



# WAIKATO BOTANICAL SOCIETY NEWSLETTER

No. 40, December 2015

---

## *Presidents' Report*

Hi Everyone,

I celebrated a significant birthday recently and someone said life is like a roll of toilet paper; the closer you get to the end the faster it goes, and this year certainly has flown!

I can tell I have been on a few trips this year by the number of photos on my hard drive. It takes a bit of effort to keep them all sorted.

I have spent quite a bit of time this year exploring our closest piece of forest to Hamilton - Mt Pirongia. DOC opened their new hut earlier in the year and I managed to stay up there a couple months ago. It's really popular so if you do go take your tent. I have also been on a couple of trips to Central Clearing up the Bell Track, stopping off on our tallest native tree on the way – the kahikatea. It's about 66 metres tall and there is quite a bit of king fern along the side track to the tree, and plenty at the lookout point. I stayed with a group of friends at Kaniwhaniwha camp at Labour weekend – a great spot only 40 minutes from the road end, and the Nikau Loop track has some glow worms to check out as a night walk. Back in January the Auckland Botanical Society was doing some exploring in the area and found some *Ophioglossum* (not sure which species) near the cave. I hope to go and have a look for it in January next year.

As usual a highlight of the botanical year is the yearly pilgrimage down to the East Cape with our sister organisation; the Rotorua Botanical Society. Tim Senior has a lovely bach at Whanarua Bay where we stay. This year we made it right out the East Cape and were shown around by Graeme Atkins (local DOC ranger). We have put together a program for next year but there are still some months with nothing on so if you would like to run a trip or have a trip idea please get in contact with me.



***Plantago picta* out on the headland at East Cape. Photo: K. Jones**



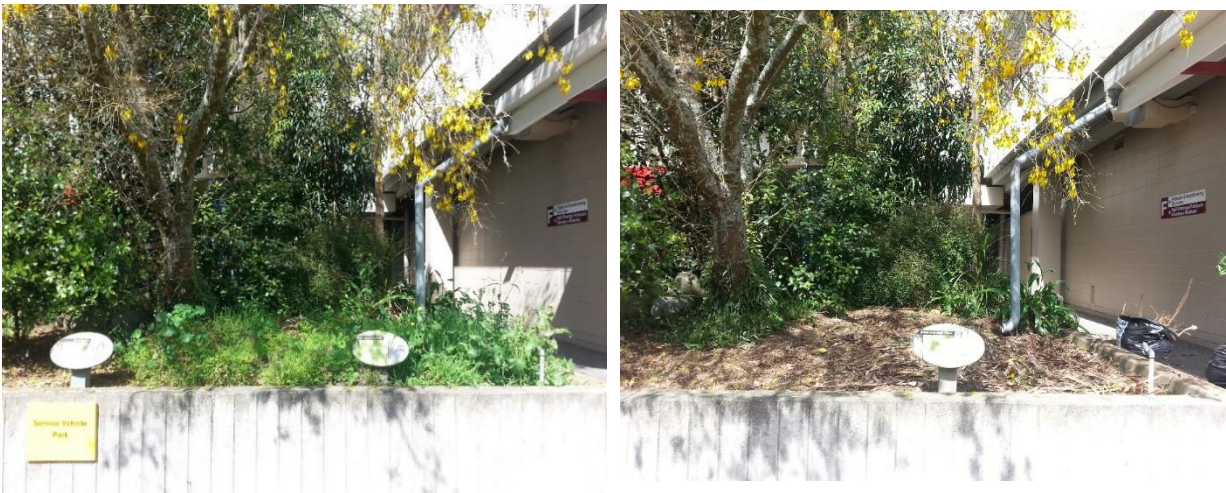
***Mazus novaezeelandiae* subsp. *impolitus* f. *hirtus* (Nationally Critical) growing in a paddock near East Cape. Photo: K. Jones**

## Threatened Native Plant Garden Update

By Kris Kramer-Walter

On the last Saturday of October we had a much need spring clean in the threatened plant garden (before and after pictures included). Plans for 2016 include getting metal tags or labels for each of the plants in the garden, and the possibility of adding a *Kunzea tenuicaulis*, which following Peter de Lange's revisions to *Kunzea*, is now classed as a threatened species. Previous transplants of the *Sporadanthus ferrugineus* from the old garden in the glasshouse complex have failed, most likely due to the recent hot dry summers. Therefore, I will be talking to University of Waikato grounds staff to see if we can find a place around the university lake margins, where the rush will stand a better chance of surviving the summers, and will be more easily accessible and viewable. If anyone has any suggestions for new plants we can add, let me know at [kkramerwalter@gmail.com](mailto:kkramerwalter@gmail.com)

Have a great Christmas everyone!



**Before the spring clean (left) and after (right) Photos: K. Kramer-Walter**

## Table Mountain - 28 February – 1 March 2015

By Michael Clearwater

Table Mountain is an outstanding but rarely visited feature of the Kauaeranga Conservation Area. The mountain is a large andesite mass with, as the name suggests, a flat top that is very poorly drained (Burns, 1985; Hayward, 1974). The summit plateau is 800-820 m in elevation and is blanketed in a layer of nutrient-poor saturated organic material, sand and silt at least 1.5 m deep (Botany Division, 1983). The resulting vegetation resembles forests normally found much further south in New Zealand, and includes several rare and endemic species. The purpose of our visit was to provide DOC with an update on the vegetation of the area, and to check on the condition of the resident Sinclair's Tamingi (*Epacris sinclairii*) population.

The mountain is notoriously inaccessible, with the tracks across closed some 15 years ago because of their boggy and degraded state. The thick undergrowth of sedges and cutty grass, and many fallen and prostrate trees, also makes travel difficult. The mountain can be reached from Waiora Track in West, and via Mount

Rowe in the East, but in both cases the approach requires several hours of walking before reaching the plateau. We decided to fly to the Moss Creek campsite, and approach via Mount Rowe, with the cost of the helicopter shared amongst the Department of Conservation, the Society and party members.



**Table Mountain viewed from the trig on Mount Rowe**  
**Photo: M. Clearwater**

The party of 11 (Kevin Carter – Trip Leader, Thomas Emmitt, Catherine Beard, John Dodgson, Virginia Shaw, Paul Cashmore, Mike Clearwater, Jackson Efford, Rebecca Bylsma, Ron Vautier and Kerry Jones) assembled at Catley's Camp early on a fine Saturday morning, waiting expectantly for the helicopter to arrive from Skywork Helicopters in Thames. The flight in afforded spectacular views of the many rocky bluffs and peaks so characteristic of the area, prompting speculation on the plants we would find growing on them, if only they could be reached! After landing and setting up camp at the old Moss Creek hut site, the party set out for the mountain via the Moss Creek and Mount Rowe tracks. Two species

lists were prepared on the first day, one for the approach over Mt Rowe, and the second for the distinct vegetation of the plateau.

The plants near camp quickly absorbed our attention – regenerating from a history of disturbance by logging and mining, the canopy included kauri, yellow-silver pine, silver pine, towai, manuka, *Griselinia*, *Quintinia*, Hall's totara and rimu. The distinctive *Coprosma dodonaefolia*, with mottled yellow green leaves, was abundant and often laden with large red fruit. Along the track we walked through a carpet of *Lycopodium laterale*, the forked sundew *Drosera binata* and patches of *Sphagnum* moss. The diminutive *Libertia micrantha* perched on better drained mounds and stumps. Time was lost as we tested whether we needed to leave the track and head



**Botanising amongst the jumble of yellow silver pine stems on the plateau. Photo: M. Clearwater**

directly for Mt Rowe, but repelled by dense kauri grass (*Astelia trinervia*) and giant *Gahnia*, we thankfully chose to stay on the track. The track to the summit of Mt Rowe is maintained, and ends at a trig with clear views of the Pinnacles, Table Mountain Plateau, and other parts of the Coromandel. From Mt Rowe to the plateau there is no permanent track; careful navigation is required to follow a route which is marked in places.

As we traversed towards the plateau, notable plants included *Mida salicifolia*, the handsome *Archeria racemosa*, and *Cordyline banksii*, with what seemed like unusually large leaves. *Dracophyllum patens* and *D. latifolium* were both common, but in contrast to previous visitors we did not notice any *D. traversii*. *Pseudopanax* species include *P. laetus*, with distinctive purple petioles and large glossy leaves, along with *P.*

*colensoi* and *P. discolor*. Epiphytic filmy ferns included *Hymenophyllum lyalli* and *H. armstrongii*, as well as the bristle fern *Abrodictyum strictum*. A sapling of narrow leaved maire (*Nestegis montana*) was found near the track, a species not noted by Graeme Jane and John Smith-Dodsworth on previous visits. Comb fern (*Schizaea fistulosa*) was spotted on the way up, and on the plateau itself.

