appears)

"Events like harmful algal blooms affect marine life here in South Australia. And when something is taken out or changes too much, it has a flow on effect all the way through the ocean." **2:52**





Looking after Sea Country



Imagine standing beside the ocean and looking out across the water. Now think about everything that makes up this place: the water, land, animals, plants, stories and people. A place can mean much more than what we can see.

Image: Squid at Ceduna Jetty, Nuyts Archipelago Marine Park, Painting by Wirangu artist Vernon Penong Miller

Looking after Sea Country

These are also important areas of Sea Country for First Nations communities, who have been living in harmony with and protecting their Sea Country for thousands of years. While you are finding out where your local marine parks are you should also discover what Aboriginal Country these marine parks are on.

We are intrinsically connected to the ocean. This connection can be seen in the air we breathe, the food we eat, our livelihoods, pastimes, spirituality and identity. For Southern Sea Country Aboriginal peoples, the coastline, reefs, islands, estuaries and open waters are far more than geographical features- they are living, breathing places woven into identity, kinship, and cultural lore.



What does it mean to care for a place?



How can knowing the stories and history of a place change the way we think about and care for it?



Explore a map showing your local coastline and marine park. Locate your place and begin to find out whose Country and Sea Country you are on. What places, waters and features can you identify?



Dive deeper – Learn the name of the Traditional Custodians of the Country and Sea Country in your area. Explore local First Nations language, stories and knowledge using resources shared or endorsed by the local Aboriginal community.

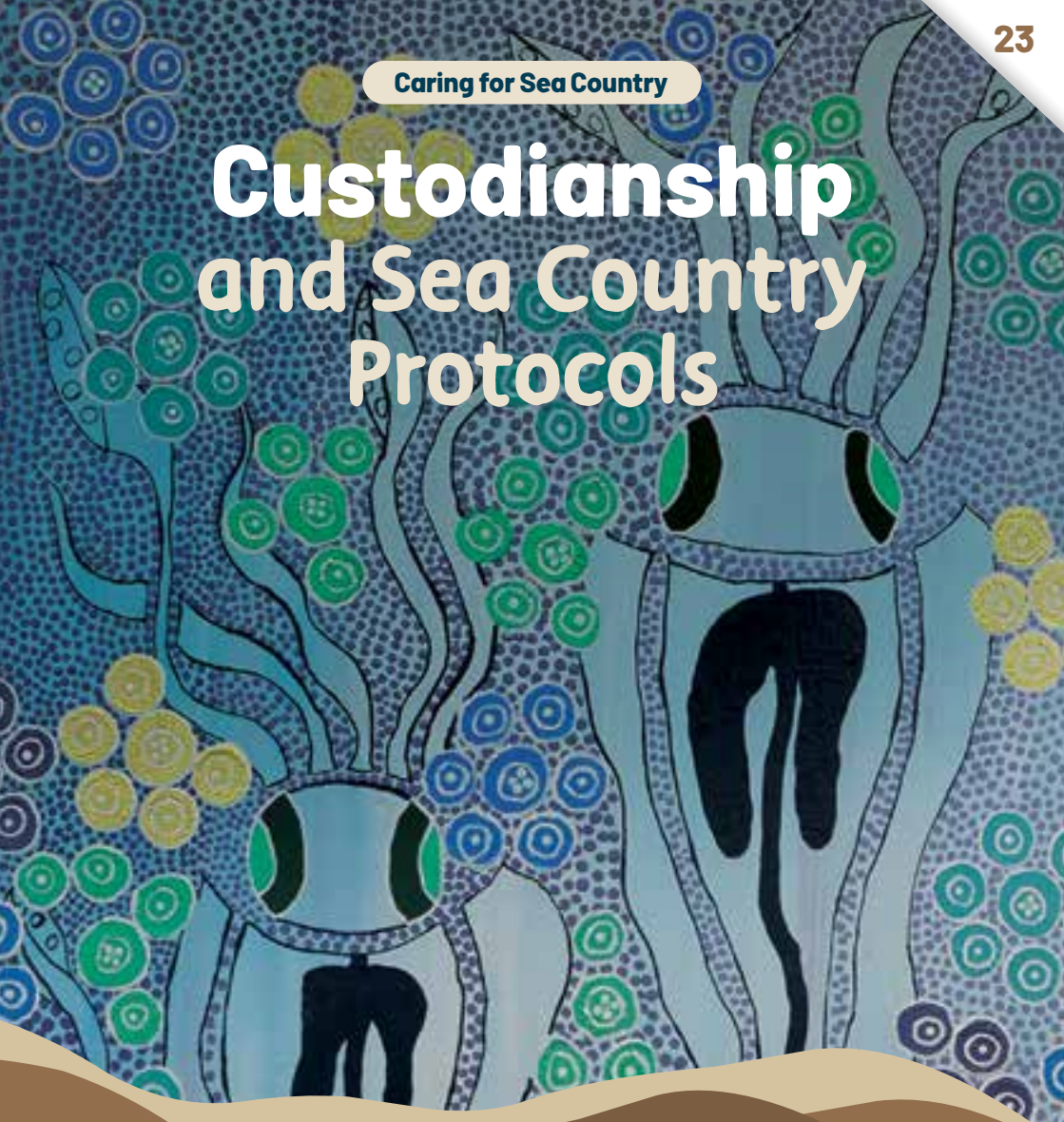
Quote from Porci's Ocean Patrol: Porci explores Marine Parks (and where it appears)

