

### Introduction

Welcome to Series 1: Episode 8 of Porci's Ocean Patrol (POP), a short, beautifully animated video that educates Reception to Year 4 students about the 'Great Southern Reef'.

Porci's Ocean Patrol is a Marine Discovery Centre project and can be accessed on YouTube and the Marine Discovery Centre website:

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

These notes for educators are designed to provide an outline of what young viewers can expect to see and discover when they view Episode 8. The notes also provide educators with key Episode 8 information to assist with student learning.

General introductory information relating to Porci's Ocean Patrol, and the presenters who appear in the videos, can be found on the Marine Discovery Centre website.

Let's get started!

### **Series 1: Episode 8** (Run time – 10 minutes and 10 seconds)

Episode 8 begins with a short, general introduction for students to the 'Great Southern Reef', located off the coast of South Australia, and to the creatures that exist from the surface to the bottom of the ocean.

This episode (as with all future episodes) has three major themes:

	THEMES	EPISODE 8 TOPICS	RUN TIMES
1.	Information about the sea creatures living in the ocean.	Western Blue Groper	0:35 to 2:39 minutes
2.	The culture of the Kaurna people from the Adelaide Plains area.	Didgeridoo	2:40 to 5:57 minutes
3.	Tips for keeping the ocean healthy that everyone can do.	Seaweed	5:58 to 8:53 minutes

<sup>&#</sup>x27;Ocean Patrollers' (students) are also invited to send their questions into Porci.

**Question 1** (35 seconds into the episode)

Ocean Patroller, Tex, asks the first question:

"Can you please tell me about the Western Blue Groper"

Porci describes how the Western Blue Groper despite their name is not actually a groper but instead is a type of wrasse. They are the largest bony fish species living on the rocky reefs of south Australia.

Porci tells us how the females and young gropers will have colours of brown and green while the males will have the beautiful bright blue colours. A cool fact Porci tells us about the Western Blue Groper is that some males will begin their life as a female and if the largest male was to disappear then the female will take over and transform into a male!

Porci informs us that the Western Blue Groper has been around for many years, with some of their family roots, stretching back to the Ice Age. They are also a fish that can live for a very long time, up to 70 years! They can also grow up to 1.7 metres long.

Porci then explains how the Gropers are important to keep the ecosystem in balance by controlling the population numbers of sea urchins and crabs. This then prevents their numbers getting too high and eating all the algae off the rocks.

The Western Blue Groper has faced some issues from spear fishermen and overfishing, which has left them on the "Vulnerable" list. This is also due to them not reaching maturity until at least 15 years old and not being fully grown until 30 years old!

Question 2 (2 minutes and 40 seconds into the episode)

Ocean Patroller, Florence, asks the second question:

"Can you show us how to play the didgeridoo?"

Karno explains that the traditional name for the didgeridoo is "Yidaki". He explains that this name came from the first creators of the instrument, the Yungu people who are found in Northern Arnhem Land. Karno then explains that for the aboriginal people of Australia, they only allow the use of the instrument by boys.

Karno then demonstrates how he plays the didgeridoo, as he is demonstrating he explains the 3 main steps.

The first step Karno demonstrates is learning to create rhythms of vibrations with your mouth.

The second step is to create sounds with your voice, like mimicking the sounds of animals such as a dingo or a kookaburra.

The third step is learning to play the instrument for long periods of time. Karno explains that this is done through a method of breathing called circular breathing. This is where you breathe in through your nose while having a continuous airflow and vibration coming out of the mouth.

Question 3 (5 minutes and 58 seconds into the episode)

Ocean Patroller, Anton, asks the third question:



"Why is so much seaweed on the beach?"

Georgie explains how there are over 10,000 different varieties of seaweed in the world, and that in the Great Southern Reef, we have around 1,500 species, many of these are found no where else in the world. Georgie goes on to explain how seaweeds can be grouped into 3 different colours, red, brown, and green. All seaweeds will have a holdfast, this is how the seaweed attaches itself to the rocks, so it does not drift away in the waves.

Georgie lets us know that we can see seaweeds floating on top of the water as they have hollow floats that help them shoot up towards the ocean surface so that they can use the sunlight to grow. Seaweeds also have the ability to grow at very fast rates! The Giant Kelp can grow up to 50cm in just one day!

Georgie also informs us that seaweeds are very good habitat builders. There are kelp forests made from brown seaweeds such as Golden Kelp, Giant Kelp, and Bull Kelp all who work together to form reefs for many different animals to live in, from the smallest of snails to the largest of whales.

Georgie then lets us know that seaweed us used in many everyday items that we might not even know about! From items such as toothpaste, ice cream and even household cleaners.

Seaweed that has washed up on the beach is still important as this is a place where shorebirds can come to feast on small animals that may be living underneath the seaweed. It is also providing nutrients to the plants that are growing further up on the beach in the sand dunes.

#### **POP Quiz Questions**

Following the answers to the three Ocean Patrollers' questions, there are two quick multiple choice POP quiz questions for students. Below are the questions and answers:

- 1. How old can Western Blue Gropers grow?
  - A. 700 years
  - B. 70 years
  - C. 7 years
- 2. How much can Giant Kelp grow in a day?
  - A. 50cm
  - B. 5cm
  - C. 5m
  - D. 150cm

## **Asking Questions**

Student Ocean Patrollers are invited to ask Porci questions. Submit any student questions using the following link:

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https://www.marinediscoverycentre.com.au/porci-s-ocean-patrol/ask-porci

### **Facts for Students**

A fact sheet for students has also been developed, and provided in PDF format, as a support document for 'Porci's Ocean Patrol' – Series1, Episode 8.

## **Activity Sheets**

A range of activity sheets have been developed to complement the video and student facts. These cover Foundation to Year 4 learning levels (with many providing two levels of difficulty) and focus on the English, HaSS and Science learning areas.