As the plateau of Table Mountain was reached, the canopy became dominated by yellow silver pine. Many of these trees have fallen, presumably because of the boggy substrate, but have continued growth, resulting in prostrate trunks with multiple upright shoots growing at a wide variety of angles. Other important members of the canopy and sub-canopy include southern rata, tawari, and in some areas, more frequent silver pine. Scattered *Quintinia* and towai were found, along with the occasional small kauri and rimu, all species which are more abundant as larger trees near the better drained edges of the plateau (Botany Division, 1983). The undergrowth is dense in places, and dominated by the giant (and often very sharp) sedges *Ghania xanthocarpa* and *G. setifolia*, the smaller *G. pauciflora*, and the gentler *Machaerina sinclairii*. Kauri grass adds to the mix of sharp edged monocots. Kiokio (*Blechnum novae-zelandiae*) is also abundant, particularly where the track was previously broad and muddy. Mounds of *Dicranaloma* and other mosses and liverworts cover the ground. The short stature and jumbled arrangement of the canopy trees, combined with the thick undergrowth and boggy substrate, made travelling across the plateau 'challenging' in places - but we were able to follow the remnants of an old track for much of the way, and the fascinating appearance and atmosphere of the vegetation was well worth the effort.



***Epacris sinclairii*, Table Mountain. Photo: M. Clearwater**



***Pimelea longifolia*, recently finished flowering, Table Mountain. Photo: M. Clearwater**

As we neared the *Epacris* area the attractive *Pimelea longifolia* caused some delay, with long glossy leaves and recently finished flowers. Soon after we found ourselves amongst a large number of *Epacris sinclairii* plants, also an attractive shrub with a distinctive leaf shape and venation. In the short time available a survey was conducted, with the party working together to count all plants into size classes for DOC records. Many large plants were found, mostly growing on moss mounds, with seed capsules and old flowers. Smaller size classes and seedlings were also easy to find, suggesting the population was still healthy.

Aware that we risked running out of daylight, we completed the survey and immediately began to retrace our steps back to our Moss Creek campsite. Unusual finds in the bog forest on the way back included a single plant of the naturally uncommon *Celmisia adamsii*, growing in the mud on the track – a plant normally colonising more open rocky crags on the Coromandel, and less interesting but looking just as lonely, a single plant of the common weed catsear (*Hypochaeris radicata*).

As we fought our way back onto Mt Rowe, Thomas picked up a 'Fitbit' activity tracker lying in the undergrowth, presumably torn from the wrist of previous visitor. Against the odds, the gadget was later reunited with its Auckland based owner after some online-sleuthing of a geocachers' blog site revealed an image of him eating his lunch in the bog forest, fitbit visible on his wrist, under the heading 'worst tramp in the world' – a reference to the thick vegetation and deep mud of the plateau.

On day two the group decided to follow a bearing of 240° from the campsite towards an area of patchy vegetation, a suspected burn site, visible in aerial photographs. A third species list was recorded for this walk. The route took us through yellow silver pine and kauri forest, including prostrate (but still growing) kauri around 1 m in diameter. Interesting finds included the large leaved climbing rata *Metrosideros albiflora*, and additional colonies of *Abrodictyum strictum*, *Hymenophyllum armstrongii*, and *H. lyallii*. We also encountered a relatively flat area with moss mounds resembling those on Table Mountain, prompting an enthusiastic but unsuccessful hunt for a new *Epacris* population. Our target destination was confirmed as an area of previously burnt vegetation, with open areas colonized by mānuka, kauri, kauri grass, *Lycopodium laterale*, yellow silver pine, *Drosera*, *Gleichinia dicarpa* and *Machaerina tenax*. The group then returned to camp to prepare for the arrival of the helicopter.



As we waited for our lift out, we noted the general lack of ungulate browsing or pig sign in the area. No wasps were seen on the trip, but two stray dogs were briefly encountered, possums were present at the camp, and there was a notable lack of a dawn chorus and few bird calls in general. Gorse was found scattered at the campsite, and royal fern, found next to the DOC shelter, was removed before we departed.

***The Ministry of Works prepares the Moss Creek helipad for departure, with logged over forest visible in the background.***  
**Photo: C. Beard**

## References

- Botany Division (1983) Vegetation of the Kauaeranga Valley, Report 452, Botany Division, Department of Scientific and Industrial Research, NZ.
- Burns, B. (1985) Ti Tipi ecological area. Unpublished Internal Report, Auckland Conservancy, NZ Forest Service.
- Hayward, B. W. (1974). Geology and eruptive history of Table Mountain area, Coromandel Peninsula. New Zealand Journal of Geology and Geophysics, 17(2), 403-422. doi: 10.1080/00288306.1974.10430400

## Table top/Plateau species list

### Gymnosperm trees and shrubs

<i>Agathis australis</i>	kauri, kauri pine
<i>Dacrydium cupressinum</i>	rimu, red pine
<i>Lepidothamnus intermedius</i>	Yellow silver pine
<i>Phyllocladus toatoa</i>	Toatoa

### Monocotyledonous lianes

<i>Ripogonum scandens</i>	Supplejack, kareao
---------------------------	--------------------

### Dicotyledonous lianes and related trailing plants

<i>Metrosideros perforata</i>	rata
-------------------------------	------

### Dicotyledonous trees and shrubs

<i>Alseuosmia macrophylla</i>	Toropapa, Karapapa
<i>Archeria racemosa</i>	
<i>Brachyglottis kirkii</i> var. <i>angustior</i>	kohurangi, Kirk's tree daisy
<i>Coprosma colensoi</i>	
<i>Coprosma dodonaeifolia</i>	
<i>Coprosma grandifolia</i>	kanono, manono, large-leaved coprosma, raurekau
<i>Corokia buddleioides</i>	korokio
<i>Dracophyllum latifolium</i>	neinei, needle-leaved neinei, spider wood
<i>Dracophyllum patens</i>	Great Barrier Inaka
<i>Dracophyllum traversii</i>	mountain neinei, grass tree, pineapple tree
<i>Elaeocarpus dentatus</i> var. <i>dentatus</i>	hinau
<i>Epacris sinclairii</i>	Sinclair's Tamingi
<i>Griselinia littoralis</i>	broadleaf, kapuka, papauma
<i>Ixerba brexioides</i>	Tawari, whakou (flowers)
<i>Leptospermum scoparium</i> var. <i>scoparium</i>	manuka, tea tree, kahikatoa
<i>Leucopogon fasciculatus</i>	Mingimingi, tall mingimingi
<i>Metrosideros umbellata</i>	Southern rata
<i>Myrsine salicina</i>	Toro
<i>Olearia rani</i> var. <i>rani</i>	heketara
<i>Pimelea longifolia</i>	taranga, long-leaved pimelea
<i>Pseudopanax colensoi</i> var. <i>colensoi</i>	Mountain five-finger, three finger
<i>Pseudopanax discolor</i>	
<i>Quintinia serrata</i>	Tawheowheo, quintinia
<i>Raukaua simplex</i>	haumakoroa
<i>Weinmannia silvicola</i>	towai, tawhero

## Lycophytes

*Lycopodiella lateralis*  
*Phlegmariurus varius*

clubmoss

## Ferns

*Abrodictyum strictum*  
*Asplenium flaccidum*  
*Blechnum novae-zelandiae*  
*Cardiomanes reniforme*  
*Cyathea dealbata*  
*Dicksonia squarrosa*  
*Gleichenia dicarpa*  
*Hymenophyllum armstrongii*  
*Hymenophyllum lyallii*  
*Hymenophyllum multifidum*  
*Hymenophyllum sanguinolentum*  
*Lindsaea trichomanoides*  
  
*Lygodium articulatum*  
*Notogrammitis billardierei*  
*Notogrammitis ciliata*  
*Schizaea fistulosa*  
*Tmesipteris tannensis*

Erect bristle fern  
Drooping spleenwort, hanging spleenwort  
kiokio, horokio, palm leaf fern  
Kidney fern, Konehu, Kopakopa, Raurenga  
silver fern, ponga  
rough tree fern, harsh tree fern, wheki  
tangle fern, swamp umbrella fern  
Filmy fern  
Filmy fern  
Much-divided filmy fern  
Filmy fern, Piripiri  
  
mangemange, bushman's mattress,  
makamaka  
common strap fern  
strapfern  
comb fern  
Fork Fern

## Orchids

*Acianthus sinclairii*  
*Earina autumnalis*  
*Earina mucronata*  
*Nematoceras acuminatum*  
*Pterostylis banksii*  
*Thelymitra longifolia*  
*Thelymitra pauciflora*

heart-leaved orchid, pixie cap  
Easter orchid, raupeka  
bamboo orchid, peka-a-waka, spring earina  
Spider Orchid  
Tutukiwi, Greenhood  
White Sun Orchid  
sun orchid

## Sedges

*Carex dissita*  
*Gahnia pauciflora*  
*Gahnia setifolia*  
*Gahnia xanthocarpa*  
*Machaerina sinclairii*  
*Schoenus maschalinus*

Forest Sedge  
cutting sedge  
mapere, Gahnia, giant Gahnia, razor sedge  
Gahnia, mapere  
Machaerina  
dwarf bog rush

