

DUNEDIN BOTANIC GARDEN



Tree Trail



Agathis australis/kauri
Kauri is one of the largest trees in the world. The largest one on record, measured in about 1860, was 30.5m from the ground to its first branch.

Chiranthodendron pentadactylon
As well as being a hit with humans by looking like a monkey's paw, the flower is a magnet for native birds - they pull it off and drink nectar from the base. Even better, the tree flowers up to eight months, from November to June.

Cupressus macrocarpa
This tree is so old we don't have a record for it. However, we think it probably dates from the 1860s when the manager of the Otago Acclimatisation Society had his cottage on this spot. There is a watercolour painting of the site on the interpretation sign by the far south end of the terrace.

Cyathea dealbata/ponga
Silver fern's pith has a traditional use as a soft, moist poultice laid on top of skin eruptions. The fronds are legendary for their silvery brightness at night when lain upside down beside a track - the ideal route marker.

Cyathea medullaris/mamaku
Mamaku is the tallest of New Zealand's 10 species of tree ferns and some say, the most handsome. The crown can have up to 30 gracefully arching fronds.

Dacrydium dacrydioides/kahikatea
We think this is one of the few kahikatea trees that remain in this area from pre-European times. Back then it would have been just a tiny seedling.

Dicksonia squarrosa/wheki
In the wild, wheki forms closely knit colonies because of underground creeping stems that can form new trunks. Wheki is the only New Zealand tree fern that has buds on its trunks. This means it can re-sprout if the main crown dies, which is why fences made of wheki trunks may come back to life. Some here were transplanted in the early 1990s from a fernery in the lower botanic garden.

Dracophyllum traversii/mountain neinei
This tree is one of the most distinctive New Zealand natives, with stiff, curving leaves arranged in clusters at the tips of the branches. In fact, its botanical name refers to "dragon leaf". Studies have shown it has a potential lifespan of around 500 - 600 years.

Eucalyptus globulus
It's a bit strange to have an Australian native in a Southern African garden, but this tree marks a historic path and predates the garden. In New Zealand, our tallest tree is a specimen of eucalyptus, just over the hill to the north, at Orakonui Ecosanctuary.

Eucalyptus gunnii
Despite standing on the side of a hill and being extremely exposed to the wind, this specimen has developed an even, graceful shape, without extensive pruning. The branches themselves are beautiful too - in spring the outer bark peels off to reveal the creamy bark below.

Kunzea robusta/kānuka
Kānuka is one of the first plants to grow back when a forest has been cleared. Like a Band-Aid for the bush, it protects young seedlings as they grow up to form future native forest. As trees get taller the canopy opens, other trees eventually replacing the kānuka which here is nearing the end of its life.

Liquidambar styraciflua
Between them, these five trees show autumn colour for about five continuous months. Over time, more deciduous trees are being added to this arboretum to increase diversity and highlight autumn colours.

Lophomyrtus obcordata/rōhutu
Look closely and you'll see its heart shaped leaves and beautiful bark. Native birds love it for its plump, fleshy, abundant fruit.

Magnolia campbellii
Big, pink flowers appear in early spring and because the tree is without leaves it creates a spectacle of colour that locals flock to see.

Magnolia doltsopa
In spring, this is one of the first plants to flower here. With its strong perfume, it becomes a bit of a shrine to the new season. The Dunedin Botanic Garden has been keeping a diary of this tree's flowering since 2010 and we're finding differing conditions in a previous winter or summer can make a difference of up to eight weeks to the start of flowering time.

Metrosideros bartlettii/rātā moehau
Bartlett's rātā has been known to science since only 1975 when it was discovered near Cape Reinga. It is one of New Zealand's rarest trees and survives in the wild in just a small area near North Cape. Around Christmas time it produces white flowers.

Metrosideros excelsa/pōhutukawa
Aerial roots grow down from the branches towards the soil. In pōhutukawa's natural habitat of exposed coastal sites or rock faces, the roots search for pockets of soil and crevices for extra support. Because this specimen is growing on the flat in rich soil, the roots take hold easily and quickly thicken into additional stems, combining to create the impressive overall girth.