"These places are a part of Sea Country where people have lived in balance with the ocean for thousands of years." **1:12**



Caring for Sea Country

Custodianship and Sea Country Protocols



Imagine someone is visiting a place that is very important to you, your family and your community. How would you hope they would behave? What would you want them to understand? What language would you want them to use?

Image: Squid at Ceduna Jetty, Nuyts Archipelago Marine Park, Painting by Wirangu artist Vernon Penong Miller

Custodianship
and Sea Country Protocols

Caring for Sea Country includes respecting Country, culture and the people who hold knowledge about it. Different Aboriginal Nations and communities have their own knowledge, stories, languages and cultural practices. When we visit, learn about or share stories of Sea Country, it is important to listen, learn and show respect.



What does showing respect for a place look, sound and feel like?



Why is it important to learn from the people who belong to and know a place?



Create a Caring for Place agreement for somewhere you or your class know well. Think about how you will enter, explore, listen, learn and leave the place. What actions show care and respect?



Dive deeper – Find out about the appropriate ways to learn about Country and Sea Country where you live. Seek out local Aboriginal organisations, knowledge holders and community-approved resources. Whose voices should we listen to when learning about this place?

Quote from Porci's Ocean Patrol: Porci explores Marine Parks (and where it appears)

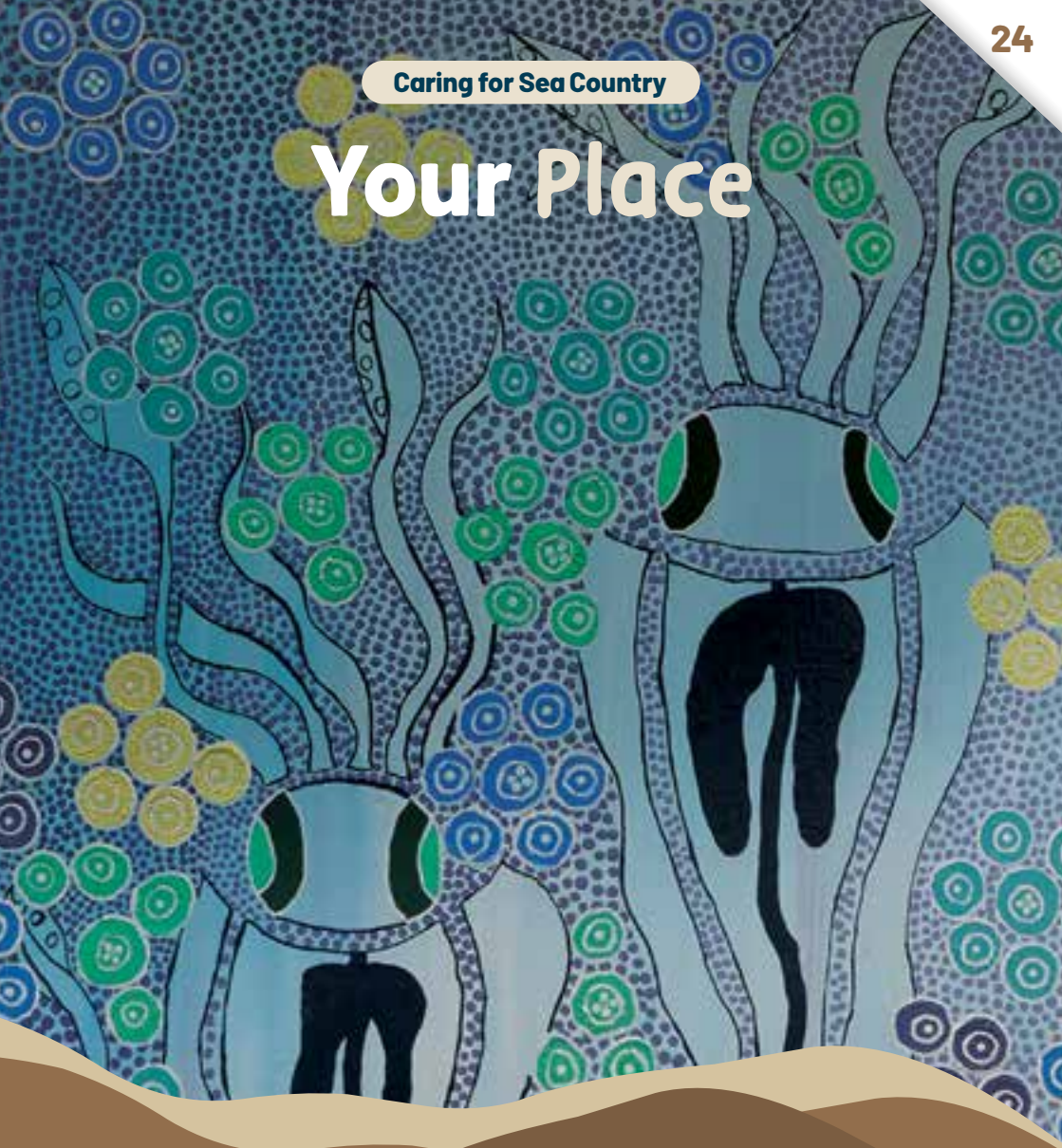
"These places are a part of Sea Country where people have lived in balance with the ocean for thousands of years." **1:12**





Caring for Sea Country

Your Place



Imagine looking at South Australia from high above. Find where you live, then follow the land until you reach the ocean. Where is your closest marine park? What might be happening beneath its water right now?

Image: Squid at Ceduna Jetty, Nuyts Archipelago Marine Park, Painting by Wirangu artist Vernon Penong Miller

Your Place

Wherever you live in South Australia — Adelaide, Fleurieu, Yorke or Eyre Peninsulas, the Far West Coast, Kangaroo Island, the South East or somewhere in between — the ocean is part of your bigger story. There are marine parks all along and beyond our coastline. Getting to know your local marine park is one way to begin caring for it.



What do you already know about the ocean and coastline near where you live?



What makes a place feel like *your place*? Is it somewhere you visit, know about, care for, have memories of or something else?



Map a journey from your school or community to your nearest marine park. Add the places, habitats, species and other features you discover along the way.



Dive deeper – Uncover the story of your local marine park. What is it called? What Sea Country is it part of? What lives there? What makes it special? How is it being cared for?

