

HAURAKI GULF MARINE PARK TĪKAPA MOANA



YOUNG
OCEAN
EXPLORERS

LESSON 8 - MARINE RESERVES

Overview

Take a look at these beautiful protected areas to see just how amazing our moana can be if it is looked after well.

NZ CIRRICULUM LINKS:

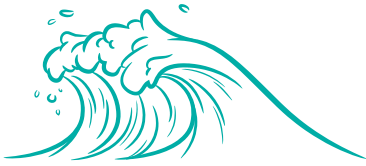
Learning areas:	Achievement objectives:
Te Ao Māori Te reo (language), tikanga (customs and traditional values)	By learning te reo Māori, students are able to participate with understanding and confidence in situations where te reo and tikanga Māori predominate and to integrate language and cultural understandings into their lives ; strengthen Aotearoa New Zealand's identity in the world.
Aotearoa NZ Histories <i>Turangawaewae me te kaitiakitanga - Place and environment</i>	Think about how people use and affect the environment.
English	Listening, Reading, Viewing
Science	Living things and how they interact with the environment. Observing / noticing.

Learning intention

Tamariki are learning to understand what the Hauraki Gulf Marine Park / Tikapa Moana was like before humans affected it, and what it could be like again if the right protection is put in place.

LEARNING SEQUENCE

Based on the Inquiry model



Inspire

Provoke curiosity
and wonder



Explore/Educate

Gather information
Use / apply
learning



Activate

Reflect and act

Success criteria

Students note the differences between marine protected areas and other areas of the sea.

Background information for teachers:

Marine reserves are the ocean equivalent of national parks and mean marine life can breed and regenerate with less disruption from humans.

Marine reserves are 'no take' areas protected from the sea surface to the seafloor where no fishing or removal of any other material is allowed. Diving, swimming, boating, snorkelling and other activities that don't harm marine life are allowed in marine reserves. Much of our scientific understanding of oceans comes from studying protected reserves.

Marine reserves in the Hauraki Gulf currently only make up .3% of the whole Marine Park!

Marine reserves within the Hauraki Gulf Marine Park are:

Cape Rodney-Okakari Point (also known as Goat Island / Te Hāwere-a-Maki), near Leigh

Long Bay-Okura, north of Auckland

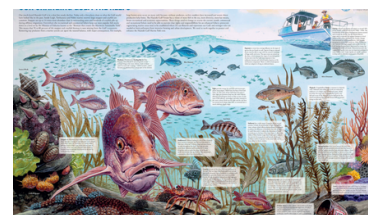
Motu Manawa-Pollen Island, in the upper Waitemata Harbour

Te Matuku, off the southern end of Waiheke Island

Te Whanganui-A-Hei (Cathedral Cove), near Whitianga

Tāwharanui Marine Reserve, approximately 90 km north of Auckland

[Goat Island poster](#)
[Hauraki Gulf reefs poster](#)



LESSON PLAN

Marine reserves

Teachers are encouraged to choose and adjust activities to suit the learning needs and interests of their tamariki.



Inspire

 Allow approximately 15 mins

- **Explore** - [Goat Island Marine Reserve with this 360 video](#). This was Aotearoa's first marine reserve - established in 1975. Move your mouse to look around, up, and down while the video is playing.



Allow 10 minutes to explore this video

- **Watch** - [What is a marine reserve - YOE video](#).

Quiz is 20 seconds long





Educate

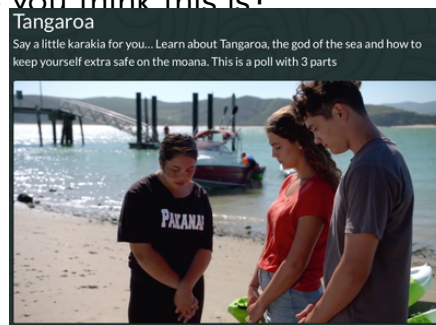
 Allow approximately 30 mins

- **Location** - Locate the first marine reserve in Aotearoa - Te Hāwera-a-Maki / Goat Island - on a map ([google map](#)). Zoom out to find Auckland city.



- **Te ao Māori** - [Watch this Young Ocean Explorers video about Tangaroa](#). How do Māori treat the moana? Why do you think this is?

Video is 1:33 minutes, it is then a poll with 3 parts



- **Watch** this Young Ocean Explorers video - [Goat Island](#). Think - what are we protecting the animals in a marine reserve from? Why do they need protecting?

Video is 1:57 minutes



- **Research** - find out about some of the [species that live in the Hauraki Gulf](#).

- Tāmure / Snapper
- Whai repo / Eagle rays
- Red moki
- Leatherjacket / Kōkiri
- Stingray / Oru
- Blue maomao
- Kina
- Kōura / Crayfish
- Parore
- Spotties / Paketi

What does it look like? What does it eat? Where does it like to live?
What are its predators? What are some special features?



