

Discover MANGEMANGEROA

SELF-GUIDED WALK

NAU MAI HARAE MAI

This self-guided walk starts from the car park at Somerville Road before continuing along the track to the sandspit at Shelly Park Beach.

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 and 2. Looking out over the Mangemangeroa Valley

Ngāi Tai and Ngāti Paoa (iwi of Tainui decent) built several pā (fortified settlements) and kīanga (villages) along the valley. Fertile soil supported prosperous māra kai (gardens), and the coast provided a rich source of kaimoana (sea food). Māori left their traditional homes along the valley and relocated to Waiheke Island under increasing pressure from European settlers in 1870. Since then areas of land around the valley have been used for growing crops, grazing livestock, forestry and housing. The reserve was established in 1992.

To read more about the history of the area visit mangemangeroa.org.nz/history.

3. Walking down the hill through restoration land

Community groups including the Friends of Mangemangeroa Society, Forest & Bird, Rotary and local schools play an important role in restoring native vegetation within the reserve. Volunteers have planted thousands of trees, formed tracks, controlled pests, eradicated weeds and created signage in partnership with the Auckland Council. Relatively fast-growing native species such as mānuka, help to reduce erosion and provide shelter for the seedlings of forest species to establish themselves. For more information on the stages of forest regeneration visit teara.govt.nz/en/forest-succession-and-regeneration.

Rabbits need to be controlled as they damage young saplings. Other pests including rats and possums are also monitored and trapped because they eat the seeds, fruit and leaves of native plants and threaten native bird populations.

Before and after you walk through the gate to the forested walkway

Noticing the differences between standing in the more open environment and when under the forest canopy is a great sensory activity. The forest may feel cooler or more humid depending on the wind; you may notice the noises made by birds and rustling leaves; there will be a difference in light as it's filtered through tree layers and the air may have a fresh smell about it.

4. Following the walkway to the left

Along the track you'll find lots of signage describing the features of native plants. At each sign you could find a leaf that has fallen to the floor and create your own identification guide, perhaps including what each plant was traditionally used for.

Take a breather at the lookout after coming up the steps.

You could walk back across the field to the car park via the information point at Archie's Lookout if you wanted a shorter, looping visit to the reserve.

5. On the boardwalk that weaves through the mangroves

Mangroves trap sediments and nutrients, providing a habitat for small animals, forming the base of a complex food web. At high tide if the water is clear you may be able to spot pātiki, (flounder), toitoi (bullies), kāraraha (whitebait) and (tuna) eels. There is much debate about the spread and control of mangroves in estuaries. On one hand the increased rates of sedimentation and spread of mangrove habitat could be considered detrimental to waterflow and coastal access; on the other hand, mangroves provide habitat for wildlife and can help prevent storm surges.

To read more about mangrove habitat visit teara.govt.nz/en/estuaries.

6. There are a number of spots along the way to stop and look for birds

The reserve is an ecologically significant area for a number of native and migrating bird species. Forest birds are important in the ecosystem as they pollinate a number of native flowers and disperse the seeds of large native trees including taraire, karaka and pūriri. Visit doc.govt.nz/nature/native-animals/birds to listen to birdcalls. nzbirdsonline.org.nz is a great online tool for helping identify what you see.

In addition to native birds, you may hear the noisy chattering of eastern rosella. Originally from Australia, they are a threat to native birds, competing with them for food and nest sites.

7. Look out for pest plants by the large slip on the left of the track

The management of invasive weeds is an ongoing task within the reserve. Areas that have been colonized by weeds after having been disturbed by storms and flooding are targeted for restoration. To download a booklet about which native species can be planted in place of pest plants visit weedbusters.org.nz/resources/plant-me-instead-booklets.

8. In the nīkau grove

A number of native plants are useful as weaving materials for making clothing, building shelter and catching and carrying food, these include nīkau, harakeke, tī kōuka, kiekie, pīngao, toetoe and toi. In addition to providing useful weaving material, nīkau leaves could also provide an emergency source of food. The immature leaves at the heart of the palm could be eaten raw or cooked; they were also used medicinally to ease childbirth. Although birds such as kererū, kākā and kākāriki feed on the red fruit, it's mostly made up of hard seed and so not tasty for us to eat. For more information about the traditional art of weaving visit teara.govt.nz/en/te-raranga-me-te-whatu.

9. Looking for pūriri moth holes

Look out for a sign labelling a putaputaweta tree that is riddled with holes that have been created by mokoroa (pūriri moth caterpillars). You might find circular patches on the trunk or a branch that have caterpillars inside that have yet to emerge. The silky coverings of their tunnels are very fragile so be careful not to disturb them. Adult moths have a wingspan of up to 15cm and most commonly emerge between October and December. Find out more about the pūriri moth by visiting nzacfactsheets.landcareresearch.co.nz.

