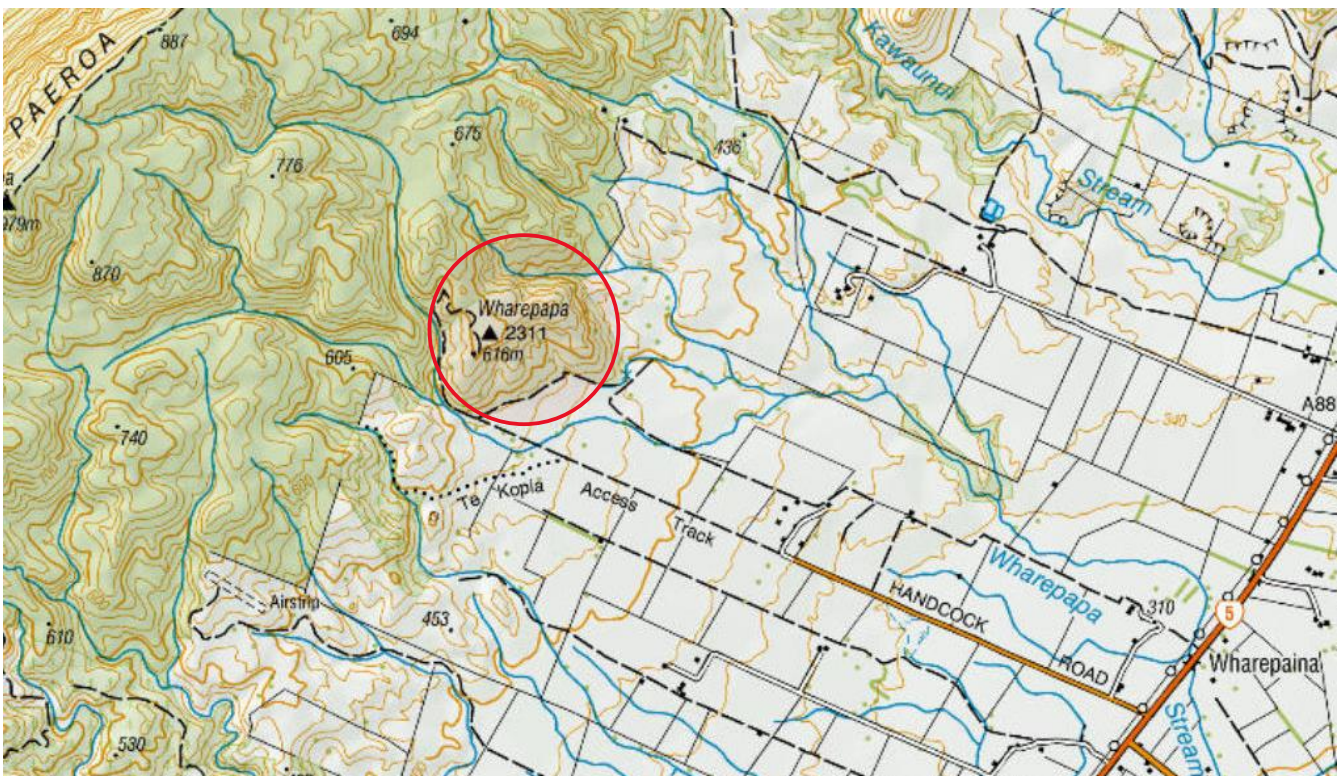


Wharepaina, Paeroa Range – 24 September 2022

Jacqui Bond

Group: Paul Cashmore, Kerry Jones, Mitch West, Matt Renner, Eugenie Pavlov, Rob Fairley, Angela Simpson, Graeme Jane, Gael Donaghy, John Jordan, Mary-Jean Paterson, Sarah Beadel, Linda Conning, Mark Conning, Chris Bycroft, Rhys Bishop, **Rosie Sargent, Clinton Handcock.**

The private land block in the Paeroa Range, Wharepaina, is next to Te Kopia Scenic Reserve and accessed from the end of Handcock Road.



Circle indicates area explored by the Rotorua Botanical Society

In the distant past the block was selectively logged for native timber, with the lower regions being farmed. In the 1980s the Handcock family sold the farm, built a hut on top of a hill and kept the upper bush block for recreation. For many of the friends of the Handcocks, this block has been a place of 2-wheeled adventures for many years!

With the Waikato Regional council using this site to test the automatic resetting traps (AT220), last year, plans were made by the family to begin pest control for rats, mice and mustelids. Lines were cut and a pest operation close to the hut begun.

Clinton Handcock and his partner Rosie were our guides for the day, using the newly created trapping network to show us around.



