

The refresh of *The New Zealand Curriculum* is replacing the Learning Progression Frameworks and Literacy Learning Progressions by incorporating the learning for literacy and communication into the curriculum learning area progressions. To learn more about the refresh, visit [Refreshing The New Zealand Curriculum](#).

## Overview

Marine reserves are protected areas where fishing and the removal of any living and non-living thing isn't allowed. This visual text uses words, maps, and illustrations to provide information about marine reserves in Aotearoa New Zealand. The information is organised in sections that explain what marine reserves are, why they are needed, where they are, and what people can do at them. A table of "marine reserve curiosities" provides examples of some of the extraordinary creatures that travel through marine reserves in Aotearoa or make their homes there.

"Marine Reserves" is scaffolded for extra support: it includes engaging illustrations of sea animals, plants and creatures; explanatory sentence structures; headings as questions; descriptions; cause and effect to make information more accessible; and a table of curious facts.

A PDF of the text is available at [www.schooljournal.tki.org.nz](http://www.schooljournal.tki.org.nz)

## Themes

"Marine Reserves" connects to the theme of "the living sea". It is designed to build knowledge and introduce the important ideas and vocabulary connected with the theme. Other texts in this Journal also focus on this theme. Page 6 of this TSM gives an overview of all the texts in this Journal, including a list of themes for each text. There is also a link to the audio for this text, which provides further support so ākonga can revisit the story as often as they need to.

The theme of the living sea invites ākonga to explore the uniqueness of our marine environments and the ways people interact with them. It encourages ākonga to consider our impact on the sea and the efforts being made to protect it. The texts that focus on this theme emphasise the importance of growing our knowledge and understanding of marine ecosystems so we can ensure that the organisms that live in them can thrive, both now and in the future. Among the texts that focus on protecting the sea in this Journal, there are stories and articles that convey the message that the more we know and understand, the more we can help.

**Other themes that can be explored in this text include:**

- Ecology
- Habitats
- Kaitiakitanga
- Biodiversity

## Texts related to the theme

"The Subantarctic Islands" *School Journal* L3 Aug 2017 | "Tiakina a Tangaroa" *School Journal* L2 Oct 2011 | "The Great Barrier Reef" *School Journal* L4 May 2013 | "Sharks" *School Journal* L3 June 2018

## Strengthening reading behaviours (what to notice)

### Text structure and features

- Visual language features such as labelled illustrations and diagrams, maps, and text boxes that support ideas and information
- **Technical terms**  
*When a habitat is protected, it becomes more biodiverse. A biodiverse habitat is healthier than one with fewer species. It copes better with change, and is more likely to survive challenging events, such as storms or heatwaves. (page 37)*

### Requiring ākonga to:

- find and evaluate information as they read about marine reserves, including information from illustrations, maps, and text boxes, to understand what marine reserves are, why they are needed, and how they help to protect marine ecosystems
- work out the meaning of unfamiliar words and phrases, by using surrounding text and features, such as illustrations and diagrams, and infer the meaning of words using known prefixes and suffixes (for example, *bio-* and *-diversity*).

## Vocabulary

### Possibly challenging words and phrases

marine reserve, habitats, subtropical, unique, marine environments, generations, biodiversity, species, overfishing, climate change, anemones, corals, sponges, crustaceans, molluscs, crayfish, no take, safe haven, snapper, heatwaves, unprotected, off-shore islands, managed, mainland, curiosities, Jason's nudibranch, hydroids, southern sunfish, ambush sea star, ambushed, southern bull kelp, snorkel, kayak, scuba dive, Hector's dolphin

### Te reo Māori

mahinga mātaītai, iwi, hapū, kaimoana, tangata whenua, rātāhuihui, pōhā, rimurapa, maomao

### Names of places, marine reserves, and organisations

Places: Lyttelton Harbour, Auckland, Taranaki, southern hemisphere, Horoirangi, Nelson–Tasman, Northland, Rakiura

Marine reserves: Cape Rodney–Okakari Point (Goat Island), Tonga Island, Tāwharanui, Parininihi, Poor Knights Islands, Te Wharawhara

Organisations: Te Papa Atawhai | The Department of Conservation

## Helpful prior knowledge (pre-reading and introducing the text)

- Some knowledge of marine environments.
- Some knowledge of [threats to marine environments](#), for example, pollution and overfishing.
- Some understanding of reserves as protected areas.
- Familiarity with some of the plants and creatures mentioned in the text, for example, seaweed, sea turtles, seals, penguins, jellyfish, snapper, crayfish.
- Some understanding of the ways plants, animals, and other organisms interact with each other and their environments (ecosystems).
- Some knowledge of the impacts of climate change such as extreme weather events and heatwaves.