Continue to follow the track towards Shelly Park Beach.

You will walk through reserve land with houses on the left towards the boats and sandspit.

10. On the beach near the sandspit

The intertidal zone near the sandspit provides 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 may spot include tōrea (pied oystercatcher) and tōrea pango (variable oystercatcher). In summer, kuaka (bar-tailed godwit) and huahou (lesser knot) feed on worms, bivalves and other small animals before migrating back to the Arctic.

The foreshore would have once 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.

Before leaving, you might like to reflect on the things you've discovered on your walk today, including how people can help to protect the biodiversity of forest and coastal ecosystems. Visit tiakitamakimakaurau.nz to find out how you could help protect and restore our environment.

TOP TIPS FOR VISITING

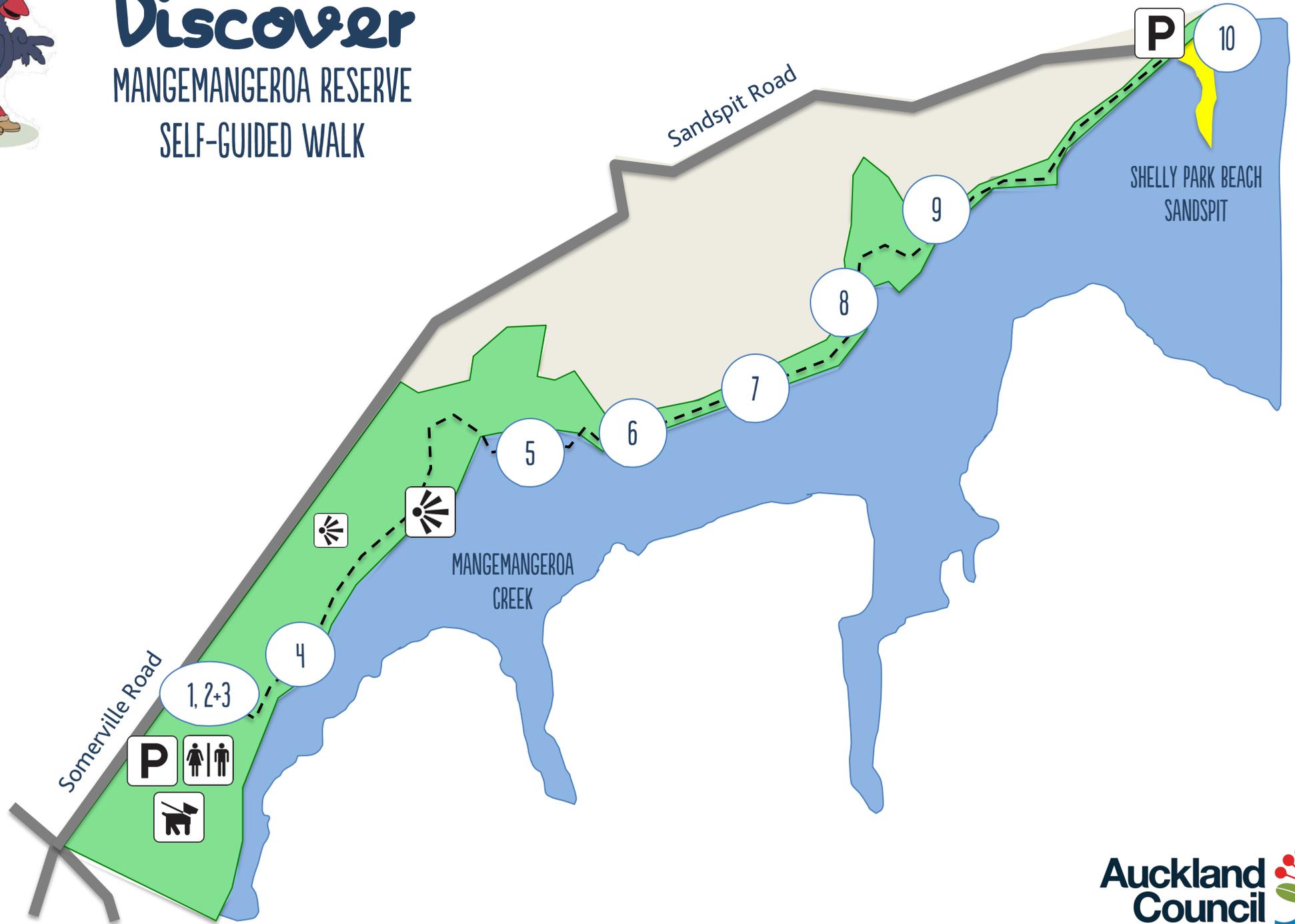
- This self-guided walk has been designed to take 2 hours at a moderate pace. You could always start at the Shelly Park Beach entrance and complete a shorter part of the walk if you have less time to spend exploring.
- There is a lot to see and experience in the reserve all year round. The best time to view wading birds is from November to March and between full-tide and half-tide. For tide times visit metSERVICE.com/marine-surf/tides/auckland.
- Bring a pair of binoculars and a wildlife guide to help you identify what you see.
- Useful books available from your local library include:
 - Which Native Tree? by Andrew Crowe
 - Which Native Forest Plant? by Andrew Crowe
 - Life-Size Guide to Native Trees by Andrew Crowe
 - New Zealand' Native Birds of Bush and Countryside: Penguin Pocket Guide
 - Native Birds of Shore and Wetland: Penguin Pocket Guide
- To find out how to get involved with projects within the park please email: mylocalpark@aucklandcouncil.govt.nz
- To report a problem please visit aucklandcouncil.govt.nz/report-it or call 09 301 0101.



