

EAST CAPE TRIP #7 DAY 3: HOUPOTO FOREST AND WETLAND

Paul Cashmore

On Sunday 6 October 2013 seven members of Rotorua Botanical Society led once again by Tim Senior and Willie Ngamoki from Nga Whenua Rahui met up at the entrance to Houpoto forest, a large multiple-owned Maori block of mostly radiata pine plantation forest interspersed with the regionally significant Houpoto wetland and several other indigenous forest remnants.

1. Houpoto tanekaha forest

Our first visit was to a steep hillslope of tanekaha (*Phyllocladus trichomanoides*) forest at NZTM 2004039 5795631 (Makakaho Stream valley). The group headed off from the road and gradually made our way uphill through the block. This block consisted of almost pure pole tanekaha, in stark contrast to some other forest remnants in the block we had driven past on the way in, which were dominated by kanuka (*Kunzea ericoides*). The pole tanekaha canopy was only broken by an occasional large kanuka or kohuhu (*Pittosporum tenuifolium*). The subcanopy and understorey were relatively open which is typical of pole tanekaha stands. Tree ferns – ponga (*Cyathea dealbata*), wheki (*Dicksonia squarrosa*) and mamaku (*Cyathea medullaris*) – were common with mahoe (*Melicytus ramiflorus*) and *Coprosma rhamnoides*. Ferns *Blechnum fluviatile* and kiokio (*Blechnum novae-zelandiae*) were the dominant ground covers. Occasional NZ passionfruit (*Passiflora tetrandra*) and supplejack (*Ripogonum scandens*) seedlings and climbers were also noted. *Hymenophyllum sanguinolentum* was commonly noted on tanekaha trunks. A lone large toro (*Myrsine salicina*) flowering profusely was spotted in the canopy as well.

The group spent some time botanising around the lower slopes. In one area we came across a small clearing dominated by ring fern (*Paesia scaberula*) with some *Machaerina tenax*. Here two large healthy plants of *Pimelea tomentosa* were noted – a threatened species found scattered throughout eastern Bay of Plenty forests.

From here on the face got steeper as we climbed towards the top. The vegetation changed little with ponga, mamaku and hangehange (*Geniostoma ligustrifolium*) being the subcanopy and understorey dominants. A few nikau (*Rhopalostylis sapida*) seedlings were

noted on the forest floor. A small population of *Corybas cheesemani* was found half way up the slope which attracted interest along with *Ichthyostomum pygmaeum*. A quick stop for morning tea and chocolate cake was produced by the author and quickly devoured. A short time later we reached the ridge where rewarewa (*Knightia excelsa*) became the canopy dominant. Here another road followed just over the ridge line and tawarewara forest could be seen just over the ridge. Having made the ridge and with time moving on we quickly followed back down the slope to the bottom, stopping briefly to show everyone the *Pimelea tomentosa* and admire some *Diplodinium trullifolium* growing on a tree fern stump. John Hobbs also pointed out some *Drymoanthus adversus*.



Figure 1: *Pimelea tomentosa* growing in a clearing at Houpoto tanekaha forest

MAKAKAHO TANEKAHA

Map: X15 Grid Ref: 2914000 6357000

G Jane & G Donaghy

Psilopsids, Lycopods & Quillworts

<i>Huperzia varia</i>	hanging clubmoss; iwituna
<i>Lycopodium deuterodensum</i>	puakarimu
<i>Lycopodium volubile</i>	climbing clubmoss

