ORONGORONGO

Flora

The vegetation of the Orongorongo Valley includes plants of the coastal region and scrub country, and indigenous lowland forest, limited areas of sub-alpine plants, and genera common to swamps and bogs.

Historical records show that the Orongorongo River once ran in a fairly narrow channel between wide flats, with a rise of 30 ins. and that the surf at the river mouth was so strong that Maori canoes had great difficulty in making landfall through it. Ensign Abel D. W. Best arrived in this manner on a shooting trip on December 9th, 1840. Accompanied by some young Maori men, he went up the Valley, which he described as 'nothing remarkable not differing from the usual characteristics of a New Zealand valley viz. 'narrow, bounded by steep scrubby hills and watered by a fine stream'. He shot one 'Wood-Quest' (pigeon) but evidently did not go far up the valley, as his companions were nervous of encountering the Ngati-Kahungunu Maoris. He reported also that it blew so hard they could not keep a fire going.

Subsequent agrading of the river and the disappearance of most of the river-flats appears to have been initiated by the 1855 earthquake, and has been accelerated in recent years by increased run-off due to thinning-out of the bush by browsing animals, and in some years, protracted southerly storms with very heavy local rain, and various scree slippings from the steeper ridges. On the western side of the river there are few flats left near the lower reaches, but there are still several flats on the eastern side; the country then rises sharply to over 2,700 ft. with occasional higher points. The coastal plants are typical of most of those found round exposed coastal areas: Ngaio (Myoporum lactum), Karaka (Corynocarpus laevigata), Kawakawa (Macropiper excelsum), Manuka (Leptospermum scoparium) are some of the principle trees, with some tussock, hard-fern, sedge, 'yellow-button' (Cotula coronopofolia) shore convolvulus, rushes and Tumatakuru, 'Wild Irishman' (Discaria toumatou). The hills of the lower part of the valley, belonging to the Orongorongo Station, are sown in pasture, with small patches of bush in the gullies.

List of alternative common names and botanical names of plants to be found in the Orongonrongo Valley.

beech, black	*Nothofagus solandri*
beech, hard (clinker beech)	*N. truncata*
beech, silver (Southland)	*N. menziesii*
bidibidi (piripiri)	*Acaena anserinfolia*
broadleaf (Kapuka)	*Griselinia littoralis*
bushlawyer	*Rubus sp.*
clover, suckling	*Trifolium dubium*
clover, white	*T. repens*

fivefinger	*Psendopanax [Neopanax cf. Allan] arboreum*
hangehange (Maori privet)	*Geniostoma ligustrifolium*
heketara	*Olearia rani*
hinau	*Elaeocarpus dentatus*
horopito	*Pseudowintera axillaris*
kaikomako	*Pennantia corymbosa*
kamahi	*Weinmannia racemosa*
karaka	*Corynocarpus laevigata*
karamu	*Coprosma lucida, and C. robusta*
kawakawa (peppertree)	*Macropiper excelsum*
kiekie (gigi)	*Freycinetia banksii*
kohekohe	*Dysoxylum spectabile*
konini (tree fuchsia)	*Fuchsia excorticata*
koromiko	*Hebe stricta*
lacebark (houhere)	*Hoheria sexstylosa*
lancewood	*Pseudopanax crassifolium*
leatherwood (leatherleaf)	*Senecio eleagnifolius*
mahoe (whiteywood)	*Melicytus ramiflorus*
maire, black	*Nestegis cunninghamii*
maire, white	*N. lanceolata*
mairetawhake	*Eugenia maire*
matipo, black (kohuhu)	*Pittosporum tenuifolium*
matai (black pine)	*Podocarpus spicatus*
mapau (red matipo)	*Myrsine australis*
mingimingi	*Cyathodes acerosa and fasciculatus*
miro	*Podocarpus ferrugineus*
mistletoe	*Elytranthe sp.*
ngaio	*Myoporum laetum*
nikau	*Rhopalostylis sapida*
passionfruit (kohia)	*Tetrapathaea tetrandra*
pate	*Schefflera digitata*
pigeonwood	*Hedycarya arborea*
pokaka	*Elaeocarpus hookerianus*
poroporo (bullibulli)	*Solanum aviculare*
puka (broadleaf)	*Griselinia lucida*
pukatea	*Laurelia novae-zealandiae*
putaputa-weta (Maori may)	*Carpodetus serratus*
ramarama	*Myrtus bullata*
rangiora	*Brachyglyottis repanda*
raukawa	*Pseudopanax edgerleyi*
rata, northern	*Metrosideros robusta*
rewarewa (Maori honeysuckle)	*Knightia excelsa*
ribbonwood, lowland	*Plagianthus betulinus*
rimu (red pine)	*Dacrydium cupressinum*
rohutu	*Myrtus obcordata*
supplejack	*Ripogonum scandens*
stinkwood (hupiro)	*Coprosma foetidissima*
tarata (lemonwood)	*Pittosporum eugenioides*
tauhinu (tauwhini)	*Cassinia leptophylla*
tawa	*Beilschmiedia tawa*
teatree, red (manuka)	*Leptospermum scoparium*
teatree, white (kanuka)	*L. ericoides*
titoki	*Alectryon excelsum*
toro	*Myrsine salicinia*
totara	*Podocarpus totara*
tutu	*Coriaria arborea*
wharangi	*Melicope ternata*
wineberry (makomako)	*Aristotelia serrata*

The valley contains a good distribution of Epiphytes, Ferns, Fungi, Lianes, Lichens, Lycopods and Mosses.

