The New Zealand Curriculum
LEVEL 2

SCHOOL JOURNAL

NOVEMBER 2022

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Estuaries

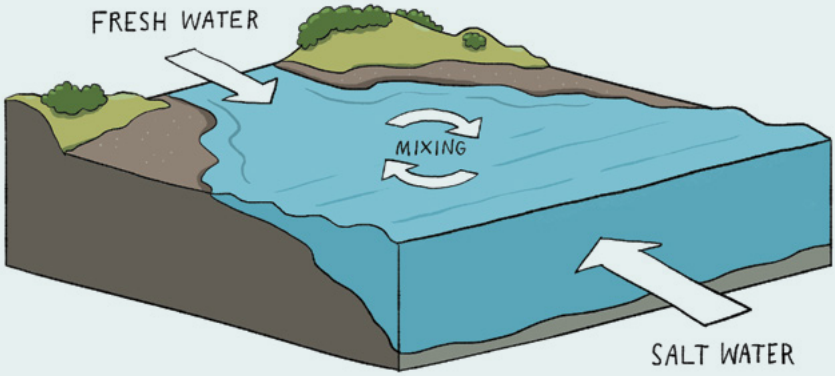
by Ursula Cochran

Would you like to live near a watery wasteland full of rubbish? Or would you rather live near a safe **haven** full of birds, fish, trees, and plants?

Estuaries can become either of these. That's why kaitiakitanga, or protection, of estuaries is so important. If we don't look after them, they can become unhealthy. And, as you'll find out, healthy estuaries are better for everyone!

What is an estuary?

An estuary is a place where fresh water from a river or stream mixes with salt water from the sea. Estuaries are different from lakes and rivers because they have tides and salty water.



What do estuaries look like?

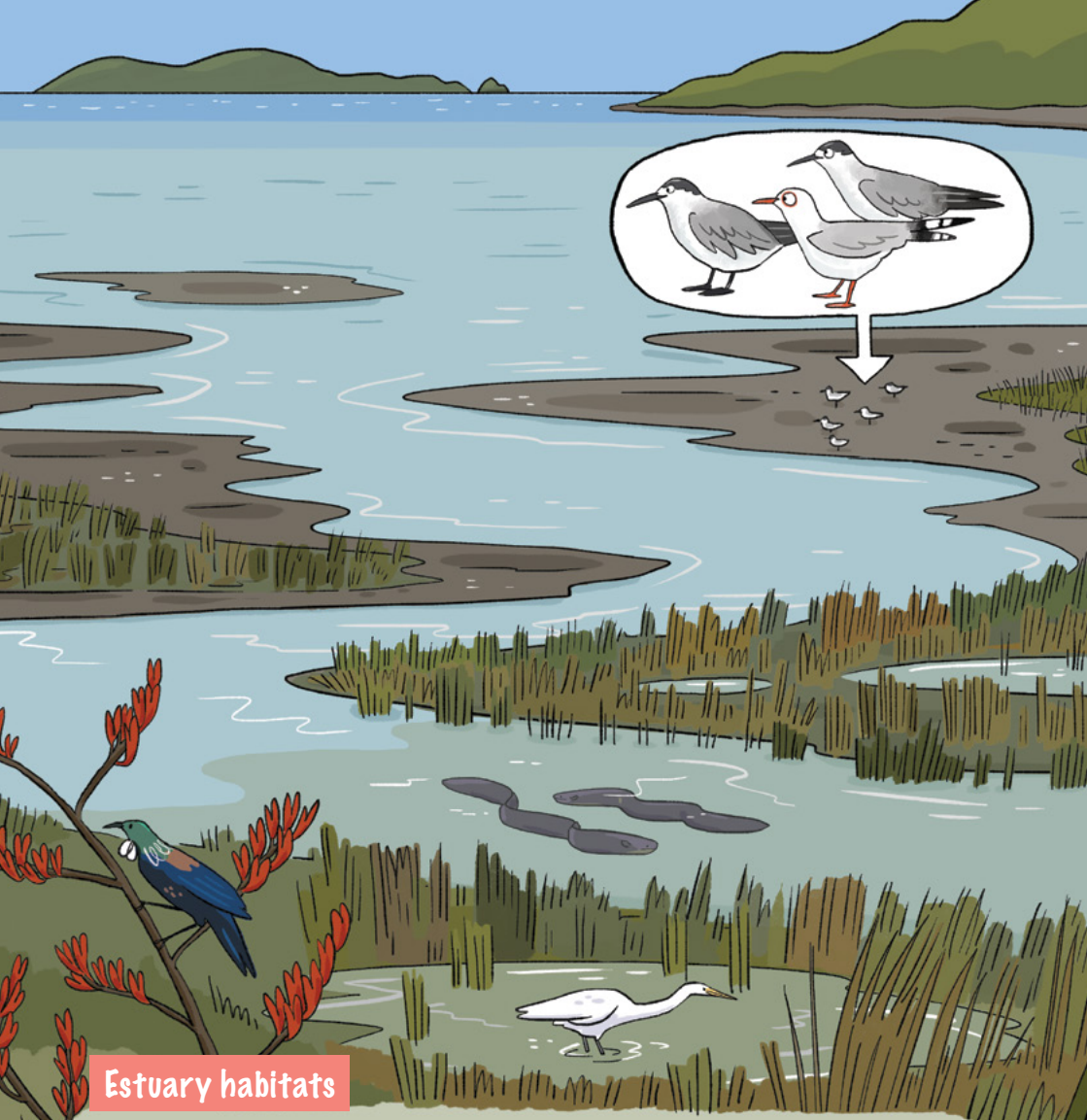
There are more than three hundred estuaries in Aotearoa New Zealand. If you live near the coast, there is probably an estuary close by – like a harbour, river mouth, inlet, or lagoon. If it has a mix of fresh water and salt water, it's an estuary.

