

Mangaroa Ohutu Incorporation Lands, Ngapukeriki, 24-26 November 2017

Gael Donaghy, Willy Ngamoki & Tim Senior

This trip was organised by Tim Senior (BOPRC), Willy Ngamoki, Hirere Ngamoki and Hori Barsdell (Nga Whenua Rahui and land owners in the block) with permission from the Mangaroa, Ohutu, Te Karaka (MOT) Incorporation Lands Trust. The land block is around 8,000ha with a 25year Nga Whenua Rahui Covenant placed over it in 1999. Nga Whenua Rahui began intensive pest management in the 1340ha Ngapukeriki site in 2000 with a Kokako restoration program starting in 2004. The block has a track network of 80kms with 3000 traps, bait stations and sentinels targeting rats, stoats and possums. Nga Whenua Rahui and the trust were keen to get the area botanised by the experts.

Participants were met on Friday 24th November by Willy, Hirere and Hori as well as Ora Barlow and Leah Gage (MOT Trustees), at the pre-arranged helicopter landing site near the Haparapara River at Omaio, Eastern Bay of Plenty. We were transported in groups by a Notar helicopter across very beautiful forest on rough, broken terrain along the south side of the Haparapara River, up to the Trusts base hut, Ngapukeriki, perched in a clearing at 486 m. We settled into the very comfortable hut, and went exploring the surrounding clearing for what was left of the day (list column 3). It was mostly in exotic grasses with patches of waterfern bordered by regrowth forest of tree ferns & pate with climbing rata clothing the tree ferns and the ground. In the open a large-flowered form of *Lobelia angulata* grew in spectacular patches. A few invasive weeds such as pampas and tutsan were noted around the hut too.

It was interesting to note the different composition of the forest here, with many very different plants, compared with the more familiar coastal forest. It's a short distance from the coast but very much higher.

On Saturday we headed west, uphill, towards the trig point (611 m). After lunch on the helipad below the trig we came back along the lower track, with four of our number returning via a slightly different route.

The forest we passed though was a mix of tawa, pigeonwood, horopito, kohekohe, mapou, nikau and tree ferns at first, then tawari, toatoa, and *Quintinia serrata* with *Libertia micrantha* on the ground as we climbed higher along the ridge. There were scattered, large hard beech, and a number of browse-prone plants such as

Brachyglottis kirkii and *Raukawa edgerleyi* in reasonable numbers but often as epiphytes. We saw a good range of ferns with 45 species recorded, including the unusual parsley fern, and *Hymenophyllum bivalve*, a filmy fern not often seen in the Bay of Plenty. Sixteen orchid species were seen - more than we would usually see in a day. It was a shame it was too late for most of them to be in flower.

It was notable that the forest understorey was very thin with few palatable plants present at all. The understorey was heavily dominated by the unpalatable horopito. The palatable shrubs were largely restricted to growing as epiphytes on the trunks of other trees, often tree ferns.

On the way back, we took a side track around the slope. Most of us saw the western Raukumara form of Hochstetter's Frog under stones in a place where a small stream crossed the track. It was a real treat to see this native animal in its natural habitat as it is classified as "At Risk" and "Data Poor".

After a good day in the field, we enjoyed dinner, organised mostly by Tim and Hirere. Later we were treated to a flight of puriri moths, attracted to the lights under the verandah. We went to sleep to the sound of ruru calling.

We woke to low fog on Sunday. The helicopter was due at midday, so we cleaned the hut and packed up, then explored down the ridge to the east of the hut. Here it was mainly beech forest with the odd rimu and miro; we found more lowland species than we had seen the previous day on the track above the hut, as was to be expected. Most notable species that we did not see above the hut were *Archeria racemosa*, *Kunzea robusta*, *Nestegis lanceolata* and *Weinmannia racemosa*. We spotted just 10 orchids in this area, with *Drymoanthus adversus* the only one that we had not seen on the uphill track.

