

WAIRERE FALLS FIELD TRIP

G. Donaghy & G. Jane

Although it was a combined trip with Waikato Botanical Society only nine managed to turn out for a fine day. Several people were keen to concentrate on ferns, so this became the main interest. The morning was cool and the lower part of the track in shadow so we decided to start off briskly, but this idea was soon dispelled as the trackside was soon enveloped in masses of filmy ferns and a rich variety of other ferns.

The lower area near the track start was a huge outwash fan from a major storm fifty or more years ago, as evidenced by the canopy of young kanuka and totara with some titoki, mahoe and pigeonwood over very irregular ground with many boulders, some up to a metre or more across. The boulders were carpeted with *Hymenophyllum scabrum* and *H. sanguinolentum* and it soon became a test in distinguishing the two. The former with its distinctive hairy stipe and the latter with curled frond tips were soon discriminated. Other filmy ferns included the distinctive kidney fern (*Cardiomanes reniforme*); *H. dilatatum*, with its very flat broad pinnules and drooping tips; *H. flexuosum* with a frilly stipe, and the brownish hairy frond of *H. frankliniae*. *Arthropteris tenella* was also locally common nearer the first bridge. This is usually found close to the sea and seemed a long way from "home". A local Kaimai specialty, *Asplenium lamprophyllum* climbing on the rocks and at the bases of trees, looks like *A. bulbiferum* but has a creeping stem and quite shiny narrow fronds that smell of oil of wintergreen when crushed.

Near the bridge over a roaring torrent, the forest was well developed with kohekohe (*Dysoxylum spectabile*), puriri, (*Vitex lucens*) and titoki (*Alectryon excelsus*) amongst dominant tawa (*Beilschmiedia tawa*). Fortuitously a recently fallen moss covered branch presented us with several plants of *Drymoanthus adversus*, often difficult to spot because of its small

size. Here the main ground cover fern was *H. demissum*. Other ferns appearing here were the scrambling *Microsorium scandens* and, the related bright green *M. pustulatum* with its thick creeping rhizome. The rather similar *Loxogramme dictyopteris* also formed mats on the rocks. It more usually occurs on tree bases and typically droops when the rains have been absent for only a few days.

Across the bridge it was sunny and forest seemed drier with bush ricegrass (*Microlaena avenacea*) and carpets of *Hymenophyllum demissum*. The shrubs now included the odd *Mida salicifolia* and *Raukawa edgerleyi* and *Streblus heterophyllus* with its distinct violin shaped leaves. For a brief section, the track was close to pasture with weeds such as blackberry (*Rubus fruticosus*) and Himalayan honeysuckle (*Leycesteria formosa*) and two new records, *Coprosma areolata* and akeake (*Dodonaea viscosa*), both clearly recent arrivals as they were abundant only as saplings alongside the track.

As the gorge became tighter the main trees became rewarewa (*Knightia excelsa*), tawa and pigeonwood with masses of *Freycinetia banksii* and supplejack (*Ripogonum scandens*) scrambling between. Where the track veered away from the gorge to gain height on a ridge, the more recently burnt forest was dominated by kanuka and the tree ferns wheki (*Dicksonia squarrosa*) and the silver fern (*Cyathea dealbata*). Ferns here included the common maidenhair *Adiantum cunninghamii* and *A. viridescens* (a hairy stiped version of the former).

When the track re-entered the gorge it was at first through a dry area with *Helichrysum lanceolatum* quite conspicuous along with *Lycopodium volubile*. It soon crossed the stream as the gorge became very narrow, cool and damp. Here *Trichomanes endlicherianum* carpeted drier rocks and a small patch of *H. atrovirens* was evident on dripping rocks. The track soon re-crossed the stream and continued as a steep set of stairs on the sunny face. Many weeds were present including new records of *Galinsoga parviflora* and *Euchiton japonicus*, probably brought in with track gravel. At the top of the stairs the rocky ground

continued with dense kiekie, supplejack and scattered rewarewa and tawa over an open understorey of pigeonwood and mahoe. Soon we were given a good view of the falls from a distance over several trees of pukatea (*Laurelia novae-zelandiae*). Again the track veered away from the stream on to an open ridge of young tree ferns.