A giant mixing bowl

An estuary is like a giant mixing bowl. Ingredients like **sediment** and **nutrients** from the land and rivers mix with sea water. An estuary can be full of water at high tide and almost empty at low tide. Some, like Tauranga Harbour, are huge.

An estuary can have many different **habitats** where plants, fish, and birds live, feed, and **breed**. These can be mudflats, inlets, ponds, and **salt marshes**. Each plant or animal can find the right food and the type of environment it likes to live in.

Mud crabs live in mudflats, where they can find food.



Estuary habitats

If you walk along the edge of an estuary, you'll pass many different habitats. Near the sea, you'll see plants and animals that like salty water and sand. You might see birds like gulls and terns. When you walk inland, you'll see plants and animals that like fresh water and soil. Here you might see rushes and flax growing by the water, tuna (eels) in a stream, and birds like tūī and kōtare (kingfishers) in trees or bushes by the estuary.

Life in an estuary

Estuaries are popular places. Tiny living things called plankton float in the water, and sea worms hide in the mud. Shellfish cling to the rocks, and fish and birds visit to feed. There is life in every part of an estuary, and every living thing is suited to its habitat.

Plants

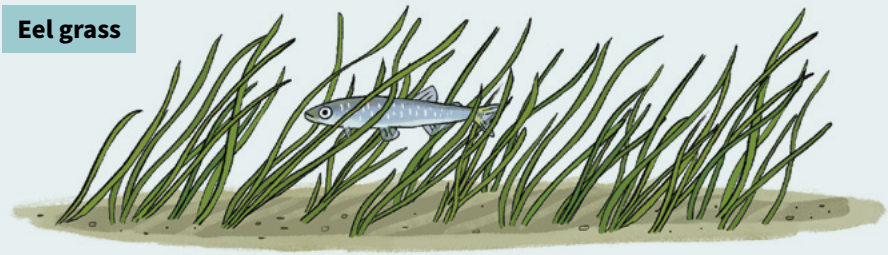
Plants that grow in estuaries are suited to living in salty water that comes in and goes out with the tides.

- Mānawa (mangrove) is a tree that grows in salt water. Its roots have breathing holes, which stick out of the mud so the tree can get air – just like we use snorkels to breathe under water.
- Ureure (glasswort) is a plant that stores salt and water inside its short, thick stems. The salt stops the water being washed out of the stem at high tide.
- Eel grass can live almost totally under the water; it takes in nutrients through its leaves and roots.

Mānawa

Ureure

Eel grass



Animals


Tuangi

Like the plants, the animals that live in an estuary are **adapted** to living there.

- Tuangi (cockles) need salty water to live. However, these shellfish can live in places with less salty water by not growing as big. That's why in an estuary you often find the biggest cockles close to the sea.
- Birds like oystercatchers, stilts, and plovers wade in shallow water to find food. Many wading birds can't swim, but they have long legs for walking in the water. They use their long beaks to dig in the mud for shellfish and worms.
- Pātiki (flounder) have adapted to hide from their prey and from predators. Because they are flat fish, they can lie on the estuary floor without being seen. They also hide by changing the colour of their skin to be like the sand or mud.


Pātiki

Feeding and resting in estuaries

Many birds that migrate from place to place stop at estuaries to rest and find food. Every year, kuaka (godwits) fly non-stop for eight days from Alaska to Aotearoa New Zealand. That's a distance of 12,000 kilometres! They spend the summer feeding in our estuaries, mostly on sea worms and crabs. It must be well known that there is great kai in the estuaries of Aotearoa!

Why are estuaries important?

Healthy estuaries keep our oceans, rivers, and streams clean. Wetlands and trees like mānawa remove pollution and sediment from the water. The roots of the mānawa help stop the land from eroding or wearing away. Estuaries can also act as a **barrier** by protecting the land from storms and floods.

Estuaries are important to people. They provide food, water, and resources. Just like birds, we can get a good feed from estuaries. We gather pipi, tuangi, and īnanga (whitebait). A lot of fish that we catch in the sea breed in estuaries.

Many towns and cities in New Zealand are near estuaries as they are good natural harbours. In the past, people often used boats to get around and carry goods. It was important to have a safe place where the boats could land.

The calm waters of an estuary are a great place to paddle.

How can we protect estuaries?

People used to fill in estuaries to build houses or make farmland. Some estuaries were used for rubbish dumps. Many became polluted with plastics, waste, and chemicals from factories. Others disappeared completely. So we need to protect the estuaries that we still have.

Estuaries have always been valuable to Māori – as places to live and gather food and plants. Māori sometimes place rāhui on estuaries to stop people from gathering food. This helps to **sustain** life there.

There are many ways we can act as kaitiaki and look after estuaries. We can plant trees and marsh plants. We can keep pollution out of the water and remove weeds and rubbish.

People can **monitor** the health of an estuary. They can measure changes in the water to see if there are any problems. The students at Maungatapu School in Tauranga are monitoring their local estuary – you can read about their work on page 12.

If you would like to help take care of an estuary, the Department of Conservation has information about protecting estuaries and what schools can do to help. Let's make sure our estuaries remain havens for the amazing variety of plants and animals that live there.

Glossary

adapted: became suited to new conditions

barrier: an obstacle that blocks the path of something

breed: to produce young

habitats: places where animals or plants are suited to live

haven: a place that provides shelter and protection

monitor: observe or watch over a period of time

nutrients: substances that help keep living things healthy

salt marshes: grasslands that are often flooded with sea water

sediment: tiny pieces of soil and sand

sustain: maintain or protect

Kaitiaki of the Estuary

by Keri Welham

Ko ngā Pāpaka o Rangataua
He paruparu te kai
He taniwha te tangata!

