

Activity Title:

Shore Birds of the Bay of Plenty

Focusing questions

- Which birds live on the Bay of Plenty coast?
- What are some features that enable them to live on the coast?
- What threatens coastal birds?
- What can we do to help?

Resources required

- Stories about shore birds (such as 'Grandpa Ngata and the Seagull' by Dave Gunson; 'A Very Important Godwit' by J & L Patrick; or 'Danger at Sandy Bay' by David McMillan)
- Pictures of shore birds
- Drawing materials and paper
- Recycled and natural materials for making a bird
- Shore Birds of the Bay of Plenty (Teacher Resource Sheet)
- A Photographic Guidebook 'Birds of the Eastern Bay of Plenty Harbours and Estuaries' – Contact Bay of Plenty Regional Council for copies

Alternative activity

Copying: My Shore Bird Research Project sheets at A4 or A3 size - one for each student

Prior learning

- 2g (i) Coastal wildlife overview
- 2l (i) and (ii) Dune Community Bingo game

Method

- 1 Tell or read a story about a shore bird (ideally one found locally).
- 2 Watch video clips online, such as the Dotterels video from Department of Conservation's 'Meet the Locals' series
<http://www.doc.govt.nz/get-involved/conservation-activities/meet-the-locals-videos/fifth-series/dotterels/>
- 3 Allocate each student a shore bird.
- 4 Give them a picture of the bird (pictures may come from the bingo cards, or be copied from the photographic guidebook 'Birds of the Eastern Bay of Plenty Harbours and Estuaries').

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Shore Birds of the Bay of Plenty

Environmental Education Aspect:

About and With/For the environment

Environmental Education Concept:

- Biodiversity
- Sustainability

Curriculum Links:

- Literacy
- Science
- Social Science

Suggested Curriculum Level:

- Levels 2-4



- 5 Pair share – what do students know about their bird? What do they notice about the bird?
- 6 Draw and label the bird. Write what they know about the bird.
- 7 Use recycled and natural materials – as a class group build a model of a bird. (You could use an old ball or something round as the body, feathers for the wings and tail, paper or card for the beak and beads for the eyes).
8. Use questioning to determine: What do we know about coastal birds? What do we want to know? How can we find out? And reflect... What have we learnt?

Alternative activity for higher level students: My shore bird research project

Get each student to choose a shore bird to research. Fill in the 'My Shore Bird Research Project' sheets, or use it as a guide. Detailed information may be found on these sites:

- www.nzbirdsonline.org.nz
- www.teara.govt.nz/en/birds-of-sea-and-shore
- www.doc.govt.nz/nature/native-animals/birds/sea-and-shore-birds

Possible next steps

Listen to the different sounds the birds make, using links such as Radio NZ, or DOC websites:

- www.radionz.co.nz/collections/birds
- www.doc.govt.nz/nature/native-animals/birds/bird-songs-and-calls



My Shore Bird Research Project

Choose a coastal bird that you want to know more about. Using as many different methods of research as you can, answer these questions about your bird.

My shore bird is:


Its scientific name/Māori name:

Draw a diagram of your bird here and label as many features as you can.

What is its nest like, and where is it?

What things might threaten or harm your bird?

Does your bird need help, if so, what can be done?

What type of sounds does your bird make? Have a go making its bird calls! 

What does it eat?

How does it go about getting food?

Other interesting facts you have found out about your bird:

Teacher resource:

Shore Birds of the Bay of Plenty

Article and photography by: Julian Fitter
(all photos are by J Fitter unless credited otherwise)

James Cook named our bay the Bay of Plenty for many reasons, one of which must have been the plenitude of seabirds he saw as he sailed across the bay. Out at sea he would have seen mainly petrels, shearwaters and albatross, many of which breed on the islands in the bay. Had he come ashore, he would have seen huge numbers of shorebirds that we can still find today.

The Bay of Plenty coast is one long sand beach with a few rocky outcrops and four large shallow harbours. The two largest of these are Tauranga to the west and Ōhiwa in the east, with two smaller ones, Maketū and Little Waihi, in the middle. The sandy beaches are also breached by rivers whose exits to the sea often change from year to year. These harbours and river mouths are the main reason why the Bay of Plenty coast is so rich in birdlife.

This birdlife divides easily into four distinct groups - waders which feed on invertebrates, shags which are fish catchers, gulls which are mainly scavengers and terns who are also fishers.

Native waders

As their title indicates, waders have long legs to enable them to wade in shallow water. Many of them also have very long bills to enable them to probe into the mud and sand in search of their favourite food. Those with shorter legs and bills tend to feed closer to the shoreline.

Most prominent of these waders is the Tūturiwhatu or New Zealand dotterel. There are approximately 2000 of these birds, which are found only in New Zealand, with nearly 10 percent of them found in the Bay of Plenty.

Two other native waders that breed in the bay are the much smaller banded dotterel, which breeds mainly in the Eastern bay, and the variable oystercatcher. The variable oystercatcher is a large, almost all black wader, with an impressive orange-red bill and legs, which is found throughout the Bay.

There are a number of much larger wading birds which are found mainly in the harbours – these are the white-faced and reef herons, and the royal spoonbill with its impressive spoon-shaped bill. Spoonbills do not breed in the bay, but there are several flocks in the harbours which increase in numbers during the winter.



