

- 46 Titoki (*Alectryon excelsus*) – planted – leaning over the track. Keep going, big rimu on your right, then straight ahead at next junction. Pass the rimu with twisted trunk.
- 47 Over to the right, a large columnar rewarewa (*Knightia excelsa*) – New Zealand honeysuckle (planted) alongside totara from 1940 planting.

Note the long serrated leaves, red flowers in spring and brown seed structures after flowering.

Now test yourself: over the next 100m or so the following plants or trees you have met on this trail are listed in the order in which they occur. See if you can recognise them. Totara, tanekaha, karamu, five-finger, manuka, hangehange, rimu, kauri, silver fern, mapou, pigeonwood and kumarahou

How did you do?

Onto the last three pegs on this trail

- 48 Koromiko (*Hebe stricta*) – long narrow leaves, an edge plant, characteristic of gumland scrub. Also seedling totara (1999).
- 49 Bush lawyer (*Rubus cissoides*) – a native climber related to blackberry with coarsely toothed leaves, panicles of white flowers and yellowish fruit. It has hooks for climbing. Opposite is the tree daisy, *Olearia furfuracea*, with thick leathery wavy-edged leaves.
- 50 A good bush of prickly mingimingi.

As you exit, you will notice a large sedge, *Gahnia setifolia*, with tan seeds and a blackish base to the leaves, and flax, harakeke (*Phormium tenax*) guarding the right.

You have now reached the end of the trail and are back where you started, we hope that you enjoyed yourself. If you are inspired to get to know more plants in this northern gumland scrub, the Centennial Park Bush Society has produced a booklet entitled *Just Scrub* – which is available through the society and online via the society's website centennialparkbushsociety.org.nz

This booklet describes and illustrates the plants of this bush helping readers to become very proficient in recognising them. To explore the park further, venture up the full length of the Kohekohe Valley and explore the world of the mamaku under the pine plantation. The more park-like area with picnic tables lies between the bush and Beach Road.

The Centennial Park Bush Society is actively involved in the whole catchment:

- carrying out weed and pest control
- planting native trees
- maintaining the track network
- generally acting as guardians of the park.

If you would like to be involved in the care of the bush, the society would welcome your help.

centennialparkbushsociety.org.nz

For more information on volunteering phone Auckland Council on 09 301 0101.

Stop Kauri Dieback

Kauri dieback disease is killing kauri trees. It spreads via soil movement.

Help prevent the spread of kauri dieback by:

- keeping to defined tracks
- cleaning footwear before and after visiting kauri areas
- staying away from kauri tree roots.

kauridieback.co.nz

This nature trail guide is compiled by the Centennial Park Bush Society.

Centennial Park Nature Trail

Experience a regenerating native forest environment

For more information: phone 09 301 0101 or visit aucklandcouncil.govt.nz



- 28 The swamp sedge *Carex lessoniana* with tasselled seed-heads – an important fighter against erosion with its network of underground roots. Five metres along the track on the left is an old putaputaweta (*Carpodetus serratus*) – mature ones have larger marbled-patterned adult leaves, hence the common name of marbled-leaf.

Note the holes in the trunk made by grubs of the puriri moth, a large pale green furry moth (female 15cm, male 10cm). Eggs are laid in flight and the caterpillars crawl on the ground until they find a tree to their liking. They eat live wood during their five-year life cycle, boring vertical tunnels near the centre of the stem, concealing the opening by incorporating pieces of chewed bark into a web curtain. The tree got its Maori name because of weta which often live in the abandoned holes of the puriri moth. Putaputaweta means "many holes for weta". Artificial "weta motels" have been installed here. If you are lucky there will be one or two in residence.

- 29 On the left a five-finger (*Pseudopanax arboreus*) with large waxy leaves.
- 30 An old putaputaweta with good moth holes – be careful not to break the curtain.
- 31 The small tree with beautifully patterned veining of the leaves is *Olearia rani* or heketara. It will have numerous heads of daisy flowers in time.
- 32 Numerous silver fern here. At the track junction you have an option of turning left and then right after 35m up onto the fourteenth tee of the golf course for a good view down the valley. Then retrace your steps