Left: *Herzogianthus vaginatus*; Right: Huge mahoe in gully. Photos: Jacqui Bond

Vehicles were parked in the “Metal Pit” and while we made our way up their muddy road to the hut, we had a good view of the forest in their block. The usually overlooked bryophytes such as *Herzogianthus vaginatus*, (NZ endemic family *Herzogianthaceae*) was found on the roadside scrapings and was getting an unusually large amount of attention due to Matt Renner being on our trip! The dry clay scarps were also the perfect habitat for orchids (leaves only), and flowering *Dracophyllum strictum*.

Due to the free draining soils in this area, there is no permanently running water in the valleys making the gullies wide and easy to walk. Closer to the farmland the forest looked to be regenerating with mahoe and tree ferns predominating. Some of the mahoe were hundreds of years old, being the truly gnarliest specimens I had ever come across. Over many years the main stem seems to be made from fused branches



Dracophyllum strictum Photo: Jacqui Bond

which then expand giving the impression of wooden lacework, a tree climber's dream.



Northern rata revealing itself through a gap in the forest. *Photo: Jacqui Bond*

Heading into the older parts of the forest, huge matai and rimu were impressively standing out amongst forest companions hundreds of years their junior. In each case the tree was hollow, presumably not warranting all the effort of felling. In a past pest-free forest these trees would have been excellent roosts for bats.

We speculated that northern rata was now, sadly, nearly non-existent in the Paeroa Range due to years of possum browse. We then found a fallen northern rata still clinging to its host and it was alive! Wandering back to the hut, looking at the ground, we found a pile of the distinctive northern rata leaves: stubby and thick with a dent in the tip. Rhys and I were on the trail of the illusive rata when we spied through a gap in the forest a

HUGE rata with its distinctive white bark and tufts of leaves YAY.

IT was time to return to the hut for a cuppa tea and to admire the view. Let's hope the pest control work on this block will bring back the species still holding on and with it some of the birds and insects which haven't been seen in the Paeroa Range for many years.

A big thanks to the Handcock family for letting us visit their land block and to Clinton and Rosie for organising many years of adventures in this forest.

Bird list, Handcock property, Paeroa Range, 24 September 2022

Chris Bycroft

NZ falcon	Tui	Fantail
Magpie	Grey warbler	Robin
Goldfinch	Silvereye	Eastern rosella
Pheasant,	Welcome swallow	Tomtit
Blackbird	Whitehead	Yellowhammer

Vascular plant checklist of Handcock property, Paeroa Range, 24 September 2022

Sarah Beadel

Indigenous Species

Gymnosperms

<i>Dacrydium cupressinum</i>	rimu
<i>Pectinopitys ferruginea</i>	miro
<i>Podocarpus laetus</i>	Hall's tōtara
<i>Prumnopitys taxifolia</i>	mataī

Monocot. trees and shrubs

<i>Cordyline australis</i>	tī kōuka, cabbage tree
<i>Cordyline banksii</i>	tī ngahere, forest cabbage tree

Dicot. trees and shrubs

<i>Aristotelia serrata</i>	makomako, wineberry
<i>Beilschmiedia tawa</i>	tawa
<i>Brachyglottis repanda</i>	rangiora
<i>Carpodetus serratus</i>	putaputawētā
<i>Coprosma grandifolia</i>	kanono, raurēkau, raurākau, manono
<i>Coprosma lucida</i>	karamū, kāramuramu, glossy karamū
<i>Coprosma robusta</i>	karamū, kāramuramu
<i>Coriaria arborea</i> var. <i>arborea</i>	tutu
<i>Dracophyllum strictum</i>	tōtorowhiti
<i>Elaeocarpus dentatus</i>	hīnau, whīnau
<i>Fuchsia excorticata</i>	kōtukutuku, kōnini
<i>Gaultheria antipoda</i>	tāwiniwini, koropuka, takapo, taupuku
<i>Gaultheria paniculata</i>	koropuka
<i>Gaultheria antipoda</i> × <i>G. paniculata</i>	koropuka
<i>Geniostoma ligustrifolium</i> var. <i>ligustrifolium</i>	hangehange
<i>Griselinia littoralis</i>	kāpuka
<i>Griselinia lucida</i>	puka
<i>Hedycarya arborea</i>	porokaiwhiri; pigeonwood
<i>Knightia excelsa</i>	rewarewa
<i>Leptospermum scoparium</i>	mānuka
<i>Leucopogon fasciculatus</i>	mingimingi
<i>Litsea calicaris</i>	mangeao
<i>Metrosideros robusta</i>	northern rātā
<i>Myrsine australis</i>	māpou, matipou, māpau
<i>Nestegis cunninghamii</i>	black maire, maire rau nui
<i>Olearia paniculata</i>	akiraho
<i>Pittosporum tenuifolium</i>	kōhūhū, rautāhiri, rautāwhiri
<i>Pseudopanax arboreus</i>	whauwhaupaku, puahou, five finger
<i>Pseudopanax crassifolius</i>	horoeka, lancewood
<i>Pseudowintera colorata</i>	mountain horopito
<i>Pterophylla racemosa</i>	kāmahi
<i>Schefflera digitata</i>	patē

