

The Subantarctic Islands

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Overview

This TSM contains a wide range of information and suggestions for teachers to pick and choose from, depending on the needs of their students and their purpose for using the text. The materials provide multiple opportunities for revisiting the text several times.

This visual text uses words and cartoon-style images to provide information about the five groups of islands that are found between New Zealand and Antarctica. The information is presented in a lively way, organised into sections that tell what and where the islands are, the weather they share, and their flora and fauna. It's an unusual topic covered in an unusual and engaging way. The format will be familiar to students from their reading of popular comics, which should make the technical information easier to relate to. "The Subantarctic Islands" provides scope for a variety of reading approaches.

This article:

- includes humorous illustrations, using a comic-strip approach
- has factual information presented in a variety of ways, including a map, visual comparisons, speech bubbles, a table, running text, labelled illustrations, and fact boxes
- poses provocative questions for the reader
- uses comparisons, including similes, to support understanding of new information.

A PDF of the text is available at www.schooljournal.tki.org.nz

Texts related by theme

"Who's Eating Who?" Connected L4 2012 | "59.5 Degrees South" SJ L3 Aug 2013 | "Severe Weather" SJSL No.1 2012 | "An Ecologist on Ice" Are You Sure? Connected L4 2013 | "Michel Mulipola: Superhero Secrets" SJ L3 Aug 2016 | "Comic Man" SJ L4 Oct 2015 | "A Country Like Mine" SJ 3.1.08

Text characteristics from the year 6 reading standard

MEGAHERBS

The mega herbs are a family of plants endemic to the Subantarctic Islands. With their enormous, bright flowers, mega herbs look like they belong in the tropics, but they're perfectly adapted to local conditions.

Brightly coloured flowers absorb more heat than pale flowers. Insects are attracted to their warm surface. While they're there, the insects take care of pollination.

Like all plants, mega herbs need warmth to grow. But it's so cloudy in the subantarctic.

The soil on the islands is boggy. It's also acidic, fertilised by lots

abstract ideas, in greater numbers than in texts at earlier levels, accompanied by concrete examples in the text that help support the students' understanding

Even though the Subantarctic Islands are a long way from us, small decisions we make have an impact on life there.

Like the lid of that spice jar: I wonder how it got to Campbell Island, one of the most pristine places in the world. Could it have come from my kitchen?

Pollution on the land, in the sea, or in the air begins and ends with us.

Because the flora and fauna of the Subantarctic

some ideas and information that are conveyed indirectly and require students to infer by drawing on several related pieces of information in the text

THERE ARE MEGAHERBS ON OUR \$5 NOTE.

some information that is irrelevant to the identified purpose for reading (that is, some competing information), which students need to identify and reject as they integrate pieces of information in order to answer questions

When you're as big as an albatross, it takes a lot of effort to get airborne, but after take-off, albatrosses don't need to flap their wings. Instead, they use their wings to glide on top of air currents - very energy efficient!

sentences that vary in length and in structure (for example, sentences that begin in different ways and different kinds of complex sentences with a number of subordinate clauses)

