

NGONGOTAHA STREAM HEADWATERS

John F. F. Hobbs

Seven members of the Rotorua Bot. Soc. plus two Paradise Valley residents gathered at the hairpin on Endean Road (off Paradise Valley Road) before setting out on a trip which two had done before but whose memories were a bit hazy on which way to go. Anyway being the leader and as there were no objections we headed off down a fenceline where the going got harder and more difficult due to the fallen dead wattle trees and some blackberry. Some wag suggested that this was the hard bit of the grade and that the rest would be easier and so it turned out – well almost. After a bit of a scramble down a step bank we came out on to some grassland and an abandoned hut, which the locals said was the old Rotorua Sun Club. We followed the Otamaroa Stream down to its confluence with the Ngongotaha Stream. Here we crossed over and headed up the ridge between the two streams.

After an easy climb up a ridge for a couple of hundred metres we came across a rather large flat area which gave the impression that it had been an old Maori garden. Of note here was the presence of many seedlings of Montpellier broom (*Teline monspessulana*). Some rather large “leaved” tanekaha evoked some spirited discussion as to whether it was a toatoa (*Phyllocladus toatoa*) / tanekaha (*P. trichomanoides*) hybrid. The immediate conclusion was toatoa as no tanekaha had been seen but was later amended to hybrid when tanekaha was found.

Lunch was eaten to the north of the high point on the ridge (and away from a rotting deer carcass). We then headed south down the ridge through kamahi / tawa forest and as the ridge got narrower the vegetation changed to scrub with the odd emergent tanekaha.

We eventually came upon the Oruareimokoroa Pa site clearly indicated by a deep trench which stretched across the narrow ridge. There would not have been too much trouble

defending this site from the enemy. Many pits were noted at the site and one person who put his head down to examine the depths was too tempting a target by those looking on.

The conditions were quite pleasant at the Pa site and we probably lingered there a bit too long enjoying the vegetation and views from the less vegetated parts. As we headed for home through the manuka scrub with clearings dominated by puakarimu (*Lycopodium deuterodensum*) and ground lichens Linda noted a lycopod that was somewhat different from puakarimu and my first impression was that this was *Lycopodiella lateralis* but I was put off by the non-bogginess of the ground. A sample was collected, identification confirmed and vouchered as *L. lateralis* in the National Forestry Herbarium. This was a significant find as the only other known population of this species in the Rotorua Lakes Ecological District had been destroyed during road works near Hamurana on the northern shores of Lake Rotorua in the mid 1980s.

The walk back to the start was a bit wayward and as the sun was lowering over the left shoulder a bit too far, a call was made for a reassessment of where we were going and a bit of back-tracking was done and we eventually dropped down into the stream then up the opposite bank to a track which we should have come down at the start of the day.

One remarkable feature of the noted vegetation between the streams was there were only four adventive species seen: Montpellier broom, fleabane (*Conyza albida*), ragwort (*Senecio jacobaea*) and catsear (*Hypochoeris radicata*) – the last three being in very low numbers. It was a pleasure to be able to go into an area that has no broom, gorse or blackberry.

As a side trip a few of us went up Endean Road to the Moore's property to inspect a mistletoe (*Ileostylus micranthus*) growing on an almond tree (*Prunus dulcis*). This may be a new host record for this mistletoe.



Participants: (from left back) Trish Hosking, Dave Stewart, Paul Cashmore, Grant Milligan, John Hobbs (Leader). (Front) Linda Conning, Chris Ecroyd,
Photo taken by Pam Moore.

HOROHORO FOREST (ENDEANS BLOCK RESERVE)

Based on the area between the confluence of, and between, the Otamaroa and Ngongotaha Streams and the Oruareimokoroa Pa site (Grid ref : U16 859 351) – mainly on and near the main ridge.