The Crabs of Rangataua
They eat mud
And have the boldness of demigods!

The students at Maungatapu School in Tauranga Moana spend a lot of time digging in the mud of the tāhuna (estuary) in Rangataua Bay. They are trying to find out how healthy the estuary is. The sea creatures they find there give them clues.

The students get excited when they see plenty of tītiko (mud snails). This is a tohu or sign the tāhuna is healthy because tītiko don't like pollution or too much **sediment**. Another good tohu is when students see lots of eggs. This means the tītiko are **breeding**.

Monitoring the estuary

Several times a year, the students monitor the sea life at Ōpūpū reserve in Rangataua Bay. They collect data to help them find out about the health of the tāhuna.

First, students lay down a line in the mud. It's 100 metres long. They move along the line and stop every 10 metres. They look for creatures living on top of the mudflats. Then they dig with their hands to find creatures in the mud.

The students name and count each **species** they find. The first time they monitored the tāhuna, they found ten different species. There were pāpaka (crabs), tītiko, kōuraura (shrimp), and ika (fish). They also found heaps of noke (worms), which can easily burrow under the muddy surface.

But the students are worried. They've noticed that they are finding fewer sea creatures each time.

The students found a kōwhitiwhiti moana (snapping shrimp) in the tāhuna. This amazing creature makes a loud popping sound.

Scientists have measured the noise it makes. It can be louder than the music at a rock concert!

The Pāpaka of Rangataua

Pāpaka are very important to the people of Ngāti Hē and Ngā Pōtiki, who have lived on the shores of Rangataua Bay for hundreds of years. They call themselves Ngā Pāpaka o Rangataua – the Crabs of Rangataua.

Maungatapu School students like Te Rehutaimoana and Kaida-Miharo trace their whakapapa to all the iwi and hapū of this area. The pāpaka connect them back to their tīpuna (ancestors).

Ko au te pāpaka, ko te pāpaka ko au – I am the crab, and the crab is me. This is how the iwi of Kaida-Miharo have described themselves and their connection to Rangataua Bay for centuries.

Kaida-Miharo

Invading the estuary

Asian paddle crabs

In the last couple of years, Maungatapu School students have found evidence of a problem in the tāhuna. Large **aggressive** crabs called Asian paddle crabs have found their way into Tauranga Moana. They have spread to every corner of the tāhuna. These crabs are taking over the **habitat** of the small pāpaka.

"The Asian paddle crab doesn't belong here – the Pāpaka o Rangataua belong here," Kaida-Miharo says.

Science teacher Chris Dixon says students have built traps to catch the Asian paddle crabs. The council and some scientists are also trapping the crabs. Incredibly, a female can lay 85,000 eggs at one time. This means the population of crabs has grown quickly.

Visiting the tāhuna

Early one morning, Mr Dixon takes some of his senior science students to the Ōpūpū reserve to look for sea life. The principal, Matua Tāne, wades into the mud, but when he goes too deep, he realises his gumboot has a hole.

Zoe carries a crab trap, Te Rehutaimoana has a spade, and Kaida-Miharo has a clipboard to record what they find.

They examine the surface of the mud, then dig down. Terence lifts a rock and finds a pāpaka. He then finds a tiny pāpaka, which he shows to Matua Tāne. They decide it's a kūao (baby).

Matua Tāne tells Terence to put the kūao back so it is with its whānau.

Looking after the environment

Students first began monitoring the tāhuna when a scientist was working with local schools. She showed them how to observe any changes or problems. Students use special microscopes to examine shells and other interesting species up close. Experts often visit and talk to students about topics related to the moana.

The school is a kaitiaki for the land it's on and the bay that surrounds it. It also takes care of the Ōpūpū reserve, where students designed a mural for the park's toilets.

Maungatapu School is on land that was **donated** to the community in 1881 by the great-great-great-grandparents of Kaida-Miharo, Te Rehutaimoana, and many other students.

"The environment has been looking after the people of Rangataua Bay for hundreds of years," Matua Tāne says. "It's important that we continue to look after it as kaitiaki of the area and as a duty to our tīpuna."

“If there is a problem in the tāhuna, we will try to find a solution,” Mr Dixon says.

As well as taking care of the tāhuna and developing their scientific skills, students collect rubbish – bottles, cans, string, and plastic – before it washes into the sea.

Through their work, the students have discovered that people using kayaks, boats, and jet skis are damaging the mangroves. They are also finding more and more Asian paddle crabs and fewer native species.

“If we don’t try and fix the problem soon, we might lose even more native species,” Zoe says.

Zoe, Kaida-Miharo, Te Rehutaimoana, and Terence

Looking to the future

Students have written letters to the local council about the species disappearing from the mudflats at Ōpūpū. They also made a flyer about the tāhuna, which they delivered to every home in Maungatapu. “We reminded the community to look after the tāhuna,” Kaida-Miharo says.