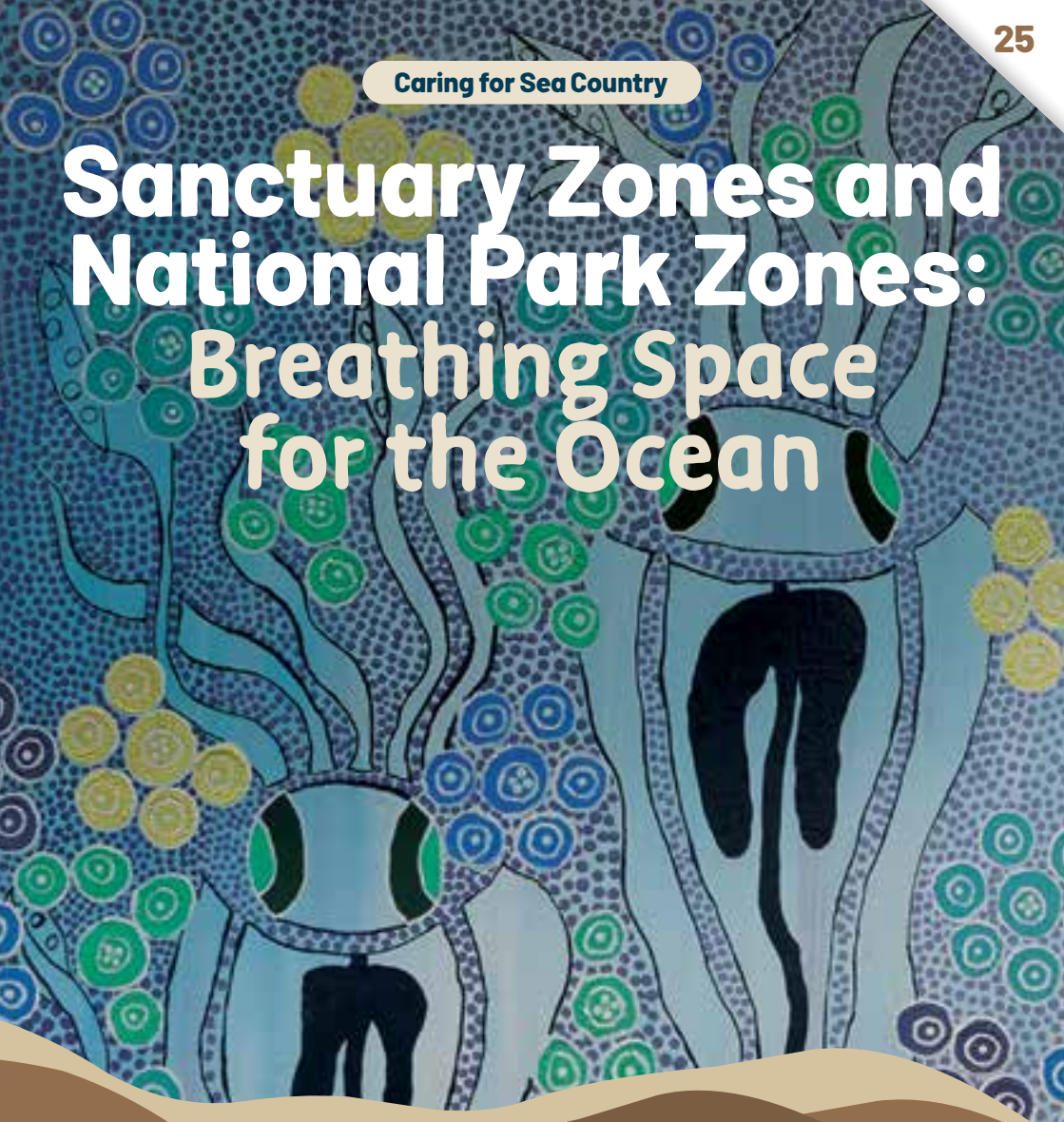
Quote from Porci's Ocean Patrol: Porci explores Marine Parks (and where it appears)

"Wherever you live, ocean patrollers, there's probably a marine park not too far from you. How cool is that? Have you been to yours?" **1:39**





Sanctuary Zones and National Park Zones: Breathing Space for the Ocean



Imagine a place where you feel safe, calm and protected. A place where you have space to rest, grow and just be. Sanctuary Zones and National Park Zones are a little like this for ocean life.

Image: Squid at Ceduna Jetty, Nuyts Archipelago Marine Park, Painting by Wirangu artist Vernon Penong Miller

Sanctuary Zones and National Park Zones:
Breathing Space for the Ocean

Sanctuary Zones and National Park Zones are special places inside marine parks where ocean life gets extra protection. People can still swim, snorkel, surf and explore, but fishing is not allowed. This gives plants, animals and habitats more time and space to grow and stay healthy.



Why might ocean animals need places where nothing is taken away?



