# Discover TÁHUNA TÖREA SELF-GUIDED WALK NAU MAI HARAE MAI

## This self-guided walk starts from the bridge at Roberta Avenue Reserve before continuing along the path to the entrance of Tāhuna Tōrea.

The numbered points on the map are associated with suggested activities and the following notes.

Please remember to 'Take nothing but memories, leave nothing but footprints' 'Haria ko ngā maharatanga anake, waiho ko ngā tapuae anake'.

#### 1. Roberta Reserve

The bridge at the far end of Roberta Reserve is a great place to stop and reflect on how people enjoy using this recreational space and the estuary. If you're lucky you might spot eels and fish in the stream from the bridge.

## 2. Looking out from the top of the hill

From this vantage point you'll be able to see Bucklands Beach (Komiti), Brown's Island (Motukorea) and Musik Point (Te Naupata) – once the site of the 500-year-old pā of Te Waiarohia of Ngai Tai. The area along the Tāmaki Estuary once supported many Māori settlements. Fertile soil supported prosperous villages and māra kai (gardens), and the coast provided rich fishing grounds. To read more about the history of the area visit waiotaiki.co.nz/blog/from-rubbish-tip-to-reserve.

## 3. On the foreshore

The area just behind the shore was once the site of a Māori summer camp. It would have been the perfect site from which to search for tuangi (cockles), tio (oysters), pipi, takarepo (mud snails) and kairau (mud crabs) at low tide and fish for small sharks, whai repo (stingray) and pātiki (flounder) in deeper water. Use the guide available from: <u>otago.ac.nz/marine-studies/resources/otago110042.pdf</u> to identify different shells. Did you know that our native cockle is one of the most important animals in the estuary ecosystem, providing food for wading birds and other animals, filtering water and recycling nutrients.

## 4. By the bench on the beach

The intertidal mudflats at Tāhuna Tōrea provide wading birds with a bountiful supply of food. Around 60 species of waders have been recorded in New Zealand, 13 of which live and breed here all year round. Species you are likely to spot include tōrea (pied oystercatcher), tōrea pango (variable oystercatcher), poaka (pied stilt) and tūturiwhatu (New Zealand dotterel). Arctic waders including the kuaka (bar-tailed godwit) and huahou (lesser knot) breed in the Arctic Circle and fly here to feed during our summer months. Wading birds are well adapted to help them find worms, snails, crabs, shellfish and other small animals in the mud. Their long legs help them feed without getting their feathers wet, their long bills can probe down into the mud and sand to feed on hidden animals and open bivalve shells.

## 5. Next to the intertidal lagoon

The intertidal lagoon to the right of the path leading away from the beach was once an old Māori fish dam. Fish including pātiki, (flounder), toitoi (bullies), kāraraha (whitebait) and (tuna) eels were driven in at spring tide and caught with a net. Mangroves provide habitats for juvenile fish and roosting sites for birds.

## 6. At the lookout over the lagoon

This is a lovely spot to sit quietly to observe and listen for birds. <u>nzbirdsonline.org.nz</u> is a great online tool for helping to identify what you see. Visit <u>doc.govt.nz/nature/native-animals/birds</u> to listen to birdcalls.

A quote from the book Tahuna Torea: Tip Site to Nature Reserve by Chris Barfoot evokes memories from the past whilst relaxing here:

Here swam the mokopuna, in mangrove inlet deep; Here was trapped the fleshy godwit, and fish dam its store did keep; The mudflats teemed with pipi, and kūmara on the flats; Kai moana's harvest, fills umu and fish racks. From all around the families come, From Ōrākei and Maungarei, from Taurere and Komiti; And deeds of old hold the young enthralled, While the nights are long, with laughter and song In the old summer camp by the shore.



#### 7. By the griselinia trees on the Lagoon Walkway

The holes created by pūriri moth caterpillars are found in many species of tree including these griselinia. Read more about the life cycle of the pūriri moth on the signage under the trees. Adult moths may emerge at any time of year, but the most common season is October–December. The trees along the Lagoon Walkway were mostly planted in the 1980s after an extensive effort to rid the area of weeds including fennel, wooly nightshade, gorse and wattle. The native vegetation now provides habitat and food for native birds. Look out for the interpretive signage that describes how each species was traditionally used by Māori and early European settlers.