### Monocotyledonous herbs

<i>Astelia solandri</i>	Perching lily, kaiwharawhara
<i>Astelia trinervia</i>	Kauri grass
<i>Libertia micrantha</i>	Native Iris, Mikoikoi

### Dicotyledonous Herbs - composites

<i>Celmisia adamsii</i> var. <i>adamsii</i>	Adams daisy
<i>Hypochaeris radicata</i> *	catsear

### Dicotyledonous herbs other than composites

<i>Luzuriaga parviflora</i>	
<i>Nertera depressa</i>	Nertera, bead plant, fruiting duckweed

## Bush bash South-west from Moss Creek campsite species list

### Gymnosperm trees and shrubs

<i>Agathis australis</i>	kauri, kauri pine
<i>Dacrydium cupressinum</i>	rimu, red pine
<i>Lepidothamnus intermedius</i>	Yellow silver pine
<i>Manoao colensoi</i>	silver pine, manoao
<i>Phyllocladus toatoa</i>	Toatoa
<i>Prumnopitys ferruginea</i>	Miro, brown pine

### Monocotyledonous trees and shrubs

<i>Cordyline banksii</i>	ti ngahere, cabbage tree, ti rakau
--------------------------	------------------------------------

### Dicotyledonous lianes and related trailing plants

<i>Metrosideros albiflora</i>	white rata, rata, aka
<i>Metrosideros perforata</i>	rata

### Dicotyledonous trees and shrubs

<i>Alseuosmia macrophylla</i>	Toropapa, Karapapa
<i>Archeria racemosa</i>	None known
<i>Brachyglottis kirkii</i> var. <i>angustior</i>	kohurangi, Kirk's tree daisy
<i>Coprosma dodonaeifolia</i>	
<i>Coprosma grandifolia</i>	kanono, manono, large-leaved coprosma, raurekau
<i>Coprosma robusta</i>	karamu, glossy karamu



<i>Corokia buddleioides</i>	korokio
<i>Dracophyllum latifolium</i>	neinei, needle-leaved neinei, spider wood
<i>Elaeocarpus dentatus</i> var. <i>dentatus</i>	hinau
<i>Geniostoma ligustrifolium</i> var. <i>ligustrifolium</i>	hangehange
<i>Griselinia littoralis</i>	broadleaf, kapuka, papauma
<i>Hebe stricta</i> var. <i>stricta</i>	koromiko
<i>Ixerba brexioides</i>	Tawari, whakou (flowers)
<i>Leptospermum scoparium</i> var. <i>scoparium</i>	manuka, tea tree, kahikatoa
<i>Leucopogon fasciculatus</i>	Mingimingi, tall mingimingi
<i>Metrosideros umbellata</i>	Southern rata
<i>Myrsine salicina</i>	Toro
<i>Nestegis cunninghamii</i>	black maire
<i>Olearia townsonii</i>	Coromandel tree daisy
<i>Pseudopanax colensoi</i> var. <i>colensoi</i>	Mountain five-finger, three finger
<i>Pseudopanax discolor</i>	
<i>Pseudowintera colorata</i>	Red horopito, mountain horopito, alpine peppertree
<i>Quintinia serrata</i>	Tawheowheo, quintinia
<i>Rubus cissoides</i>	Tataramoa, bush lawyer
<i>Toronia toru</i>	toru, toro, toto, mihimihi
<i>Ulex europaeus</i> *	gorse
<i>Weinmannia silvicola</i>	towai, tawhero

## Lycophytes

<i>Lycopodiella lateralis</i>	
<i>Lycopodium deuterodensum</i>	clubmoss
<i>Lycopodium volubile</i>	climbing clubmoss, waewaekoukou
<i>Phlegmariurus varius</i>	clubmoss

## Ferns

<i>Abrodictyum strictum</i>	Erect bristle fern
<i>Asplenium flaccidum</i>	Drooping spleenwort, hanging spleenwort
<i>Asplenium polyodon</i>	sickle spleenwort
<i>Blechnum fraseri</i>	
<i>Blechnum novae-zelandiae</i>	kiokio, horokio, palm leaf fern
<i>Blechnum procerum</i>	small kiokio
<i>Cardiomanes reniforme</i>	Kidney fern, Konehu, Kopakopa, Raurenga
<i>Dicksonia squarrosa</i>	rough tree fern, harsh tree fern, wheki
<i>Gleichenia dicarpa</i>	tangle fern, swamp umbrella fern
<i>Hymenophyllum armstrongii</i>	Filmy fern
<i>Hymenophyllum dilatatum</i>	Filmy fern, Matua mauku
<i>Hymenophyllum lyallii</i>	Filmy fern
<i>Hymenophyllum multifidum</i>	Much-divided filmy fern
<i>Hymenophyllum rarum</i>	filmy fern
<i>Hymenophyllum revolutum</i>	Filmy fern

<i>Hymenophyllum sanguinolentum</i>	Filmy fern, Piripiri
<i>Lindsaea trichomanoides</i>	
<i>Lygodium articulatum</i>	mangemange, bushman's mattress, makamaka
<i>Notogrammitis billardierei</i>	common strap fern
<i>Notogrammitis ciliata</i>	strapfern
<i>Notogrammitis heterophylla</i>	comb fern
<i>Rumohra adiantiformis</i>	leathery shield fern, florists fern
<i>Tmesipteris tannensis</i>	Fork Fern

### Orchids

<i>Acianthus sinclairii</i>	heart-leaved orchid, pixie cap
<i>Dendrobium cunninghamii</i>	Winika, pekapeka, Christmas orchid, bamboo orchid
<i>Earina autumnalis</i>	Easter orchid, raupeka
<i>Pterostylis banksii</i>	Tutukiwi, Greenhood
<i>Thelymitra pauciflora</i>	sun orchid

### Grasses

<i>Agrostis capillaris</i> *	browntop
<i>Austroderia fulvida</i>	Toetoe
<i>Rytidosperma sp.</i>	bristle grass

### Sedges

<i>Gahnia xanthocarpa</i>	Gahnia, mapere
<i>Machaerina tenax</i>	

### Rushes and allied plants

<i>Juncus effusus</i> var. <i>effusus</i> *	leafless rush
---	---------------

### Monocotyledonous herbs

<i>Astelia fragrans</i>	Bush flax, bush lilly, kakaha
<i>Astelia trinervia</i>	Kauri grass
<i>Dianella nigra</i>	turutu, New Zealand blueberry, inkberry
<i>Libertia micrantha</i>	Native Iris, Mikoikoi

### Dicotyledonous herbs other than Composites

<i>Drosera binata</i>	sundew
<i>Gonocarpus incanus</i>	
<i>Nertera dichondrifolia</i>	

## Moss Creek - Table Top Mountain species list

### Gymnosperm trees and shrubs

<i>Agathis australis</i>	kauri, kauri pine
<i>Dacrydium cupressinum</i>	rimu, red pine
<i>Lepidothamnus intermedius</i>	Yellow silver pine
<i>Phyllocladus toatoa</i>	Toatoa
<i>Podocarpus cunninghamii</i>	Mountain totara, Hall's totara, thin-barked totara, totara-kiri-kotukutuku
<i>Prumnopitys ferruginea</i>	Miro, brown pine

### Monocotyledonous trees and shrubs

<i>Cordyline banksii</i>	ti ngahere, cabbage tree, ti rakau
--------------------------	------------------------------------

### Monocotyledonous lianes

<i>Ripogonum scandens</i>	Supplejack, kareao
---------------------------	--------------------

### Dicotyledonous lianes and related trailing plants

<i>Clematis paniculata</i>	white clematis, puawananga
<i>Parsonsia heterophylla</i>	New Zealand jasmine

### Dicotyledonous trees and shrubs

<i>Alseuosmia macrophylla</i>	Toropapa, Karapapa
<i>Archeria racemosa</i>	None known
<i>Beilschmiedia tawa</i>	Tawa
<i>Brachyglottis kirkii</i> var. <i>angustior</i>	kohurangi, Kirk's tree daisy
<i>Coprosma colensoi</i>	
<i>Coprosma dodonaeifolia</i>	
<i>Coprosma grandifolia</i>	kanono, manono, large-leaved coprosma, raurekau
<i>Corokia buddleioides</i>	korokio
<i>Dracophyllum latifolium</i>	neinei, needle-leaved neinei, spider wood
<i>Dracophyllum patens</i>	Great Barrier Inaka
<i>Dracophyllum traversii</i>	mountain neinei, grass tree, pineapple tree
<i>Elaeocarpus dentatus</i> var. <i>dentatus</i>	hinau
<i>Gaultheria antipoda</i>	bush snowberry, fool's beech
<i>Griselinia littoralis</i>	broadleaf, kapuka, papauma
<i>Hebe stricta</i> var. <i>stricta</i>	koromiko
<i>Hedycarya arborea</i>	Porokaiwhiri, Pigeonwood
<i>Ixerba brexioides</i>	Tawari, whakou (flowers)
<i>Knightia excelsa</i>	Rewarewa, NZ honeysuckle

