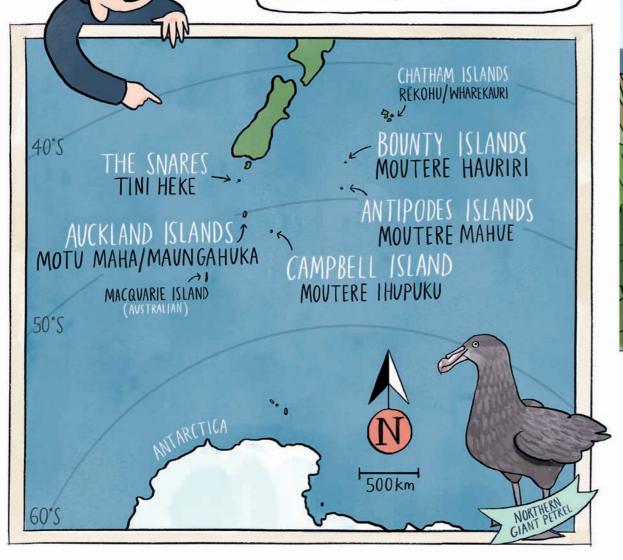
New Zealand is a bunch of islands, but do you know how many? More than a thousand! Some of these islands are a long way out to sea. They include the Kermadec Islands in the north, the Chatham Islands to the east, and way down south...



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





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

## 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.





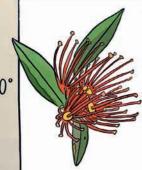
### THE SNARES/TINI HEKE

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.



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!





#### 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.

### CAMPBELL ISLAND/MOUTERE IHVPVKV

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.



### 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.

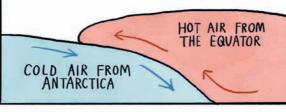






This wind is caused when hot air from the equator meets cool air from Antarctica. Warm air is lighter than cold air, so when the two meet, warm air always rises. This leaves a space, which the cold air rushes into - movement otherwise known as wind!

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.

52°

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# MEET the LOCALS

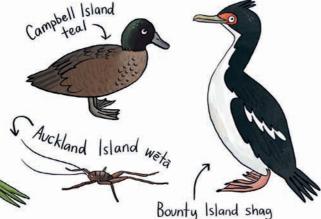
There's nowhere else in the whole world quite like the New Zealand Subantarctic Islands. Their location and isolation make them absolutely one of a kind. The plants and animals that live on the islands are as unique as their habitat. Many of them are endemic species.

Each group of islands has many



A native species can live in different places, but an endemic species has only one home.





### ADAPTATIONS

Over a long time, the subantarctic environment has caused many of the local species to adapt. For example, there's an unusually high percentage of flightless moths and beetles in the region. When you're very small and live on a very windy island, flying can be a perilous activity!

After accidentally arriving on the islands, most insects that dared to fly were blown out to sea. Forever.

Those that chose to stay under cover survived. They had offspring. Eventually these species lost the ability to fly altogether.

Think of it as evolution caused by weather!







GIBSON'S WHITE-CAPPED

A lot of albatross species live in the New Zealand subantarctic region.

Six of them are endemic to the islands.

Albatrosses are pelagic. This means they live at sea and only return to land when it's time to breed and raise a chick. Young birds stay at sea for up to six years!

ANTIPODEAN

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!

When you're as big as an albatross, it takes

Southern royal albatrosses have a

wingspan of over 3 metres!



PENGUINS

There are four species of endemic penguins breeding on the New Zealand Subantarctic Islands. You'll notice that they all have very stylish eyebrows!



These penguins live in large, sociable colonies, except for the hoiho. Hoiho are very shy and like their privacy. They nest under bushes where their neighbours can't see them!

### PENGUIN AIR CONDITIONING

Have you ever noticed the way penguins often stand around with their flippers sticking out?

Penguins are built for surviving in really cold water, so it's easy for them to overheat on land. They stay comfy by directing blood into their flippers and letting them cool off in the breeze.



# 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.

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.



Pleurophyllum speciosum

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.



THERE ARE MEGAHERBS ON OUR \$5 NOTE.

Some of the megaherbs were bigger than me!



Rulbinella rossii

### 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.



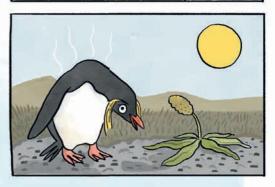
Even though the Subantarctic Islands are a long way from us, small decisions we make have an impact on life there.

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

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