Why do you think we can swim and explore in Sanctuary Zones and National Park Zones, but not fish?



Create and share what ***sanctuary*** means to you. You might draw, build, make, move, write or tell a story about a place where you feel safe and protected. What might sanctuary look and feel like for ocean life?



Dive deeper – Find a Sanctuary Zone and National Park Zone near you. What lives there, and what can people do when they visit?

Quote from Porci's Ocean Patrol: Porci explores Marine Parks (and where it appears)

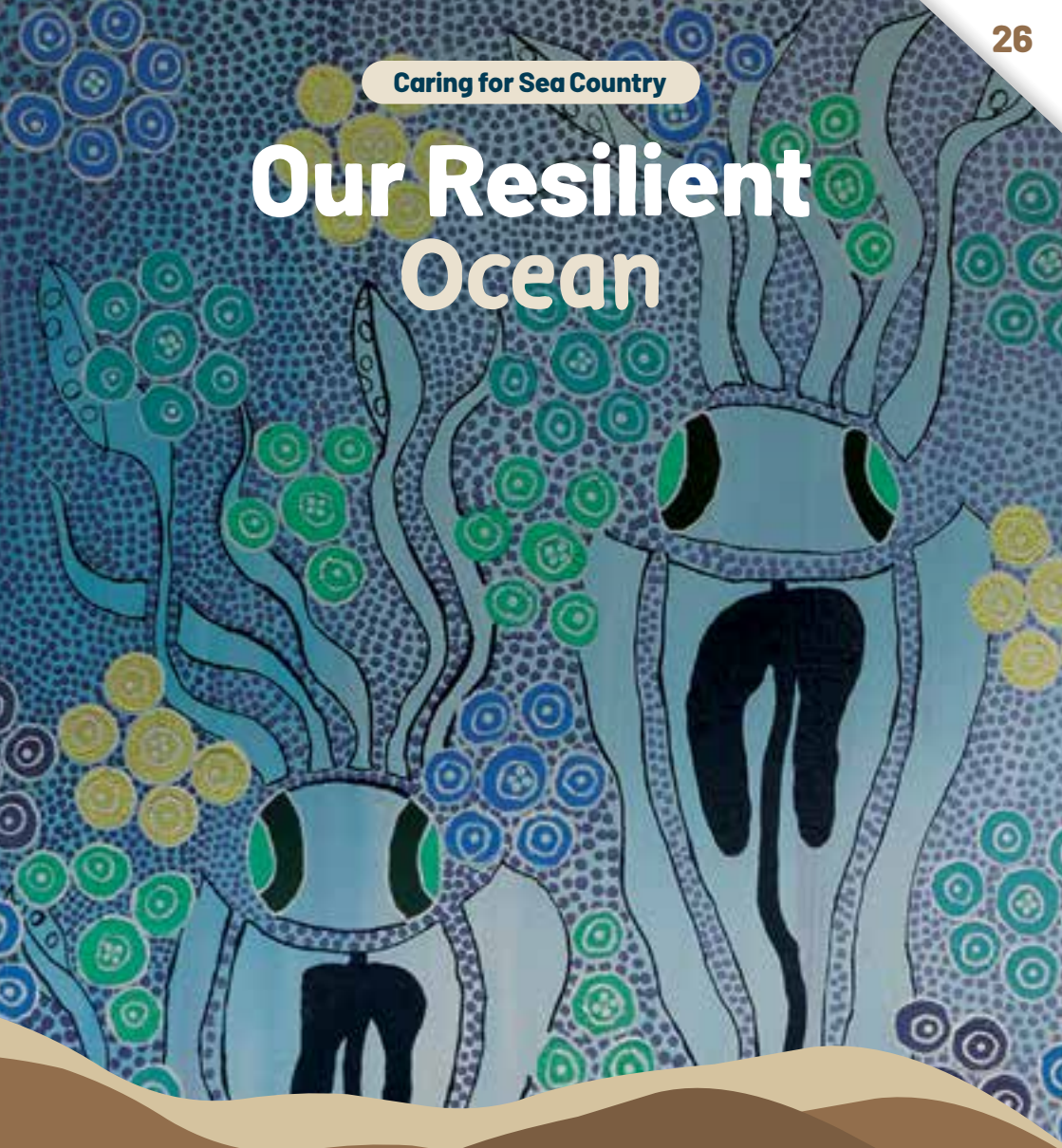
"Marine parks play an important role by reducing some of those pressures. Within marine parks, there are areas called sanctuary zones where activities like fishing aren't allowed. These areas are like safe places where marine life can grow, have babies, and bounce back." **3:27**