#### 8. Next to the midden on the Lagoon Walkway

Middens are places where food remains such as shells and animal bones; ashes and charcoal raked out of cooking fires; and worn out or broken implements were discarded.

A midden can provide information about how and when people lived in the area, the resources they used, how long a site was occupied and even which month of the year different shellfish species were gathered in.

### 9. Near the Reg Connelly Lookout

Kawakawa is one of the many plants people have traditionally used for medicinal purposes. The sweet fruits are eaten by kererū and Māori sometimes added them to food after removing the small seeds. The peppery leaves could be used to make tea and brewed to make beer. Near the bench look for the sign "Tainui Põhutukawa" to read the story of the Tainui waka and find out why this Põhutukawa tree is special.

## 10. On the shore at Cable Beacon Point

This is another great spot to take a closer look at the growth of mangroves and search for their propagules on the shore. Mangroves trap sediments and nutrients, providing a habitat for shellfish and other small animals forming the base of a complex food web. Visit <u>sciencelearn.org.nz/resources/1230-life-in-the-estuary</u> to find out more. For more about mud crabs visit <u>gopi.org.nz/education/tunnelling-mud-crabs</u>.

## Along the boardwalk on your way to the freshwater pond

As you walk along the boardwalk look out for tī kōuka (cabbage trees). Captain Cook named them cabbage trees because the cooked shoots taste like cabbage. The shoots, tap roots and core of the trunk were an important food source for Māori and also had lots of medicinal uses. The leaves were woven to make rope, clothing, roof thatching and baskets. Tī kōuka flower nectar attracts insects and birds love to eat the berries in summer.

### 11. At the freshwater pond

The sign overlooking the freshwater pond provides an excellent overview of how the area has been transformed from abandoned farmland into a haven for wildlife.

The inspiration to develop Tāhuna Tōrea as a nature reserve came from naturalist Ronald Lockley. A dedicated group of volunteers, the Tāhuna Tōrea Rangers, has since planted thousands of trees, formed tracks, controlled pests and eradicated weeds and created signage in partnership with the Auckland Council to bring his vision to life. The reserve is now an ecologically significant area for a number of native and migrating bird species.

### 12. Returning to Roberta Reserve via the Lower Bush Walk

The walk back to Roberta Reserve takes about 20 minutes from here.

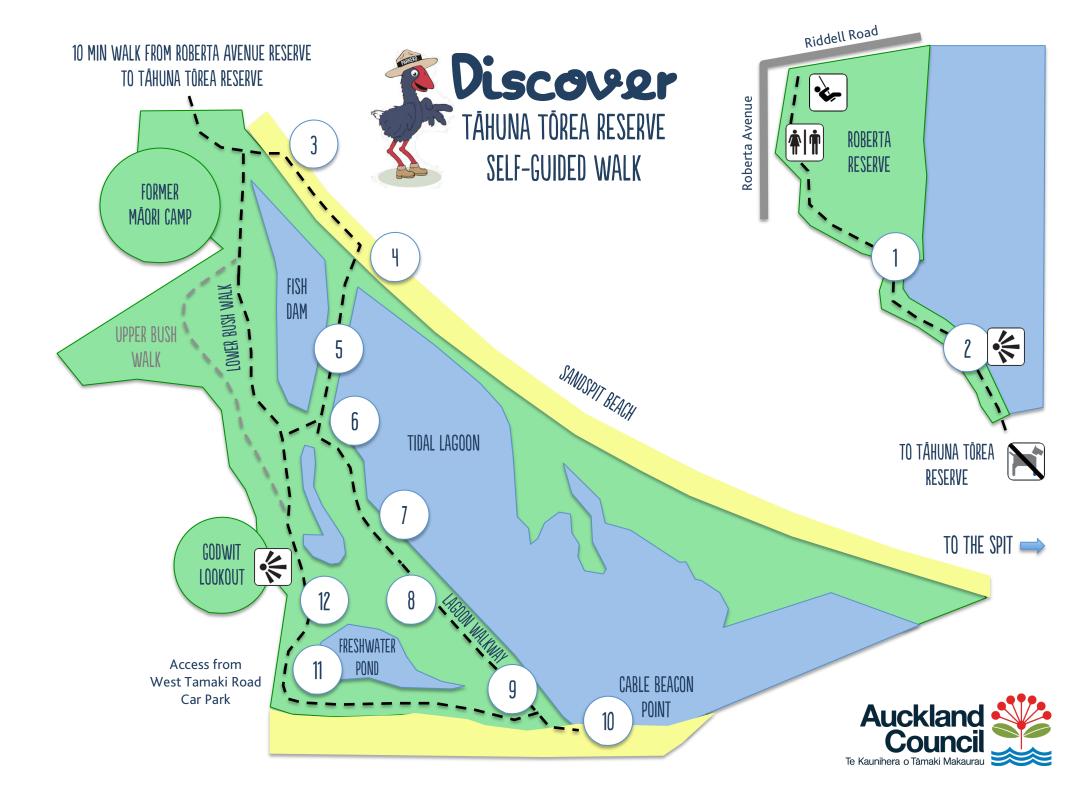
After the Godwit Lookout, be sure to follow signs to the Lower Bush Walk – the Upper Track is a longer route back that will take you uphill.