On reaching the edge of the plateau the forest changed to tawa, kamahi (*Weinmannia racemosa*), tawari and the odd rimu as we followed the edge around to the top of the falls. Here *Hymenophyllum frankliniae* was quite common along with *Trichomanes venosum* on the soft tree fern *Cyathea smithii*. *Blechnum nigrum* appeared in the darkest, damp places along the track. In more open areas the mini tree fern *B. fraseri* and *Lycopodium deuterodensum* formed patches.

After viewing the top of the falls and lunch nearby amongst low wind and spray swept forest and masses of flax and kiekie, we briefly headed up river in search of *Hymenophyllum lyallii* only to find *H. minimum* instead and a huge pendulous lycopod *Phlegmariurus varius*. From there we began the retreat down to the vehicles, noting a few things missed earlier. At one point *Trichomanes elongatum* was noted in a dark hole in the bank. We also stopped briefly for *H. atrovirens* which most people had missed deep in the gorge on the way up. In all a great day for ferns.

~ ~ ~ ~ ~

Ferns and Fern Allies along the Wairere Falls Track

Psilopsids, Lycopods & Quillworts

Lycopodium deuterodensum
Phlegmariurus varius

puakarimu

Ferns

<i>Adiantum cunninghamii</i>	maiden hair fern
<i>Adiantum viridescens</i>	
<i>Arthropteris tenella</i>	
<i>Asplenium bulbiferum</i>	hen and chickens fern, moku
<i>Asplenium flaccidum</i> subsp. <i>flaccidum</i>	hanging spleenwort, makawe
<i>Asplenium lamprophyllum</i>	
<i>Asplenium oblongifolium</i>	shining spleenwort
<i>Blechnum chambersii</i>	nini, lance fern
<i>Blechnum discolor</i>	crown fern, piupiu, petipeti
<i>Blechnum filiforme</i>	Climbing hard fern, thread fern
<i>Blechnum nigrum</i>	
<i>Blechnum novae-zelandiae</i>	kiokio
<i>Cardiomanes reniforme</i>	kidney fern, raurenga
<i>Cyathea dealbata</i>	ponga, silver fern
<i>Cyathea medullaris</i>	mamaku, korau, black tree fern
<i>Cyathea smithii</i>	
<i>Dicksonia squarrosa</i>	wheki, harsh tree fern
<i>Doodia australis</i>	pukupuku, rasp fern
<i>Gleichenia dicarpa</i>	waewaekaka, tangle fern
<i>Histiopteris incisa</i>	water fern
<i>Hymenophyllum atrovirens</i>	
<i>Hymenophyllum demissum</i>	piripiri, irirangi
<i>Hymenophyllum dilatatum</i>	lop-sided filmy fern
<i>Hymenophyllum flexuosum</i>	
<i>Hymenophyllum frankliniae</i>	
<i>Hymenophyllum minimum</i>	
<i>Hymenophyllum sanguinolentum</i>	blood-scented filmy fern
<i>Loxogramme dictyopteris</i>	
<i>Lygodium articulatum</i>	mangemange, bushman's mattress
<i>Microsorium pustulatum</i> subsp. <i>pustulatum</i>	hounds tongue, kowaowao
<i>Microsorium scandens</i>	
<i>Paesia scaberula</i>	scented fern, matata, ring fern
<i>Pneumatopteris pennigera</i>	gully fern, pakau, pakauharoha
<i>Polystichum wawranum</i>	common shield fern, pikopiko
<i>Pteridium esculentum</i>	bracken, rauaruhe
<i>Pteris macilenta</i>	sweet fern
<i>Pyrrosia eleagnifolia</i>	leather-leaf fern
<i>Trichomanes elongata</i>	
<i>Trichomanes endlicherianum</i>	
<i>Trichomanes venosum</i>	