Caring for Sea Country

Our Resilient Ocean



Imagine two underwater habitats facing the same big challenge. One is already healthy and full of life. The other has been under lots of pressure. Which might have a better chance of recovering? Why?

Image: Squid at Ceduna Jetty, Nuyts Archipelago Marine Park, Painting by Wirangu artist Vernon Penong Miller

Our Resilient Ocean

Marine parks are important, but they can't solve every problem facing our ocean. Sanctuary Zones and National Park Zones reduce some pressures and give marine life a better chance to stay healthy and recover when challenges occur. Scientists call this resilience. Looking after the ocean takes marine parks, good decisions and people working together.



What do you think it means for an ocean habitat to 'bounce back'?



Marine parks can't stop every threat to the ocean. Why are they so important?



Create a healthy ocean ecosystem with lots of connections. Now introduce a challenge. What happens? What could help your ecosystem stay strong or recover?



Dive deeper – Find out how scientists are helping protect South Australia's marine environment. What problems are they investigating? What solutions are people trying?

Quote from Porci's Ocean Patrol: Porci explores Marine Parks (and where it appears)

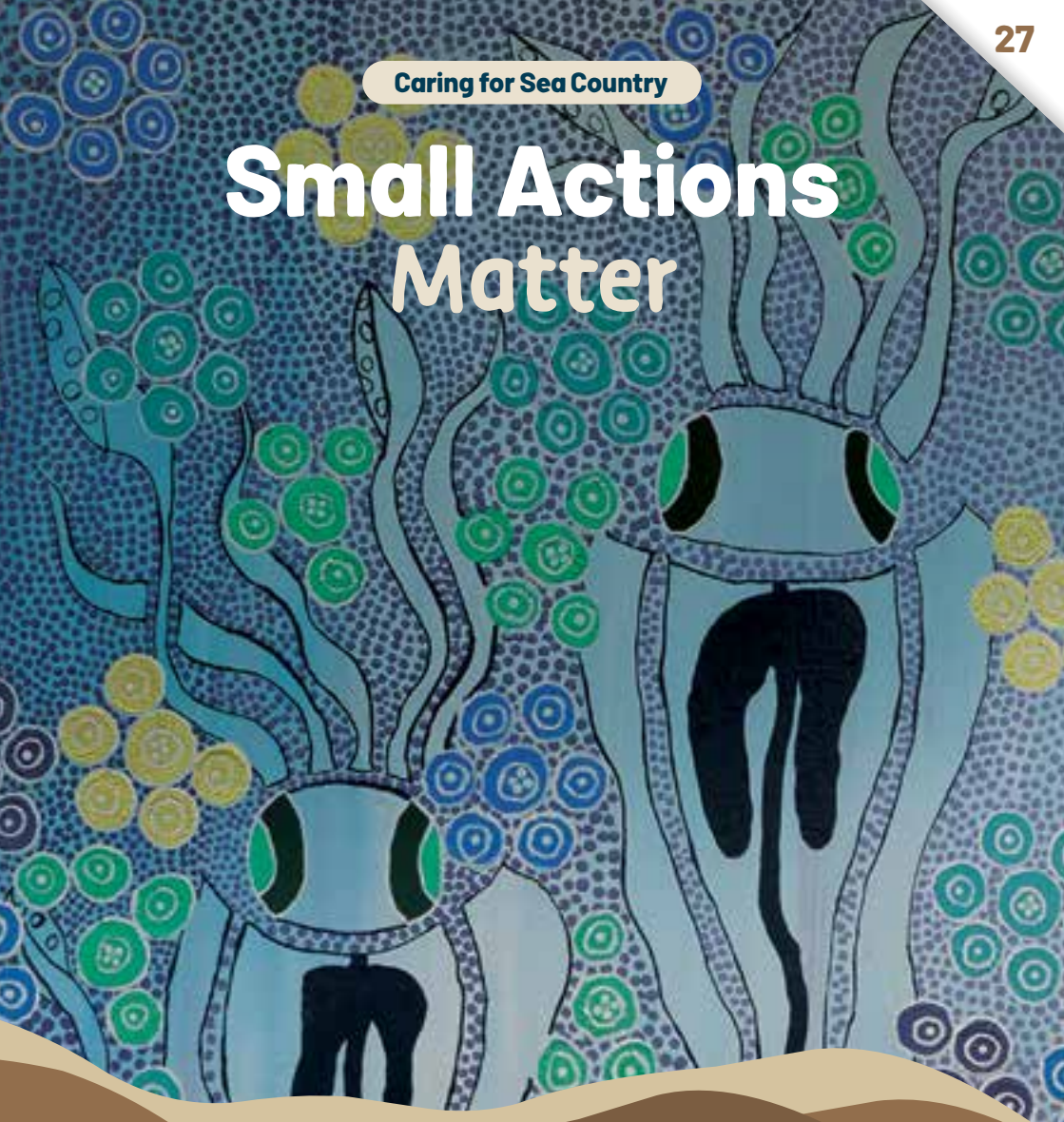
"When nature is given space, it can start to repair itself. Animals can grow bigger and live longer. It's kind of like taking care of your body. When you're healthy, you can fight off a cold more easily. But, if you're already run down, its much harder. We call this resilience, the ability for ecosystems to recover from impacts. Marine parks help build that resilience by reducing stress on the system" **3:29**