Discover

MANGEMANGEROA RESERVE

SELF-GUIDED WALK



Discover MANGEMANGEROA

SELF-GUIDED WALK

NAU MAI HARAE MAI

The Mangemangeroa Valley is an area of significant scenic, environmental and cultural value. During your visit today you'll walk through coastal native bush, wetland and estuarine habitats, learning about the history of the area and the special plants and animals that live here.



1 – HISTORY OF THE VALLEY

Ngāi Tai and Ngāti Paoa (iwi of Tainui decent) lived in this area from around 800 years ago until the 1800s when the land became utilized for farming by European settlers. There were once several pā (fortified villages) along the valley. Why do you think this area would have been a good place for people to settle?



2 – A CHANGING LANDSCAPE

The natural habitats in the area have changed significantly since people have occupied the area. Looking across the valley, how many different human activities can you see that continue to alter the landscape?

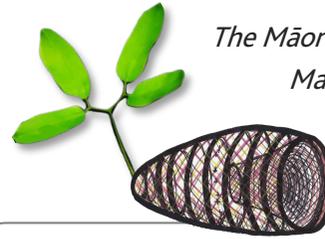
3 – RESTORATION OF NATIVE FOREST

The slopes of the valley that had been cleared for farming now form part of the reserve are being restored to help stop erosion. How many different types of native plant can you identify that have been recently planted? You might spot mānuka, harakeke, māhoe, karamu and tī kōuka. The young plants have protectors around them to stop rabbits from eating them. Which other pests do you think could be a problem for plants?



Did YOU KNOW?

The Māori word 'mangemangeroa' means 'valley of the mangemange'. Mangemange is a type of twisting, climbing fern that was traditionally used to make hīnaki (eel traps) and construct whare (huts).



4 – GET TO KNOW YOUR NATIVE PLANTS AND THEIR TRADITIONAL USES

As you walk along the track, you'll find lots of signs to help you identify native plants. Can you spot the following species and find out more about them? You could collect leaves from the ground to help you make your own native plant identification guide.

- Māhoe The wood was used to make fire by rubbing it with tōtara. The inner bark could be applied to help heal burns.
- Kawakawa Crushed leaves can be used as an insect repellent. The leaves were made into tea and had lots of medicinal uses.
- Tōtara The trunk was carved to make waka. The small red fruit is edible. The inner bark was used for roofing and containers.
- Mamaku The fronds were used as mats, and the trunks to build whare walls. The stem pith was used to help heal skin rashes.
- Pūriri Yellow dye was extracted from the bark for colouring woven items. The leaves were boiled for aches and pains, and sore throats.
- Tūrepo Also known as 'Milk Tree' – early European settlers found that the white sap was a palatable replacement for milk in tea!
- Hangehange The leaves were used for flavouring food and for making black dye. The sap was applied to the skin to treat infections.
- Karaka The wood was used for burning. The poisonous fruit needed careful preparation and treatment before being ground into a type of flour.
- Taraire No traditional medicinal uses. The cooked fruit was eaten by Māori. The wood wasn't used by Māori as it's not durable without treatment.



Please note: Do not try any traditional remedies without professional guidance. Do not eat or gather any plant matter unless guided by an adult who knows it is safe.

Did YOU KNOW?

The coloured ribbons that you may spot tied on trees along the track help park rangers and volunteers identify where they've put pest traps and tracking tunnels.

Visit tiakitamakaurau.nz to find out more about pest control.



5 – WHAT'S LIVING IN THE MANGROVES?



Shallow coastal areas are home to lots of different animals including shellfish, kairau (mud crabs), ika (fish), kōtare (kingfisher) and matuku moana (white-faced heron). Sit quietly on the boardwalk to see if you can spot any fish or birds, what you see will depend upon how high the tide is.

