

Activity Title:

Case study – East Coast

Focusing question

How have and do different people in New Zealand use and value their beaches?

Resources required

- Case study: The story of pīngao at Ōpape – page 143
- Copying: copy the fact sheets for independent reading or use digital image of fact sheet

Prior learning

- 1b Beach brainstorm
- 2i Interrelationships – dune plants and animals
- 3c How we feel about and value beaches
- 3d New Zealanders and the beach
- 3e Kiwiana and the beach

Method

- 1 The objective of this activity is to explore an example that illustrates how different people in New Zealand use and value their beaches.
- 2 Independently, read the fact sheet **Case study: The story of pīngao at Ōpape**.
- 3 As a class or in small groups discuss:
 - What was the beach traditionally used and valued for by different groups in the story?
 - What impacts did these traditional uses and values have on the beach and the plants and animals that live there?
 - From this story – how do you think research and quality information can help us manage our beaches?
 - Were there any conflicting values in the story?

Possible next steps

- 4d The role of plants in dunes – picking up on some of the themes in this case study, this is an activity that looks at the function of plants on dunes and their role in erosion protection of our coastline.
- 5a The past – how have people affected beaches? – this activity looks back in time at how we have treated beaches around Aotearoa and attempted to mitigate coastal erosion.

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Environmental Education Aspect:

About and For/With the environment

Environmental Education Concept:

- Personal and social responsibility for action
- Biodiversity
- Sustainability
- Interdependence

Curriculum Links:

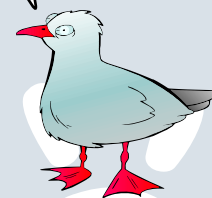
- Social Science
- Science

Suggested Curriculum Level:

Any

SUSTAINABILITY TIP!

Project a digital image of the fact sheet and save paper.





Tukutuku panels at the marae near Ōpape

Case study: The story of pīngao at Ōpape

A story – as told to the Coast Care Coordinator

“I guess this goes for all coastal marae but this particular story came from Omaramutu just east of Ōpōtiki near Ōpape. In that marae, in the whareniui, you can look at the beautiful tukutuku panels. When enquiring where the pīngao came from to make those panels I was told it came from the beach adjacent to and down below the marae. When we went and had a look there were no plants left on the beach; it was just a barren bare sand area.

I think the tukutuku panels were made in the late 1950s. In the early 1960s big herds of cattle had been driven through the beaches there. This continued for decades afterwards and those herds removed all of the native plants on those dunes. They totally wiped them out – the spinifex, pīngao and probably the *Euphorbia glauca* and most of the back dune plants as well. There were at least 100,000 cattle coming through those beaches every year, probably more. And that brought destruction on a massive scale.

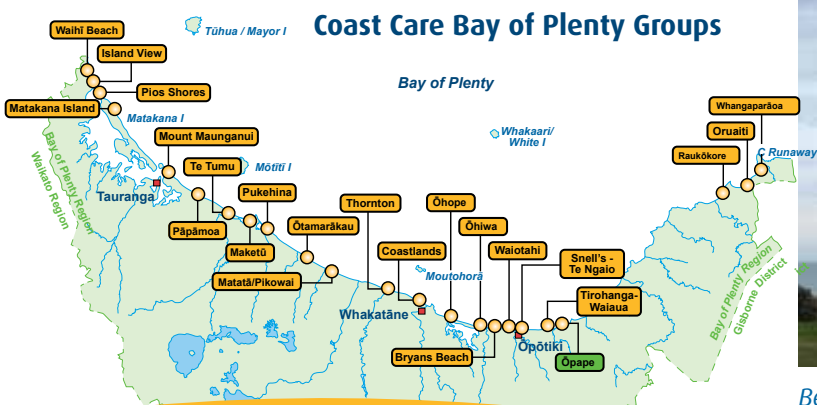
Through no fault of their own these people (at the marae) had lost that weaving resource (taonga raranga pīngao) and were very quiet and very humble about it. They didn't make any demands. They didn't want any compensation or anything like that. They said it was a real shame that the weaving resource had been lost and that now to get pīngao they had to go over to the Whanganui area. They had some contacts over there and they had to go to those people and get permission

to harvest pīngao in Whanganui which is hundreds of kilometres away. So we resolved then that we (Coast Care) should try and do something to reverse the damage to the dunes and dune plants of Omaramutu.