Overall there were many more species recorded on the uphill track (153 species) than on the shorter downhill track (91 species). Some of the difference is accounted for by the time spent / distance travelled (a full day on the first day, less than half a day on the second day) and the greater variety of habitat traversed (ridge and gully on the first day), compared to ridge habitat only traversed on the second.

The helicopter surprised us (and relieved those of us who were not looking forward to walking out over the rough terrain) by appearing from under the thick fog at the appointed time. We are grateful to the trustees for this opportunity to botanise an area which we would otherwise not be able to access, and for their wonderful hospitality. Nga mihi nui.

Participants: Hirere Ngamoki and Hori Barsdell (Nga Whenua Rahui), Ora Barlow and Leah Gage (Trustees), Tim Senior, Elizabeth Miller, Graeme Jane, Mieke Kapa, Jo Bonner, John Hobbs, John Jordan, Gael Donaghy (Rotorua Botanical Society).

Reference:

Donald G. Newman, Ben D. Bell, Phillip J. Bishop, Rhys J. Burns, Amanda Haigh and Rodney A. Hitchmough. (2013). *Conservation status of New Zealand frogs*. New Zealand threat classification, series 5. Department of Conservation, Wellington, NZ. Available at <https://www.doc.govt.nz/Documents/science-and-technical/nztcs5entire.pdf>



Ngapukeriki hut, high above the Haparapara River. *Photo: Mieke Kapa*



Hirere and Hori heading in to the helicopter, just landed, at Ngapukeriki. Bale of gear to be loaded below the helicopter, in the foreground. *Photo: Mieke Kapa*.



Lunch at the helipad near 611 m trig, Ngapukeriki *Photo: Elizabeth Miller*



Haparapara River and surrounding landscape, from the helicopter. *Photo: Mieke Kapa*

Ngapukeriki, Mangaroa Ohutu Incorporation Lands species list

G. Jane, G. Donaghy
& Rotorua Botanical Society

Compiled 24-26 November 2017

*= adventive species

Map: BE42 Grid Ref: 2014780 5801729

Eastern track, Western track & Hut Site (lists marked in that order in Column 1)

Psilopsids, Lycopods & Quillworts

xx_	<i>Lycopodium volubile</i>	waewae-koukou; climbing clubmoss
xx_	<i>Phlegmariurus varius</i>	hanging clubmoss; iwituna

Ferns

x	<i>Asplenium bulbiferum</i>	hen and chickens fern; moku
xx_	<i>Asplenium flaccidum</i>	hanging spleenwort; makawe
x	<i>Asplenium oblongifolium</i>	shining spleenwort
x	<i>Asplenium polyodon</i>	sickle spleenwort; petako
x	<i>Blechnum chambersii</i>	nini; lance fern
xxx	<i>Blechnum discolor</i>	crown fern; piupiu; petipeti
x	<i>Blechnum fluviatile</i>	kiwakiwa; kiwikiwi
xxx	<i>Blechnum novae-zelandiae</i>	kiokio
x	<i>Blechnum procerum</i>	kiokio; small kiokio
x	<i>Botrychium bifforme</i>	fine-leaved parsley fern
xx_	<i>Cyathea dealbata</i>	ponga; silver fern
xx_	<i>Cyathea medullaris</i>	mamaku; korau; black tree fern
x	<i>Cyathea smithii</i>	soft-leaved tree fern; katote
xxx	<i>Dicksonia squarrosa</i>	wheki; harsh tree fern
_xx	<i>Histiopteris incisa</i>	water fern
xx_	<i>Hymenophyllum bivalve</i>	
x	<i>Hymenophyllum demissum</i>	piripiri; irirangi
xx_	<i>Hymenophyllum dilatatum</i>	lop-sided filmy fern
x	<i>Hymenophyllum flabellatum</i>	fan fern
xx_	<i>Hymenophyllum multifidum</i>	
xx_	<i>Hymenophyllum nephrophyllum</i>	kidney fern; raurenga
xx_	<i>Hymenophyllum rarum</i>	wire-stemmed filmy fern
xx_	<i>Hymenophyllum revolutum</i>	
xx_	<i>Hymenophyllum sanguinolentum</i>	blood-scented filmy fern
_xx	<i>Hypolepis lactea</i>	
_xx	<i>Hypolepis rufobarbata</i>	sticky pig fern
x	<i>Lastreopsis hispida</i>	hairy fern, hairy legs
xx_	<i>Leptopteris hymenophylloides</i>	single crepe fern; heruheru

