

# Undersea Gardens

by Julie Ellis

## Overview

This report provides information about seaweeds found in New Zealand waters and how they are used. There is a quiz activity that helps children to apply knowledge from diagrams to actual examples. The rich content means that this text is best read over more than one session and shared before being used for guided reading. There is an audio version on the Ready to Read CD *Readalong 2005*.

## Suggested purposes

This text supports the comprehension strategies of forming and testing hypotheses, asking questions, summarising main ideas, and analysing and synthesising (exploring the features of non-fiction texts). You could also use this as a reference text with older readers.

## Text features

(Focus on only one or two per session.)

- the concept of “undersea gardens”
- the many facts about seaweeds
- the use of specific examples
- the report structure (the introduction, the sections on different aspects, and the conclusion)
- the non-fiction text features:
- the quiz on page 5
- the Māori content
- the inclusion of historical material
- the compound words “fingernail”, “holdfast”, “necklace”, “Seahorses”, “seaweed”, “sunlight”, “undersea”, “waterproof”.
- the contents page
- the index
- the section headings
- the subject-specific vocabulary
- the use of bold print to indicate new words
- the inclusion of definitions and explanations
- the use of diagrams, photographs, and illustrations, including close-ups

## Possible challenges

- the idea that seaweeds are not plants
- the large amount of new information
- the different ways the information is presented (through body text, text boxes, photographs, illustrations, and diagrams)
- the subject-specific vocabulary.

## Introducing the text

(Choose the suggestions that best fit your purpose for the reading and the needs of the group.)

Bring in some seaweed for the children to look at and feel. Encourage them to share what they know about seaweed.

Focus on the cover. Ask the children to read the title and the author's name. *Are there really gardens under the sea? Do these look like any plants you know? What can you see in the top right-hand corner? Why do you think it's there?*

You could bring in some seemingly unrelated items, as on page 13 (paint, shampoo, and an ice cream container). *What do these items have to do with undersea gardens? This book will tell us.*

Look through the book together and identify some of the features of a non-fiction text. List the children's ideas so that you can return to them later.

Tell the children that this book includes lots of information about seaweeds and a lot of new words. Identify some of the unfamiliar words in the book (or in the section of the book you intend to read during the session) and talk about their meanings and how to say them.

You could start a "Before and After" chart. Before the reading, list what the children already know about seaweeds and then return to it after the reading, adding what they've learnt.

## During the reading

(Many suggestions are included in this section. Choose those that fit the purpose of the reading and the needs of the group. Allow plenty of time to discuss new ideas and be prepared to spread the reading over two [or more] sessions.)

Contents page – *What is this page for?* Skim the list of headings. *What sorts of things will this book tell us?* Check that the children know what "history" means. As the children read the text, draw their attention to the headings for each section.

Ask the children to read the text silently, pausing often to discuss, summarise, or clarify the information in the text. Be prepared to vary your approach to suit the needs of the children. Don't slow the reading and risk losing meaning by having the children decode all of the interest vocabulary. It may be better to just tell them some words. Reassure them that there is a lot of new information in this book and they don't need to worry about remembering it all because they'll be able to refer back to it.

Page 2 – Check that the children have identified the main idea (the many kinds of seaweeds in the seas around New Zealand).

Page 3 – *Why are some of these words in bold print?* Draw out the idea that the children can expect them to be explained in the text. (There is more information about spores on page 5.) Model the pronunciation of “algae” (al-gee, with a hard “g”). Check that the children understand that algae are not plants. *If they’re not plants, why has the author called the book Undersea Gardens?*

Pages 4 and 5 – Work slowly around the diagram. Model the pronunciation of the subject-specific vocabulary and check that the children understand that the inset pictures (and the photographs on page 5) are enlarged sections of the seaweed. Note the further information about spores. Move to the quiz on page 5. *These photographs don’t look exactly like the diagram. Why not?* Link this back to the information on page 2 (that there are many different kinds of seaweeds). You may need to explain that the stipe in photo “c” has lumps on it but that not all stipes do. Have the children work with a partner to do the quiz.