Ngā mahi tahi – working together as one

So we worked together – Ōpape Coast Care and a great bunch of iwi members. We got together down on the beach and started replanting pīngao and spinifex. This all began sometime around the year 2000.

What happened next was that a local chap who was well meaning and avid about conservation threatened to spray or remove the pīngao because he thought pīngao plants could harbour predators which might attack the dotterels nesting in there. This person didn't really want to consider any other reason for having the pīngao there. We think maybe there was some misconception of pīngao and its past relationship with dotterel. But in the end, the bottom line was; as far as he was concerned the pīngao and the dotterels would never get on. To save the dotterels, to ensure their successful breeding, he said the pīngao had to go.



Beach and foredune in front of the marae near Ōpape



The head of the new Ōpape Coast Care Group invited this young man around to have a cup of tea and pulled out the New Zealand Coastal Policy Statement (written by the Minister of Conservation). Much to the surprise of this well-meaning conservationist this document said the destruction of taonga such as native coastal plants like pīngao was not condoned at all. The head of the Ōpape Coast Care Group pointed out that it would not be tolerated by the locals either as they in fact owned the land (it was Māori/iwi owned land).

(The story of what happened to the land is another story altogether as a lot of the land in Ōpōtiki was land confiscated by the government. Māori were left with the scruffy land that the government didn't want. Iwi living in Ōpōtiki at the time were left to find some way of surviving. Most of it was too steep to do anything with so there were problems created there for the iwi and they were forced to live in this hilly land which couldn't sustain them... Anyway that's another tale!)

To get back to our story, the bottom line was that the pīngao remained and so did the dotterel. And they both survived really well. Unbeknown to the dotterel conservation man we sought the assistance and input of one of the ladies who ran one of the best dotterel survival programmes in the country – at Matakana Island. She came down so we could check whether restoring pīngao in this area would affect the dotterel.

She confirmed that pīngao planting would not hinder but enhance the dotterel breeding programme. She told us about the predation of black-backed gulls. They had a big problem at Matakana Island when the old Cambridge Road (Tauranga) dump was closed. All of a sudden there were thousands of black-backed gulls flying over to Matakana Island. These gulls had fed at the dump but now the dump was closed and they were hungry. As soon as the dotterels started to successfully rear their chicks at Matakana these black-backed gulls were coming over in hordes and killing every little dotterel. They had to cull the black-backed gulls to save the dotterel. She realised then that dotterel chicks really need something to hide under so they can get away from the black-backed gulls. Dotterel chicks have

a natural will within them to find somewhere to hide. At this time on Matakana Island there was no pīngao either. But further research found that pīngao was traditionally the main plant dotterel chicks used to hide under.

So this story has a very happy ending – pīngao and other coastal plants line the beach at Ōpape, the marae folk have pīngao to continue weaving their tukutuku panels, the beach in front of the marae is well protected from erosion by the dune plants and the dotterel population of Ōpape is thriving.”

*Oranga taipū. Mana taipū.
Dune livelihood. Dune power.*



Pīngao, *Desmoschoenus spiralis* [80cm]

The bronze-green sedge (top of page) turns golden-orange (above) in winter. A very efficient sand trapper with runners like spinifex, but is readily damaged by grazing, and trampling. In the future at Ōpape some mature plants will have leaves (which dry to a beautiful gold colour) harvested sustainably for weaving and use in tukutuku panels (for Wharenuī) and kete (small traditional baskets).

Find out more

If you want more information on Coast Care groups and programmes contact:

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Bay of Plenty Regional Council in partnership with Tauranga City Council; Whakatāne, Western Bay of Plenty, and Ōpōtiki District Councils; and the Department of Conservation.