## Possible reading and writing purposes

- Understand the purpose of marine reserves and the role they play in protecting the sea
- Learn about the biodiversity within marine ecosystems in Aotearoa New Zealand
- Retell information about another protected area, using text features such as diagrams, illustrations, maps, text boxes, and captions
- Develop an argument for creating a [protected area](#), then write a persuasive piece for a specific audience, for example, ākongā, whānau, or the local council.

## Possible curriculum contexts

This text has links to level 3 of the New Zealand Curriculum in science (The living world) and Social sciences.

## Understanding progress

The following aspects of progress are taken from the [Learning Progression Frameworks](#) (LPFs) and relate to the specific learning tasks below. See the LPFs for more about how ākongā develop expertise and make progress in these aspects:

- Acquiring and using information and ideas in informational texts
- Making sense of text: using knowledge of text structure and features
- Reading to organise ideas and information for learning
- Using writing to think and organise for learning.

## Supporting ākongā for successful reading

- Prompt ākongā to make direct or indirect connections with their own knowledge and experiences of marine environments and/or protected places. The [Te Papa Atawhai Department of Conservation Seaweed 2022 Marine reserves](#) video has visuals that can be used to discuss marine habitats, biodiversity, scientific research, and ecosystems.

- For English language learners, some pre-reading tasks may be useful to support the reading and comprehension of the text, such as a before-and-after vocabulary grid or an [anticipatory guide](#).
- There are some possible vocabulary challenges in the text, as described on page 2. Have ākonga highlight any unfamiliar or challenging vocabulary, concepts, or sentences and discuss strategies for figuring them out, such as using decoding skills, word knowledge, text structure and features, and context clues. Challenging vocabulary could be listed on a shared document, and ākonga could work in pairs to find them in the text and then describe their meanings or examples to another pair. Offer guidance on which words are most important and which are low frequency and not such a priority. Rather than using dictionary definitions, ākonga could use context to work out the meanings of words.
- Some English language learners may need explicit teaching around some of the prefixes in the text, such as “sub” and “bio”. It may be useful to discuss the meanings of these prefixes and how they affect the meaning of the root words. Ākonga could work in pairs to find examples of other words that use these prefixes.
- There are numerous collocations that may be challenging for English language learners, such as “marine reserve”, “future generations”, “world famous”, “climate change”, “special places”, and “challenging events”. These pairs of words are best taught as one chunk, rather than as separate words. For more information on collocations, see the [English Language Learning Progressions Introduction](#), page 40.
- Facilitate a set of Who, What, Where, When, Why, and How cards and ask ākonga to develop questions for each other to answer. Afterwards, discuss the strategies they used to locate information when answering each other’s questions. *Were some questions easier to answer than others? Why?*
- Some ākonga may benefit from listening to the audio before reading and discussing the ideas with others. Share-read with ākonga where necessary and provide the audio for them to revisit the article as often as they need to. This may especially benefit English language learners as there is a lot of topic specific vocabulary. This will help with fluency and phrasing and enable ākonga to make meaning and think critically about the ideas presented.

## Strengthening understanding through reading and writing

Select from the following suggestions and adapt them according to the strengths, needs, and experiences of your ākonga. Most of these activities lend themselves to ākonga working in pairs or small groups. Use appropriate teaching strategies that support your ākonga to complete the activities you select.

- **PROMPT** ākonga to make connections with other [protected areas](#) they have visited or know about (for example, nature, scientific, historic, scenic, and/or dark sky reserves). Encourage them to consider what these reserves have in common, for example, their purpose, what you can and can’t do there, and why they are important both now and for the future.
- **DIRECT** ākonga to the map on pages 38–39 and have them find the marine reserve closest to where they live. Ask them what they notice about where the reserves are located and prompt them to discuss why they think there are many reserves in some areas and not others, for example, the south-eastern side of the South Island.
- **ASK QUESTIONS** to check that ākonga are integrating information:
  - *What pieces of information tell you about biodiversity?*
  - *What references can you find to scientific knowledge, including unanswered questions that scientists might have?*
  - *What examples of unique or endemic species can you find in the article? What is the purpose of including these examples?*
  - *What three things do you think the author would like you to learn from this text?*
- **MODEL** how to use the graphic organiser on page 5 of this TSM to locate and connect information about the need for marine reserves and how they help protect the sea and the environment. Adapt the template for ākonga to use when researching another type of protected area.
- **IDENTIFY** (or ask ākonga to identify) the key concepts and terms associated with marine reserves, for example, protection, habitat, “no take” areas, scientific knowledge. Ask ākonga to use the terms to create a concept map that shows how the terms are connected to the theme of the living sea. Refer to ESOL Online for examples of [concept maps](#) and other [vocabulary strategies](#).
- **DIRECT** ākonga to the information about mātaītai on page 34 and ask them to identify the similarities and differences between Māori approaches to protecting marine habitats and marine reserves, for example, their purpose and the constraints around fishing and taking kaimoana to ensure sustainability and to prevent overfishing. You could also introduce the concept of rāhui, which is a ban on fishing or taking kaimoana that is often put in place when a marine species or habitat is at risk. (The article “He Rāhui” in this Journal explores this further.)
- **DISCUSS** the writer’s purpose in presenting the information through text, illustrations, and maps. Identify other features that make the information engaging and interesting, for example, the additional information in the text boxes and the examples of “Marine reserve curiosities”. Ask ākonga to write a report about a protected area that includes some or all of these features.