On your way you'll find lots of interpretive signage describing the features and use of native trees. You might like to find a quiet spot to look and listen for tūī and pīwakawaka (fantails).

# TOP TIPS FOR VISITING

- This self-guided walk has been designed to take 2 hours at a moderate pace. You could always start at the West Tamaki Road entrance and complete a shorter part of the walk if you have less time to spend exploring.
- There is a lot to see and experience in the reserve all year round. The best time to view wading birds is from November to March and between full-tide and half-tide. For tide times visit <u>metservice.com/marine-surf/tides/auckland</u>
- Bring a pair of binoculars and a wildlife guide to help you identify what you see.
- Useful books available from your local Auckland Council library include: Tōrea Tōrea: Tipsite to nature reserve by Chris Barfoot Native Birds of Shore and Wetland: Penguin Pocket Guide New Zealand Seashell Identification Guide by Andrew Crowe
- To find out how to get involved with projects led by the Tāhuna Tōrea Rangers please email <u>mylocalpark@aucklandcouncil.govt.nz</u>
- To report a problem, visit <u>aucklandcouncil.govt.nz</u> or call 09 301 0101.







Tāhuna Tōrea means 'the gathering place of oystercatcher'. The reserve is an important sanctuary for a variety of native birds and has a fascinating history of Māori occupation.

On your walk today you'll learn more about the history of the area, its transformation into a sanctuary for wildlife and the special plants and animals that live here.

*How could you help protect the nests of* 

shorebirds when visiting the beach?

# Dia You KNOW?



The green bench on the beach is a lovely place to sit and watch wading birds as they forage for food in the intertidal zone. The best time to view them is 2 hours before or after high tide.

You're likely to spot torea (oystercatchers) probing for food. Also look out for kuaka (bar-tailed godwit) that visit here as part of an epic migration – they breed in the Arctic during our winter months and then fly 11,000 km without stopping to feed here over summer.

## 1 — ENJOYING THE ESTUARY

Parks and reserves are great places for people to visit and relax. How many different activities can you think of that people could enjoy here? What's your favourite thing to do when you visit a beach or reserve?

## 2 - HISTORICAL LANDMARKS

Enjoy the view from the top of the hill! How many landmarks can you recognise from here? 500 years ago there was a large pā (fortified village) on the headland opposite. Why do you think this area would have been a good place for people to settle?

## 3 - SEARCHING FOR SHELLS

The taikoraha (mudflats) were once a good place to gather kai moana including shellfish, kairau (mud crabs) and ika (fish). How many different shells can you spot? Can you find a matching pair? See if you can identify tio (oysters), pipi, tuangi (cockles) and kawari (whelk). Remember to return anything you find.

Dig YOU KNOW? Oystercatchers can eat 350 cockles in one day!

