

LAKE MOERAKI RIVERSIDE RAINFOREST WALK

Welcome to the World of the rainforest. These notes are to guide you along this easy walk through riverside forest to a lovely view of Lake Moeraki. The walk begins near the towering kahikatea tree on the up-river side of the lodge and the return trip takes about 30 minutes. Note too that you say “good-bye” to sandflies once you enter the forest although they are still likely to be present at places where the track emerges at viewpoints beside the river and lake.

Before you enter the forest stop for a minute and listen for the call of the birds found in this rainforest habitat. These include the flute-like call of the tui, the tinkling chimes of korimako (the bellbird), the long warbling trill of riroriro (the grey warbler), the squeaky-hinge call of ngiru-ngiru (the tomtit), the chirpy chatter of piwakawaka (fantail), the “cli-cli-cli” of small flocks of tauhou (silvereye) and the rhythmic “whoosh” of kereru (wood pigeon) wings.

STOP 1-You are about to enter the dense tangle of South Westland lowland rainforest, dominated by a mixture of giant native conifers (or “podocarps”) and tall silver beech trees. Maori legend tells us that these “rakau rangitira”, the lordly trees, watch over the garden of Tane, god of the forest. Step back out of the forest and look again at the soaring kahikatea tree (*Dacrycarpus dacrydiodes*) or New Zealand white pine. Approximately 60 metres high (190 feet) and festooned with perching lilies, orchids and ferns this tree could be 900-1000 years old. Kahikatea extends back further in our fossil record than any other New Zealand tree, its ancestors being part of the forests which evolved 100-200 million years ago on the ancient southern super-continent Gondwana. New Zealanders consequently describe these forests of ancient lineage as “dinosaur forests”.

[If the weather is sunny it will take a minute or two for your eyes to adjust to the subdued light of the forest interior. Watch out for the head-high branch of a kamahi tree extending across the track a few steps inside the forest from this first marker peg.]

STOP 2- A striking feature of most West Coast lowland forests is the great numbers of ferns including tree-ferns up to 15m tall. Of the eight species of tree-ferns found on mainland New Zealand two occur along this fern forest walk. Wheki (or hard tree-fern) sheds dead fronds intact onto the forest floor while the soft tree-fern (katote) retains its dead fronds as a “grass skirt” at the base of its crown of living green fronds.

Besides these two species of tree-fern almost one third of New Zealand’s 180 species of ferns are found in the forest between Lake Moeraki and the sea (see also stops 4 and 8).

STOP 3- (Under the road bridge) The Moeraki River was not bridged below the lake until 1963. Prior to this the main “road” though this part of South Westland was the old Haast-Paringa Cattle Track which followed an inland route beyond the head of the lake with a link track out to the coast along the north side of the lake the coastal section of which has been restored as the present Monro Track. One-lane bridges like this were built as an economy measure and remain the standard type of bridge in remoter parts of New Zealand. Before the construction of bridges on the West Coast drowning in flooded rivers was so common it was known as “the West Coast death”.

STOP 4- Pause at almost any point along the track and you will immediately see that the trunks of trees as well as tree-ferns and dead trees are enveloped in mosses, lichens, filmy ferns, spleenworts, rata vines and other perching and climbing plants which colonise every available niche in this damp rainforest environment. While huge ancient matai and kahikatea trees can play host to dozens of these perching and climbing plants, even the fibrous trunks of tree-ferns are often completely encased in a green tangle of other species.

STOP 5- Matai or black pine (*Prumnopitys taxifolia*) is found in South Westland mainly close to rivers on fertile, well-drained soils regularly “top-dressed” by fresh silt during floods. Since these are also the soils most favoured for conversion to pasture matai forest today is very rare, even in such an extensively forested region as South Westland. In the early 1980s the more fertile areas of the Moeraki Valley were zoned for further farm development, but these plans were abandoned as a result of a successful campaign to protect these forests as part of the South West New Zealand World Heritage Area. Matai bark looks hammer-dented and when wet has a reddish hue. The wood is very hard and in the past was widely used for flooring.

STOP 6- About 30 years ago this 800-1000 year old matai tree tumbled to the forest floor and started decomposing. The nutrients released by this process now feed the plants which have colonised the decaying trunk, including a number of young pigeon wood seedlings and wheki tree-ferns. By growing on raised sites such as this plants avoid water-logging in the regular floods and periods of heavy rain which over the past decade have averaged almost 4400mm per year (or 180 inches) at the Wilderness Lodge (see notes for Stop 12).

STOP 7- The brief detour here to the river’s edge gives you a viewpoint across the river to the rainforest profile on the opposite bank. As along much of the river between the lake and the sea tall kiekie-draped rimu and kahikatea trees soar above a complex mosaic of smaller trees and tree-ferns with flax prominent along the river’s edge. Compare this complex forest tangle with the much more regular zonation of the swamp-forest on the southwest shore of the lake, seen from the viewpoint at Stop number 12. The most prominent ferns bordering this short detour track are the two species of *Blechnum* ferns described in the notes for the next stop.