VOCABULARY

Possible supporting strategies

- Possibly unfamiliar words and phrases, including “permit”, “exposed”, “roost”, “Antipodes”, “harsh”, “colony”, “mountainous”, “southernmost”, “incessant”, “reliable”, “parakeet”, “perilous activity”, “wingspan”, “sociable”, “absorb”, “boggy”, “acidic”, “fertilised”, “botanical”, “full potential”, “pristine”
 - The place names of the island groups: Kermadec; Chatham / Rēkohu / Wharekauri; Subantarctic; The Snares / Tini Heke; Bounty / Moutere Hauriri; Antipodes / Moutere Mahue; Auckland / Motu Maha / Maungahuka; Enderby; Campbell / Moutere Ihupuku; Macquarie; Jacquemart
 - Topic-specific words and phrases, including “nature reserves”, “habitats”, “flora and fauna”, “rangers”, “breeding site”, “crested”, “sitka spruce”, “equator”, “survive”, “temperate”, “endemic”, “adaptations”, “pelagic”, “energy efficient”, “megaherbs”, “perfectly adapted”, “pollination”, “thrive”, “ecosystems”
 - The two-part Latin names of plants such as *Stilbocarpa polaris*
 - The names of albatross and penguin species
 - Colloquial expressions and references: “a bunch of”, “seabird poop”, “weren’t prepared for”, “not *THAT* cold”, “Meet the Locals”, “one of a kind”, “stylish eyebrows”
- Review the text to identify words that students may not be able to work out from their prior word knowledge or the context. Decide which words you will need to pre-teach (for example, by making a map of words connected to the topic of adapting to an environment).
 -  The students could create word maps using an online mind-mapping tool such as [Mindmup](#).
 - Direct students to the definitions or explanations within the text, for example, the text box on page 6 that explains the difference between endemic and native species.
 - You may decide that some words, such as the Latin names of plants on page 8, are not relevant to the identified purpose for reading. Read these aloud, making connections where possible with words students already know, for example, “*Stilbocarpa polaris*” and “polar” – of the North or South pole.
 - Explore the meaning of “subantarctic”, in particular the use of the prefix “sub” and what it could mean in relation to the Antarctic.
 - Explore the meaning of te reo Māori words for each of the island groups and what clues they might provide about the islands, for example, “tini” (small), “heke” (migrate or disembark), “motu” (island), “maha” (many or a lot), “maunga” (mountain), “huka” (snow, frost, or deficient). Make connections with other te reo Māori place names or words that the students are familiar with.
 - Challenge the students to make a drawing for each topic-specific word. To do this, they need to understand the meaning of each word. You can check students’ understanding from what they draw and provide further support as necessary.
 - *The English Language Learning Progressions: Introduction*, pages 39–46, has useful information about learning vocabulary.
 - See also [ESOL Online, Vocabulary](#), for examples of other strategies to support students with vocabulary.

SPECIFIC KNOWLEDGE REQUIRED

Possible supporting strategies

- Experience in reading mixed text types, including visual texts
 - Knowledge of the geographical position of New Zealand in relation to Antarctica
 - Some understanding of the impact of geography on climate, including in polar regions
 - Some knowledge of the flora and fauna of New Zealand
 - Some understanding of the ways in which species adapt to different environments
 - Familiarity with some of the wildlife mentioned in the text, for example, penguins, albatrosses, parakeets, shags, seals, insects
 - Some understanding of lines of latitude and “the roaring forties”
- Prompt students’ prior knowledge of comics and mixed text types, introducing the concept of their use in non-fiction texts.
 - Use a map of the world to focus on the proximity of New Zealand to Antarctica. Explain that the region in between is known as the “subantarctic” and that there are several groups of islands there.
 -  Using Google Maps (satellite view), find New Zealand and then zoom out to show the whole Earth, pointing out Antarctica and the Subantarctic Islands. Switch to map view so that the students can see where the countries are located on a traditional map. After reading the text, the students could then search for the various Subantarctic Islands, making note of what they see.
 - Prompt the students to share what they know or understand about the changes in the climate as we go closer to the South Pole. *What weather patterns would you expect if you sailed from New Zealand to Antarctica? Why? What kinds of creatures can live in these conditions?* Explain that they will be reading more about this in the text.
 - Remind students of the concept of adaptation to environments, using an example such as seals, which have thick layers of blubber (fat) to keep them warm in freezing waters.
 - During reading, support students to make connections between information in the text and their own knowledge and experience.
 - Have the students research New Zealand’s flora and fauna, either online or in reference books, to find out about any they are unfamiliar with.
 - You may want to share-read the section on Longitude and Latitude in “Captain Cook: Charting Our Islands” in *School Journal*, Level 4, May 2016 to build understanding of the information on page 2.