# 5 - INVESTIGATING MANGROVES

Most New Zealand shorebirds breed between September and November. Many nest on the ground, creating a

which is why pest control is important. Why do you think dogs are not allowed on the reserve?

simple 'scrape' or hollow in the sand. The eggs and chicks are at risk from predators including rats and hedgehogs,

As you walk up the path from the beach take a closer look at the mangroves to spot some of their special adaptations: Because they live in salty, muddy water with low oxygen levels they grow roots called pneumatophores "new-mato-fores" to take in air. They can get rid of excess salt from their leaves

look for salt crystals underneath them.
New plants grow from bud-like propagules.

# 1 III

# 5- Herons and Kingfishers

The lookout is a great place to watch matuku moana (white-faced heron)

and kōtare (kingfisher) roosting or searching for fish and mud crabs amongst the mangroves. You might see and hear other birds too. Close your eyes and each time you hear a new bird call hold up a finger.

How many different birds could you identify?



## 7 – LOOKING FOR PÜRIRI MOTH HOLES

At the end of the boardwalk, to your left you'll find some trees riddled with holes - how many can you count? The holes have been made by ngutara (pūriri moth caterpillars) that live inside for up to 7 years and grow up to 10cm long. They would have provided Māori camping here with a tasty snack. Can you find a tree nearby that could have been used for firewood to cook them on?



## *Crabs eat plankton, bacteria and algae found in the mud. They can travel up to 200m away from their burrows in search of food.*

## 10 - SEARCHING FOR CRABS

Kairau (mud crabs) are an important source of food for fish and wading birds. They also help to recycle nutrients in the estuary. Look for crabs under the smaller rocks; lift them carefully and remember to place the rocks and crabs back where you found them.

## 11 — WONDERFUL WETLANDS

How many different native birds can you spot at the freshwater pond?

kawau paka (little shag)

pūtangitangi (paradise shelduck)

- warou (welcome Swallow)
- 🗌 kōtare (kingfisher)
- 🗆 matuku moana (white-faced heron) 🛛 pūkeko

**Di** YOU KNOW? Feeding the ducks bread can make them sick! They have plenty of natural food to eat in the pond.

# 8 — UNCOVER A MIDDEN

Look out for a sign on your right and pull away the grass near it to reveal a 400-500 year old midden containing old shells and fish bones. This provides evidence that people once camped and fished near here. Other archaeological finds nearby include fishing hooks.

# 9 – LOOKING FOR KAWAKAWA LEAVES

Look for heart-shaped kawakawa leaves that have many traditional medicinal uses:

- a cure for cuts, wounds and stomach pains
- chewed to relieve toothache and for fresh breath
- the liquid from boiled leaves treats bruises and colds
- added to a steam bath to soothe aches and pains
- crushed and used as an insect repellent
- Try tasting a leaf, they have a peppery flavour.

# Dia You KNOW?

The holes in the leaves are made by the caterpillar of the Kawakawa Looper Moth. They are the only insects to eat these leaves. See if you can spot one hiding under a leaf.

# 12 - GET TO KNOW YOUR NATIVE TREES

As you walk along the Lower Bush Walk track you'll find lots of signs to help you identify trees that have been planted within the past 50 years. Can you spot the following trees and find out more about them?

- □ Karaka What did Māori have to do to the poisonous orange fruits before they could eat them?
- □ Tōtara What was the wood traditionally used to make?
- □ Nīkau What did Māori use the leaves for?
- □ Rimu What did Captain Cook use the young leaves to make?
- $\hfill \square$  Kahikatea Which birds help to spread the seeds of our tallest species of native tree?

Look out for coloured tags on trees that help park rangers and volunteers identify where they've placed rat and possum traps. Why do you think it's important that pests and weeds are controlled in a reserve?









# MĀTAKITAKI MANU REPO WATCHING WETLAND BIRDS

**Did you know?** Wetland habitats including swamps, freshwater lakes, rivers and streams are home to 30% of New Zealand's native bird species, some of which are very rare. To find out more about wetland birds visit <u>teara.govt.nz</u> and search 'wetland birds'. For help with bird identification visit <u>nzbirdsonline.org.nz</u> and click on 'Identify that bird'. The Auckland region has about 3,700ha of freshwater wetland, 14,000ha of estuarine wetland, 10,000km of rivers and streams and over 30 lakes. To discover more about these special places and where you can go to explore them visit <u>aucklandcouncil.govt.nz</u> and search 'wetland'.