Caring for Sea Country

Small Actions Matter



Imagine one piece of rubbish is stopped before it reaches a drain. Then another. And another. Imagine a whole street, school or community doing the same thing. What could all those small actions add up to?

Image: Squid at Ceduna Jetty, Nuyts Archipelago Marine Park, Painting by Wirangu artist Vernon Penong Miller

Small Actions Matter

The things we do every day can affect our ocean. Using less plastic, reducing waste, saving energy, fishing sustainably, caring for waterways and making thoughtful choices can all help. Learning about local marine places and sharing what we know matters too. Lots of small actions can add up to something bigger.



What is one small action you already take that can help the ocean?



Which small actions could lots of people do together? Why might working together make a bigger difference?



Start a *small-action challenge*. Choose one action your group could take and find a playful way to track what happens over a day, week or month. How can you show the difference your actions make?



Dive deeper – Investigate how the choices you make about the use of water, energy or food eventually connect with the ocean.

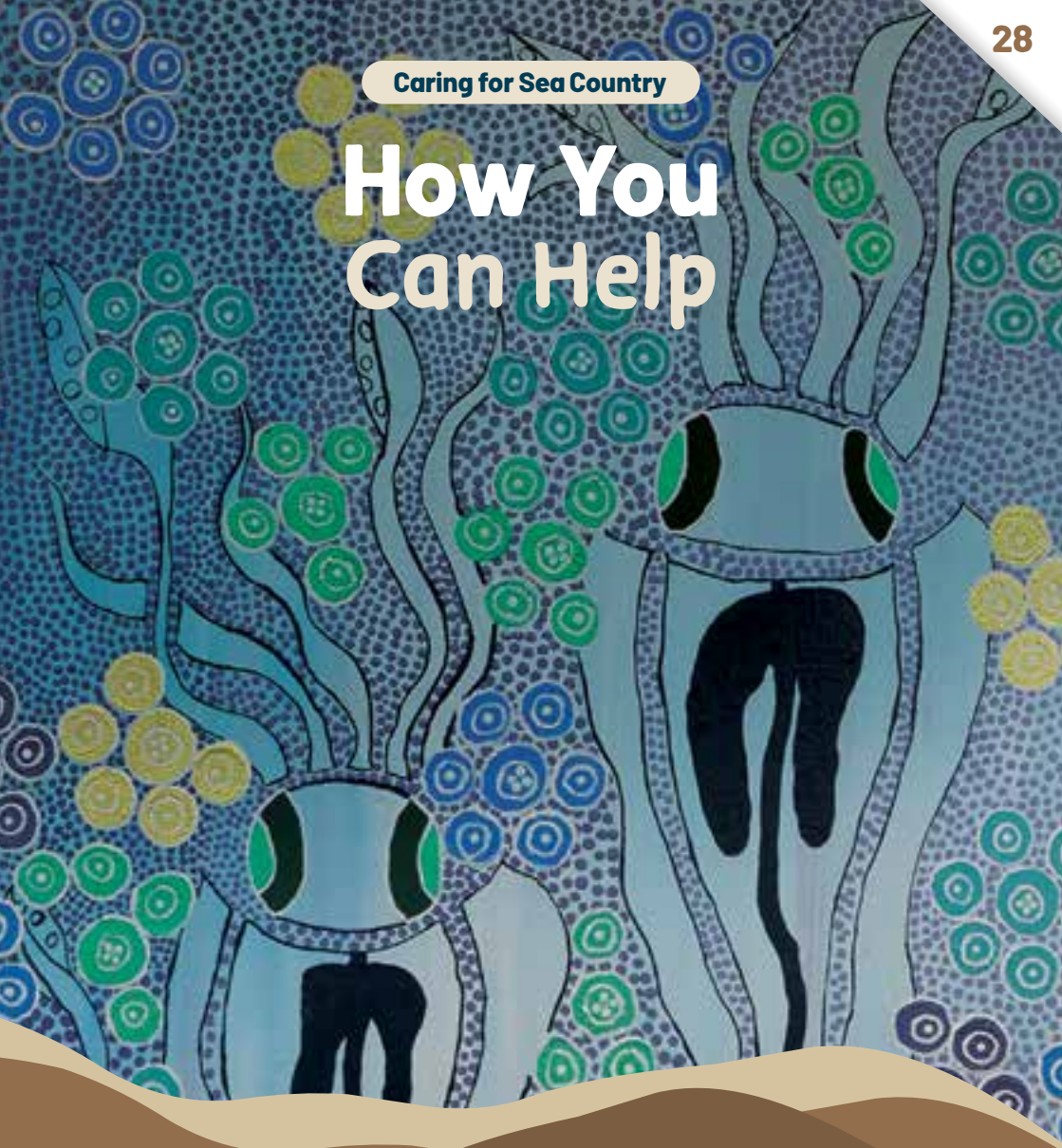
Quote from Porci's Ocean Patrol: Porci explores Marine Parks (and where it appears)

"Together, ocean patrollers, we can help keep our oceans happy, healthy, and full of life." **4:31**





How You Can Help



Imagine you have discovered something amazing about your local marine park – something you think everyone should know. How could you help other people discover it too?

Image: Squid at Ceduna Jetty, Nuyts Archipelago Marine Park, Painting by Wirangu artist Vernon Penong Miller

How You Can Help