J.F.F. Hobbs, C.E. Ecroyd, P. Cashmore, G. Milligan

Fern Allies

<i>Huperzia varia</i>	hanging club moss
<i>Lycopodiella lateralis</i>	bog clubmoss
<i>Lycopodium deuterodensum</i>	puakarimu
<i>Lycopodium volubile</i>	climbing clubmoss
<i>Tmesipteris elongata</i>	fork fern
<i>Tmesipteris tannensis</i>	fork fern

Ferns

<i>Asplenium bulbiferum</i>	hen and chickens fern
<i>Asplenium flaccidum</i>	hanging spleenwort
<i>Asplenium oblongifolium</i>	shining spleenwort
<i>Asplenium polyodon</i>	sickle spleenwort
<i>Blechnum chambersii</i>	nini
<i>Blechnum discolor</i>	crown fern
<i>Blechnum filiforme</i>	thread fern
<i>Blechnum fluviatile</i>	kiwakiwa
<i>Blechnum membranaceum</i>	
<i>Blechnum novae-zelandiae</i>	kiokio
<i>Blechnum procerum</i>	small kiokio
<i>Ctenopteris heterophylla</i>	
<i>Cyathea dealbata</i>	silver fern
<i>Cyathea smithii</i>	soft tree fern
<i>Diplazium australe</i>	southern lady fern
<i>Dicksonia squarrosa</i>	wheki
<i>Gleichenia microphylla</i>	waewaeakaka
<i>Histiopteris incisa</i>	water fern
<i>Hymenophyllum demissum</i>	irirangi
<i>Hymenophyllum dilatatum</i>	filmy fern
<i>Hymenophyllum ferrugineum</i>	rusty filmy fern
<i>Hymenophyllum flabellatum</i>	filmy fern
<i>Hymenophyllum rarum</i>	filmy fern
<i>Hymenophyllum revolutum</i>	filmy fern
<i>Hymenophyllum sanguinolentum</i>	piripiri
<i>Hymenophyllum scabrum</i>	filmy fern
<i>Hypolepis ambigua</i>	pig fern

<i>Lastreopsis glabella</i>	
<i>Lastreopsis hispida</i>	hairy fern
<i>Leptolepia novae-zelandiae</i>	hare's foot fern
<i>Leptopteris hymenophylloides</i>	heruheru
<i>Lindsaea trichomanoides</i>	
<i>Anarthropteris lanceolata</i>	lance fern
<i>Lygodium articulatum</i>	mangemange
<i>Microsorium pustulatum</i>	hound's tongue
<i>Microsorium scandens</i>	fragrant fern
<i>Paesia scaberula</i>	lace fern
<i>Pneumatopteris pennigera</i>	gulley fern
<i>Polystichum vestitum</i>	prickly shield fern
<i>Pteridium esculentum</i>	bracken
<i>Pyrrosia eleagnifolia</i>	leather-leaf fern
<i>Rumohra adiantiformis</i>	leathery shield fern
<i>Sticherus cunninghamii</i>	umbrella fern
<i>Trichomanes reniforme</i>	kidney fern
<i>Trichomanes venosum</i>	veined filmy fern

Gymnosperms

<i>Dacrycarpus dacrydioides</i>	kahikatea
<i>Dacrydium cupressinum</i>	rimu
<i>Phyllocladus toatoa</i>	toatoa
<i>Phyllocladus toatoa</i> X <i>P. trichomanoides</i>	
<i>Phyllocladus trichomanoides</i>	tanekaha
<i>Podocarpus hallii</i>	Hall's totara
<i>Prumnopitys ferrugineus</i>	miro
<i>Prumnopitys taxifolia</i>	matai