Take a closer look at the special adaptations of mangroves:

Because they live in salty, muddy water with low oxygen levels they grow roots called pneumatophores "new-mato-fores" to take in air. New plants grow from bud-like propagules – can you see any young mangroves growing?

Over the years, a lot more sediment has washed into the estuary.

It's estimated that before humans arrived, 1mm of sediment accumulated on estuary floors each year. Now, up to 20mm is deposited in some areas. What problems do you think this increase could cause?



6 – TE TAUTU MANŪ – BIRD SPOTTING

As well as spotting wetland birds, you are likely to see or hear forest birds as you walk along the track, for example in spring, tūi visit the kōwhai trees that line the boardwalk. Find a quiet spot to spend 5 minutes looking and listening for birds. How many different native birds can you identify?

- tauhou (silvereye)
- tūi
- kererū (wood pigeon)
- pīwakawaka (fantail)
- kākā
- riroriro (grey warbler)

7 – BECOME A PEST PLANT DETECTIVE

A few sections of native bush have been affected by storms that have caused slips – washing soil, trees and other plants down the hillside. Pest plants such as tradescantia, nightshades, pampas grass and ginger are often quick to establish themselves on the disturbed ground. Why not download the free app 'Plant Snap' to help identify them? Check to see if you have any pest plants at home. You can discover how to remove them and what to plant instead by visiting tiakitamakaurau.nz.



Did YOU KNOW?

There are several middens in the reserve. These are places where food was prepared. They contain large quantities of mātaītai (shellfish) and some contain pieces of burned hāngī stones and charcoal.

8 – IN THE NĪKAU GROVE

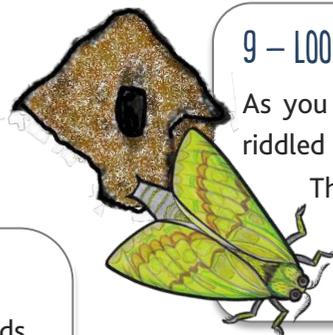
Nīkau palms are the world's southernmost growing palm tree. They can reach 15m tall with fronds up to 3m long. The large curved bases of the leaves were used to carry water. The fronds were traditionally woven to make kete (baskets), whariki (mats) and roofing; they could also be used to wrap food before cooking in a hāngī. You could have a go at weaving using some of the old fronds that have fallen to the floor. Can you spot another plant nearby that was used for weaving?



9 – LOOKING FOR PŪRIRI MOTH HOLES

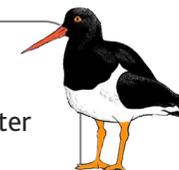


As you walk along the track look out for pūriri and putaputaweta trees that are riddled with holes. The holes have been made by ngutara (pūriri moth caterpillars). The caterpillars live in the wood for up to 7 years and grow up to 10cm long. When the adults emerge as moths in the spring, they only live for a couple of days to mate and lay eggs.



10 – WATCHING WADING BIRDS AT THE SANDSPIT

The best time to view wading birds is 2 hours before or after high tide. You're likely to spot tōrea (oystercatchers) and huahou (knots) feeding in the intertidal zone. Also look out for kuaka (bar-tailed godwit) during the summer months.





BECOME A PEST PLANT DETECTIVE

Did you know? The Auckland Region has over 700 species of introduced plants. Those that cause serious harm to the environment or economic loss are known as 'pest plants'. The edge of the reserve is very susceptible to invasive weeds and controlling them requires ongoing management. Can you spot any of these pest plants during your walk today?



TRADESCANTIA *Tradescantia fluminensis*

Originally from South America. This weed spreads easily as even small fragments of the plant can quickly take root and reproduce, forming a dense mat of foliage. It smothers native vegetation, slowing the growth of mature plants and seedlings, and reducing forest biodiversity.



WOOLLY NIGHTSHADE *Solanum mauritianum*

Originally from South America. Can grow into a small tree up to 4m tall. Identifying features include grey/green leaves covered in furry hairs, clusters of purple flowers and round, yellow fruits. Can interfere with native plant regeneration and causes skin irritation and respiratory problems for people.



WILD GINGER *Hedychium gardnerianum* and *H. flavescens*

Originally from South Africa. Identifying features include large green leaves and yellow or creamy yellow flowers growing up in spikes. Can interfere with native plant regeneration and may increase erosion and alter nutrient cycling within the soil.



PAMPAS GRASS *Cortaderia jubata* and *C. sellonana*

Originally from South America. A large, clump-forming grass with fluffy flowerheads that range in colour from white and cream to pink and purple. Competes with the similar looking native toetoe and prevents other native plants regenerating. Can harbour pest mammals and create a fire hazard.



NUTGRASS *Cyperus rotundus*

Originally from India. Identifying features include tall triangular stems with flowers borne on a few rays. Competes with native species in wetlands, stream margins and coastal areas.