<i>Laurelia novae-zelandiae</i>	Pukatea
<i>Leptospermum scoparium</i> var. <i>scoparium</i>	manuka, tea tree, kahikatoa
<i>Leucopogon fasciculatus</i>	Mingimingi, tall mingimingi
<i>Metrosideros umbellata</i>	Southern rata
<i>Mida salicifolia</i>	willow-leaved maire, maire taïke
<i>Myrsine salicina</i>	Toro
<i>Nestegis montana</i>	narrow-leaved maire
<i>Olearia rani</i> var. <i>rani</i>	heketara
<i>Pseudopanax colensoi</i> var. <i>colensoi</i>	Mountain five-finger, three finger
<i>Pseudopanax discolor</i>	
<i>Pseudopanax laetus</i>	None known
<i>Pseudowintera axillaris</i>	Lowland horopito, lowland pepper tree
<i>Quintinia serrata</i>	Tawheowheo, quintinia
<i>Raukaua simplex</i>	
<i>Toronia toru</i>	toru, toro, toto, mihimihi
<i>Weinmannia silvicola</i>	towai, tawhero

### Lycophytes

<i>Lycopodiella lateralis</i>	
<i>Lycopodium deuterodensum</i>	clubmoss
<i>Lycopodium volubile</i>	climbing clubmoss, waewaekoukou
<i>Phlegmariurus varius</i>	clubmoss

### Ferns

<i>Abrodictyum strictum</i>	Erect bristle fern
<i>Asplenium bulbiferum</i>	Hen and chicken fern, pikopiko, mother spleenwort
<i>Asplenium flaccidum</i>	Drooping spleenwort, hanging spleenwort
<i>Asplenium polyodon</i>	sickle spleenwort
<i>Blechnum fraseri</i>	
<i>Blechnum novae-zelandiae</i>	kiokio, horokio, palm leaf fern
<i>Blechnum procerum</i>	small kiokio
<i>Cardiomanes reniforme</i>	Kidney fern, Konehu, Kopakopa, Raurenga
<i>Cyathea dealbata</i>	silver fern, ponga
<i>Cyathea smithii</i>	katote, Smiths tree fern, soft tree fern
<i>Dicksonia squarrosa</i>	rough tree fern, harsh tree fern, wheki
<i>Gleichenia microphylla</i>	carrier tangle fern, parasol fern
<i>Hymenophyllum armstrongii</i>	Filmy fern
<i>Hymenophyllum lyallii</i>	Filmy fern
<i>Hymenophyllum multifidum</i>	Much-divided filmy fern
<i>Hymenophyllum rarum</i>	filmy fern
<i>Hymenophyllum revolutum</i>	Filmy fern
<i>Lindsaea trichomanoides</i>	
<i>Lygodium articulatum</i>	mangemange, bushman's mattress
<i>Notogrammitis billardierei</i>	common strap fern

<i>Notogrammitis ciliata</i>	strapfern
<i>Notogrammitis heterophylla</i>	comb fern
<i>Paesia scaberula</i>	Lace fern, Ring fern, Scented fern
<i>Rumohra adiantiformis</i>	leathery shield fern, florists fern
<i>Sticherus cunninghamii</i>	Umbrella fern, Waekura, Tapuwae kotuku
<i>Tmesipteris tannensis</i>	Fork Fern

### Orchids

<i>Acinanthus sinclairii</i>	heart-leaved orchid, pixie cap
<i>Chiloglottis cornuta</i>	bird orchid, ant orchid
<i>Dendrobium cunninghamii</i>	Winika, pekapeka, Christmas orchid, bamboo orchid
<i>Earina autumnalis</i>	Easter orchid, raupeka
<i>Earina mucronata</i>	bamboo orchid, peka-a-waka, spring earina
<i>Pterostylis banksii</i>	Tutukiwi, Greenhood

### Grasses

<i>Austroderia fulvida</i>	Toetoe
<i>Microlaena avenacea</i>	bush rice grass, oat grass
<i>Rytidosperma</i> sp.	bristle grass

### Sedges

<i>Carex dissita</i>	Forest Sedge
<i>Eleocharis gracilis</i>	slender spike sedge
<i>Gahnia setifolia</i>	mapere, Gahnia, giant Gahnia, razor sedge
<i>Gahnia xanthocarpa</i>	Gahnia, mapere
<i>Isolepis prolifer</i>	None Known
<i>Isolepis reticularis</i>	None Known
<i>Machaerina sinclairii</i>	Machaerina
<i>Machaerina tenax</i>	
<i>Schoenus maschalinus</i>	dwarf bog rush
<i>Uncinia rupestris</i>	bastard grass, hook sedge
<i>Uncinia uncinata</i>	bastard grass, hook sedge, kamu, matau-a-maui

### Rushes and allied plants

<i>Juncus effusus</i> var. <i>effusus</i> *	leafless rush
<i>Juncus tenuis</i> subsp. <i>tenuis</i> *	track rush

### Monocotyledonous herbs

<i>Astelia fragrans</i>	Bush flax, bush lilly, kakaha
<i>Astelia solandri</i>	Perching lily, kaiwharawhara
<i>Astelia trinervia</i>	Kauri grass
<i>Collospermum microspermum</i>	

*Dianella nigra*  
*Libertia micrantha*

turutu, New Zealand blueberry, inkberry  
Native Iris, Mikoikoi

### **Dicotyledonous herbs other than Composites**

*Drosera binata*  
*Nertera depressa*  
*Nertera dichondrifolia*

forked sundew  
Nertera, bead plant, fruiting duckweed

### **Mosses**

*Campylopus introflexus*  
*Catharomnion ciliatum*  
*Cladomnion ericoides*  
*Cyathophorum bulbosum*  
*Dawsonia superba*  
*Dicranoloma billardierei*  
*Dicranoloma menziesii*  
*Hypnodendron menziesii*  
*Leucobryum javense*  
*Ptychomnion aciculare*

### **Liverworts**

*Bazzania adnexa*  
*Pallavicinia* sp.  
*Schistochila appendiculata*  
*Trichocolea mollissima*

# The Awaroa Ganoderma hunt – May 10 2015

By Kathryn Row and Michael Clearwater. Images by Kathryn Row and Yanbin Deng

Only three specimens of the *Ganoderma* sp. we were seeking have ever been seen. These were discovered by Reg Bell; a fungi enthusiast from the Awaroa area, between 1969 to 1972. Unfortunately the exact location he found them is not known, so we were left with a very large potential search area. Thomas chose some likely spots along Kaimango Road and our very able guide, Landcare fungi expert Peter Buchanan, described for us some of the defining characteristics to look for. He even brought along one of the three original specimens for us to see.



*Ganoderma applanatum* 'Artists Conk'

*Ganoderma* is a bracket fungi growing out from the trunk of a tree like a shelf (or bracket). *G. applanatum*, the species most commonly seen in the forest is fan-shaped with a hard dull grey to brown upper surface and a pale pore under surface. It gets its name of Artist Porebracket or Artists Conk from the drawings which can be scratched in the under surface.

Peter explained that the undescribed *Ganoderma* sp., classified as nationally critical, was likely to be lightweight and soft, the result of relatively fast growth. It should also have a glossy upper surface, even when dry, because it belongs to a lacquer producing group of ganoderms, unlike the other more common NZ species we were likely to encounter. Reg Bell's notes stated 'on pukatea, near Pirongia'. Peter suggest the host range was not likely to broad – our goal was therefore to locate and examine dead or dying pukatea (*Laurelia novae-zelandiae*) for any signs of the elusive fungus.



*Ganoderma applanatum*, with white undersurface



**Peter Buchanan points out the features of the Awaroa Ganoderma before the hunt began**

The search began at a track junction with road near the Orakei stream head, with the group walking the track then into the gully in search of pukatea. All of the pukatea in the area were confined as usual to the gulleys, with none present on ridges. The terrain was quite steep, making it difficult to locate the trees in the dense undergrowth and thick supplejack. The target even briefly switched to finding members of our party after several, perhaps paying too much attention to Peter’s fungal insights, managed to become disoriented within 100 m of the road. Some live trees with hollow centres were found, but few dead trees were located.

Many *Ganoderma* brackets were found on other species, but none had the morphology we were looking for.

The tall forest in the area included tawa, pukatea, miro, totara, rimu, kamahi, mangeo, tawheowheo (*Quintinia serrata*), the tree ferns *Cyathea medullaris*, *C. dealbata*, *C. smithii*, and *Dicksonia squarrosa*. Abundant regeneration was occurring in disturbed areas, with no sign of browsing animals, and lots of pukatea saplings in the gulleys. Scrub along the road and tracksides included lancewood, several species of lycophyte, *Hebe*, *Coprosma*, manuka, cabbage trees and ferns.

While we didn’t find the *Ganoderma* we were looking for, we did find a great many other fungi, and with Peter’s help a lot was learnt about them. A few examples are described below.