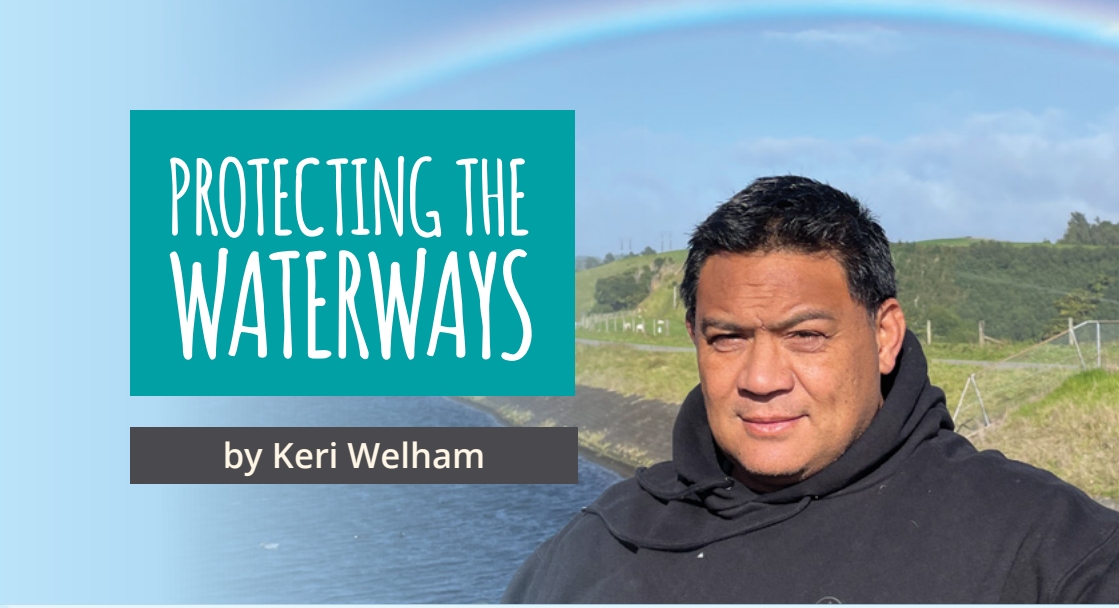
“Hopefully the tāhuna will get cleaner,” Zoe says. “And in a few years’ time, after we have left Maungatapu School, students will count even more species.”

Glossary

aggressive: likely to attack
breeding: producing young
donated: gave something to help someone or something
habitat: a place where an animal is suited to live
sediment: tiny pieces of soil and sand
species: a group of animals of the same kind

PROTECTING THE WATERWAYS

by Keri Welham



Des Heke Kaiawha was a student at Maungatapu School in the 1980s. Since then, he has helped build knowledge of te ao Māori in the school. He spoke to **Keri Welham** about the waterways of Tauranga and his work to protect them.

Keri: What were the harbour and tāhuna like when you were growing up?

Matua Des: We used to fish for pātiki (flounder) in the moana. And we gathered tītiko (mud snails) for my whānau and to feed people who came to events at the marae.

Keri: How have the harbour and tāhuna changed?

Matua Des: As I got older and the city grew, I noticed the stormwater that runs out of the drains was polluting the harbour. The water was no longer clean enough for some species of fish to live there.

Keri: How has this pollution changed the moana?

Matua Des: It's harder to gather kai now. There are fewer pātiki and tītiko and other native kaimoana (seafood). People also built houses on the waterfront. They cut down the mānawa (mangrove trees) where lots of native species lived as they wanted to be able to see the sea and launch their boats and kayaks. This has destroyed some of our oldest tuna holes – where the eels lived. It has also damaged the places that are a refuge, or safe place, for young fish.

All these things make it difficult for us to gather kaimoana from the tāhuna. This Māori custom is called mahinga kai. Our hapū, Ngāti Hē and Ngāi Te Ahi, can only gather food from the tāhuna if it's healthy.

What is stormwater?

Stormwater is the water that runs off roads and footpaths when it rains. It picks up dirt, rubbish, and chemicals, which then wash into the sea.

Keri: How do you help to protect the environment?

Matua Des: I work as an environmental advocate, which means I speak out to support the environment. When the council decides how Tauranga city will grow and develop, I advocate or argue why this might change or damage the environment. I use mātauranga Māori (Māori knowledge). I use my knowledge of the environment around Tauranga Moana too.

Keri: Does that mean you are a kaitiaki?

Matua Des: Yes. It's important that people want to be kaitiaki to protect our environment. The estuary is our food basket – it provides us with kai. We have a duty to take care of it. If we look after nature, nature will nurture or look after us.

I'm proud to see the students at Maungatapu School monitoring the tāhuna so they can protect the environment.

Keri: What are young people in your hapū doing today?

Matua Des: Some young people still gather watercress from the streams with their grandparents. They go to the tāhuna to look for fish. They have learnt to notice how healthy the environment is. They ask: Has the watercress been sprayed? Are there eels in the streams near the stormwater drains? Is this part of the tāhuna polluted?

Gathering kai keeps us in tune with our environment. With young people taking on the role of kaitiaki, there is hope for the future of the tāhuna.

TREE TALK

by Simon Cooke

“We’re lost!” Ruby exclaimed, as she struggled to keep up with her brother. They were trying to find their way back to the campground, but the forest looked the same in every direction.

“If we’re lost, it’s your fault,” Sefa said. “You ran off after that pīwakawaka.”

“I was trying to take a photo for the climate change competition,” Ruby explained. “The best photo and best article win awesome prizes, remember?”

“Yeah, I remember,” Sefa replied. He wanted to enter an article in the competition, too, but he couldn’t think of anything to write. He stopped and sat down on a fallen log.

Ruby sat beside him. “We’d better stay here. When you’re lost, it’s best to stay where you are. We’re not far from the campground, so we’ll hear Mum and Dad when they start looking for us.”

“I guess you’re right,” Sefa said. He kicked angrily at a young rimu sapling.

“Feel better?” Ruby asked.

“No,” Sefa replied. “Now my foot hurts.”

***

“Ow!” Rimu cried. “One of those possums attacked me!”

“I don’t think they’re possums,” replied a young kahikatea. “They don’t have any fur. Maybe they’re a type of tree?”

“Well, they’d better not plant themselves here,” Rimu replied. “There’s no room.”

“Silly saplings!” boomed Tōtara from far above. “They’re not trees. They’re humans.”

“I know all about humans,” said a tall mataī. “They’re destroying the planet.”

“These are young humans,” Tōtara said. “We can’t blame them. They’re not responsible for all the damage.”

Mataī waved its leaves. “You have your head in the clouds again, Tōtara.”