Ferns

<i>Adiantum cunninghamii</i>	maiden hair fern
<i>Asplenium flaccidum</i>	hanging spleenwort; makawe
<i>Asplenium polyodon</i>	sickle spleenwort; petako
<i>Blechnum chambersii</i>	nini; lance fern
<i>Blechnum colensoi</i>	peretao; paretao
<i>Blechnum filiforme</i>	Climbing hard fern; thread fern
<i>Blechnum fluviatile</i>	kiwakiwa; kiwikiwi
<i>Blechnum novae-zelandiae</i>	kiokio
<i>Cyathea dealbata</i>	ponga; silver fern
<i>Cyathea medullaris</i>	mamaku; korau; black tree fern
<i>Dicksonia fibrosa</i>	wheki-ponga; kuripaka
<i>Dicksonia squarrosa</i>	wheki; harsh tree fern
<i>Hymenophyllum demissum</i>	piripiri; irirangi
<i>Hymenophyllum dilatatum</i>	lop-sided filmy fern
<i>Hymenophyllum flabellatum</i>	fan fern
<i>Hymenophyllum multifidum</i>	
<i>Hymenophyllum rarum</i>	wire-stemmed filmy fern
<i>Hymenophyllum sanguinolentum</i>	blood-scented filmy fern
<i>Hymenophyllum scabrum</i>	coarse-haired filmy fern
<i>Leptopteris hymenophylloides</i>	single crepe fern; heruheru
<i>Microsorium pustulatum</i> subsp. <i>pustulatum</i>	hounds tongue; kowaowao
<i>Microsorium scandens</i>	mokimoki; fragrant fern
<i>Notogrammitis heterophylla</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>Tmesipteris elongata</i>	
<i>Trichomanes venosum</i>	veined bristle fern

Gymnosperm trees and shrubs

<i>Dacrydium cupressinum</i>	rimu, red pine
<i>Phyllocladus trichomanoides</i>	tanekaha; celery pine
<i>Podocarpus cunninghamii</i>	Hall's totara; thin bark totara

Dicotyledonous trees and shrubs

<i>Alectryon excelsus</i> subsp. <i>excelsus</i>	titoki
<i>Beilschmiedia tawa</i>	tawa
<i>Brachyglottis repanda</i>	rangiora; bushmans friend
<i>Carpodetus serratus</i>	putaputaweta; marbleleaf
<i>Coprosma rhamnoides</i>	thorny coprosma
<i>Coprosma robusta</i>	karamu
<i>Coprosma spathulata</i> subsp. <i>spathulata</i>	
<i>Coriaria arborea</i> var. <i>arborea</i>	tree tutu
<i>Corynocarpus laevigatus</i>	karaka; kopi
<i>Gaultheria antipoda</i>	snowberry; tawiniwini
<i>Geniostoma ligustrifolium</i> var. <i>ligustrifolium</i>	hangehange; privet
<i>Hedycarya arborea</i>	pigeonwood; porokaiwhiri
<i>Hoheria sexstylosa</i>	houhere
<i>Knightia excelsa</i>	rewarewa; NZ honeysuckle
<i>Kunzea ericoides</i> var. <i>ericoides</i>	kanuka; white teatree
<i>Leptecophylla juniperina</i> subsp. <i>juniperina</i>	prickly mingimingi
<i>Myrsine australis</i>	red matipo; mapou
<i>Myrsine salicina</i>	toro
<i>Olearia furfuracea</i>	akepiro
<i>Olearia rani</i> var. <i>colorata</i>	heketara
v <i>Pimelea tomentosa</i>	
<i>Piper excelsum</i> subsp. <i>excelsum</i>	
<i>Pittosporum tenuifolium</i>	black matipo; kohuhu
<i>Pseudopanax arboreus</i>	five finger; puhou; whaupaku
<i>Pseudopanax crassifolius</i>	lancewood; horoeka
* <i>Ulex europaeus</i>	gorse
<i>Weinmannia racemosa</i>	kamahi; towai; tawhero

Dicotyledonous lianes and related trailing plants

<i>Clematis foetida</i>	scented clematis
<i>Metrosideros diffusa</i>	white climbing rata; akatea
<i>Metrosideros perforata</i>	aka; small white rata; torotoro
<i>Muehlenbeckia complexa</i>	pohuehue; wire vine
<i>Passiflora tetrandra</i>	passionfruit; kohia
<i>Rubus cissoides</i>	bush lawyer; tataramoa

Dicotyledonous herbs other than Daisies

<i>Centella uniflora</i>	
* <i>Lotus pedunculatus</i>	lotus major
<i>Nertera depressa</i>	common nertera
<i>Nertera dichondrifolia</i>	hairy nertera
* <i>Prunella vulgaris</i>	selfheal

Monocotyledonous trees and shrubs

<i>Cordyline australis</i>	cabbage tree; ti-kouka
<i>Cordyline banksii</i>	forest cabbage tree; ti ngahere
<i>Rhopalostylis sapida</i>	nikau