We saw many Wood-ear jelly fungi (*Auricularia cornea*) with its flabby brown ear-like appearance. Large quantities of this edible fungus were exported to China in the late 1800s to early 1900s from the Taranaki district, where supplies were abundant as a result of forest clearance providing ample habitat on dead trees.



***Auricularia cornea*, the wood ear jelly fungus**

Interest was sparked by Peter pointing out *Favoluschia calocera*, the invasive orange pore fungus, on branches and logs. This small kidney shaped fungus with its distinctive orange colour was first noted in New Zealand in 1969, after arriving from Asia or Madagascar. Since then it has spread throughout the country, competing with the native white *Favoluschia*.

We did not see any of the striking blue pinkgill *Entoloma hochstetteri*, although we did see grey-brown pinkgill *Entoloma aromaticum*. Peter pointed out to us that *E. hochstetteri* is featured on our \$50 note





***Entoloma aromaticum*, the grey-brown pinkgill**

along with the North Island kokako with its sky-blue wattles. According to Tuhoë legend the Kokako flew down and rubbed against the blue mushroom which is how its wattles became blue. The note also features supplejack (*Ripogonum scandens*), a food source for the bird. The forest illustrated on the note is part of Pureora Forest around Pikiariki village, and will be familiar to many from the Botanical Society.

A discussion was held about the deathcap or death flycap mushroom *Amanita phalloides*, with Hamilton being one of the few places in New Zealand where this has been found. It has a greenish or olive-brown cap that is at first convex, but becomes concave with age. The stem grows out of a membranous white cup with a white hanging ring on it. This mushroom grows under oak trees along the riverbank in Hamilton. Some years ago a Vietnamese migrant mistook it for an edible mushroom from his homeland and added some to soup which he and his 18 month old son consumed. They both became very ill, but thankfully both survived, although the father required a liver transplant. Peter mentioned that the only mushrooms he eats come from the supermarket. While I was photographing the deathcap mushrooms in the park an Asian man who spoke no English

was gathering the nuts of the Ginkgo biloba from the tree next to the oak tree where I was taking pictures. I think I managed to convey to him what would happen if he picked the mushrooms and ate them.



***Amanita phalloides*, the deathcap, showing the characteristic yellowish or olive green cap, and annulus around the stipe just beneath the cap. Beneath the leaf litter the cup-like other end of the veil is diagnostic for the deathcap. Parana Park, Hamilton.**

Although we were not successful in locating new examples of the Awaroa *Ganoderma*, many in the group returned home with a new found interest in fungi. The following field trip to the nearby Walter Scott Reserve also provided plenty of opportunities for fungi spotting, and it was at that reserve that Don Horne took many of his photographs of fungi for the popular field guide 'Mushrooms and Other Fungi of New Zealand' (Geoff Ridley and Don Horne, New Holland Publishers).

## Walter Scott Reserve - 13 June 2015

By Chris Lusk and Michael Clearwater

A small party converged on the Walter Scott Reserve, and the first thing we learned was that the reserve was NOT named after the famous Scottish writer, but after an illustrious local citizen. We were hoping to extend the suspiciously short species list available to us. Our three-and-a-half our walk certainly realized that hope, adding 37 species including trees, shrubs, ferns, climbers, orchids and other herbs. The reserve's population of king fern (*Ptisana salicina*) looked to be in very good health, with plants of all sizes plentiful in some gullies. The reserve also harbours a rich fern flora for its size, with ferns contributing 1/3 of the species recorded after only a relatively brief search.

Tawa (*Beilschmedia tawa*) is the main canopy tree throughout, but there are also a good number of pukatea (*Laurelia novae-zealandiae*), kamahi (*Weinmannia racemosa*), hinau (*Eleaocarpus dentatus*), rewarewa (*Knightia excelsa*) and mangeao (*Litsea calicaris*), with kohekohe (*Dysoxylum spectabile*) and pigeonwood (*Hedycarya arborea*) common in the subcanopy and understorey. The few totara we saw inside the reserve appeared to be *Podocarpus cunninghamii*, and we later also found *P. totara* growing on the forest margin at the carpark. Even after our additions, the reserve seems to have only moderate tree and shrub species richness, Mike Clearwater commenting on the almost total lack of divaricates and other small-leaved species. The walk turned out to be something of a fungal safari, with a splendid array of red, orange, yellow, blue and even green fungi on view, including some exquisite waxgills. Kathryn Mercer had brought along a photographic guide to New Zealand fungi, and so was able to identify some for us.

### Walter Scott Reserve Species List

Showing species present in 1968 (from NZPCN database) and those present during the survey in 2015.

		15/06/1968	13/06/2015
<b>Gymnosperm Trees &amp; Shrubs</b>			
<i>Dacrycarpus dacrydioides</i>	kahikatea, white pine	x	x
<i>Dacrydium cupressinum</i>	rimu, red pine	x	x
<i>Podocarpus cunninghamii</i>	Mountain totara, Hall's totara, thin-barked totara, totara-kiri-kotukutuku		x
<i>Podocarpus totara</i> var. <i>totara</i>	Totara	x	x
<i>Prumnopitys ferruginea</i>	Miro, brown pine		x

### Monocotyledonous trees and shrubs

<i>Cordyline banksii</i>	ti ngahere, cabbage tree, ti rakau	x	x
<i>Rhopalostylis sapida</i>	Nikau palm	x	x

### Monocotyledonous lianes

<i>Freycinetia banksii</i>	kiekie	x	x
<i>Ripogonum scandens</i>	Supplejack, kareao	x	x

### Dicotyledonous lianes and related trailing plants

<i>Clematis paniculata</i>	white clematis, puawananga	x	x
<i>Metrosideros diffusa</i>	white rata	x	x
<i>Metrosideros fulgens</i>	rata	x	x
<i>Metrosideros perforata</i>	white rata, akatea		x
<i>Muehlenbeckia australis</i>	Pohuehue, large-leaved muehlenbeckia	x	x
<i>Parsonsia heterophylla</i>	New Zealand jasmine	x	x
<i>Rubus australis</i>	Tataramoa, bush lawyer, swamp lawyer	x	x
<i>Rubus cissoides</i>	Tataramoa, bush lawyer		x
<i>Rubus schmidelioides</i> var. <i>schmidelioides</i>	Tataramoa, bush lawyer, white-leaved lawyer		x

### Dicotyledonous trees and shrubs

<i>Alseuosmia macrophylla</i>	Toropapa, Karapapa		x
<i>Alseuosmia quercifolia</i>	oak-leaved toropapa, toropapa, karapapa	x	x
<i>Aristotelia serrata</i>	Makomako, wineberry	x	x
<i>Beilschmiedia tawa</i>	Tawa	x	x
<i>Berberis glaucocarpa</i> *	barberry		x
<i>Brachyglottis repanda</i>	rangiora, bushman's toilet paper, bushman's friend	x	x
<i>Coprosma grandifolia</i>	kanono, manono, large-leaved coprosma, raurekau	x	x
<i>Coprosma lucida</i>	karamu, shining karamu	x	
<i>Coprosma robusta</i>	karamu, glossy karamu		x
<i>Dysoxylum spectabile</i>	kohekohe, New Zealand mahogany	x	x
<i>Elaeocarpus dentatus</i> var. <i>dentatus</i>	hinau	x	x
<i>Fuchsia excorticata</i>	kotukutuku, tree Fuchsia		x
<i>Geniostoma ligustrifolium</i> var. <i>ligustrifolium</i>	hangehange	x	x
<i>Griselinia lucida</i>	puka	x	x
<i>Hebe stricta</i> var. <i>stricta</i>	koromiko	x	x
<i>Hedycarya arborea</i>	Porokaiwhiri, Pigeonwood		x
<i>Hoheria sexstylosa</i>	Houhere, lacebark		x
<i>Knightia excelsa</i>	Rewarewa, NZ honeysuckle	x	x
<i>Kunzea ericoides</i>	Manuoea, Titira, Atitira, Kanuka		x

<i>Laurelia novae-zelandiae</i>	Pukatea	x	x
<i>Leptospermum scoparium</i> var. <i>scoparium</i>	manuka, tea tree, kahikatoa	x	x
<i>Litsea calicaris</i>	Mangeao, tangeao	x	x
<i>Lophomyrtus bullata</i>	Ramarama, bubble leaf	x	
<i>Meliccytus ramiflorus</i>	mahoe, hinahina, whitey wood	x	x
<i>Mida salicifolia</i>	willow-leaved maire, maire taïke		x
<i>Myrsine australis</i>	Red mapou, red matipo, mapau, red maple	x	x
<i>Nestegis lanceolata</i>	White maire		x
<i>Olearia rani</i> var. <i>colorata</i>	Heketara	x	x
<i>Pennantia corymbosa</i>	Kaikomako		x
<i>Pittosporum eugenioides</i>	Tarata, lemonwood		x
<i>Pseudopanax arboreus</i>	Fivefinger, five finger, whauwhaupaku		x
<i>Pseudopanax crassifolius</i>	Horoeka, lancewood	x	x
<i>Pseudowintera axillaris</i>	Lowland horopito, lowland pepper tree	x	
<i>Quintinia serrata</i>	Tawheowheo, quintinia	x	
<i>Schefflera digitata</i>	Patete, pate, seven-finger	x	x
<i>Solanum aviculare</i> var. <i>aviculare</i>	poroporo		x
<i>Vitex lucens</i>	puriri		x
<i>Weinmannia racemosa</i>	kamahi, tawheo, tawhero, tawherowhero	x	x