x	<i>Lindsaea trichomanoides</i>	
x	<i>Loxogramme dictyopteris</i>	
x	<i>Lygodium articulatum</i>	mangemange; bushman's mattress
x	<i>Microsorium novae-zelandiae</i>	fragrant fern
xxx	<i>Microsorium pustulatum</i> ssp. <i>pustulatum</i>	hounds tongue; kowaowao
x	<i>Microsorium scandens</i>	mokimoki; fragrant fern
x	<i>Notogrammitis billardierei</i>	common strap fern
x__	<i>Notogrammitis ciliata</i>	hairy strap fern
xx_	<i>Notogrammitis heterophylla</i>	
x	<i>Notogrammitis pseudociliata</i>	
xxx	<i>Paesia scaberula</i>	scented fern; matata; ring fern
x	<i>Pneumatopteris pennigera</i>	gully fern; pakau; pakauroraro
x__	<i>Pteridium esculentum</i>	bracken; rauaruhe
xx_	<i>Pyrrosia eleagnifolia</i>	leather-leaf fern
xx_	<i>Rumohra adiantiformis</i>	butcher's fern
xx_	<i>Sticherus cunninghamii</i>	umbrella fern; kotuku; tapuwae
x__	<i>Tmesipteris elongata</i>	
x	<i>Tmesipteris lanceolata</i>	
xx_	<i>Tmesipteris tannensis</i>	chain fern; fork fern
x	<i>Trichomanes elongatum</i>	bristle fern

Gymnosperm trees and shrubs

xx_	<i>Dacrydium cupressinum</i>	rimu, red pine
x	<i>Phyllocladus toatoa</i>	toatoa
xx_	<i>Phyllocladus trichomanoides</i>	tanekaha; celery pine
x	<i>Podocarpus laetus</i>	Hall's totara; thin bark totara
xx_	<i>Prumnopitys ferruginea</i>	miro; brown pine

Dicotyledonous trees and shrubs

x__	<i>Archeria racemosa</i>	
xx_	<i>Aristotelia serrata</i>	wineberry; makomako
xx_	<i>Beilschmiedia tawa</i>	tawa
x	<i>Brachyglottis kirkii</i> var. <i>angustior</i>	
xx_	<i>Brachyglottis repanda</i>	rangiora; bushmans friend
xx_	<i>Carpodetus serratus</i>	putaputaweta; marbleleaf
xx_	<i>Coprosma grandifolia</i>	raurekau; kanono; mamono
x	<i>Coprosma lucida</i>	karamu; shining karamu
x	<i>Coprosma robusta</i>	karamu
xx_	<i>Coprosma spathulata</i> ssp. <i>spathulata</i>	
xx_	<i>Dracophyllum latifolium</i>	needle-leaved neinei
xx_	<i>Dysoxylum spectabile</i>	kohekohe
xx_	<i>Elaeocarpus dentatus</i>	hinau