“Are all humans bad?” Rimu asked.

"No. Some do good things," Tōtara said. "Mataī, do you remember when the loggers came? Then some humans climbed us. They protected us until the loggers left."

"True, but other places haven't been so lucky," Mataī argued.

"Will these humans go away?" Kahikatea asked.

"I don't think so. They are lost," Tōtara replied.

"Then let's help them," Rimu said.

"I have an idea," Kahikatea said. "We can ask the other trees to lay a trail of leaves and berries to show them the way out."

Mataī relaxed its roots. "OK, I'll help, too. I'll give them some of my berries to eat. They still have a long way to go. They'll need energy."

***

“Hey!” Ruby shouted as something hit her on the head. She looked up. “Someone’s throwing berries at me.”

Sefa rolled his eyes. “There’s no one here. Oh! I got hit, too!”

“I told you,” Ruby said.

Sefa looked up. “They’re just ripe berries falling from that matai. Maybe a kererū is shaking them loose.”

Although it was mid-afternoon, it was cold and gloomy under the canopy. Sefa and Ruby huddled together.

“When do you think Mum and Dad will find us?” Sefa asked.

“Soon,” Ruby replied. “Don’t worry.”

Leaves rustled and branches creaked. “It sounds as though the trees are whispering,” Ruby thought. Calmed by the sounds of the forest, they both closed their eyes.

***

Ruby felt strange. Her arms were branches covered with leaves. Her feet were roots deep in the earth.

"Sefa! What's happening?" Ruby cried.

They felt the wind in their branches. They heard the forest talking.

"Ouch, something bit me!" Sefa yelled.

"That'd be a possum," Rimu said. "Serves you right for kicking me."

"Sorry," Sefa replied. "I didn't know."

"Know what?" Mataī asked. "That trees are alive? That they can talk?"

"Trees can't talk," Sefa said. Then he realised what he'd said, and he blushed.

"We don't talk like humans," Tōtara said. "Humans are all squeaks and giggles. We speak through our roots."

"What do trees talk about?" Ruby asked.

"Mostly about who will reach the sky first," Rimu said laughing.

"And who's hogging all the sunlight," added Kahikatea.

"That's Tōtara," Rimu whispered to Ruby and Sefa.

"Humph!" Tōtara said. "I heard that, you cheeky sapling. But these days we mostly talk about how the climate is changing."

“More floods,” Mataī agreed. “More forest fires. And humans are causing it.”

“But we can fix the damage, can’t we?” Ruby asked.

“We bike to school,” Sefa said.

“I guess we all need to take more responsibility,” Ruby said. “We could ask Mum and Dad to bike to work.”

“They need the exercise,” Sefa laughed.

“It might help if we buy less stuff,” Ruby suggested. “And recycle more things instead of throwing them away.”

“And plant more trees!” Sefa added.

“Little humans with big ideas,” the trees murmured.

“I think people would try harder if they knew trees could talk,” Sefa said. He rustled his leaves in excitement. “That’s given me a brilliant idea for an article for the climate change competition!”

***

When Ruby opened her eyes, she half expected to have branches instead of arms.

"What just happened?" Sefa asked sleepily.

Before Ruby could answer, she heard voices calling. For a moment, she thought the trees were talking again.

But then the ferns parted, and a woman in a bright yellow jacket appeared.

"Mum!" Ruby shouted.

"How'd you find us?" Sefa asked as they hugged Mum.

"I just followed the trail of leaves and berries you left to show your way. Very smart!"

"It wasn't us," Ruby said.

"I think it was the trees," said Sefa. "They must have made a path so we could find our way back to the campground."

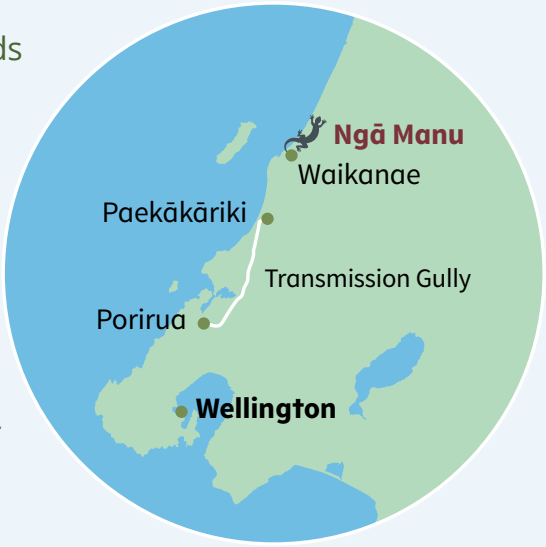
Mum laughed. "The trees made the trail! Next, you'll be saying they can talk."

"Funny you should say that," Ruby said grinning.

illustrations by Scott Pearson

Saving the

In 2015, eighty native lizards were moved to Ngā Manu Nature Reserve because their homes were in the path of the new Transmission Gully motorway. The lizards stayed at Ngā Manu until new homes were made for them near the motorway.



Capturing the lizards

Before they started building the motorway, workers **surveyed** the area. They wanted to find out what types of native **flora and fauna** lived there. They discovered that no native birds or bats were in danger from the motorway. But they did find that some native fish and lizards were threatened.

Workers captured the native fish and moved them to nearby streams. Then the native lizards were also collected from their natural **habitat** and taken to Ngā Manu.

Lizards

by Iona McNaughton

Kaumātua from local iwi Ngāti Toa and Te Āti Awa ki Whakarongotai blessed the lizards' new home at Ngā Manu. The kaumātua are **kaitiaki** of the native lizards. They also blessed the lizards and their new rocky homes when they were taken there in 2018.

Ngā Manu

Ngā Manu Nature Reserve is on 14 hectares of land near Waikanae. The staff at the reserve take care of native forests and native birds and reptiles, including lizards. Many people visit Ngā Manu, including school students.