# KĀRUHIRUHI / PIED SHAG

Native to New Zealand. They are often seen basking with their wings spread out to dry because their feathers are not waterproof. They dive for fish and eels. Females lay 3-4 eggs at any time of year in a nest that's built as a platform of sticks in a tree overhanging the water.

## KAWAUPAKA / LITTLE SHAG

Native to New Zealand. Their plumage can vary from completely black through to white and combinations in between. They can be distinguished from other types of shag by their small size, short yellow bill and relatively long tail. They dive for small fish and other aquatic animals.

## PŪTANGITANGI / PARADISE SHELDUCK

Endemic to New Zealand. Females have a white head and chestnut-coloured body, while males have dark plumage. Breeding pairs mate for life and return to the same nesting sites each year. Females lay a clutch of 8-12 eggs in spring, and both share the parenting of chicks when they hatch a month later.

## PĀPANGO / NEW ZEALAND SCAUP

Endemic to New Zealand. They are New Zealand's only species of diving duck. They can dive more than 2m to feed on aquatic plants, snails and other invertebrates. Females lay 2-15 eggs in spring and summer, caring for the eggs and chicks by themselves. Day-old chicks can swim and dive down to 1m.

## PĀRERA / NEW ZEALAND GREY DUCK

Native to New Zealand. They look similar to female mallard ducks but have a distinguishing facial stripe and olive-coloured legs (mallard feet are orange). They have naturally interbred with introduced mallard ducks to such an extent that pure grey ducks have been given a critical conservation status.

'Native' means a species is living in its natural range, including areas it has reached without human introduction. 'Endemic' means that a species can only be found in a particular place.















## OTHER BIRDS

## WEWEIA / NEW ZEALAND DABCHICK

Endemic to New Zealand. They can dive down to 4m, holding their breath for 30 seconds to catch small fish, aquatic insects, snails and crayfish. Females lay 2-3 eggs from winter to summer. Chicks can swim as soon as they hatch but often ride on their parents backs until they are about 4 weeks old.

## KÕTUKU NGUTUPAPA / ROYAL SPOONBILL

Native to New Zealand, also found in Australia and parts of South-East Asia. They sweep their long spoon-shaped bills from side to side to catch crustaceans, fish and small insects. When breeding, long white plumes grow from the back of their heads and coloured patches appear on their face.

## MATUKU MOANA / WHITE FACED HERON

Native to New Zealand having self-introduced from Australia in the 1940s. They are often seen walking slowly in shallow water looking for fish, crabs, worms and other small animals which they can catch at lightning speed. They build nests and roost in tall trees with both parents raising their chicks.

## PŪKEKO / SWAMP HEN

Native to New Zealand, also common in Australia. They are mostly vegetarian but also eat fish, frogs, eggs and other small animals. They live in extended family groups and can breed all year round with females laying eggs in one nest. All the adults in the group help to incubate the eggs and rear the chicks.

## AUSTRALIAN COOT

They self-colonised from Australia in the 1950s and are classified as native. Coots are related to pūkeko and takahe. They breed during the spring and summer, laying 3-5 eggs on a floating nest of twigs anchored to branches or reeds. They dive to feed on aquatic vegetarian and invertebrates.

## KAKĪĀNAU / BLACK SWAN

They were introduced in the 1860s from Australia but are classified as native to New Zealand as they probably self-colonised around the same time. They mainly feed on aquatic plants and grass. Breeding pairs are strongly territorial, protecting their eggs and chicks in nests made of mounds of grassy vegetation.

Other native birds that you are likely to find in wetlands include kōtare (kingfisher), warou (welcome swallow), tarāpunga (red-billed gull), karoro (black-backed gull), along with species such as tūī and pīwakawaka (fantail).

Rakiraki (mallard ducks) and kuihi (geese) are also commonly seen in wetlands. Please don't feed the birds bread, it makes them sick, disrupts their natural feeding behaviours and pollutes the water; peas or seeds are healthier alternatives.