Monocotyledonous lianes

<i>Freycinetia banksii</i>	kiekie
<i>Ripogonum scandens</i>	supplejack; kareao

Sedges

<i>Gabnia lacera</i>	
<i>Gabnia setifolia</i>	
<i>Machaerina tenax</i>	
<i>Schoenus maschalinus</i>	
<i>Schoenus tendo</i>	
<i>Uncinia uncinata</i>	watu

Grasses

* <i>Cortaderia selleana</i>	pampas
<i>Microlaena avenacea</i>	bush rice grass; oat grass
* <i>Miscanthus nepalensis</i>	Himalayan fairy grass
<i>Oplismenus hirtellus</i> subsp. <i>imbecillis</i>	oat grass

Remaining Monocotyledonous herbs

* <i>Aristea ecklonii</i>	
<i>Astelia solandri</i>	kowharawhara
<i>Collospermum hastatum</i>	kahakaha
<i>Dianella nigra</i>	blueberry; turutu

Orchids

<i>Corybas cheesemani</i>	
<i>Diplodium trullifolium</i>	
<i>Drymoanthus adversus</i>	
<i>Earina mucronata</i>	spring orchid; peka-a-waka
<i>Ichthyostomum pygmaeum</i>	bulb-leaf orchid
<i>Nematoceras trilobum</i>	spider orchid
<i>Pterostylis</i> aff. <i>montana</i>	
<i>Pterostylis banksii</i>	tutukiwi
<i>Singularibas oblongus</i>	

2. Houpoto wetland

After lunch we moved on to the large Houpoto wetland which fills a long stream valley with several side arms – all surrounded by radiata pine forest. We entered the wetland off a side road which crossed the wetland. Here there was some open water surrounding an old culvert. *Ludwigia palustris* and *Persicaria decipiens* were present in the open water. The wetland was fringed with manuka scrub on both sides with occasional cabbage trees (*Cordyline australis*) throughout. Grey willow (*Salix cinerea*) was locally present throughout. Many of the larger trees were dead having been poisoned by contractors for forest managers Hancocks Forest Management, although younger live seedlings were present in many areas.



Figure 1: Houpoto wetland looking from access road.

The main body of the wetland was comprised of a mix of *Carex secta*-*Carex virgata*-flax-Yorkshire fog-buttercup-lotus-swamp millet grass-sedgeland in the damper areas. *Calystegia sepium* subsp. *roseata* was common throughout this vegetation type. Also noted

were tall clumps of *Juncus sarophorus*. Areas of *Machaerina rubiginosa* were present near the manuka scrub fringe.

As we continued downstream the areas of raupö (*Typha orientalis*) reedland became more common and extensive. Cabbage trees became more dominant along the manuka scrub fringe as well. In the middle Pete Livingstone made the most significant discovery in the wetland noting something different which he hadn't seen before. A quick look from John and I confirmed he had rediscovered a population of burr reed (*Sparganium subglobosum*) which has been previously noted in the wetland in the Motu Ecological District Protected Natural Areas Report (Clarkson *et. al.* 1986). Although not flowering we noted well over 30+ plants scattered in wet depressions with *Ranunculus repens*, Yorkshire fog (*Holcus lanatus*) and lotus (*Lotus pedunculatus*) in an area approx 25m² at NZTM 2002306 5797069. Near here a small area of *Gleichenia dicarpa* was noted on the wetland edge near manuka scrub fringing the wetland.



Figure 2: Houpoto wetland showing cabbage tree forest on fringes with raupö reedland and carex sedgeland in wetter areas.

As we continued down the valley the wetland vegetation gradually changed to raupö – *Carex geminata* –swamp millet -Yorkshire fog –*Eleocharis acuta* - (blackberry) - reed sedge

grassland. Raupo reedland dominated beside the main stream channel which we crossed heading for drier ground. Downstream of here the stream channel became more defined with the surrounding wetland area appearing to be drier, being dominated by blackberry-*Carex geminata*-Yorkshire fog- *Blechnum novae-zelandiae* sedge-grass-vineland.