Nothofagus dombeyi
It may resemble a New Zealand beech tree, but it's a South American relative. Some say this is evidence of dispersal on the Gondwana supercontinent - made up of New Zealand, South America, Australia, New Caledonia, New Guinea and Antarctica before it was covered in ice. The two *Griselinia racemosa* near your feet are also distantly related to our native *Griselinia* broadleaf trees.

Olearia paniculata/akiraho
You might recognise this as a popular plant for suburban hedges. Here it spreads into its beautiful natural form and is surrounded by other trees from the daisy family.

Pinus ponderosa
The "ponderous" size of this tree led to its name. It reaches over 60m in its native habitat and these trees are about that high. Bark is particularly thick and breaks into large, flat plates that eventually fall off.

Pinus radiata/Monterey pine
These trees' size extends below ground too - pine roots can, in some situations, reach down as far as 12m. In the late 1990s we tried to install a water line beneath this lawn, but the entire area was so solid with roots, even a machine couldn't cut through. The drainage had to go through a nearby border instead.

Rhododendron arboreum
Most rhododendrons are shrubby but these are upright, like trees. They form their own forests in the wild and this clump allows us to imagine how that might look.

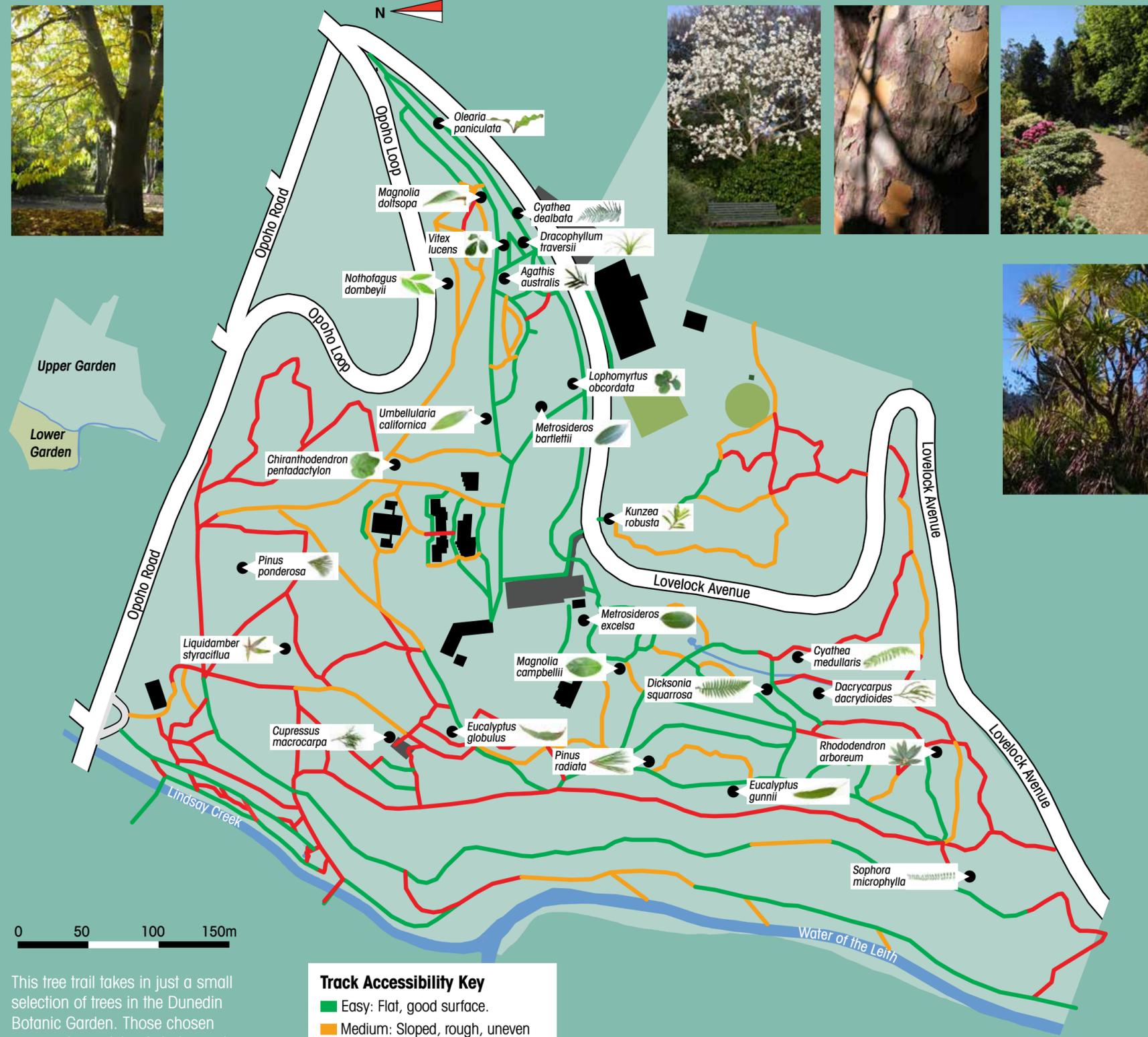
Sophora microphylla/kōwhai
Tui and bellbirds flock to these two native kōwhai in spring, feeding on the nectar within the flowers. This particular species is the most widespread of the eight native species in New Zealand, growing throughout the country.