TEXT FEATURES AND STRUCTURE

- Non-fiction text using a variety of visual and written formats
- The use of illustrated characters and speech bubbles to add information and comment
- A number of sections with illustrated headings
- A map with latitude, directional, and distance markers
- Explanations of natural phenomena, including weather, wind patterns, and adaptations to the environment
- Information about the threat of pollution and a challenge to readers
- The repeated use of the similar sentence structure, “might make you/It might sound like/You’d think/You can ... but ...”
- The use of questions to the reader: “Will we do our best for them?”
- The use of time, causal, and additive connectives and the simple present tense

Possible supporting strategies

- Discuss the structure of the text by skimming it briefly. *What is unusual about this text? Where would you usually see features like these? What features are similar to those in most non-fiction texts?* (headings, text boxes, captions)
- During subsequent readings, highlight specific features, such as the use of questions, the “You can ... but ...” structures, and the kind of information given in text boxes. Remind the students to use what they know from reading similar texts to support their understanding of how this text works.
- English language learners may need support to notice the types of text connectives and the tense used in written explanations. A vanishing cloze activity could be a fun way to take notice of these words. Select a short piece of text and write it on the whiteboard, for example, page 5, “*This wind is caused when hot air from the equator meets cool air from Antarctica ... otherwise known as wind.*” As a group, read the text together chorally several times until the students are very familiar with it. Then erase one or two words. Begin by deleting some of the text connectives, prepositions, or verbs, which English language learners often find more difficult to notice. The students then choral-read the text again saying the missing words as they read. Keep erasing more words and rereading the text. Challenge the students to continue until all the words have been erased.



Sounds and Words

Possible curriculum contexts

ENGLISH (Reading)

- Level 3 – Ideas: Show a developing understanding of ideas within, across, and beyond texts.
- Structure: Show a developing understanding of text structures.

ENGLISH (Writing)

- Level 3 – Structure: Organise texts, using a range of appropriate structures.

SCIENCE (Living World)

- Level 3 – Ecology: Explain how living things are suited to their particular habitat and how they respond to environmental changes, both natural and human-induced.

Possible first reading purpose

- To find out about the environment of the special islands between New Zealand and Antarctica
- To navigate a text that presents factual information in a different way.

Possible subsequent reading purposes

- To identify the main ideas in the text
- To identify some of the survival characteristics of the flora and fauna
- To discuss the effectiveness of different text structures to generate interest and support understanding
- To consider threats to the ecology of the island groups.

Possible writing purposes

- To compare one species of subantarctic flora or fauna with a related species in New Zealand and explain how each is suited to its habitat
- To retell information about another environment, using a visual text structure
- To develop an argument for protecting the island environments, then write a persuasive piece for a specific audience, for example, students, families, politicians.



The New Zealand Curriculum

Instructional focus – Reading

English Level 3 – Ideas: Show a developing understanding of ideas within, across, and beyond texts; Structure: Show a developing understanding of text structures.

Science (Living World) Level 3 – Ecology: Explain how living things are suited to their particular habitat and how they respond to environmental changes, both natural and human-induced.

First reading

- Share the purpose for reading.
- Read the title and the speech bubbles on the first page together, then discuss the details on the map, including the compass direction and the latitude markings.
- If you have students who have lived in other countries, make connections by having them locate those countries on a globe, check their latitudes, and then share what the climates were like compared with New Zealand. Students can then use this knowledge to make predictions about the climate in the Subantarctic Islands.
- Invite the students to make predictions about the kinds of life that might be found on the Subantarctic Islands. Record these and check the list as the students read on.
- Alternatively, they could use a KWL chart to record what they think they already know about the plants and animals that might be found on the islands (K) and what they want to find out (W). As they read and find answers to their questions, they record what they've learnt (L). When they finish reading, they evaluate their initial thoughts and record their findings as "What I now know".
 The students could create their KWL chart as a Google Doc so that they can add to it and share it with others.
- Skim and scan the rest of the text together, focusing on the different features of the text and how they are used. Use "think-alouds" to invite responses. *I wonder why there are numbers down the side of the chart on page 4. They look similar to those on the map on page 2. I wonder why the text uses characters and speech bubbles. How important are the text boxes? What kind of information do they show? I wonder if these albatrosses and penguins are the same as the ones we have in New Zealand. What do you think?*
- Direct the students to work in pairs, reading one section of the text at a time. *As you read each section, ask each other questions to find out how the information connects with things you already know and to see if you have any shared questions about the content.*
- Record the students' questions for discussion in subsequent readings.