### Lycophytes

<i>Huperzia australiana</i>		x	x
<i>Lycopodium volubile</i>	climbing clubmoss, waewaekoukou	x	x
<i>Selaginella kraussiana</i> *	Selaginella		x

### Ferns

<i>Abrodictyum elongatum</i>	bristle fern	x	
<i>Asplenium bulbiferum</i>	Hen and chicken fern, pikopiko, mother spleenwort	x	x
<i>Asplenium flaccidum</i>	Drooping spleenwort, hanging spleenwort	x	x
<i>Asplenium oblongifolium</i>	Shining Spleenwort	x	x
<i>Asplenium polyodon</i>	sickle spleenwort	x	x
<i>Blechnum chambersii</i>	Lance fern, nini, rereti	x	x
<i>Blechnum colensoi</i>	Colenso's hard fern, peretao, petako		x
<i>Blechnum discolor</i>	crown fern, petipeti, piupiu	x	x
<i>Blechnum filiforme</i>	thread fern, climbing hard fern	x	x
<i>Blechnum fluviatile</i>	kiwikiwi, kiwakiwa, creek fern	x	x
<i>Blechnum fraseri</i>		x	
<i>Blechnum nigrum</i>	black hard fern	x	
<i>Blechnum novae-zelandiae</i>	kiokio, horokio, palm leaf fern	x	x
<i>Cyathea cunninghamii</i>	gully tree fern, slender tree fern, ponga	x	x
<i>Cyathea dealbata</i>	silver fern, ponga	x	x
<i>Cyathea medullaris</i>	black tree fern, mamaku, black mamaku	x	x

<i>Cyathea smithii</i>	katote, Smiths tree fern, soft tree fern	x	x
<i>Dicksonia squarrosa</i>	rough tree fern, harsh tree fern, wheki histiopteris, water fern, mata, bat's wing fern	x	x
<i>Histiopteris incisa</i>	fern	x	x
<i>Hymenophyllum demissum</i>	Drooping filmy fern, Irirangi, Piripiri	x	x
<i>Hymenophyllum dilatatum</i>	Filmy fern, Matua mauku		x
<i>Hymenophyllum flabellatum</i>	filmy fern	x	x
<i>Hymenophyllum frankliniae</i>	Rusty filmy fern	x	x
<i>Hymenophyllum revolutum</i>	Filmy fern	x	x
<i>Hymenophyllum sanguinolentum</i>	Filmy fern, Piripiri		x
<i>Lastreopsis hispida</i>	Hairy fern		x
<i>Leptopteris hymenophylloides</i>	Crape fern, Single crape fern, Heruheru		x
<i>Lindsaea trichomanoides</i>		x	x
<i>Loxogramme dictyopteris</i>	Lance fern		x
<i>Lygodium articulatum</i>	mangemange, bushman's mattress, makamaka	x	x
<i>Microsorium pustulatum subsp. pustulatum</i>	hounds tongue, kowaowao, paraharaha	x	x
<i>Microsorium scandens</i>	fragrant fern, mokimoki	x	x
<i>Notogrammitis heterophylla</i>	comb fern	x	
<i>Paesia scaberula</i>	Lace fern, Ring fern, Scented fern	x	x
<i>Pneumatopteris pennigera</i>	gully fern, feather fern, piupiu	x	x
<i>Polyphlebium venosum</i>	veined bristle fern, veined filmy fern	x	x
<i>Pteridium esculentum</i>	bracken, rarauhe, bracken fern	x	x
<i>Pteris macilentata</i>	Sweet fern	x	x
<i>Ptisana salicina</i>	King fern, Para, Tawhiti para, Horseshoe fern	x	x
<i>Pyrrosia eleagnifolia</i>	leather-leaf fern, Pyrrosia	x	x
<i>Rumohra adiantiformis</i>	leathery shield fern, florists fern	x	
<i>Tmesipteris elongata</i>	Fork fern	x	x

## Orchids

<i>Acianthus sinclairii</i>	Heart-leaved orchid, Pixie cap	x	x
<i>Chiloglottis cornuta</i>	bird orchid, ant orchid	x	
<i>Dendrobium cunninghamii</i>	Winika, pekapeka, Christmas orchid, bamboo orchid	x	x
<i>Earina autumnalis</i>	Easter orchid, raupeka	x	x
<i>Earina mucronata</i>	bamboo orchid, peka-a-waka, spring earina	x	x
<i>Nematoceras macranthum</i>	Spider Orchid	x	
<i>Nematoceras trilobum</i>	Spider Orchid	x	
<i>Pterostylis banksii</i>	Tutukiwi, Greenhood	x	
<i>Pterostylis trullifolia</i>	trowel-leaved orchid	x	
<i>Thelymitra longifolia</i>	White Sun Orchid	x	

## Grasses

<i>Microlaena avenacea</i>	bush rice grass, oat grass		x
----------------------------	----------------------------	--	---

<i>Microlaena stipoides</i>	meadow rice grass, slender rice grass	x	
-----------------------------	---------------------------------------	---	--

### Sedges

<i>Uncinia uncinata</i>	bastard grass, hook sedge, kamu, matau-a-maui		x
-------------------------	---	--	---

### Monocotyledonous herbs

<i>Astelia solandri</i>	Perching lily, kaiwharawhara		x
<i>Collospermum hastatum</i>		x	x
<i>Dianella nigra</i>	turutu, New Zealand blueberry, inkberry	x	x
<i>Phormium tenax</i>	flax, harakeke, korari (maori name for inflorescence).		x

### Dicotyledonous Herbs - Composites

<i>Conyza sumatrensis</i> *	broad-leaved flea-bane		x
<i>Crepis capillaris</i> *	hawksbeard		x
<i>Mycelis muralis</i> *	wall lettuce		x

### Dicotyledonous herbs other than Composites

<i>Digitalis purpurea</i> *	foxglove		x
<i>Elatostema rugosum</i>	parataniwha, New Zealand Begonia		x
<i>Hydrocotyle dissecta</i>		x	x
<i>Nertera depressa</i>	Nertera, bead plant, fruiting duckweed	x	
<i>Phytolacca octandra</i> *	inkweed		x
<i>Potentilla vesca</i> *	alpine strawberry		x
<i>Ranunculus reflexus</i>	Hairy buttercup, Maru, Maruru, Kopukapuka, Pirikau	x	

## Koroki Kahukura ki Hinuera Scenic Reserve – 16 August 2015

By Chris Lusk

I confess I've driven past the Koroki Kahukura ki Hinuera Scenic Reserve countless times (it's on SH1), without ever noticing its existence. Overlooking the Southern end of Lake Karapiro, it was previously known as the Horahora Gorge Scenic Reserve before its return to Ngati Koroki Kahukura last year.

The view from the road wasn't terribly prepossessing, showing a few tawa and rewarewa emerging from a treefern canopy, with plenty of gorse and other exotics in evidence around the margins. It looked more inviting from Rick Barnaby's house perched on a hilltop above the reserve, where Rick gave us some helpful background, estimating that most of the vegetation had regenerated since the 1930's. In his book, the reserve only shows its best after dark – out shooting possums one evening,

his son was thrilled to discover that the three rocky caves in the reserve glowed “better than the Waitomo Caves”.

There are no tracks through the reserve, and the steep terrain and wetness of the place made progress tricky at times. A few of us quietly congratulated ourselves on our early-morning decision to wear gumboots and/or leggings. We spent most of our time exploring a gully at the east end of the reserve, full of typical gully species like mahoe, pate, hangehange and mamaku. We didn’t take long to find the first of the three glowworm coves, within 20 minutes of entering the reserve. They were beautiful even in daylight, the overhanging rocky faces adorned with ferns, and sporting some impressive “vegetable stalactites” of aerial roots descending almost to the ground below.

We were well served with expertise on a wide range of plant groups, thanks especially to Thomas Emmitt, Paula Reeves and Norm Mason. After lunching beneath a dense grove of treeferns (included a few *Cyathea cunninghamii*), most of us splashed around in a small area of sedgeland on the gully floor, before exiting the reserve onto what turned out to be a private driveway. The unannounced arrival of a herd of muddy botanists caused slight consternation to one of the residents, but in the end she seemed grateful for a distraction from her knitting, and kindly showed us a short-cut back to Ricky Barnaby’s place.

