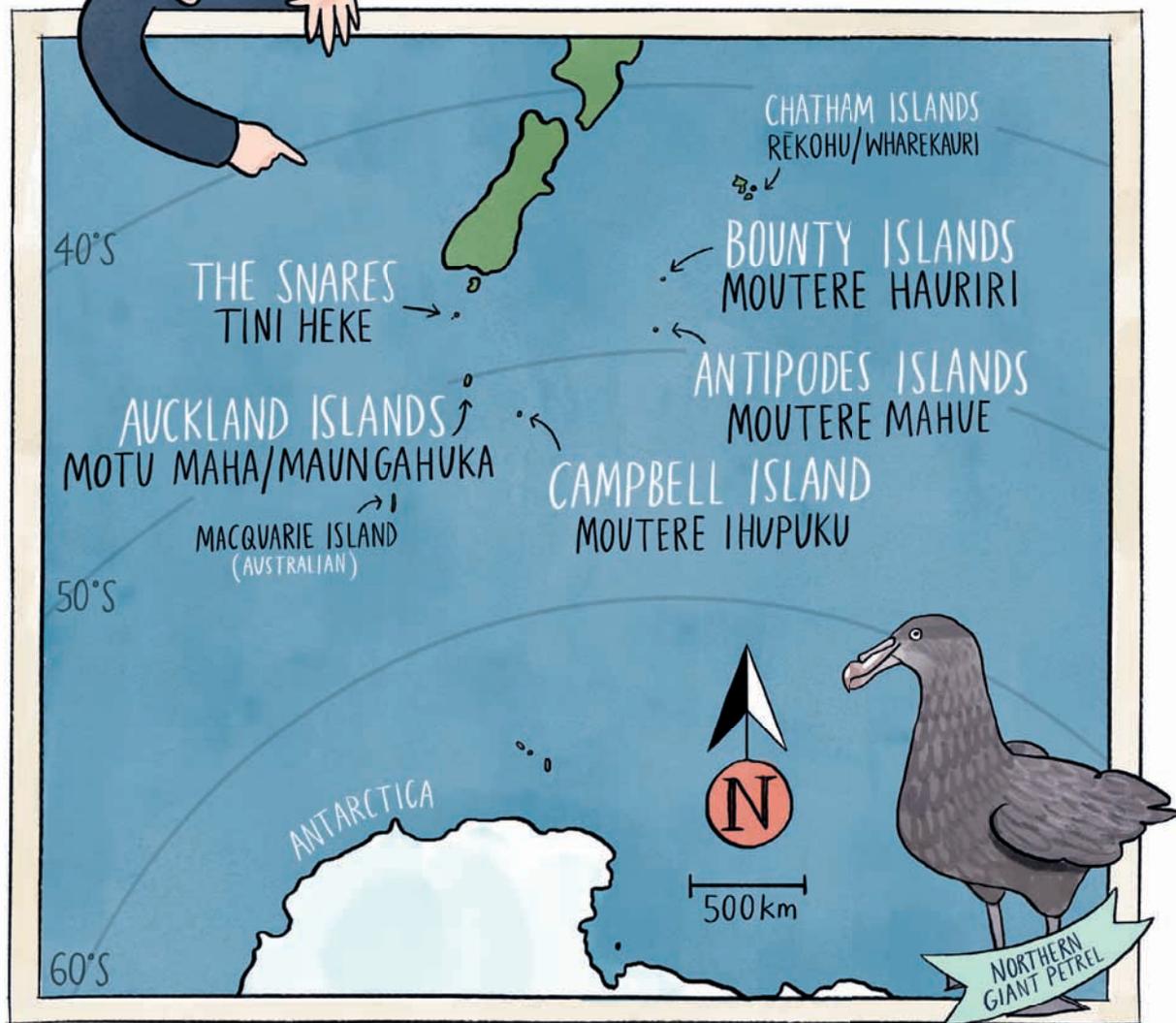


New Zealand is a bunch of islands, but do you know how many? More than a thousand! Some of these islands are a long way out to sea. They include the Kermadec Islands in the north, the Chatham Islands to the east, and way down south...

the SUBANTARCTIC ISLANDS

This is me, Giselle Clarkson.