The Epiphytes include many of the Astelias, Orchids, Rata, Puka and Five finger, which sometimes commences life as an epiphyte on tree-ferns, also accidental epiphytes such as mosses and ferns.

Few other countries have such a great variety of ferns as New Zealand. There are over 150 species found in this country, representatives of 12 families, and of these species 54 are endemic, ranging from filmy ferns to large tree-ferns. Some of the more common species found in the valley are the: hen-and-chicken ferns (Asplenium bulbferium), the climbing ferns (Pyrrosia serpens) and (Phymatodes diversifolium) species; ferns of the damp forest floor such as the kidney fern (Cardiomanes reniforme), the maiden-hair (Adiantum sp.), the brackens (Pteridium esculentum), the spleenworts (Asplenium sp.), the shield ferns (Polystichum richardii) sp. Of the Tree-ferns, the mamaku (Cyathea medullaris) is not so numerous in the valley as it was in previous years, but the silver-ferns, (C. dealbata and S. smithii) and the smaller (Dicksonia sp.) are fairly common.

Fungi of the three main groups, Phycomycetes (aquatic), Ascomycetes (sac fungi) and Basidiomycetes (rusts etc.), are well represented; there are over 1,200 species belonging to approximately 240 genera to be found in New Zealand, and one or two of the more rare specimens have been found in the Orongorongo valley, e.g. a deep purple toadstool, in the beech forest, Catchpole, possibly Secotium porphyreum, which occurs only in New Zealand Nothofagus forests. Entolomo cyaneum can be found in the damper parts of the 5 Mile Track.

Dactylanthus Taylori: There is only one representative of this order in New Zealand, and it was originally discovered by the Rev. Richard Taylor in 1845, growing on the roots of Pittosporum and Nothofagus. The Maoris call the plant Pua-o-te-reinga. It is not very common, but has been found and identified on Cattle Ridge.

Lichens: there are over 1,250 species belonging to 150 genera already known, of which many are endemic to New Zealand. A lichen is a composite plant consisting of two organisms living together for mutual benefit. A particular species of fungus lives in symbiotic association with a particular species of alga to form a distinct body. They can be roughly classified into three groups, foliose, fruitcose and crustose. Many species can be found in the valley; the Parmelias, Stictae, Peltigera, Nephroma, Collema and Leptogium, with the appealing coral lichens, Cladia, and branching lichens, Neuropogon, Ramalina and Sphaerophorus, and the crustose Lecidea, Lecanora and Pyrenula.

Lycopods: These are the club-mosses, a small group of plants of which two genera are found in New Zealand, Lycopodium and Phylloglossum. Of the latter genus there is only one species, P. drummondii; there are 12 species of Lycopodium, of which some are epiphytes. L. scariosium is common in open country, and L. volubile has branches 10-12 ft. long. The two epiphytic species are L. billardieri and L. novae-zealandicum, the latter found mostly on tree-ferns.

Mosses: The indigenous moss flora of New Zealand comprises 450 species. Mosses are often confused with lichens, but if a plant produces flowers or fruits, it cannot be a moss, and if it produces true leaves, it cannot be a lichen. Mosses can be classified into three main groups, Andreaeales or lantern mosses, Sphangnales or bog mosses, Bryales to which belong all the other species. In the last group, the most advanced forms are the Dawsonias, which can attain a height of 30 ins. The sub-alpine moss Dendroligotrichum dendroides commonly carpets the beech forest floor in damper areas. The pendulous mosses known as 'Spanish moss' and, less elegantly, 'old man's beard' are epiphytic genera of Weymouthia and Papillaria. Mount Matthews and the Whakanui Track are two places where a variety of mosses can be seen 'on the tops', and Mac's track from the 5 Mile Track to the Orongorongo river-bed has a more easily accessible area for study.

Orchidaceae: There are about 60 species in New Zealand, most of them so inconspicuous that they pass un-noticed. The perching, or epiphytic orchids are perhaps the best known; Dendrobium cunninghamii, Earina mucronata and E. autumnalis are found widely distributed in the valley from the top of Mount Matthews to the riverbed. The common green orchid, tutukiwi (Pterostylis banksii) and sp. are very abundant, as are the Microtis uniflora, Thelymitra sp. E. autumnalis is frequently found growing as a ground plant throughout the valley.

Poisonous Plants: Some of the more common varieties found are: karaka, the kernels of the berry can cause paralysis; ngaio, every part of the tree is toxic; poroporo, the berries are poisonous when green; tutu, all parts can be considered toxic; stinging nettle (Utica ferox) or tree nettle, has caused fatalities, the latter being a contact poison.