### *Koroki Kahukura ki Hinuera Scenic Reserve species list*

#### **Gymnosperm trees and shrubs**

<i>Dacrydium cupressinum</i>	rimu
<i>Dacrycarpus dacrydioides</i>	kahikatea
<i>Pinus radiata</i> *	radiata pine

#### **Monocotyledonous trees and shrubs**

<i>Cordyline australis</i>	tī kōuka, cabbage tree
----------------------------	------------------------

#### **Monocotyledonous lianes**

<i>Freycinetia banksii</i>	kiekie
----------------------------	--------

#### **Dicotyledonous lianes and related trailing plants**

<i>Metrosideros diffusa</i>	rātā
<i>Muehlenbeckia australis</i>	puka
<i>Passiflora tetrandra</i>	kohia; native passionfruit
<i>Ripogonum scandens</i>	supplejack, kareao

#### **Dicotyledonous trees and shrubs**

<i>Alectryon excelsus</i> subsp. <i>excelsus</i>	tītoki
<i>Aristotelia serrata</i>	makomako, wineberry

<i>Beilschmiedia tawa</i>	tawa
<i>Brachyglottis repanda</i>	rangiora
<i>Buddleja davidii</i> *	buddleia
<i>Carpodetus serratus</i>	putaputawētā
<i>Coprosma grandifolia</i>	kanono, raurēkau, raurākau,
<i>Coprosma</i> × <i>cunninghamii</i>	( <i>Coprosma propinqua</i> × <i>C. robusta</i> )
<i>Coprosma robusta</i>	karamū, kāramuramu
<i>Coprosma rotundifolia</i>	
<i>Corynocarpus laevigatus</i>	karaka
<i>Cytisus scoparius</i> *	broom
<i>Fuchsia excorticata</i>	kōtukutuku, kōnini
<i>Geniostoma ligustrifolium</i> var. <i>ligustrifolium</i>	hangehange
<i>Hebe stricta</i> var. <i>stricta</i>	koromiko, kōkōmuka
<i>Hedycarya arborea</i>	porokaiwhiri; pigeonwood
<i>Knightia excelsa</i>	rewarewa
<i>Kunzea robustum</i>	kānuka
<i>Laurelia novae-zelandiae</i>	pukatea
<i>Leucopogon fasciculatus</i>	mingimingi
<i>Ligustrum lucidum</i> *	tree privet
<i>Litsea calicaris</i>	mangeao
<i>Meliclytus ramiflorus</i> subsp. <i>ramiflorus</i>	māhoe
<i>Myrsine australis</i>	māpou, matipou, māpau
<i>Pittosporum tenuifolium</i>	kōhūhū, rautāhiri, rautāwhiri
<i>Prunus</i> sp.*	ornamental cherry
<i>Pseudopanax crassifolius</i>	horoeka, lancewood
<i>Pseudopanax crassifolius</i> × <i>P. lessonii</i>	
<i>Rubus</i> sp. ( <i>R. fruticosus</i> agg.)*	blackberry
<i>Schefflera digitata</i>	patē
<i>Streblus heterophyllus</i>	tūrepo
<i>Ulex europaeus</i> *	gorse

## Ferns

<i>Adiantum raddianum</i> *	huruhuru tapairu, maidenhair fern
<i>Asplenium bulbiferum</i>	mouku, hen and chicken fern
<i>Asplenium flaccidum</i>	makawe, ngā makawe o Raukauri
<i>Asplenium polyodon</i>	petako
<i>Asplenium oblongifolium</i>	huruhuru whenua
<i>Blechnum chambersii</i>	rereti, nini
<i>Blechnum filiforme</i>	pānako
<i>Blechnum minus</i>	swamp kiokio
<i>Blechnum procerum</i>	
<i>Cyathea cunninghamii</i>	pūnui, gully tree fern
<i>Cyathea dealbata</i>	ponga, silver fern
<i>Cyathea medullaris</i>	mamaku
<i>Deparia petersenii</i> subsp. <i>congrua</i>	



<i>Dicksonia squarrosa</i>	whekī
<i>Hymenophyllum demissum</i>	irirangi, pipiripi, filmy fern
<i>Lastreopsis glabella</i>	
<i>Leptopteris hymenophylloides</i>	heruheru
<i>Microsorium pustulatum</i>	kōwaowao, pārahara, hound's tongue fern
<i>Microsorium scandens</i>	mokimoki
<i>Pneumatopteris pennigera</i>	pākau
<i>Polystichum neozelandicum</i> subsp. <i>neozelandicum</i>	pikopiko, shield fern
<i>Pteridium esculentum</i>	rārahu, bracken
<i>Pteris macilenta</i>	titipo, sweet fern
<i>Pyrrosia eleagnifolia</i>	leather-leaf fern
<i>Trichomanes venosum</i>	

### Sedges

<i>Carex dissita</i>	
<i>Carex geminata</i> agg.	rautahi
<i>Carex secta</i>	pūrei, makura, pūreirei
<i>Juncus articulatus</i> *	jointed rush
<i>Typha orientalis</i>	raupō
<i>Uncinia</i> sp.	

### Rushes and allied plants

<i>Isolepis prolifera</i>	
<i>Schoenus maschalinus</i>	

### Monocotyledonous herbs

<i>Phormium tenax</i>	harakeke, flax
<i>Zantedeschia aethiopica</i> *	arum lily

### Dicotyledonous herbs - composites

<i>Mycelis muralis</i> *	wall lettuce
--------------------------	--------------

### Dicotyledonous herbs other than composites

<i>Acaena</i> sp.	panapana
<i>Callitriche petriei</i> subsp. <i>petriei</i>	
<i>Callitriche stagnalis</i> *	starwort
<i>Cardamine debilis</i> agg.	
<i>Galium aparine</i> *	cleavers
<i>Lobelia angulata</i>	pānakenake
<i>Lotus pedunculatus</i> *	lotus
<i>Ludwigia palustris</i> *	water purslane

*Phytolacca octandra*\*

*Prunella vulgaris*\*

*Ranunculus repens*\*

*Solanum nigrum*\*

inkweed

selfheal

creeping buttercup

black nightshade

### **Grasses**

*Glyceria declinata*\*

*Holcus lanatus*\*

*Microlaena avenacea*

*Oplismenus hirtellus* subsp. *imbecillis*

blue sweetgrass

Yorkshire fog

bush rice grass

## Pehitawa Kahikatea Forest Reserve – 22 November 2015

By Chris Lusk

After weather caused a couple of postponements, it was good to finally get to Pehitawa, an 18.5 ha block purchased by the Native Forest Restoration Trust in 2001. The trust's timely intervention was spurred by the ongoing clearance of once-extensive kahikatea forests in the Mangapu River valley, North-West of Te Kuiti. "Kahikatea forest" was interpreted as a mandate to don gumboots, and this turned out to be a good decision. Pehitawa is a rare example of a kahikatea forest remnant where the water table has not been lowered radically by drainage.

What struck me first was the abundance of frost-sensitive pukatea (*Laurelia novae-zealandiae*). I thought the King Country was supposed to be cold, but on checking climate data afterwards, I found Te Kuiti's climate is almost identical to Hamilton's. The whole forest has a thoroughly warm-temperate character, the commonest trees besides kahikatea (*Dacrycarpus dacrydioides*) being swamp maire (*Syzygium maire*), pukatea and titoki (*Alectryon excelsus*); plus lots of young nikau (*Rhopalostylis sapida*) in the understorey. A dislike of wet feet probably explains the absence or scarcity of some other widespread warm-temperate trees, like tawa (*Beilschmiedia tawa*) (uncommon), mangeao (*Litsea calicaris*) (uncommon), hinau (*Eleocharis acicularis*) (not seen) and rewarewa (*Knightsia excelsa*) (not seen). Treeferns were also scarce, apart from occasional *Dicksonia squarrosa*. On the other hand, the damp meant our species list included many wetland plants.



***Fuschia perscandens* Photo: K. Jones**



***Ranunculus amphitricus* Photo: K. Jones**

Between us we turned up over 140 vascular plant species in the forest, about 25% of them exotics. The privets (*Ligustrum lucidum* and *L. sinense*) probably pose the biggest threats to the reserve, as their seedlings are present throughout, and the shade tolerance of *L. lucidum* in particular has enabled it to develop to adult size right in the heart of the forest. In the afternoon, an exotic-looking fern appeared in front of us, growing on the bank of a small stream; I looked on oblivious as Thomas and Kerry rushed forward in tacit complicity, and ferociously assaulted the plant. I was soon to learn this green villain was Royal fern (*Osmunda regalis*), which they had been trying to eradicate at another site only days before. They

thought it was probably yet to sporulate; we searched downstream for other invaders (none found) before carrying out the remains in a plastic bag, to be disposed of at DOC's bio-dump.



*Hymenophyllum flexuosum* Photo: K. Jones

We were Thomas Emmitt (leader), Amy Hawcroft, Dave Smith, Kerry Jones, Paul Cashmore, Tim Quinnell, Chris Lusk (scribe). Thanks to Amy, Thomas and Paul for identifying the most difficult plants.