Turn right onto the Mamaku Track

- 33 Numerous naturally occurring putaputaweta thriving in a light well. Nikau palm with long narrow leaves (*Rhopalostylis sapida* planted). Erosion visible on the left.
- 34 Note the change in vegetation as the track climbs. This is gumland scrub, an endangered habitat in Auckland because it is considered so expendable when development options are being considered.
- 35 Manuka and hangehange are here and also *Coprosma lucida*.
- 36 The thick-trunked tea-tree is kanuka (*Kunzea ericoides*) – longer-lived than manuka. Kanuka is a large tree which could live to 200 years. The long threadlike sedge at the base is *Schoenus tendo*.
- 37 Venture off trail a short distance and you will find one of two World War II pillboxes in the park. The view from these reinforced concrete shelters once extended right down the valley after the army bulldozed the bush. The non prickly mingimingi (*Leucopogon fasciculatus*) can be found here as well.
- 38 The row of large pines here are *Pinus elliottii* – the slash pine – planted as a boundary tree under the original golf club lease. Feel the softer fine leaves of this kanuka. Softer leaves gives the mnemonic "kind kanuka". Compare with darker pricklier leaves of manuka "mean manuka" further on.
- 39 Note kauri (*Agathis australis*) with thick short narrow leaves – 50 of them were planted in 1985 in this area. Opposite is umbrella fern (*Gleichenia dicarpa*) with more horizontal fronds – also common in dry places. Also here is a fine patch of hard or scented fern, sometimes called pig fern (*Paesia scaberula*), with more erect fronds. Another 30 kauri planted here in 1999.

Turn right at the top of this track onto the Baylis Track

Stop at the junction and look back down the valley to a medium sized totara (*Podocarpus totara*), probably planted in 1940 to celebrate Auckland's centenary. People remember planting lines of trees in knee-high scrub. They have not done well in all that time, a factor being the condition of the ground after the demise of kauri. Kauri leave a legacy of hard (podsolised) clay of very low fertility. It takes a long time to accumulate enough leaf litter to support young trees.

- 40 Planted kauri.
- 41 The small tree is dragonleaf (*Dracophyllum sinclairii*) with erect fine leaves – getting increasingly rare as this type of "gumland scrub" habitat disappears. There are a number of them on this track and the umbrella fern *Gleichenia* is in great abundance. The wiry fern is club-moss (*Lycopodium deuterodensum*), with erect candelabra branching.
- 42 Small pohutukawa growing as an epiphyte from a tree fern trunk. It was probably seeded from the large pohutukawa planted in the 1940s, 15m's further on. Look for signs of the leaf miner caterpillar in the leaves of the larger tree. Seventeen metres past the large pohutukawa is a small puriri (*Vitex lucens*) – large wavy leaves with prominent veins and year round small pink flowers, a favourite of the tui.
- 43 Rimu (*Dacrydium cupressinum*) – planted 1940s – with more dragonleaf.
- 44 Remains of felled pine. In the past pines growing in the bush have been ring-barked and left to die. Whether they fall to pieces or are felled later, they do much less damage to the surrounding bush if they are bare-branched and light. This practice is no longer permitted and wild pines must now be felled or left. Pines can repress regenerating native forest.
- 45 Totara, planted. Is it a boy or a girl? Look out for small cones in autumn on the boys.



The nature trail starts at the Tui Track which runs off the grass clearing below the pine tree car park, below the tennis club on Morton Way, off Rae Road. Since the nature trail was first described in the 1980s many changes have taken place in the bush. A number of the colonising species such as bracken and manuka are dying out. The numbered pegs on the trail are to draw your attention to plants identified in this guide. On the left of the entry point is a large karo (*Pittosporum crassifolium*) with its grayish leathery leaves and small red flowers in spring.

1 You are surrounded by the most common tree fern in the park – the silver fern (*Cyathea dealbata*) – recognised by the silver stripes (stems) and silver underside of the fronds. It can grow to 10m and is one of New Zealand's national emblems. The track has been moved out of the stream bed due to silt from erosion. Flooding is common in the stream due to rainwater run-off from the housing development on the surrounding ridges.

Look up and across the stream and you will see an emergent rimu (*Dacrydium cupressinum*) with its graceful drooping leaves.

2 This grove of trees is mahoe or whiteywood (*Meliccytus ramiflorus*) – there are many around here. Note white-patterned trunk, fine-toothed leaves, and flowers (early summer) sprouting directly from quite thick branches. Hounds tongue fern (*Microsorium pustulatum*) uses the trunk to reach the light.

3 Mapou or red matipo (*Myrsine australis*) with small wavy leaves with red blotches, with reddish stems.

4 Tall straight kahikatea (*Dacrycarpus dacrydioides*), with threadlike leaves will eventually grow up to 40m tall. Opposite are young pigeonwood or porokaiwhiri (*Hedycarya arborea*), with dark glossy leaves and blackish stems. Compare with young mahoe with lighter green thinner leaves and silver stems.