Protecting the environment

"When we build new roads, we have to follow strict rules to protect the environment," says Reuben Mills, who worked on the motorway project. It was important that the environment was left in better condition when the motorway was finished.

During the project, workers planted native trees and shrubs. They protected nearby streams and set traps to catch pests.

Many native trees and shrubs were planted.

Feeling at home

Most of the native lizards taken to Ngā Manu were skinks. There were only eight geckos. Before the lizards arrived, staff built cages to protect them from predators like rats and mice. They put ferns, branches, sticks, and bark in each cage to make the lizards feel at home.

The native lizards were captured in groups from different areas in the hills. They stayed in these groups in the cages at Ngā Manu. Because they knew each other, they were more likely to get along.

"Our job was to take care of the lizards and keep them healthy," says Dave Banks from Ngā Manu. The lizards were fed insects, moths, and maggots.

Skinks and geckos

Skinks and geckos are both native lizards, but they are very different.

	Skink	Gecko
Scales	has hard, shiny scales	has soft scales
Eyes	can blink	can't blink
Sheds its skin (as it grows)	skin comes off in several pieces	skin comes off in one piece
Habitat	mostly lives on the ground	mostly lives in trees and bush
When in danger	dashes away	likes to stay still

Measuring the lizards

The lizards were measured and weighed when they arrived at Ngā Manu. Their average length was between 8 and 11 centimetres. They were measured and weighed again before they were returned to their habitat. Each skink was given a tag so scientists could identify them when they checked up on their health.

Designing new homes

Ox Lennon, a student from Victoria University, designed rock piles for the lizards to live in when they returned to the hills. The rock piles protect them from predators. The gaps between the rocks are big enough for the lizards to slip through but are too small for rats and mice to get in.

The lizards' measurements were useful when Ox was designing the rock piles.

More lizard projects

Since the first group of native lizards were released in 2018, the staff at Ngā Manu have collected and taken care of two more groups. The third group is still at the nature reserve. "We've learnt a lot from the first project," says Dave Banks. "We moved the cages to a sunnier place, and the lizards are thriving."

Scientists have visited the rock piles many times. They discovered that other native lizards had also moved in and made themselves at home.

Everyone at Ngā Manu is pleased to have cages that are pestproof so they can continue to look after other reptiles when they need a safe home.

Glossary

flora and fauna: plants and animals

habitat: a place where an animal is suited to live

kaitiaki: someone who protects the environment

kaumātua: elders

surveyed: examined and recorded the features of an area

TANIWHA

by Monique and Pātaka Moore

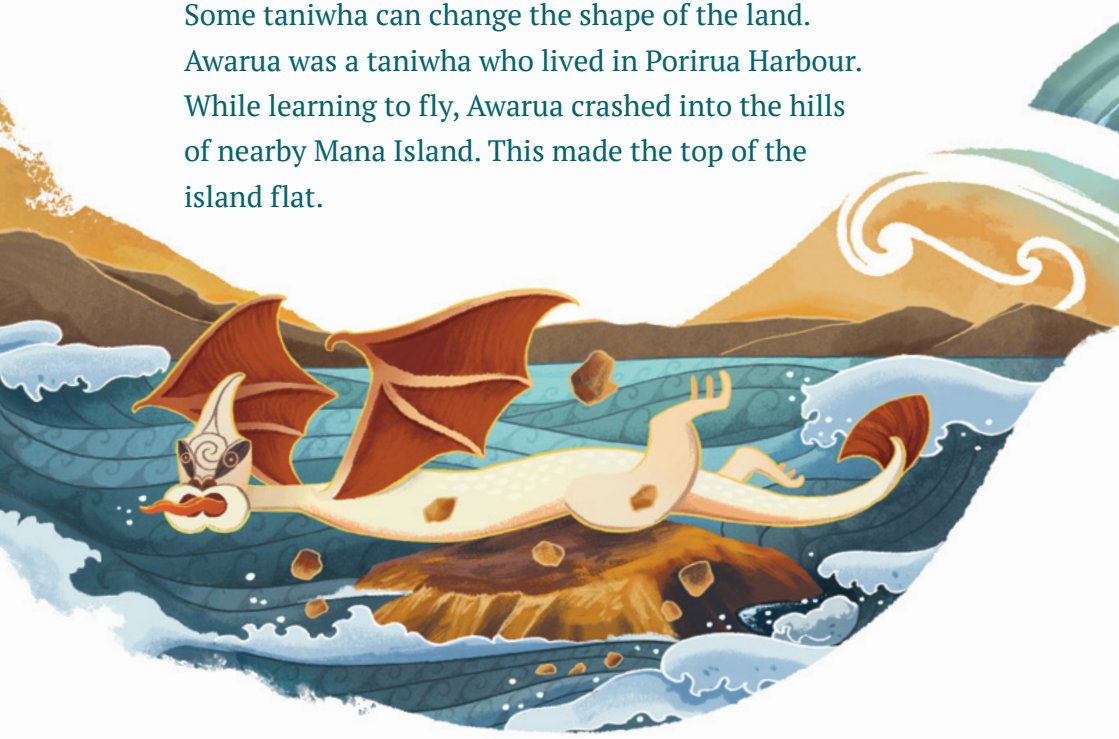
Taniwha have a special relationship with Māori, who tell many stories about them. Taniwha have different roles – and one of these is as kaitiaki. Many taniwha live in or near lakes, rivers, or the sea and help to protect and keep these places safe.

What are taniwha?

Taniwha can be creatures or objects and can have many different shapes and forms. Some taniwha even change what they look like when it suits them. They might appear as large, giant lizards, as fish such as sharks, as whales, or even as logs of wood. There are also stories of taniwha who look like creatures from another planet!