STOP 8- Among the more prominent of the ferns encountered on this walk are two of the ten species of *Blechnum* ferns found in New Zealand. *Blechnum* ferns are fairly easy to identify as their fronds are only “once dividing” – that is the parts of the frond attaching to the stem (called “pinnae”) do not redivide into more complex and intricate structures, as is the case with many other species of ferns. Here the metre-high crown fern (*Blechnum discolor*) is the prominent fern on the left-hand side of the track while the larger fronds of kiokio

fern (*Blechnum capense*), which regularly covers roadside banks throughout many parts of the West Coast, occurs on the right (see also notes for Stop 12).

STOP 9- Many of the trunks of the larger trees throughout lowland and coastal parts of the West Coast are covered in sharp, tooth-edge kiekie vines (*Freycinetia baueriana*) a member of a tropical familiar of climbers that includes pandanus. Kiekie also sprawls in impenetrable tangles across the forest floor and coastal headlands throughout lowland parts of the West Coast making access virtually impossible unless there is a track. Kiekie had many practical uses for Maori and is still widely used in the Pacific Islands for things like baskets, mats and roofing thatch.

STOP 10- The small feathery seedlings growing on this tree trunk are kahikatea and have probably been dropped here by native wood pigeon. Kahikatea means “food basket of the forest” and in a good fruiting year a large adult tree can produce up to 700-800 kilograms of fruit containing 2-3 million seeds. Maori used to climb these trees to gather the peppercorn-sized edible fruits and set bird snares - and if you fell from a kahikatea it was said that you were “food for the roots”. Many rainforest seedling start life like this, perched above the forest floor on both dead and living trees (see also notes for stops 4 and 6).

STOP 11- Look above you at the giant kahikatea covered in kiekie vines and other perching and climbing plants (including easter orchids, lady’s slipper orchids, and feathery *Asplenium* ferns). This tree is nearing the end of its long life although the foliage on the end of some of its branches clearly shows that it is still alive. While slowly rotting branches will progressively join those which have already fallen to the forest floor the main trunk may not topple over for another 50 or years or more.

STOP 12- In the frequent heavy rains both the lake and river can rise rapidly 1-2 metres above their normal levels subjecting this area of forest adjacent to the lake outlet to regular flooding. Many plants are however able to cope with this constant inundation by floodwaters including trees like kahikatea, seven-finger (New Zealand’s only member of the *Schefflera* genus) and mahoe, flax-like astelias, and kiokio ferns. This short section of elevated board-walk brings you to a viewpoint at the outlet of the lake (Stop 13) so walk quietly to avoid disturbing any of the water birds which are regularly seen at this end of the lake (see notes for Stop 16).

STOP 13- Welcome to the outlet of Lake Moeraki. Look across the outlet to the clearly defined pattern of vegetation (or “zonation”) on the opposite shore. Closest to the water’s edge is a dense band of spiky yellow/green New Zealand flax with scattered patches of rushes on the shallower parts of the shore. Behind the flax is a brown/green band of manuka or tea-tree (*Leptospermum scoparium*) a shrubby tree which is found in a wide variety of habitats and has air-cells in its roots to enable it to grow in permanently water-logged soils. Behind the manuka, tower tall swamp-tolerant kahikatea trees with rimu becoming dominant on the hillsides beyond. The bed of the lake here is also a mosaic of different species of aquatic plants forming lovely patterns and textures as you paddle a canoe across this shallow outlet on calm sunny days.

STOP 14- The now stable and well-drained soils on the gravel beach at this end of the lake have provided an ideal site for this giant ancient matai or black pine. It's trunk is encircled by massive vines of the winter-flowering rata (*Metrosideros fulgens*) which is not a strangling vine but simply uses the matai as a ladder to get better access to sunlight. As elsewhere in this forest many other plants have colonised this ancient forest giant, including several puka trees (*Griselinia lucida*) which are often found on big old matai and kahikatea trees and are easily identified by their large glossy-green leaves.

STOP 15- The small swamp impounded behind the gravel beach at this end of the lake is home to flax plants (*Phormium tenax*) more than 2 metres tall. Flax occurs widely throughout New Zealand and provided Maori with a strong and versatile material for making things like garments, shoes, ropes, mats and fishing nets. Early European seafarers and settlers also used it for making ropes, and later in making bales for wool and sacks for grain. Its nectar-rich flowers appear between October and December and constitute an important source of food for birds, especially tui and bellbird. (New Zealand flax is in the Agave family of plants and is not related to European linen flax.)

STOP 16- Lake Moeraki viewpoint. The track ends at this small gravel beach and shallow bay, which can be an excellent fly-fishing spot for brown trout and is also a prized feeding area for birds which inhabit the lake. Here you will regularly see flocks of small black diving ducks (or New Zealand scaup), solitary black shag, black swan, mallard, pairs of paradise shelduck (the male with a black head, the female with a white head) and possibly too the rare Southern crested grebe and kotuku (white heron). It also provided an excellent viewpoint of the upper Moeraki Valley and its surrounding peaks with Eureka (1830m) and Monro Peak (2050m) the highest of the summits visible from this viewpoint.

We hope you have enjoyed this walk and will discover other secrets of this rainforest on your return trip back to the lodge. If you have any questions about anything you have encountered or any of the features we have highlighted in these notes please do not hesitate to refer them to our guides who will be happy to provide you with answers or direct you to books in our lodge library that will help to answer your inquiries.