- 5 The tangle of vines is supplejack (*Ripogonum scandens*). On the opposite bank, five metres on the right, is the glossy fern *Asplenium oblongifolium*.
- 6 Hangehange (*Geniostoma ligustrifolium*) is one of the more common native trees. Its thin pale green leaves droop in the summer heat.
- 7 Small-leaved shrubs are the divaricating coprosma (*Coprosma rhamnoides*). On the opposite side of the track is the prickly mingimingi (*Cyathodes juniperina*). Opposite the mingimingi the tall tree is kumarahou (*Pomaderris kumeraho*) with rough wrinkly leaves.
- 8 Tanekaha or celery pine (*Phyllocladus trichomanoides*), a familiar tree in the park and one of the most beautiful, especially in the young stage. The small grasses (sedges) with grooved leaves are *Carex dissita* and *C. lambertiana* (distinguishable by their flowers in early summer).
- 9 Manuka (*Leptospermum scoparium*), have grown here in a light well. They are becoming less common in this maturing bush. Many large manuka have now died – large trunks are rotting and providing nourishment for the next cycle.

Down the steps to the left, onto the Kohekohe Track

- 10 The small sedge on the left is *Carex dissita*. The taller sedge is a native cutty grass *Gahnia lacera* under a small mahoe and mapou.
- 11 Grove of kahikatea or white pine (*Dacrycarpus dacrydioides*) – juvenile form with feathery leaves and many young adults acquiring threadlike leaves.

Turn left at the bottom of the steps onto the bridge

- 12 To the left of the bridge, the large pigeonwood is a female, with numerous vertical black epicormic shoots, growing from the trunk of the tree. Note the evidence of serious upstream erosion here, a result of loss of vegetation and development in the upper catchment.

- 13 Large Kahikatea thought to be more than 150 years old, and to have grown in a more open environment with little competition. Fortunately, this is a female kahikatea, hence the great number of younger ones growing throughout the park. The ladder fern, opposite, is *Doodia australis*, a common ground fern. New fronds have a pink colouring. More *Gahnia lacera*.

Continue over the bridge and resume track left

Note the many young adult kahikatea and pigeonwood here.

- 14 The ferns are *Blechnum novae-zealandiae*, kiokio, large fronds with wavy segments. Lady-fern or gully fern (*Pneumatopteris pennigera*) with toothed segments is nearer the stream. From the bridge the giant sedge upstream is *Gahnia xanthocarpa*.
- 15 In the background covering the stream bed is a mass of kiekie (*Freycinetia baueriana* ssp. *banksii*) – a scrambler with dark green long narrow leaves, and interesting arum-like flowers in late spring. Closely related to the tropical pandanus, it is said to flower only every five or ten years.
- 16 Juvenile kahikatea in abundance here as well as the small round leaved *Coprosma rhamnoides*.
- 17 Look across the stream to conical shaped emergent kahikatea, tanekaha on the ridge and kiekie.
- 18 The large overhanging tree with long leathery leaves is houpara (*Pseudopanax lessonii*).
- 19 The track deviation is again due to flooding. Here we have *Coprosma lucida*, a leathery leaved plant with a raised mid rib on the top of the leaf. Tanekaha can be seen on the ridge uphill of the track.
- 20 Two metres to the right of the peg this small tree is kohuhu (*Pittosporum tenuifolium*) with small leaves.
- 21 *Olearia furfuracea* or tree daisy. Note the leathery leaves, glossy above with softer downy undersides. In the streambed is a mass of kiekie with some supplejack with orange berries in early summer.

- 22 Swamp maire (*Syzygium maire*) planted about 2m beyond the peg. It has light green reddish narrow "opposite" leaves (come off the stem opposite one another rather than randomly or alternating). Three metres along the track on the left is a large native broom *Carmichaelia australis*.
- 23 The scramblers, supplejack with larger leaves, and the much smaller leafed pohuehue (*Muehlenbeckia complexa*) climbing up and over shrubs.
- 24 On the silver fern trunks, the tiny protruding fern is *Tmesipteris elongata*. All four species of *Tmesipteris* are present in the park. The publication Just Scrub (see below), which describes this bush has more detail.
- 25 On the uphill side of the track, growing high in the trunk of a silver fern are several hangers on. Seeds are deposited in the trunk of the fern and the plant starts off as an epiphyte (a plant that grows on another plant without damaging it). One is a small five finger (*Pseudopanax arboreus*). It eventually envelops the fern. This is quite common in the park and doesn't seem to kill the tree fern. Another is a small mingimingi. Across the stream are two pukatea (planted *Laurelia novae-zealandiae*), with green serrated upright leaves. Eventually these trees could reach 35m tall. Also a good example of the large cabbage tree (*Cordyline australis*)

Keep straight ahead up the steps onto the Putaputaweta Track

- 26 Gully fern (*Pneumatopteris pennigera*) here with its wavy edged leaves. Also kiokio (*Blechnum novae-zealandiae*) with its red tinged new growth in spring.
- 27 Note trunk of kahikatea ahead on the right. It becomes easy to recognise trees by their bark when their leaves are high up in the canopy. This is a good one to start with.