Māori sometimes leave gifts, such as food, at the homes of taniwha. Taniwha are also celebrated in carvings and buildings, on murals (wall paintings), and in stories.

Some taniwha can change the shape of the land. Awarua was a taniwha who lived in Porirua Harbour. While learning to fly, Awarua crashed into the hills of nearby Mana Island. This made the top of the island flat.



Taniwha as kaitiaki

Māori have worked together with taniwha for hundreds of years and think of them as very special kaitiaki.

There are many stories about taniwha who lived in the sea and guided waka safely to the shores of Aotearoa. Pane-iraira was a taniwha who looked like a whale. Pane-iraira swam with the great Tainui waka and kept those on board safe by calming the waves during storms and rough seas.

Pane-iraira swam with the Tainui waka.

Taniwha also protect the environment and can help us to be better kaitiaki of our lands and seas. If we don't look after these places with care and respect, taniwha can give us a sign that something is wrong. Some people believe that taniwha can get angry and cause problems if their homes are polluted or damaged. If the building of a new road destroys the home of a taniwha, people worry that the workers' trucks and machines might break down.

How can taniwha help us?

Taniwha can give us helpful information. Some iwi believe that when certain taniwha appear, it's a sign that good weather is on its way. Other stories tell of a taniwha that appears in the sea as a log of wood. This is a sign that crops will grow well or there will be plenty of fish to catch.

How can we help taniwha?

Like taniwha, we can be kaitiaki. Think about the rivers or streams near where you live. How can you help taniwha to keep these places healthy? You could plant trees and shrubs along rivers to help keep the water clean. You could pick up rubbish with your friends at your local beach or lake. And you can be kaitiaki at home by not using too much water when taking a shower, brushing your teeth, and washing the dishes.

Remember that if we keep the homes of taniwha healthy and safe, we can enjoy playing, swimming, and gathering food from these places too!

illustrations by Isobel Joy Te Aho-White

Hukarere and Hine Tai

by Apirana Taylor

Hukarere listened to the waves breaking on the seashore nearby.

"Nan?" she asked.

"Yes," replied Nan Waikawa.

"Are taniwha real?"

"Yes."

"Nan?"

"Yes."

"Are they lots of colours?"

"They can be."

"Nan?"

"Yes."

"Do taniwha have wings?"

"Some do."

"Nan?"

"Yes."

"Have they got scales?"

"Sometimes."

"Nan?"

"Yes."

"Can taniwha talk?"

"Hukarere! You ask too many questions. Eat your breakfast and pipe down!"

Hukarere gulped as she looked at Nan, who glared at her.

"Are you angry with me?" she asked.

"No."

"Why are you frowning?"

"Because I want you to eat your breakfast and get to school!" Nan erupted.

"Nan can be scary when she frowns," Hukarere thought. She dug her spoon into her cereal and popped it into her mouth. She chewed and looked thoughtful as she swallowed.

"My teacher, Mr Taikaha, said that if we want to learn, ask questions." She looked at Nan, who was still frowning. Then Nan's glare disappeared and was replaced by a gentle smile.

"Very well," Nan replied. "Ask questions. But just one at a time, please."

"Nan? Are taniwha really real?"

"Yes."

"But are they really, really real?"

"It's time for you to go to school!" Nan said.

Hukarere grabbed her backpack and scooted out the door. "Wait till I tell Wiremu, Nancy, and Tania that taniwha are real," she thought.

*****

After school, Hukarere sat at the table eating a sandwich.

"Nan," she said.

"Yes."

"I don't believe in taniwha."

"Why?"

"We talked about them at school today. My friends said they aren't real. And Mr Taikaha said he wasn't sure."

"Well, let me tell you –"

"Nan!" Hukarere interrupted. She leapt to her feet and pointed at Nan. "Taniwha aren't real. Have you ever seen one?"

"Yes," Nan replied.

"Have they got gigantic sharp teeth?" Hukarere asked.

"Sharper than razor blades," Nan said.

"Are they as big as mountains?"

"They can be bigger than mountains."

"Have they got claws?"

"Long as spears," Nan laughed.

"Do they fight and eat people?"

"They kill a thousand warriors a day. Then they eat them and use their leg bones for toothpicks."

"I don't believe you. Taniwha sound scary."

"Taniwha are powerful and can be dangerous," Nan continued, "but some are kind and caring. I call these taniwha kaitiaki. They guide us and care for us. Many Māori whānau have them. They can appear in many forms."

"Have you seen a kind taniwha?" Hukarere asked. "A kaitiaki."

"Yes. Her name is Hine Tai. She is our kaitiaki," Nan replied.

"What does she look like?"

"You ask too many questions, girl."

*****

The next day was Saturday. Nan sat in her chair gazing out the window at the sea. She looked thoughtful. "Hukarere," she called.

"Yes, Nan."

"It's a beautiful day. Good to warm my bones. Let's walk down to the rocks. I know a pool where Hine Tai lives."

When they reached the pool, Nan stood back a little and said to Hukarere, "Haere koe kia kite mehemea a Hine Tai kai te koma i ōna makawe. Go and see if Hine Tai is combing her hair."

Hukarere felt a bit scared. “What if Hine Tai isn’t a kind taniwha, a good kaitiaki? What if she eats me?” She peeked over the rocks and gazed into the pool to see if Hine Tai was combing her hair. She saw sunlight dancing on the water.

When Hukarere looked back, Nan asked, “I kite koe i a Hine Tai kai te koma i ōna makawe? Did you see Hine Tai combing her hair?”

“Kāo,” Hukarere replied.

*****

The next day, Nan called, “Hukarere! Haere koe kia kite mehemea a Hine Tai kai te koma i ōna makawe. Go and see if Hine Tai is combing her hair. The sea is calm. I’ll keep an eye on you from the porch.”

