

EXPLORING THE AUCKLAND REGIONAL BOTANIC GARDEN'S NATIVE FOREST TRAIL

for everyone to enjoy

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The following trail guide has been devised and written for our customers as a basic introduction to a remnant of broadleaf/podocarp forest.

Welcome to the Native Forest Trail.....

This short trail starts at the area known as the Home Garden Trees which is 5-10 minutes walk from the Visitor Centre. The trail passes through an open parkland setting before entering the tranquil majesty of the forest. The Botanic Gardens Native Forest covers 10 ha and is known as a broadleaf/podocarp forest which originally covered much of lowland New Zealand/Aotearoa.

The trail is an easy well-marked one, with fairly flat ground; it is a one-hour return walk from the Visitor Centre.

Follow the blue-topped and numbered marker posts, as these will guide you to the forest entrance, through the forest and back into the Gardens. Stop at the numbered markers, and refer to this leaflet.

Station 1

The trail starts by walking through a grove of totara (*Podocarpus totara*) interspersed with manuka (*Leptospermum scoparium*). Notice how the trees in this area have no lower branches, the result of being so close together. Most of the ground cover is the native meadow rice grass (*Microlaena stipoides*) with the occasional regeneration of cabbage trees (*Cordyline australis*) This area had been grazed in the past hence the absence of undergrowth.

Station 2

We next come to a small remnant of mainly podocarp trees on your left after passing the exotic Leyland hedge (x *Cupressocyparis leylandii*) on your right. Look closely at the titoki (*Alectryon excelsus*) the branches are covered in the native epiphytic leather-leaf fern (*Pyrrosia eleagnifolia*). Titoki was much used by Maori as an oil for curing skin disorders and as a hair oil. Beneath these trees young plants of puriri (*Vitex lucens*), mahoe (*Melicactus ramiflorus*), houpara (*Pseudopanax lessonii*) karaka (*Corynocarpus laevigatus*) and ti kouka (*Cordyline australis*) are naturalising as a result of birds dispersing the seeds.

Carry on following the blue-topped posts that now border the stream. At this point take a look across in front of you at the stunning panorama of native forest.

Station 3

Crossing the Gardens road stop at Station 3 dominated by a single rimu (*Dacrydium cupressinum*)

with its pendulous branches. Rimu is a forest giant reaching 50 m in height. Maori made a pulp from the inner bark which was applied to burns.

At the next marker post enter the forest through the gate and take in the sheer tranquility of this peaceful haven. Relax. Mauri, (life force) is all about us. Hear the breath, feel the heartbeat of the forest. Experience the contrast and different smells between the grass paddocks and the natural forest. In summer the coolness of the forest is refreshing. Which one do you prefer?

Cross the bridge over the Puhinui Stream. The wairua (spirituality) of this place flows with the stream out of the forest to a greater connection with the sea into the Manukau Harbour where it spreads but is not diminished.

Station 4

Just at the end of the bridge on the right examine the underside of a ponga fern (*Cyathea dealbata*) frond. The underside has a silver hue. Pieces of leaf laid upside down on the forest floor acted as markers. The pith of the ponga was bandaged onto ulcers by Maori. Turn sharp right, the track is signposted Puhinui Stream Track and Totara Park. This track keeps to the left side of the stream until you reach the end of the track.

Station 5

Stop and feel the textured 'hammer-marked' effect on the bark of the large old matai (*Prumnopitys taxifolia*). This textured bark is characteristic of matai. Look for the reddish-brown flakings of bark around the base of the tree. The plum-like fruits of matai are a favourite food of bush birds. Cast your eyes up to the branches to find the lily-like perching nest epiphyte (*Collospermum hastatum*) bathing in filtered sunlight. The fan-like arrangement of the leaves allows the plant to catch water when it rains and nourishment is derived from the decaying leaves and mosses.

Notice how the forest is becoming denser with groves of young regenerating nikau (*Rhopalostylis sapida*). These nikau fronds growing in the shade are much larger and spreading than those growing in full light. Like many plants of the forest floor these nikau are maximising the effect of the little available light.