x	<i>Fuchsia excorticata</i>	fuchsia; kotukutuku
xx_	<i>Fuscospora truncata</i>	hard beech; tawhairaunui
x__	<i>Gaultheria antipoda</i>	snowberry; tawiniwini
x	<i>Geniostoma ligustrifolium</i> var. <i>ligustrifolium</i>	hangehange; privet
xx_	<i>Griselinia lucida</i>	puka
x	<i>Hebe stricta</i> var. <i>stricta</i>	koromiko
x	<i>Hedycarya arborea</i>	pigeonwood; porokaiwhiri
x	<i>Helichrysum lanceolatum</i>	niniaio
x	<i>Hoheria sexstylosa</i>	houhere
__x	* <i>Hypericum androsaemum</i>	tutsan
xx_	<i>Ixerba brexioides</i>	tawari
xx_	<i>Knightia excelsa</i>	rewarewa; NZ honeysuckle
x__	<i>Kunzea robusta</i>	kanuka
xx_	<i>Leucopogon fasciculatus</i>	mingimingi; kaikaitau
xx_	<i>Melicytus ramiflorus</i>	mahoe
x	<i>Metrosideros robusta</i>	northern rata
xx_	<i>Mida salicifolia</i>	willow-leaved maire
xx_	<i>Myrsine australis</i>	red matipo; mapou
x	<i>Myrsine salicina</i>	toro
x	<i>Nestegis cunninghamii</i>	black maire
x__	<i>Nestegis lanceolata</i>	white maire
xx_	<i>Olearia furfuracea</i>	akepiro
xx_	<i>Olearia rani</i> var. <i>colorata</i>	heketara
__x	<i>Piper excelsum</i> ssp. <i>excelsum</i>	kawakawa; pepper tree
xx_	<i>Pittosporum tenuifolium</i>	black matipo; kohuhu
xx_	<i>Pseudopanax arboreus</i>	Five-finger; puhou; whaupaku
x__	<i>Pseudopanax crassifolius</i>	lancewood; horoeka
xx_	<i>Pseudowintera axillaris</i>	horopito
xx_	<i>Quintinia serrata</i>	Westland quintinia; tawheowheo
xx_	<i>Raukaua anomalus</i>	whauwhaupaku
x	<i>Raukaua edgerleyi</i>	raukawa
xx_	<i>Schefflera digitata</i>	pate; patae; kotete
x__	<i>Weinmannia racemosa</i>	kamahi; towai; tawhero

Dicotyledonous lianes and related trailing plants

x	<i>Clematis cunninghamii</i>	scented clematis; pokopoko
x	<i>Clematis forsteri</i>	pataua; green clematis
xx_	<i>Clematis paniculata</i>	clematis; puawhananga
xx_	<i>Metrosideros diffusa</i>	white climbing rata; akatea
xxx	<i>Metrosideros fulgens</i>	scarlet rata; winter rata
xx_	<i>Metrosideros perforata</i>	aka; small white rata; torotoro
_xx	<i>Muehlenbeckia australis</i>	pohuehue

x	<i>Parsonsia capsularis</i> var. <i>capsularis</i>	small flowered jasmine; akakior
x	<i>Parsonsia heterophylla</i>	Maori jasmine; kaihu; kaiwhiria
xx_	<i>Rubus cissoides</i>	bush lawyer; tataramoa

Daisy-like herbs

x	* <i>Cirsium arvense</i>	Californian thistle
_xx	* <i>Cirsium vulgare</i>	Scotch thistle
x	* <i>Crepis capillaris</i>	hawkesbeard
x	* <i>Erigeron sumatrensis</i>	fleabane
xx_	<i>Euchiton japonicus</i>	
_xx	* <i>Gamochaeta coarctata</i>	
x	* <i>Hypochaeris radicata</i>	catsear
x	* <i>Lactuca serriola</i>	prickly lettuce
_xx	* <i>Mycelis muralis</i>	wall lettuce
x	<i>Pseudognaphalium luteoalbum</i>	Jersey cudweed
x	* <i>Senecio bipinnatisectus</i>	Australian fireweed
x	* <i>Sonchus oleraceus</i>	sow thistle; puha; puka
x	* <i>Taraxacum officinale</i>	dandelion