Veronica stricta var. *stricta*

koromiko, kōkōmuka

Monocot. lianes

Ripogonum scandens

supplejack, kareao

Dicot. lianes

Clematis paniculata

puawānanga

Metrosideros colensoi

rātā

Metrosideros diffusa

rātā

Metrosideros fulgens

rātā

Metrosideros perforata

aka

Muehlenbeckia australis

puka

Parsonia capsularis

akakiore

Rubus cissoides agg.

tātārāmoa, tātaraheke, bush lawyer

Rubus schmidelioides var. *schmidelioides*

tātārāmoa, bush lawyer

Lycopods and psilopsids

Phlegmariurus varius

Pseudodiphasium volubile

waewaekoukou, climbing clubmoss

Tmesipteris elongata

Tmesipteris tannensis

Ferns

Asplenium bulbiferum

mouku, mauku, hen and chicken fern

Asplenium flaccidum subsp. *flaccidum*

makawe, ngā makawe o raukatauri,

Asplenium oblongifolium

huruhuru whenua, shining spleenwort

Asplenium polyodon

petako, paratao, sickle spleenwort

Blechnum chambersii

rereti, nini, lance fern

Blechnum discolor

piupiu, petipeti, crown fern

Blechnum filiforme

pānako, thread fern

Blechnum fluviatile

kiwikiwi, kiwakiwa, creek fern

Blechnum novae-zelandiae

kiokio, horokio

Blechnum vulcanicum

korokio

Cyathea cunninghamii

pūnui, gully tree fern

Cyathea dealbata

ponga, silver fern

Cyathea medullaris

mamaku, black tree fern

Cyathea smithii

kātote, soft tree fern

Dicksonia fibrosa

whekī-ponga, kurīpākā

Dicksonia squarrosa

whekī

Diplazium australe

Histiopteris incisa

mātātā, water fern

Hymenophyllum demissum

irirangi, piripiri, drooping filmy fern

Hymenophyllum dilatatum

matua mauku, filmy fern

Hymenophyllum flabellatum

mauku, fan-like filmy fern

Hymenophyllum frankliniae

mauku, rusty filmy fern

Hymenophyllum multifidum

mauku, much-divided filmy fern

Hymenophyllum rarum

mauku, tufted filmy fern

Hymenophyllum sanguinolentum

piripiri, filmy fern

Lecanopteris pustulata subsp. *pustulata*

kōwaowao, hound's tongue fern

Lastreopsis hispida

tuakura

<i>Leptolepia novae-zelandiae</i>	lace fern
<i>Leptopteris hymenophylloides</i>	heruheru, single crepe fern
<i>Loxogramme dictyopteris</i>	lace fern
<i>Notogrammitis heterophylla</i>	
<i>Paesia scaberula</i>	mātātā, hard fern
<i>Parapolystichum glabellum</i>	smooth shield fern
<i>Pakau (Pneumatopteris) pennigera</i>	piupiu, feather fern, gully fern
<i>Polystichum silvaticum</i>	
<i>Polystichum vestitum</i>	pūniu, prickly shield fern
<i>Pteridium esculentum</i> subsp. <i>esculentum</i>	rārahu, bracken
<i>Pteris macilenta</i>	titipo, sweet fern
<i>Pteris tremula</i>	turawera, shaking brake
<i>Pyrrhosia elaeagnifolia</i>	leather-leaf fern
<i>Rumohra adiantiformis</i>	karuwhai
<i>Trichomanes strictum</i>	erect bristle fern
<i>Trichomanes venosum</i>	

Orchids

<i>Chiloglottis cornuta</i>	
<i>Dendrobium cunninghamii</i>	
<i>Drymoanthus adversus</i>	
<i>Earina autumnalis</i>	raupeka
<i>Earina mucronata</i>	peka-a-waka
<i>Microtis unifolia</i> agg.	
<i>Orthoceras novae-zeelandiae</i>	māikaika
<i>Thelymitra longifolia</i>	

Grasses

<i>Austroderia fulvida</i>	toetoe
<i>Microlaena avenacea</i>	bush rice grass
<i>Microlaena stipoides</i>	pātītī, meadow rice grass
<i>Pentapogon avenoides</i>	
<i>Pentapogon crinitus</i>	plume grass
<i>Poa anceps</i> agg.	
<i>Rytidosperma gracile</i>	

Sedges

<i>Carex banksiana</i>	matau
<i>Carex dissita</i>	
<i>Carex solandri</i>	
<i>Carex uncinata</i>	kamu matau a Maui, kamu
<i>Cyperus ustulatus</i>	toetoe upoko-tangata
<i>Gahnia pauciflora</i>	takahikahi
<i>Gahnia setifolia</i>	māpere
<i>Morelotia affinis</i>	
<i>Schoenus maschalinus</i>	