If the students struggle with this text

- Chunk the text and use a shared reading approach for a first reading together. Prompt the students to notice the way the text uses visual features and to share their own connections with them – for example, page 5 looks like a comic book.
- In subsequent readings, use shared reading again and provide focused guiding questions for each section, for example:
 - *From the two images on page 3, what did you think the islands might look like? Were you surprised they look so full of plants and animals? If so, why?*
 - *At the end of page 5, stop and tell me (or your partner) why the islands are so windy. What does "incessant" mean? Why were there a lot of shipwrecks?*
 - *Page 8 explains why the islands have such big plants. Can you explain this in your own words?*
 - *Look at the creatures on page 6. Would you find a Snares Island tomtit in New Zealand? Why not? What about the Auckland Island wētā? Why can't many of the insects fly?*
 - *What's the big problem discussed on page 9?*
- Take note of sections, ideas, visual features, sentence structures, and vocabulary that are challenging for students and focus on clarifying these in subsequent readings.

Subsequent readings How you approach subsequent readings will depend on your reading purpose.

The teacher

Ask the students to identify the "big ideas" in the text.

- *What makes these islands special?*
- *Why are they protected nature reserves?*
- *Why does the writer think it is important that we know about them?*

The students:

- evaluate and integrate ideas and information across the text (including what we know from the meaning of the Māori place names) to identify the special features of the islands. Students could carry out an information transfer task by selecting the key information from the text to complete this chart.

Subantarctic Islands	Geographic features	Flora	Fauna
The Bounty Islands			
The Snares			
The Antipodes Islands			
The Auckland Islands			
Campbell Island			

- make connections across the text and between the text and what they already know about nature reserves to infer why the islands are protected
- consider and reject irrelevant information (for example, that the \$5 note has an image of a megaherb, penguins' air conditioning) as they evaluate the main ideas
- make connections between the text and already familiar messages about the impact of pollution to infer that the writer believes knowing about the islands will encourage people to reduce pollution.

Subsequent readings (cont.)

The teacher

Focus on the information on pages 6–8, enlarging the text for discussion if possible. Make a two-column chart and direct the students to make comparisons between the native flora and fauna where you live and that of the Subantarctic Islands. The Department of Conservation website has photographs and information on what makes New Zealand flora unique, which could be used as a reference. Go to: <http://www.doc.govt.nz/nature/native-plants>

- *Starting with the bush we're familiar with in our area, how is our native flora and fauna different from that in the Subantarctic Islands?*
- *What environment factors are different?*
- *What adaptations help the plants survive in the subantarctic environment? How do they compare with our local plants?* (If necessary, prompt the students to consider the characteristics of local native trees and shrubs.)

The teacher

Lead a discussion on the way this text is presented.

- *The use of comic strip features is unusual for non-fiction. Why do you think the writer has used these features? What is the impact of using them? Explain your thinking.*

METACOGNITION

- *Which visual features were most helpful to you in understanding the information? How did they help?*

The students:

- locate examples in the text and compare them with what they know about native plants in their local environments
- reread to locate examples of adaptations
- integrate information about plants in their local environments with information in the text to think critically about the similarities and differences between plants and determine which adaptations are most significant.

The students:

- respond to and think critically about the presentation of the text
- evaluate the effectiveness of the text, supporting their thinking by analysing examples and providing their responses.