Dicotyledonous herbs other than daisies

_xx	<i>Acaena anserinifolia</i>	bidibid
x	* <i>Cardamine flexuosa</i>	wavy bitter cress
x	* <i>Cerastium fontanum</i> ssp. <i>vulgare</i>	mouse-eared chickweed
x	* <i>Digitalis purpurea</i>	foxglove
xx_	<i>Hydrocotyle dissecta</i>	
xxx	<i>Hydrocotyle microphylla</i>	hydrocotyle
_xx	<i>Hydrocotyle moschata</i> var. <i>moschata</i>	
_xx	<i>Lobelia angulata</i> f. "large flowers"	
_xx	* <i>Lotus pedunculatus</i>	lotus major
x__	<i>Nertera depressa</i>	common nertera
x	<i>Oxalis exilis</i>	yellow oxalis; creeping oxalis
x	* <i>Plantago lanceolata</i>	ribwort; narrow-leaved plantain
_xx	* <i>Plantago major</i>	broad-leaved plantain
x	* <i>Prunella vulgaris</i>	selfheal
_xx	* <i>Ranunculus repens</i>	creeping buttercup
x	* <i>Rumex crispus</i>	curled dock
x	* <i>Rumex pulcher</i>	fiddle dock
x	* <i>Solanum tuberosum</i>	potato
x	* <i>Stellaria media</i> ssp. <i>media</i>	chickweed
x	<i>Stellaria parviflora</i>	
x	* <i>Trifolium dubium</i>	suckling clover
x	* <i>Trifolium pratense</i>	red clover

x * *Trifolium repens* white clover

Monocotyledonous trees and shrubs

x *Cordyline banksii* forest cabbage tree; ti ngahere
x *Rhopalostylis sapida* nikau

Monocotyledonous lianes

xx_ *Freycinetia banksii* kiekie
xx_ *Ripogonum scandens* supplejack; kareao

Sedges

x *Carex banksiana*
x *Carex solandri*
xxx *Carex uncinata* watu
x_ *Carex zotovii*
x *Gahnia pauciflora*
xxx *Gahnia setifolia*
x *Morelotia affinis*
x *Schoenus maschalinus*

Rushes and allied plants

xxx * *Juncus tenuis* ssp. *tenuis* track rush

Grasses

x * *Agrostis capillaris* browntop
x * *Anthoxanthum odoratum* sweet vernal
x *Austroderia fulvida* kakaho; toetoe
x * *Axonopus fissifolius* narrow-leaved carpet grass
x * *Dactylis glomerata* cocksfoot
x_x * *Holcus lanatus* Yorkshire fog
x * *Lolium arundinaceum* tall fescue
xx_ *Microlaena avenacea* bush rice grass; oat grass
x *Oplismenus hirtellus* ssp. *imbecillis* oat grass
x * *Paspalum dilatatum* paspalum
x * *Poa pratensis* Kentucky blue grass
xxx *Rytidosperma gracile* forest fairy grass

Remaining Monocotyledonous herbs

xx_ *Astelia hastata* kahakaha
xx_ *Astelia microsperma*
xx_ *Astelia solandri* kowharawhara
xx_ *Dianella nigra* blueberry; turutu

x *Libertia micrantha* star herb
__x_ **Sisyrinchium "blue"*

Orchids

x *Acianthus sinclairii* heart-leaf orchid
x *Bulbophyllum pygmaeum*
x *Caladenia chlorostyla*
xx_ *Chiloglottis cornuta* green bird orchid
x *Corybas acuminatus*
x *Corybas macranthus*
xx_ *Corybas oblongus*
x *Corybas trilobus*
xx_ *Dendrobium cunninghamii* bamboo orchid
x__ *Drymoanthus adversus*
xx_ *Earina autumnalis* Easter orchid; raupeka
xx_ *Earina mucronata* spring orchid; peka-a-waka
xxx *Microtis unifolia* onion orchid
xxx *Pterostylis banksii* tutukiwi
_xx *Pterostylis cardiostigma*
xxx *Pterostylis irsoniana*
xxx *Thelymitra longifolia* white sun orchid