Umbellularia californica
You're welcome to take a sample leaf to crush and smell, especially if you have a headache. A small sniff can clear a headache but beware - too much can actually cause one.

Vitex lucens/pūriri
It flowers mainly in spring but flowers and berries are also produced throughout the year, which is unusual for a New Zealand tree. This could be because pūriri comes from a largely tropical genus. In the wet tropics flowering is not climatically restricted to a particular season, so many species flower more than once a year, allowing pollinators to thrive all year round.



Upper Botanic Garden



This tree trail takes in just a small selection of trees in the Dunedin Botanic Garden. Those chosen represent a variety of stories and types of trees in the most accessible locations.

Track Accessibility Key

- Green: Easy: Flat, good surface.
- Orange: Medium: Sloped, rough, uneven surface
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Aesculus hippocastanum/horse chestnut
Believe it or not, this massive hulk of a tree is a favourite for bonsai. It doesn't produce edible nuts but "conkers", used for a traditional British and Irish children's game where nuts are cooked and hardened, threaded on string then used to try and hit a partner's.

Araucaria bidwillii/bunya bunya
Australian aboriginals had whole festivals built around the ripening of the edible kernels. Thousands of people travelled hundreds of kilometres and stayed for months together, arranging marriages, trading goods and resolving disputes.

Cedrus brevifolia/Cyprus cedar
This conifer is rare in its native Cyprus, an island in the Mediterranean Sea. Usually the tree is conical and single stemmed rather than this broad, multi-leadered one. It may have been pruned as a youngster.

Cordyline australis/cabbage tree
Cabbage trees were once part of the forest that grew in this area. Early Māori obtained food from the stem and from the root that grows about a metre into the ground like an enormous carrot.

Dacrycarpus dacrydioides/kahikatea
Kahikatea was once a more common sight around the swamps of early Dunedin. Today the only relics are a few lonely individuals in nearby Woodhaugh Gardens; this one has been planted. Kahikatea is New Zealand's tallest native tree, growing higher than 50m.

Fagus sylvatica Atropurpurea Group/copper beech
It may be famous and popular but copper beech is a mutation. In 1680 this naturally occurring form was found growing wild in central Europe and has been cultivated since then.

Fagus sylvatica/European beech
In Britain these trees may live well over 300 years. In New Zealand's milder climate they grow more rapidly and there is debate about whether this will affect longevity. This avenue was planted in the late 1800s.

Fagus sylvatica 'Pendula'/weeping beech
Look closely and you'll see a knot in the tree trunk. It is the "graft union" where two parent trees have been joined. It has the best features of both – a strong root stock that shows off the unique weeping habit of the branches.

Fraxinus excelsior 'Jaspidea'/golden ash
In the 1980s, this mature tree was shifted here from beside the nearby fountain as it was touching the statue and damaging it. Its golden yellow leaves are one of the earliest signs of autumn.

Fraxinus excelsior 'Pendula'/weeping ash
Notice the difference between this and the nearby golden ash. Both have the same parent plant but have been cultivated to display special horticultural characteristics. In this case 'Pendula' refers to branches hanging to the ground.

Fuscospora fusca/red beech
Red beech often grows in high quality soils so a lot of red beech forest has been converted to pasture. Dunedin isn't within its natural range but it has been planted here since the early days of European settlement and some mature specimens remain throughout the city.