Activate

 Timing will vary

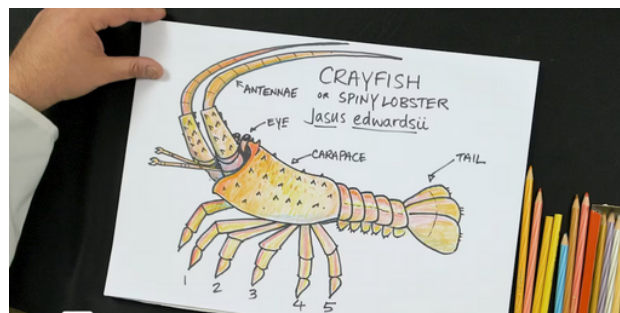
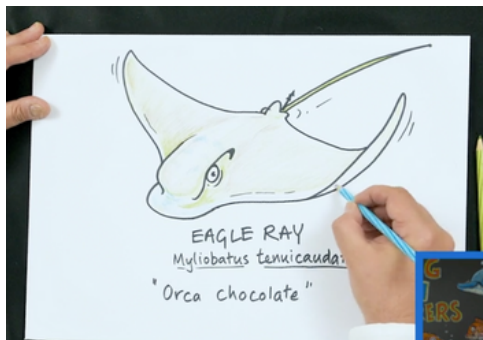
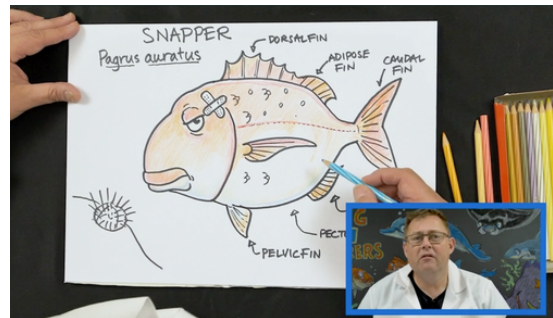
- **Go outside and pick up at least 1 piece of plastic or other rubbish** – make a difference in YOUR community. Log your rubbish data on the

[21 day challenge graph.](#)

Each daily entry goes into the draw to win amazing prizes for your class and school



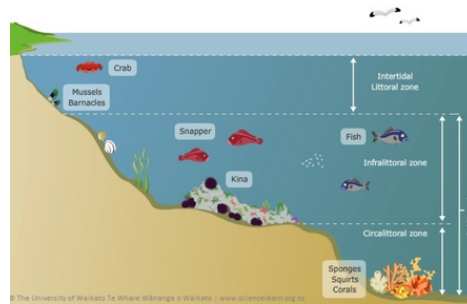
- **Create** a class marine reserve mural. Each student draws a creature that would live in Tikapa Moana in a marine reserve. You might like to try some of these Young Ocean Explorer learn to draw videos to help you. Don't forget to add kelp / seaweed, rocks, sponges etc to your mural. Send Young Ocean Explorers a photo (add it as a digital upload on the 'my classroom' tab on the YOE website) – we'd love to see your work!
- [Learn to draw tāmure / snapper](#)
- [Learn to draw kōura / crayfish](#)
- [Learn to draw whai repo / eagle ray](#)



EXTRA LEARNING IDEAS AND RESOURCES

Learn

- Learn about life on a reef and the different zones. [Life on a reef - Science Learning Hub.](#)



- Hauraki Gulf Forum [posters to explore](#) - some even feature our very own Young Ocean Explorers!
 - [Goat Island poster](#)
 - [Hauraki Gulf reefs poster](#)

People making a difference

- People making a difference - learn about EMR - [Experiencing Marine Reserves](#). Would you like to experience a marine reserve? Anyone can visit one of the marine reserves in Tikapa Moana. [Here are some tips on how to snorkel.](#) If you would like some time with experts, check out the dates of the [EMR events](#).



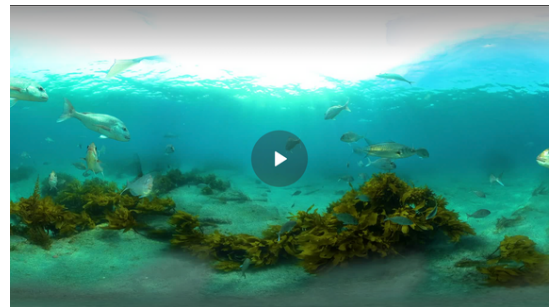
EXTRA LEARNING IDEAS AND RESOURCES

Spot the difference

- Explore these VR videos. Firstly, under a wharf in Tīkapa Moana. Look all around. What do you notice? [NZ Geographic 360 dumped.](#)



- Now compare it to footage from inside a marine reserve. [NZ Geographic 360 snapper city.](#)



Compare the sounds as well as what is different visually. What would cause these difference?

Find out more:

There are many other lesson ideas from Young Ocean Explorers – choose another one. [Young Ocean Explorers](#) You can find out about some of the amazing creatures that live in or visit the Hauraki Gulf. There are also lessons on some of the amazing places in Tīkapa Moana. Or you could explore ideas of how people are connected to the moana / ocean.