At this point it was now mid afternoon and with a long drive home we decided to cut back through the pine forest to the vehicles parked nearby at the roadend, thereby completing a loop trip. We had time to botanise only a small part of this long wetland. On the way home we detoured to another part of the wetland downstream which had been impounded by a dam built for water storage for firefighting. We only spent a brief period of time here looking up valley towards an area of blackberry (*Rubus fruticosus* agg.) and wilding pines with the main wetland being dominated by grey willow, some of which had been poisoned. The open water areas in the dam were shallow and muddy and surrounded by pampas (*Cortaderia selloana*) with less botanical interest than the area we had visited earlier upstream. On this note we headed home.

Reference

Clarkson, B.D. Daniel, L.J., Overmars, F. B., Courtney S.P. 1986. Motu Ecological District. *Survey for the Protected Natural Areas Programme*. Department of Lands and Survey, Wellington.

HOUPOTU WETLAND (PART)

Map: X15 Grid Ref: 2912300 6358500

Author: G Jane & G Donaghy

Ferns and allies

<i>Blechnum novae-zelandiae</i>	kiokio
<i>Cyathea medullaris</i>	mamaku; korau; black tree fern
<i>Dicksonia squarrosa</i>	wheki; harsh tree fern
<i>Gleichenia dicarpa</i>	waewaekaka; tangle fern
<i>Pteridium esculentum</i>	bracken; rauaruhe

Trees, shrubs & creepers

<i>Calystegia sepium</i> subsp. <i>roseata</i>	putaputaweta; marbleleaf
<i>Carpodetus serratus</i>	raurekau; kanono; mamono
<i>Coprosma grandifolia</i>	thorny coprosma
<i>Coprosma rhamnoides</i>	karamu
<i>Coprosma robusta</i>	cabbage tree; ti-kouka
<i>Cordyline australis</i>	koromiko
<i>Hebe salicifolia</i>	kanuka; white teatree
<i>Kunzea ericoides</i> var. <i>ericoides</i>	manuka; red teatree
<i>Leptospermum scoparium</i> var. <i>scoparium</i>	five finger; puhou; whaupaku
<i>Pseudopanax arboreus</i>	blackberry
* <i>Rubus fruticosus</i>	grey willow
* <i>Salix cinerea</i>	

Herbs

<i>Acaena anserinifolia</i>	bidibid
* <i>Callitriche stagnalis</i>	starwort
* <i>Conyza sumatrensis</i>	broad-leaved fleabane
* <i>Digitalis purpurea</i>	foxglove
<i>Epilobium cinereum</i>	
<i>Epilobium pallidiflorum</i>	
* <i>Galium aparine</i>	cleavers
* <i>Galium palustre</i> subsp. <i>palustre</i>	marsh bedstraw
<i>Hydrocotyle pterocarpa</i>	
* <i>Lotus pedunculatus</i>	lotus major
* <i>Ludwigia palustris</i>	water purslane
* <i>Myosotis laxa</i> subsp. <i>caespitosa</i>	water forget-me-not
<i>Myriophyllum propinquum</i>	
<i>Persicaria decipiens</i>	swamp willow weed
<i>Phormium tenax</i>	flax
* <i>Plantago lanceolata</i>	ribwort; narrow-leaved plantain

<i>Ranunculus amphitrichus</i>	waoriki
* <i>Ranunculus repens</i>	creeping buttercup
* <i>Ranunculus sceleratus</i>	celery-leaved buttercup
* <i>Rumex crispus</i>	curled dock
* <i>Senecio bipinnatisectus</i>	Australian fireweed
<i>Senecio hispidulus</i>	fireweed
* <i>Sonchus oleraceus</i>	sow thistle; puha; puka
<i>Sparganium subglobosum</i>	burr reed
* <i>Stellaria alsine</i>	bog stichwort
<i>Typha orientalis</i>	raupo

Grasses & similar plants

<i>Carex geminata</i>	
<i>Carex secta</i>	niggerhead; pukio
<i>Carex virgata</i>	
* <i>Cortaderia selloana</i>	pampas
<i>Eleocharis acuta</i>	spike rush
* <i>Glyceria declinata</i>	glaucous sweet grass
* <i>Holcus lanatus</i>	Yorkshire fog
<i>Isachne globosa</i>	swamp millet
* <i>Juncus articulatus</i>	jointed rush
<i>Juncus planifolius</i>	
<i>Juncus prismatocarpus</i>	
<i>Juncus sarophorus</i>	
<i>Machaerina rubiginosa</i>	
<i>Machaerina tenax</i>	