Hukarere walked down to the pool. She didn’t feel as scared as yesterday. She peered into the deep water and saw silvery blue fish darting about beneath the surface.

When Hukarere came back, Nan asked, “I kite koe i a Hine Tai kai te koma i ōna makawe? Did you see Hine Tai combing her hair?”

“Kāo.”

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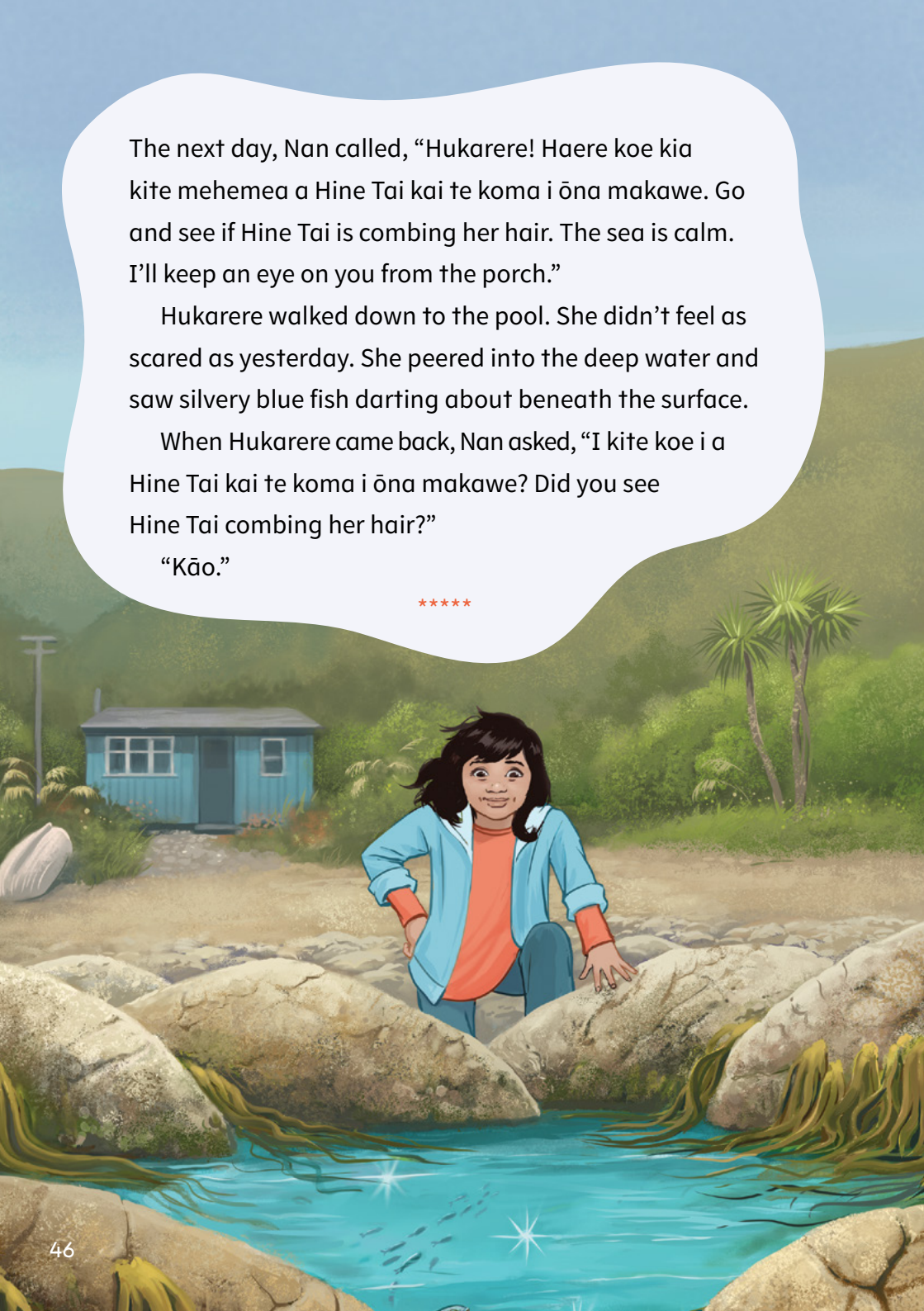

On the third day, Nan repeated, “Haere koe kia kite mehemea a Hine Tai kai te koma i ōna makawe.”

Hukarere ran to the pool. She crouched down and peered in.

Sunlit water and shadows danced over the rocks. Silver and blue fish darted about hither and thither. Sea shells glittered. Bull kelp swirled in the current.

“Can I see someone down there?” Hukarere wondered. She looked and looked. Suddenly she jumped up and ran back to the house.

“I kite koe i a Hine Tai kai te koma i ōna makawe?” Nan asked.

“Āe. Āe, e kui. I kite au i a Hine Tai kai te koma i ōna makawe,” Hukarere said. “Yes. Yes, Nan. I did see Hine Tai combing her hair.”

“Good,” Nan replied. “That’s a sign Hine Tai has risen from the deep to bring us lots of fish and mussels to eat. The sea is her home. If we keep the ocean clean and look after her whare, she will care for us and bring us riches from the sea.” Nan gazed through the window.

“Tell me, what did Hine Tai look like?” she asked.

“She was very beautiful,” Hukarere replied.

illustrations by Andrew Burdan

HARBOUR VIEW

I live near the sea, north of Auckland. Above my house, there is a small but welcoming hill. It has a wooden chair and a breathtaking view of the sparkling ocean.

Some nights I go up there with my dad, my sister, and my brother. We play rippa rugby – passing and catching the ball. Sometimes my brother can't play because there are too many people. But my sister and I carry on. On the way home, I take one more look at the beautiful view.

by Eden Rose, age 8
Year 4, Oteha Valley School

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