Pages 6 and 7 – After reading this section, briefly review its structure – first, the three colour groups are named, and then there is general information about each group followed by specific examples. Link the idea of the brown kelp forests to the idea of undersea gardens. (The children will discover more information and an illustration on page 9.)

Page 8 – Ask the children to read the top text box. *Have you seen seaweeds like these?* Tell them that this page has a similar structure to that on pages 6 and 7, where the first part is followed by examples. Clarify that the bottom picture is of a rimu tree, which looks like seaweed.

Page 9 – *What have you found out about seaweeds from this page?* Focus on the right-hand illustration. *What sort of seaweed do you think this is?* See if the children make the link back to the information about kelp forests on page 7.

Page 10 – *Have you ever touched seaweed? What did it feel like? Why is seaweed slime important? What does “wiry” mean?* You may find it useful to have a wire pot scrubber and some cellophane at hand to demonstrate the feel.

Page 11 – Have the children read the page and then talk to a partner about what each animal is and how it is using the seaweed.

Page 12 – *Have you ever eaten seaweed?* Ask the children to read the page and then identify the food in the illustration.

Page 13 – *Remember when we talked about paint and shampoo? Read this page and then talk with your partner about what these things have to do with seaweed.*

Pages 14 and 15 – Check that the children understand that these are images from the past. Allow plenty of time to discuss such features as the idea of catching mutton birds, the inset photograph, the size of the bull kelp pōhā tītī on page 14, and the idea of soldiers and the Second World War.

Page 16 – The woman in the photograph is Dr Wendy Nelson, a world expert on New Zealand seaweeds. (Note the acknowledgment on the inside front cover.)

The index – Help the children use the index to find any sections they would like to have another look at. Encourage discussion and further questions.

Briefly review the non-fiction text features. *How was this book the same as/different from what you expected?*

## After the reading

(Choose only one or two per session.)

Review the non-fiction text features in this book. Talk about how they help the reader. Ask the children questions that are answered in the text (for example, *What is agar weed? Can you name the different parts of a seaweed?*) and have the children practise using the contents page or index to find the information quickly. Talk about how the contents page helps them to find more general information, whereas the index is more specific. Have the children devise their own questions and have a partner look up the answers.

Relate the structure of the text to the children's experiences of writing reports. Identify the introduction, the sections on different aspects of the topic, and the conclusion.

Review the structure of pages 6 and 7. Have the children work with a partner to identify these elements on page 8. Talk about how examples add interest to reports and make the information seem more relevant.

Support the children in identifying main ideas. Photocopy information "bites" from the text and have the children work with a partner to match them with the correct section headings.

Show the children how to create a simple graphic organiser and model how to take notes by summarising or paraphrasing (not copying) the text. The headings for the graphic organiser could be: What Is Seaweed?, Types of Seaweed, and Uses for Seaweed. Show the children how to add to the notes using information from other sources.

Use the information on the graphic organiser to write a paragraph together about seaweeds.

Identify some of the subject-specific vocabulary and create a glossary together.

Have the children "break apart" the compound words in the text and discuss their meanings.

## Suggestions for further tasks

Listen to the audio version on the CD *Readalong 2005*.

Read the article "Karengo" in *Junior Journal 22*.

Try tasting sushi or karengo.

Use the book to identify real seaweed and name the parts.

Draw and label the parts of a piece of seaweed.

Read the book *Sun Bears Are Special (Gold)*, which also features the use of examples to illustrate general points.

Arrange a visit by an expert to answer the children's prepared questions.

Use the library or the Internet to find out more about seaweeds.

Use notes from a graphic organiser to create an information chart about seaweeds.

Encourage the children to find out about their family's experiences (or the recollections of older relatives) of using pōhā tītī or collecting seaweed.

Visit the seashore or a marine centre.