Fuscospora solandri/black beech
Whole forests turn a reddish colour in summer due to the male flowers of black beech and its close cousin, mountain beech.

Ginkgo biloba/ginkgo
The ginkgo tree has been called a living fossil. It is one of the oldest living types of seed plant. It is also thought to have fire retardant properties because during Tokyo's great fire of 1923 many ginkgo trees survived. They were also amongst a range of trees to survive the Hiroshima nuclear bomb.

Hoheria populnea/lacebark
Tiny growths of wood penetrate through a fibrous inner bark layer, giving this layer the appearance of lace when it is pulled free. The fibrous inner bark is used for fine, decorative weaving on baskets and trim on hats and cloaks.

Juglans regia/walnut tree
As well as being tasty, walnuts grow into magnificent specimen trees. Half the world's commercial walnuts are grown in China.

Liriodendron tulipifera/tulip tree
The leaf and flower are both tulip shaped. Leaves turn bright butter yellow in autumn and stay on the tree for ages, making this one of the last trees here to lose its leaves. This is a relatively long lived and fast growing tree with records of some reaching more than 60m.

Lophozonia menziesii/silver beech
Of the five species of native beech, this is the only one naturally occurring in the Dunedin area. It is a host to the spectacular red-flowering semi-parasitic scarlet mistletoe, although there is now much less of this mistletoe due to introduced possums.

Luma apiculata/Chilean myrtle
The fruit is appreciated in homeland South America for its ability to heal sores and cuts. Although edible and sweet it is not highly regarded here. As a shrub it makes a good hedge and can even be trained as a bonsai.

Metasequoia glyptostroboides/dawn redwood
Fossils were found in 1941 in Japan then two years later living specimens were recognised as still growing in China. By 1948 seeds and cuttings were being sent all around the world. This specimen arrived here in the early 1950s.

Platanus x hispanica/London plane
Popular as a street tree in London, planes grow fast, are hardy, and their beautiful marbled bark looks good when they lose their leaves. The "x" in its name refers to the fact it is a cross between two species, showing combined characteristics of both parent species.

Pinus radiata/Monterey pine
Native to California in the United States it comes from only a small area on Monterey Peninsula and a few nearby islands. In New Zealand there are thousands of hectares of pine grown and exported for paper and timber.

Quercus ilex/holm oak
There are about 600 species of oak and many are evergreen, like this one. In its native Mediterranean, holm oak creates a forest with other species or grows alone in pure stands.

Quercus palustris/pin oak
Compared with other oak species, this autumn stunner is fast growing and short-lived, surviving for about 150 years. Of the approximately 600 species of oak, 19 are growing in Dunedin Botanic Garden.

Quercus robur/English oak
See the plaque for why this special oak is considered royal. It is one of the few surviving transplants from 1869 when flooding forced the Botanic Garden to be moved here from its original site at today's University of Otago.

Sequoiadendron giganteum/giant redwood
A specimen of this species contains the largest volume of timber of any tree known in the world. One particular example in California sprouted about 1,500 BC and is still alive.

Sequoia sempervirens/coast redwood
These soaring sentinels of the forest have the distinction of being the tallest trees on earth. In their native United States of America, they grow to a height of more than 100m.

Sophora microphylla/kōwhai
Kōwhai is one of Dunedin's best known and loved indigenous trees and is ingrained in New Zealand culture. Its leaves and flowers provide important seasonal food resources to kereru, tui and korimako or bellbird.

Taxodium distichum/swamp cypress
When these trees grow in wet places they develop bumps that bulge out of the ground and look like knobby knees. They were thought to help transport air to the submerged roots but are now thought to be for support and stabilisation.

Tilia platyphyllos/broad leaved lime
Native to much of Europe, it grows well in New Zealand. The small, pale flowers are pollinated by bees which make a delicately flavoured honey from the nectar.

Trachycarpus fortunei/hemp palm
This exotic looking palm is one of the hardiest tree-like palms in the world, but is damaged by prolonged exposure to severe cold. The name hemp refers to the fibre which makes good rope, sacks and cloth.

Ulmus procera/English elm
A classic English hedgerow plant, it may not be so English. Scientists have found that the English elm may be a clone of a single tree shipped to Britain by the Romans 2000 years ago. Now it is popular throughout New Zealand parks as a specimen tree.

Lower Botanic Garden



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