There are five island groups in the subantarctic region of New Zealand.



The word "subantarctic" might make you picture something like this...



But it's closer to...



New Zealand's Subantarctic Islands are protected nature reserves. They're recognised around the world as extraordinary habitats filled with an amazing variety of flora and fauna.

Nobody lives on the islands, although rangers and scientists can stay there. Visitors are allowed if they have a permit.

LATITUDE SOUTH

THE ISLANDS

THE BOUNTY ISLANDS/MOUTERE HAURIRI

The Bounty Islands are so exposed there are no plants at all! You'd think nothing would want to live here, but the Bounties are a vital breeding site for hundreds of thousands of seabirds! The islands were named by Captain Bligh, who sailed past on the *Bounty* not long before the famous mutiny.



47°

THE SNARES/TINI HEKE

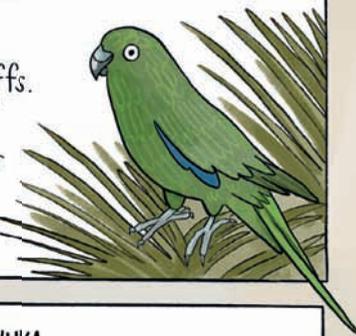
The Snares are a group of small, bush-covered islands with steep cliffs. The islands are home to their very own penguin - the Snares crested penguin. These penguins can climb trees and will often roost 2 metres off the ground.



48°

THE ANTIPODES ISLANDS / MOUTERE MAHUE

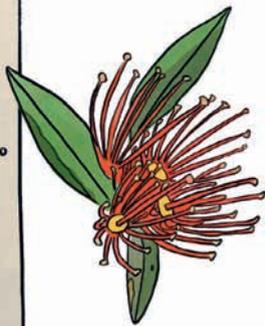
The Antipodes stand like rocky fortresses with towering cliffs. There are no trees, but the tussock is enormous! "Antipodes" means "opposite". They were named this by an English explorer because if you dug a hole straight through the centre of the Earth from London, this is where you'd arrive!



49°

THE AUCKLAND ISLANDS/MOTU MAHA/MAUNGAHUKA

Auckland Island is covered in southern rātā forest. It's the biggest island in the Auckland Islands group and also New Zealand's biggest subantarctic island. English settlers once tried to live here, but they weren't prepared for the harsh environment. Their colony only lasted a few years. Many New Zealand sea lions live on Enderby Island, part of the Auckland Island group. The species is the rarest sea lion species in the world.



50°

CAMPBELL ISLAND/ MOUTERE IHUPUKU

Wild and mountainous, Campbell Island is home to its very own endemic duck, six different kinds of albatross, and one tree: a single sitka spruce planted over a hundred years ago. Jacquemart Island, near Campbell Island, is the southernmost place in New Zealand.



52°

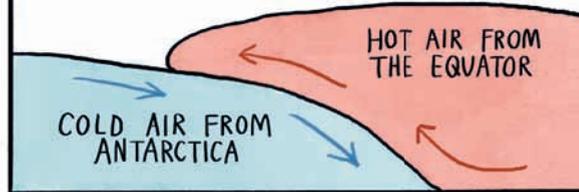
A WORD ABOUT THE WEATHER...

It's cold on the Subantarctic Islands, but not *THAT* cold. Year round, the temperature stays between 4 and 16 degrees Celsius. It can snow any time of the year, and it's nearly always cloudy.

The weather changes often. It can be fine one minute and hailing the next! The islands all lie within the latitudes known as the roaring forties and furious fifties. They're called this because it gets very, very...



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.