Tūturiwhatu,
New Zealand
dotterel,
*Charadrius
obscurus*



Tōrea pango,
variable
oystercatcher
and chick,
*Haematopus
unicolor*



Matuku
moana,
white-faced
heron, *Ardea
novaehollan-
diae*





Kuaka, bar-tailed godwits
Limosa lapponica



Left: Kawau, black shag,
Phalacrocorax carbo

Right: Kawau/kāruhiruhi, pied
shag, *Phalacrocorax varius*



Karoro, Southern black-backed
gulls, *Larus dominicanus*



Tarāpunga, red billed gull,
Larus novaehollandiae scopulius (Photo: CC)



Tara, white-fronted tern,
Sterna striata

Migratory waders

In addition to the native waders that breed along the coast, there are huge numbers of migratory waders, some of which migrate from the South Island in the winter. These include the South Island pied oystercatcher, and the wrybill. The wrybill is the only bird in the world with a bill that curves to the right, apparently to help it turn stones over when searching for food.

The other migratory waders are the long distance guys, led by the bar-tailed godwits. These wonderfully long-legged and long-billed birds fly all the way to Alaska to breed, and then all the way back. Perhaps the most amazing feature of this 22,000 km annual journey is that, on the way south, if the weather conditions are right, they will do it in one single flight – eight days and eight nights, non-stop! That really is awesome! Some godwits, most likely the very young and the older ones, stay in New Zealand all year round. So godwits can be seen in all of our harbours at any time of the year.

Shags

Shags nest in trees on or close to the coast. They are large birds that sit very low in the water when swimming and then dive down to catch fish using their large webbed feet to propel them. They can spend a lot of time underwater, and when they have finished fishing they can often be seen resting on the beach, a post, or tree, with their wings held open to dry. There are two all black species and two black and white species. Shags have been far less affected by the arrival of humans than many other species. Because they nest high up in trees and feed underwater they are less likely to be attacked by mammalian predators.

Gulls

These common coastal birds are mainly white. Gulls are the ultimate scavenger and the red-billed gull will be known to many for its liking for picnic scraps. Its larger cousin, the black-backed gull, has also adapted well to humans and has increased in numbers to the detriment of a number of native species. Because they like a breakfast of baby dotterel chicks, black-backs need to be controlled close to dotterel nesting areas.

Another much less common gull is the black-billed gull; this is very similar to the red-billed gull but has a finer black bill and black legs, in contrast to the red bill and legs of the red-billed gull. The black-billed gull is endangered and found mainly in the South Island, but we have breeding colonies at Maketū and in Ōhiwa Harbour.

Terns

Terns are graceful relatives of the gulls; most common in the Bay are the handsome white-fronted terns with their jet black caps and long v-shaped tails. They often breed close to the red-billed gulls while their cousins, the much larger Caspian tern breeds individually or in small scattered colonies. Caspians are the largest terns in the world and, like all terns, feed by diving into the sea to catch small fish. Just occasionally you may also be fortunate enough to see the smallest tern in the world, the very rare and very small fairy tern.



Important Bird Area

The designation 'Important Bird Area' or 'IBA', is one given by BirdLife International to sites which are particularly important for one or more threatened or endangered bird species. In mid 2014, they announced a list of 141 Seabird IBAs in New Zealand. Most of these are on offshore islands but, of only 15 sites on the North Island, one is Maketū in the Bay of Plenty. This is a significant recognition, as it raises the profile of the area and can make it easier to obtain support for the protection of the birds in the area.

Threats

Like many other native birds, shore birds have been hard hit by a loss of habitat from human activities, and the introduction of mammalian pests. Rats, stoats, weasels, ferrets, hedgehogs, cats and dogs are a pretty formidable army to have to deal with.

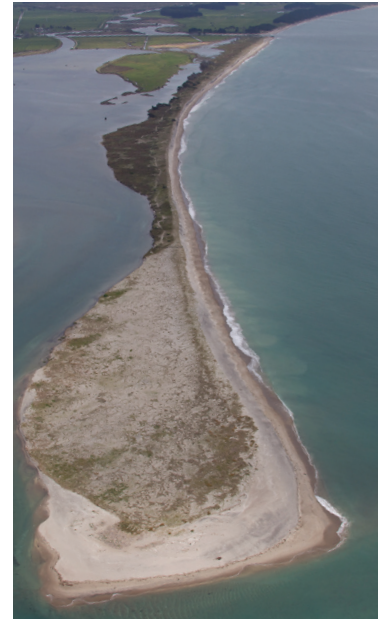
Some shore birds nest and lay their eggs in the sand on the beach above the high tide mark, and in the sand dunes, and these may also be affected by vehicles, and pedestrian use of the beach.

Restoration programmes

There are various restoration programmes, spearheaded by DOC, and supported by the Bay of Plenty Regional Council, as well as local Councils, and voluntary groups such as Forest & Bird and the Maketu Ongatoro Wetland Society. The main focus of these programmes are to control mammalian predators during the breeding season from August through February, while at the same time looking to restore the ecology of the main breeding sites. The protection being given primarily to our shore birds benefits many other native species of birds, reptiles and invertebrates.

What can you do to help?

- Watch out for 'Bird nesting' signs on beaches and stay outside of fenced areas. Use designated accessways to the beach.
- Keep your pets under control at all times at the beach. Dogs should be kept on a leash during nesting season. Be aware of local Council bylaws relating to dogs on beaches.
- Follow local Council bylaws on vehicle use at beaches. Ideally, keep vehicles off beaches during the shore bird nesting season (August through to February) and stay below the high tide line whenever possible.
- Become a bird minder! Volunteer your time or provide other support for pest control programmes through DOC, your local Council or other conservation groups.



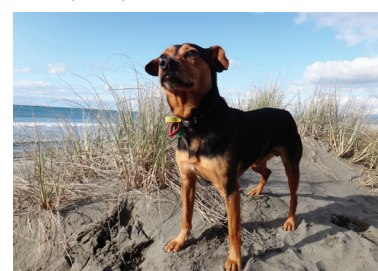
Maketū Spit



Variable Oystercatcher Nest



Stoat (DOC)



Dog in dunes (CC)



Hedgehog (DOC)