Station 6

Look on the trunk of the large nikau and see the rings left behind as the plant sheds its leaves. Occasionally a

flower spike can be seen emerging out of the trunk and just below the lower leaf sheaf. Nikau is New Zealand's only native palm and the world's most southerly occurring one. In some areas nikau leaves were used to thatch Maori dwellings. The slightly laxative pith was eaten by pregnant Maori women to relax the pelvic muscles. The sap was also drunk as a further aid to ease labour during child birth.

Station 7

Just over the bridge and on your right you will notice another matai. Do you remember this species? It's the tree with the hammered-marked bark. Compare it with the smooth trunk of the tanekaha also known as the celery pine (leaf resembles that of a celery plant) (*Phyllocladus trichomanoides*) on the opposite side of the track with lianes clambering up into its canopy. Trees with smooth trunks are often hosts to lichens (lichens consist of algae and fungi which grow together and indicate clean air). Trees which shed their bark make it difficult for lichens to get established.

The track gently climbs. Rest for a while, close your eyes and listen for the high pitched trilling of the grey warbler. You may also hear the unmistakable call of the tui. Keep an eye open for the kereru (New Zealand pigeon) who come to the forest for food and shelter and nesting.

Station 8

On your right look for the huge plank-buttressed tree pukatea (*Laurelia novae-zelandiae*) usually associated with swampy ground. These buttresses act as stabilisers assisting anchorage. Pukatea is one of New Zealand's tallest trees. The buttresses were often used for carving elaborate figureheads on canoes. The bark was used as a remedy for toothache and stomach complaints. Other plants such as kiekie (*Freycinetia banksii*) can be found climbing up the pukatea. The leaves of kiekie, a member of the tropical family Pandanaceae, were used for weaving. The climbing fern (*Microsorium scandens*) can also be seen here. Many species of plants found in New Zealand's broadleaf / conifer forest have their ancestral origins in tropical climates. The track descends into an area of larger nikau.

Station 9

Beside this marker are some tall-growing manuka (*Leptospermum scoparium*) with the characteristic loose peeling strips of bark. Manuka is known as a

coloniser, creating shade and shelter for the establishment of longer term forest dwellers. The wood was used to make canoe deckings, canoe poles, fish hooks and fishing rods. Continue along the track signposted Totara Park and Puhinui Stream Track unless you feel like discontinuing your walk in which case you can turn right at the sign indicating 'Botanic Gardens 10mins.'

Station 10

Continuing along the forest track stop and look at the tangled weave of kareao, commonly known as supplejack (*Ripogonum scandens*) which is growing up into the totara. Stems of supplejack were used for thatch roof supports of shelters and for making crayfish and eel pots.

Station 11

Growing here on the side of the track is a large coniferous tree - kahikatea (*Dacrycarpus dacrydioides*), New Zealand's tallest native tree. They prefer wet soils. Feel and compare the dark-coloured bark with the lighter bark of the totara on the opposite side of the track. The long straight trunks were ideal for making canoes. Soot of kahikatea heartwood was used in moko (tattooing); the gum resin was chewed and wood chips were infused in boiling water and drunk as a tonic.

Station 12

You will recognise the titoki on the right of the path previously seen at Station 2. The leafy broad head of this species gives areas of the bush a bright green appearance from a distance. Opposite is a small tree of karaka (*Corynocarpus laevigatus*) with its characteristic dark green and leathery leaves. Although the fruits and kernels are highly poisonous the kernels or kopia were an important food source. To eliminate the poisons a skilled process of steaming, steeping in water and drying was carried out after which they would store for long periods.

The Track now crosses the stream. A sign pointing to the right directs you back across the open paddocks to the Botanic Gardens and Visitor Centre, whereas turning left leads you into Totara Park.

We hope that you have enjoyed and become inspired by this walk of adventure and discovery. A species list of native vascular plants occurring in this remnant of native forest is available from the Botanic Gardens Visitor Centre.

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Open from 8am to dusk throughout the year.