- **SUPPORT CRITICAL LITERACY** by discussing whether there are any missing voices in the article, for example, people or groups who are opposed to marine reserves.
- **USE** a text reconstruction activity to build ākonga recognition of text connectives. Copy a piece of text, cut it up into paragraphs or sentences, and mix them up. Ask ākonga to recreate the text in the correct sequence using text connectives across sentences. With a partner, they can discuss the order they have placed them in.
- **MODEL** the correct fluency and phrasing of reading by using a disappearing definition. The first paragraph on page 34 could be useful as it will help with students' understanding of what a marine reserve is. For more information on using a disappearing definition, see [ESOL online](#).
- **SUPPORT** ākonga to synthesise the text in visual form by working in small groups to create a [collaborative poster](#) that summarises the main ideas of the text (or a section of the text).
- **DIRECT** ākonga to page 41 and point out that the instructions in the speech bubbles use imperatives and the second person point of view. This can be challenging for English language learners, and they may need explicit teaching about the use of the verbs that start each sentence and how the subject is often implied rather than stated. Ākonga could have a turn at writing their own rules or instructions, based either on the text or another context that is familiar to them.
- **INSPIRE** ākonga to take ownership of their own environment by considering how they could act as a kaitiaki and beautify an aspect of the school or community. Exploring a local initiative in the community could lead to an inquiry that also includes discussion and consideration about what has been done traditionally.
- **HAVE** ākonga research a Pacific country that is directly affected by climate change, such as Tokelau, Tuvalu, or Fiji. *How do rising seas, higher water and air temperatures, and changing rainfall patterns affect the marine life and coral reefs? What is being done about this?* Ākonga could create a map or diagram that shows the results of their research.









## Reflecting on the text: “Marine Reserves”

<p>What is a marine reserve?</p>	<p>Why are they needed?</p>
<p>How do they help protect the seas?</p>	<p>Examples</p>

**Marine reserves**

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Exploring a theme: The texts marked with a **T** share the theme of the living sea.

		READING LEVEL	THEMES	CURRICULUM LINKS
	<b>The Sea and Me</b> PERSONAL ESSAY <b>T</b> Dave Lowe began surfing at a young age and later became an environmental scientist. He was one of the first scientists in the world to gather evidence of climate change.	Year 6	Climate change Scientific process/endeavour Responsibility	Science (The living world) English
	<b>He Rāhui</b> ARTICLE <b>T</b> This article examines the rapid decline in scallop numbers due to overfishing and pollution and the efforts being made to recover and save the species.	Year 6	Indigenous knowledge Resource management Kaitiakitanga	Science (The living world) Social sciences
	<b>Marine Reserves</b> ARTICLE <b>T</b> <b>DOWNLOAD AUDIO</b> Aotearoa New Zealand has one of the most unique marine environments in the world. This article explores our marine habitats and reserves and the challenges they face to stay safe, healthy, and biodiverse.	Year 4	Kaitiakitanga Environment Biodiversity Ecology	Science (The living world)
	<b>Fresh</b> STORY <b>T</b> <b>DOWNLOAD AUDIO</b> When Emily goes to the beach on a hot day with her larger-than-life Māmā, she is dismayed at the muddy, polluted beach and that they can't swim. Emily sees Māmā in a new light when she chats in Cook Islands Māori to a large family group, and they begin to dance together.	Year 5	Pollution Resilience Community/whānau Humour	English
	<b>Give Forever</b> ARTICLE Zuhaib Abbas Bangash arrived in New Zealand in 2013 with just a few hundred dollars in his pocket. Eventually, he found a job and a home. Today he owns three kebab shops, and every week he gives away over two hundred meals to people in need.	Year 5	Community Resilience	Health and PE Social sciences
	<b>The Monster That Swallowed the Moon</b> STORY Once upon a time, there lived a hero by the name of Finch. Finch wasn't a super-hero kind of hero, with muscles on muscles. Finch was the everyday kind – the sort that does all they can and hopes it will be enough.	Year 6	Fairy tales Courage Responsibility	English Health and PE
	<b>The Stinging Moon</b> POEM A poem about finding a jellyfish.	Year 5	Observing nature	English
	<b>Draining the Swamp</b> STUDENT WRITING In their search for a new home, a group of pūkeko encounter massive metal monsters and other pūkeko until they find a safe place.	N/A	Environment	English