Everyone can help care for our ocean, and caring can begin with knowing your place. Start by getting to know your local marine park. Visit it, learn what lives there and understand the rules that help protect it. You can also share what you discover and help other people understand why these places matter.



What is one thing you could do to help people care about your local marine environment?



What could your class, school, family or community do together that might make a difference?



Become an *Ocean Patroller.* Create something that helps other people connect with and care for your local marine park. It might be a sign, song, performance, artwork, game, model, poster or something completely new.



Dive deeper – Find a group or organisation already caring for your local coast or marine environment. What are they doing? Is there a way your school or community could learn from or support their work? How can we all create hope for our oceans?

Quote from Porci's Ocean Patrol: Porci explores Marine Parks (and where it appears)

"Learning about our marine parks and protecting them is something we can all be part of. There's so much to see and so much to discover. And the best part, marine parks are places of hope. Find a marine park near you!" **4:21**





South Australia State and Commonwealth Marine Park Zones





www.marinediscoverycentre.com.au/porci-s-ocean-patrol

This resource was produced by Maria Taylor (Outside the Box Learning) in collaboration with Dr Shelley Paull (Department for Environment and Water).

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This project was a collaboration between Parks Australia, the South Australian Department for Environment and Water, the Marine Discovery Centre, Fastbreak Films and Outside the Box Learning.

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Australian Marine Parks

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