# Who's Kermade

Imagine a map of New Zealand ... See the three main islands? Now look harder. All around are hundreds of other islands that are part of New Zealand, too. And that group of islands furthest north? They're the Kermadecs. Why, exactly, are we so crazy about them?

### Geologists ♥ the Kermadecs

The Kermadec Islands are the tops of tall volcanoes poking up through the sea's surface. In fact, they're part of the longest underwater volcanic mountain range in the world – the 'Kermadec Arc'.

The range thrusts up where two of the Earth's tectonic plates collide. Studying the arc helps geologists understand the hot, powerful forces that shape our planet.

#### Fish ♥ the Kermadecs

The Kermadecs sit in the subtropics where warm waters from the tropics and subtropics meet cooler waters from the south. It's the only part of New Zealand where tropical fish, subtropical fish and cooler-water fish all hang out in one place.

At the moment, the area just around the islands (out to 12 nautical miles) is protected from fishing and mining. But the fish would be even happier if they had more space than that to swim undisturbed.





Spotted black grouper. Photo: Tom Hitchon

# Spotted black groupers ♥ the Kermadecs

These amazing fish all start life as female, then when they get big enough (about a metre long) they turn into males!

The waters around the Kermadecs are home to the only un-fished population of spotted black groupers in the world. That's great for the groupers – and for scientists. It gives the scientists the only opportunity they have to study what spotted black grouper communities should naturally look like.

This place looks familiar ...



cs-crazy?

## Seabirds V the Kermadecs

Ten to fifteen million seabirds can't be wrong – right? That's about how many come in to land on the Kermadec Islands to breed, every single year: birds like the Tasman booby on the cover of this Wild Things.

Right now, the Kermadecs are a safe haven for those birds – they've recently become predator-free, thanks to the wonderful work of the Department of Conservation, and volunteers who visit to work on the islands.

## **Explorers ♥ the Kermadecs**

Around the Kermadecs is the deepest ocean floor in New Zealand waters. You could hide Mt Everest down there! So far, more people have been to the Moon than have braved those ocean depths.

Explorers – who are usually biologists – go on missions there in small submarines called submersibles. If they can't get all the way down themselves, they send cameras. They're constantly discovering amazing new creatures and landscapes!

The 'Brothers' black smoker. Photo: Karen Baird, DOC.





Vent-loving crabs, shellfish, tube worms, and more. Photo: Malcolm Clark, NOAA-NIWA

# Vent creatures ♥ the Kermadecs

What's a vent creature?

Underwater vents are places where hot volcanic liquid spews from cracks in the sea floor and mixes with the sea. The liquid is full of toxic chemicals like hydrogen sulfide and it would kill most plants and animals.

However, in the deep around the Kermadecs are strange communities that actually need those chemicals to live. Because it's so dark down there, they get their energy from chemicals instead of from the sun.



#### Kids **V** the Kermadecs!

In 2012, Rebecca Vela-King was one of 30 high school students who went to the Kermadecs. The trip was run by the Sir Peter Blake Trust.

Rebecca went snorkelling and saw spotted black groupers, a Galapagos shark, a green turtle, millions of fish, and giant Kermadec limpets – bigger than your hand. She looked into a volcanic crater, went shark tagging, and was on a boat when a humpback whale dived underneath it!

### Help create a sanctuary

Wouldn't it be cool to have a giant safe space for fish, whales, seabirds and all the other animals living in or passing through the waters in the Kermadecs region?

Forest & Bird is working with Pew Charitable Trusts and World Wildlife Fund NZ to create a Kermadec Ocean Sanctuary. New Zealand would be a world leader if we did this!

Become a Kermadec supporter by learning all about the Kermadecs and telling your friends and family how wonderful a sanctuary would be.

Find out more at www.kcc.org.nz/wild-places

# The Whitebait Wriggle & What's That Living in my Stream?

By Amber McEwan \$21.99 each Papawai Press www.papawai.co.nz

There's more to our beautiful native whitebalt than fritters! We have three book sets to give away. To go in the draw, tell us the names of

three of New Zealand's native migratory fish. (Hint: pages 16 & 23.) See page 19 for entry details.



WIN

#### Forest & Bird staff ♥ the Kermadecs

Meet Anton van Helden, a marine biologist at Forest & Bird. He's working on helping people everywhere understand what's so great about the Kermadecs region, so we can convince the government to protect it fully.



Many animals – including whales and dolphins – travel through the Kermadecs on their migrations. The larger the area protected, the better off they'll all be.

Anton is also an illustrator. Do you like his cartoon showing some of the Kermadec sealife he loves? What creatures can you recognise?



with thanks to Anton van Helden and Tiff Stewart for assistance.