GIVE FEEDBACK

- *When you compared the subantarctic environment with our local environment, your use of examples from the text helped to make the similarities and differences clear.*



Reading standard: by the end of year 6



The Literacy Learning Progressions



Assessment Resource Banks

Instructional focus – Writing

English Level 3 – Structure: Organise texts, using a range of appropriate structures.

Science (Living world) Level 3 – Ecology: Explain how living things are suited to their particular habitat and how they respond to environmental changes, both natural and human-induced.

Text excerpts from
“The Subantarctic Islands”

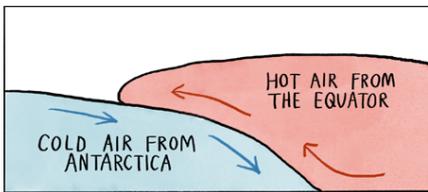
Examples of text
characteristics

Teacher
(possible deliberate acts of teaching)

Page 5

This wind is caused when hot air from the equator meets cool air from Antarctica. Warm air is lighter than cold air, so when the two meet, warm air always rises. This leaves a space, which the cold air rushes into – movement otherwise known as wind!

In this part of the world, there's very little land to get in the way and slow the wind down.



EXPLANATION

Informational texts often feature explanations. An explanation tells how or why a process or phenomenon happens.

VISUAL INFORMATION

Visual information, such as diagrams, charts, maps, and illustrations, can support the text and clarify an idea that may be hard to explain in words.

Direct the students to examine an explanation such as the one in this extract.

- *What does it explain?* (the cause of the strong winds)
- *Which words show a sequence of actions or events?* (caused when, meets, so when, rises, This leaves a space, rushes into)
- *What is the purpose of the last sentence and the illustration? How do they strengthen the explanation?*

Ask the students to draw a diagram to explain an idea in their writing.

- *What is the difference between a picture and a diagram? How do you know when to use one or the other?*
- *Explain what you have included in your diagram and say why you included them.*
- *Show your diagram to a partner and ask them if there is anything you could add to make the idea clearer.*

DIGITAL TOOLS  The students could create a poster to explain their idea, using a digital tool such as [Postermywall](#) to arrange text, images, shapes, and backgrounds.

Page 4

You'd think nothing would want to live here, but the Bounties are a vital breeding site for hundreds of thousands of seabirds!

Page 8

You can see megaherbs at the botanical gardens in Invercargill, but you might not be impressed.

SENTENCE STRUCTURE

Writers use a variety of sentence structures for impact, but sometimes repeating a particular structure can reinforce ideas by providing a clear pattern for the reader to follow, in this case, to challenge or contradict the reader's assumptions.

Direct the students to read these examples closely. Prompt them to notice that the first part of the sentence makes a statement about what the reader might do or think, then the second part contradicts that.

- *What is the function of the word “but” in each sentence?*
- *Why do you think the writer uses this structure of statement and contradiction? What impact does it have?*
- *Is this a structure you could use in your writing? Try it out and ask your partner for feedback.*

Page 4

The Antipodes

“Antipodes” means “opposite”. They were named this by an English explorer because if you dug a hole straight through the centre of the Earth from London, this is where you'd arrive!

VISUALISING

Writers use words or images to support understanding. Often, the intention is to have readers “see” something they are describing.

Explain how writers choose language to help readers visualise (form a mental picture of) something. Model the image this extract generates:

- *You wouldn't really dig a hole through the Earth, but this simile helps me understand the meaning of the word “antipodes”.*
- *Find places in your own writing where you could support your readers to visualise something. Can a simile or metaphor help?*
- *Would a diagram or funny illustration help readers to understand a complex idea?*

METACOGNITION

- *Why have you chosen to use visual features to explain this topic? How do you expect this will engage your readers or convince them of your main points?*

GIVE FEEDBACK

- *The explanation is clearer now that you've put the steps of the process in order. The diagram makes it even clearer because I can match the words in the explanation to the parts of the diagram.*



Reading standard: by the end of year 6



The Literacy Learning Progressions