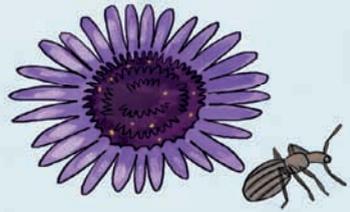
The strong, incessant subantarctic wind causes some of the wildest seas on our planet. In the days of sailing ships, sailors used these reliable winds to travel quickly around the southern part of the globe. But it was a risky business, and shipwrecks were common.



It might sound like an unpleasant place to live, but the local plants and animals are well adapted to the harsh conditions. They wouldn't survive in a warmer, drier, more temperate climate.

MEGAHERBS

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



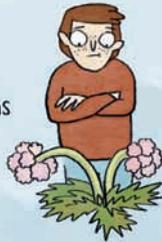
Brightly coloured flowers absorb more heat than pale flowers. Insects are attracted to their warm surface. While they're there, the insects take care of pollination.

Like all plants, megaherbs need warmth to grow. But it's so cloudy in the subantarctic, they have to make the most of any heat they can get from the sun. They have large leaves to absorb as much heat as possible. Grooves and hairs on the leaves' surface hold the heat there.



You can see megaherbs at the botanical gardens in Invercargill, but you might not be impressed. The soil, the temperature, and the weather conditions aren't quite right. The megaherbs grow, but not to their full potential.

The soil on the islands is boggy. It's also acidic, fertilised by lots and lots of seabird poop! Only plants that have evolved to these soil conditions will thrive here.



THERE ARE MEGAHERBS ON OUR \$5 NOTE.

Some of the megaherbs were bigger than me!



OUR IMPACT



When I visited the Subantarctic Islands, I saw extraordinary beauty - but on Campbell Island, I saw something terrible as well: the remains of an albatross chick that had died of starvation the year before. Among the bones and feathers were the pieces of plastic it had swallowed, including the lid of a spice jar.

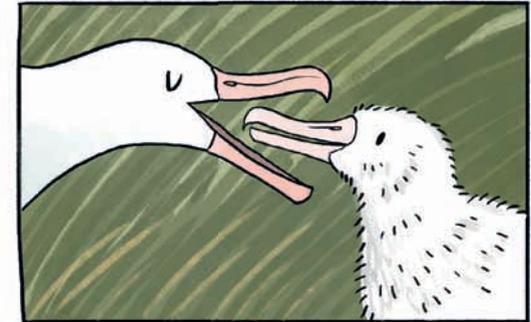


Even though the Subantarctic Islands are a long way from us, small decisions we make have an impact on life there.

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 Islands are so suited to their natural habitat, any sudden or significant change could spell the end for many of them. Climate change is a serious risk for these ecosystems.



Our Subantarctic Islands are home to many rare and wonderful species. It's an incredible privilege to have these islands in our care - but a huge responsibility too.



Will we do our best for them?

The Subantarctic Islands

by Giselle Clarkson

Text and illustrations copyright © Crown 2017

For copyright information about how you can use this material, go to:
<http://www.tki.org.nz/Copyright-in-Schools/Terms-of-use>

Published 2017 by the Ministry of Education
PO Box 1666, Wellington 6140, New Zealand.
www.education.govt.nz

All rights reserved.
Enquiries should be made to the publisher.

ISBN 978 1 77669 059 6 (online)

Publishing Services: Lift Education E Tū
Editor: Susan Paris
Designer: Simon Waterfield
Literacy Consultant: Melanie Winthrop
Consulting Editors: Hōne Apanui, Ross Calman, and Emeli Sione



SCHOOL JOURNAL LEVEL 3 AUGUST 2017

Curriculum learning areas	English Science
Reading year level	Year 6
Keywords	adaptation, albatrosses, Antarctica, Antipodes Islands, Auckland Islands, Bounty Islands, Campbell Island, cartoon, climate, climate change, endangered species, endemic, environment, fauna, flora, latitude, longitude, Maungahuka, megaherbs, Motu Maha, Moutere Hauriri, Moutere Mahue, native, penguins, pollution, subantarctic, Subantarctic Islands, The Snares, Tini Heke, weather