Dicotyledonous Trees & Shrubs

<i>Alectryon excels</i> subsp. <i>excelsus</i>	titoki
<i>Alseuosmia macrophylla</i>	karapapa
<i>Aristotelia serrata</i>	wineberry
<i>Beilschmiedia tawa</i>	tawa
<i>Carpodetus serratus</i>	putaputaweta
<i>Coprosma grandifolia</i>	kanono
<i>Coprosma lucida</i>	glossy karamu
<i>Coprosma robusta</i>	karamu
<i>Dracophyllum strictum</i>	totorowhiti
<i>Elaeocarpus dentatus</i>	hinau
<i>Gaultheria antipoda</i>	snowberry
<i>Gaultheria antipoda</i> X <i>G. paniculata</i>	
<i>Gaultheria paniculata</i>	snowberry
<i>Geniostoma ligustrifolium</i> var. <i>ligustrifolium</i>	hangehange

<i>Griselinia lucida</i>	puka
<i>Hebe stricta</i> var. <i>stricta</i>	koromiko
<i>Hedycarya arborea</i>	pigeonwood
<i>Ixerba brexioides</i>	tawari
<i>Knightia excelsa</i>	rewarewa
<i>Kunzea ericoides</i> var. <i>ericoides</i>	kanuka
<i>Laurelia novae-zelandiae</i>	pukatea
<i>Leptecophylla juniperina</i>	prickly mingimingi
<i>Leptospermum scoparium</i>	manuka
<i>Leucopogon fasciculatus</i>	mingimingi
<i>Litsea calicaris</i>	mangeao
<i>Macropiper excelsum</i> subsp. <i>excelsum</i>	kawakawa
<i>Melicytus ramiflorus</i>	mahoe
<i>Metrosideros robusta</i>	northern rata
<i>Mida salicifolia</i>	taiko
<i>Myrsine australis</i>	mapou
<i>Nestegis lanceolata</i>	white maire
<i>Nothofagus truncata</i>	hard beech
<i>Pittosporum colensoi</i>	kohuhu
<i>Pittosporum cornifolium</i>	tawhirikaro
<i>Pseudopanax crassifolius</i>	lancewood
<i>Pseudowintera axillaris</i>	horopito
<i>Quintinia serrata</i>	tawheowheo
<i>Schefflera digitata</i>	pate
* <i>Teline monspessulana</i>	Montpellier broom
<i>Toronia toru</i>	toru
<i>Weinmannia racemosa</i> var. <i>racemosa</i>	kamahi

Dicotyledonous Lianes

<i>Clematis paniculata</i>	clematis
<i>Metrosideros diffusa</i>	white rata vine
<i>Metrosideros fulgens</i>	rata vine
<i>Metrosideros perforata</i>	rata vine
<i>Parsonsia heterophylla</i>	New Zealand jasmine
<i>Rubus cissoides</i>	bush lawyer

Dicotyledonous Herbs

* <i>Conyza albida</i>	fleabane
* <i>Hypochoeris radicata</i>	catsear
<i>Nertera depressa</i>	
<i>Nertera villosa</i>	
* <i>Senecio jacobaea</i>	ragwort

Monocotyledonous Trees Shrubs & Lianes

Cordyline banksii

cabbage tree

Freycinetia banksii

kiekie

Ripogonum scandens

supplejack

Orchids

Bulbophyllum pygmaeum

bulb-leaved orchid

Corybas macranthus

spider orchid

Drymoanthus adversus

green fleshy orchid

Earina autumnalis

ruapeka

Earina mucronata

peka-a-waka

Thelymitra sp.

sun orchid

Winika cunninghamii

winika

Grasses

Cortaderia fulvida

toetoe

Deyeuxia quadriseta

bush rice grass

Microlaena avenoides

danthonia

Rytidosperma gracile

Sedges

Gahnia pauciflora

gahnia

Lepidosperma australe

square-stemmed sedge

Morelotia affinis

Schoenus tendo

Uncinia banksii

hooked sedge

Uncinia uncinata

kamu

Uncinia zotovii

hooked sedge

Other Monocotyledonous Herbs

Astelia solandri

kahakaha

Astelia trinervia

kauri grass

Collospermum hastatum

Collospermum microspermum

Dianella nigra

turutu