Rushes

<i>Luzula picta</i> var. <i>picta</i>	
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Monocot. herbs (other than orchids, grasses, sedges, and rushes)

<i>Astelia hastata</i>	kahakaha
<i>Astelia microsperma</i>	
<i>Astelia solandri</i>	kōwharawhara
<i>Dianella nigra</i>	tūrutu

Composite herbs

<i>Euchiton audax</i>	
<i>Lagenophora pumila</i>	papataniwhaniwha
<i>Senecio bipinnatisectus</i>	Australian fireweed

Dicot. herbs (other than composites)

<i>Acaena anserinifolia</i>	piripiri, hutiwai
<i>Cardamine</i> sp.	
<i>Epilobium nerteroides</i>	
<i>Epilobium pedunculare</i>	
<i>Geranium potentilloides</i> var. <i>potentilloides</i>	
<i>Haloragis erecta</i> subsp. <i>erecta</i>	toatoa
<i>Hydrocotyle heteromeria</i>	
<i>Hypericum pusillum</i>	
<i>Lobelia angulata</i>	pānakenake
<i>Nertera depressa</i>	
<i>Oxalis exilis</i>	
<i>Ranunculus reflexus</i>	maruru
<i>Urtica sykesii</i>	
<i>Wahlenbergia violacea</i>	rimuroa

Naturalised and Exotic Species

Gymnosperms

<i>Pinus contorta</i> (Rosie Sargent pers. comm.)	lodgepole pine
<i>Pinus pinaster</i>	maritime pine
<i>Pinus radiata</i>	radiata pine

Dicot. trees and shrubs

<i>Buddleja davidii</i>	buddleia
<i>Cytisus scoparius</i>	Scotch broom
<i>Erica lusitanica</i>	Spanish heath
<i>Rubus</i> sp. (<i>R. fruticosus</i> agg.)	blackberry
<i>Teline monspessulana</i>	Montpellier broom
<i>Ulex europaeus</i>	gorse

Grasses

<i>Agrostis capillaris</i>	browntop
<i>Anthoxanthum odoratum</i>	sweet vernal
<i>Bromus</i> sp.	brome
<i>Dactylis glomerata</i>	cocksfoot
<i>Festuca rubra</i> subsp. <i>commutata</i>	chewings fescue
<i>Holcus lanatus</i>	Yorkshire fog
<i>Poa annua</i>	annual poa

Rushes

<i>Juncus articulatus</i>	jointed rush
<i>Juncus tenuis</i> var. <i>tenuis</i>	track rush

Composite herbs

<i>Cirsium vulgare</i>	Scotch thistle
<i>Crepis capillaris</i>	hawksbeard
<i>Erigeron sumatrensis</i>	broad-leaved fleabane
<i>Gamochaeta coarctata</i>	purple cudweed
<i>Hypochaeris radicata</i>	catsear
<i>Jacobaea vulgaris</i>	ragwort
<i>Leontodon taraxacoides</i>	hawkbit
<i>Mycelis muralis</i>	wall lettuce
<i>Sonchus oleraceus</i>	puha, sow thistle
<i>Taraxacum officinale</i>	dandelion

Dicot. herbs (other than composites)

<i>Digitalis purpurea</i>	foxglove
<i>Lotus pedunculatus</i>	lotus
<i>Plantago lanceolata</i>	narrow-leaved plantain
<i>Prunella vulgaris</i>	selfheal
<i>Ranunculus repens</i>	creeping buttercup
<i>Rumex acetosella</i>	sheep's sorrel

Bryophytes of Handcock property, Paeroa Range, Part 1

Matthew A.M. Renner

Following the interesting suite of species gathered at Highlands Station in August, the Rotorua Botanical Society trip to the Handcock property on 25th September 2022, presented another opportunity for good collecting in an under-explored area of high habitat diversity on one of the higher elevation landforms of the Taupo Volcanic Zone. Indeed, the early detection of *Herzogianthus vaginatus* (At Risk-Naturally Uncommon) on a south-facing ignimbrite bluff alongside the road as we walked up to the hut heralded a good day.

The Australasian Virtual Herbarium has vouchers from 12 other populations in the North Island which, along with records on iNaturalist from Mangorewa Gorge just north of Rotorua, and one possible recent collection by Leon Perrie in the Nelson Region, make the Paeroa Range the 15th, or thereabouts, population of this species known. *Herzogianthus* is the sole genus in the Herzogianthaceae, perhaps New Zealand's only endemic family of plant. *Herzogianthus* is a very unusual liverwort, having two of the four growth patterns known in leafy liverworts both of which are