## *Pehitawa Kahikatea Forest Reserve species list*

### **Gymnosperm Trees & Shrubs**

<i>Dacrycarpus dacrydioides</i>	kahikatea, white pine
<i>Dacrydium cupressinum</i>	rimu, red pine
<i>Podocarpus totara</i>	totara
<i>Prumnopitys taxifolia</i>	matai

### **Monocotyledonous trees and shrubs**

<i>Cordyline australis</i>	ti kouka, cabbage tree
<i>Rhopalostylis sapida</i>	nikau

### **Monocotyledonous lianes**

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

### **Dicotyledonous lianes and related trailing plants**

<i>Clematis foetida</i>	
<i>Lonicera japonica*</i>	japanese honeysuckle
<i>Metrosideros colensoi</i>	rata
<i>Metrosideros diffusa</i>	white rata
<i>Muehlenbeckia australis</i>	Pohuehue, large-leaved muehlenbeckia
<i>Parsonsia capsularis</i>	new zealand jasmine,
<i>Parsonsia heterophylla</i>	new zealand jasmine,
<i>Passiflora tetrandra</i>	Kohia, NZ passionflower, NZ passionfruit
<i>Rubus australis</i>	Tataramoa, bush lawyer, swamp lawyer
<i>Rubus fruticosus*</i>	blackberry
<i>Rubus schmidelioides</i> var. <i>schmidelioides</i>	Tataramoa, bush lawyer, white-leaved lawyer

## Dicotyledonous trees and shrubs

<i>Alectryon excelsus</i>	titoki
<i>Aristotelia serrata</i>	wineberry, makomako
<i>Beilschmedia tawa</i>	tawa
<i>Berberis glaucocarpa*</i>	barberry
<i>Carpodetus serratus</i>	putaputaweta, marble leaf
<i>Coprosma areolata</i>	thin-leaved Coprosma
<i>Coprosma propinqua</i>	mingimingi
<i>Coprosma propinqua x robusta</i>	
<i>Coprosma rhamnoides</i>	
<i>Coprosma robusta</i>	karamu, glossy karamu
<i>Coprosma rotundifolia</i>	
<i>Coprosma tenuicaulis</i>	swamp Coprosma, hukihuki
<i>Dysoxylum spectabile</i>	kohekohe
<i>Fuchsia excorticata</i>	kotukutuku, tree Fuchsia
<i>Fuchsia perscandens</i>	
<i>Geniostoma rupestre</i>	hangehange, maori privet
<i>Hedycarya arborea</i>	pigeonwood, porokaiwhiri
<i>Hoheria populnea</i>	hohere, lacebark
<i>Hoheria sexstylosa</i>	hohere, lacebark
<i>Laurelia novae-zelandiae</i>	pukatea
<i>Leucopogon fasciculatus</i>	mingimingi
<i>Ligustrum lucidum*</i>	tree privet
<i>Ligustrum sinense*</i>	chinese privet
<i>Litsea calicaris</i>	mangeo
<i>Melicope simplex</i>	Poataniwha
<i>Melicytus micranthus</i>	Swamp mahoe
<i>Melicytus ramiflorus</i>	mahoe, whiteywood
<i>Myrsine australis</i>	mapou, red matipo
<i>Neomyrtus pedunculata</i>	rohutu
<i>Nestegis cunninghamii</i>	black maire
<i>Nestegis lanceolata</i>	white maire
<i>Olearia lineata (P)</i>	
<i>Piper excelsum</i>	kawakawa
<i>Pittosporum eugenioides</i>	tarata
<i>Pittosporum tenuifolium</i>	kohuhu
<i>Prunus species*</i>	
<i>Pseudopanax crassifolius</i>	horoeka
<i>Salix cinerea*</i>	grey willow
<i>Salix fragilis*</i>	crack willow
<i>Schefflera digitata</i>	pate
<i>Sophora microphylla</i>	kowhai
<i>Streblus heterophyllus</i>	small-leaved milk tree, turepo
<i>Syzygium maire</i>	swamp maire, maire tawake, waiwaka

## Lycophytes

*Phlegmariurus varius*

clubmoss

## Ferns

*Adiantum cunninghamii*

Common maidenhair, Cunninghams maidenhair

*Arthropteris tenella*

Jointed fern

*Asplenium bulbiferum*

Hen and chicken fern, pikopiko, mother spleenwort

*Asplenium flaccidum*

Drooping spleenwort, hanging spleenwort

*Asplenium oblongifolium*

Shining Spleenwort

*Asplenium polyodon*

sickle spleenwort

*Blechnum chambersii*

Lance fern, nini, rereti

*Blechnum filiforme*

thread fern, climbing hard fern

*Blechnum fluviatile*

kiwikiwi, kiwakiwa, creek fern

*Blechnum membranaceum*

*Blechnum novae-zelandiae*

kiokio, horokio, palm leaf fern

*Cyathea dealbata*

silver fern, ponga

*Cyathea medullaris*

black tree fern, mamaku, black mamaku

*Cyathea smithii*

katote, Smiths tree fern, soft tree fern

*Deparia petersenii*

*Dicksonia squarrosa*

rough tree fern, harsh tree fern, wheki

*Diplazium australe*

*Histiopteris incisa*

histiopteris, water fern, mata, bat's wing fern

*Hymenophyllum flexuosum*

filmy fern

*Lastreopsis glabella*

Smooth shield fern

*Microsorium pustulatum*

hounds tongue, kowaowao, paraharaha

*Microsorium scandens*

fragrant fern, mokimoki

*Osmunda regalis\**

royal fern

*Pneumatopteris pennigera*

gully fern, feather fern, piupiu

*Pteris macilenta*

sweet fern

*Pyrrhosia eleagnifolia*

leather leaf fern

*Tmesipteris elongata*

fork fern

## Orchids

*Corybus trilobus*

spider orchid

*Earina autumnalis*

Easter orchid, raupeka

*Earina mucronata*

bamboo orchid, peka-a-waka, spring earina

## Grasses

*Austroderia fulvida*

toetoe

*Cortaderia jubata\**

pampas

*Microlaena avenacea*

bush rice grass

*Oplismenus hirtellus subsp. imbecillis*

*Glyceria maxima*\*  
*Poa trivialis*\*

floating sweetgrass, reed sweetgrass  
rough-stalked meadow grass

### Sedges

*Carex dissita*  
*Carex geminata*  
*Carex virgata*  
*Cyperus eragrostis*\*  
*Gahnia* sp.

forest sedge  
Cutty grass, Rautahi  
swamp sedge, pukio, toitoi, toetoe  
umbrella sedge

### Rushes and Allied Plants

*Isolepis prolifera*  
*Juncus articulatus*\*

jointed rush

### Monocotyledonous herbs

*Astelia grandis*  
*Astelia hastata*  
*Astelia solandri*  
*Phormium tenax*

Swamp astelia  
tank lily  
Perching lily, kaiwharawhara  
flax, harakeke

### Dicotoledonous Herbs - Composites

*Conyza sumatrensis*\*  
*Jacobaea vulgaris*\*  
*Lactuca serriola*\*  
*Leontodon taraxicoides*\*  
*Senecio bipinnatisectus*\*  
*Sonchus oleraceus*\*

broad leaved fleabane  
ragwort  
prickly lettuce  
hawkbit  
australian fireweed  
sow thistle

### Dicotyledonous herbs other than Composites

*Alisma plantago-aquatica*\*  
*Apium nodiflorum*\*  
*Callitriche petrei*  
*Centella uniflora*  
*Cardamine* sp.  
*Galium palustre*  
*Ludwigia palustris*\*  
*Lycopus europaeus*\*  
*Haloragis erecta*  
*Hydrocotyle hetromeria*  
*Hydrocotyle pterocarpa*  
*Lobelia angulata*  
*Lotus pedunculatus*\*

water plantain  
water celery, fool's water cress  
Petrie's starwort  
  
bittercress  
marsh bedstraw  
Water purslane, marsh ludwigia  
gypsywort  
shrubby toatoa  
waxweed, waxweed pennywort

<i>Myosotis laxa</i> *	water forget-me-not
<i>Phytolacca octandra</i> *	inkweed
<i>Prunella vulgaris</i> *	selfheal
<i>Ranunculus amphitrichus</i>	waoriki
<i>Ranunculus flammula</i> *	spearwort
<i>Ranunculus repens</i> *	buttercup
<i>Solanum nigrum</i> *	black nightshade
<i>Stachys sylvatica</i> *	hedge woundwort
<i>Stellaria parviflora</i>	New Zealand chickweed
<i>Tradescantia fluminensis</i> *	wandering jew
<i>Urtica incisa</i>	scrub nettle

## Trip programme – 2016

**\*\*Please note:** We would like intending participants to give the leader a call during the week before the trip. This will give the leader an idea of the party, and enable them to give you any last minute information. If the leader is not available contact Kerry Jones Ph: 027 747 0733.

**The meeting place unless otherwise stated, is the carpark at Landcare Research, Gate 10 Silverdale Road. We will carpool with a donation for petrol expenses for cars/boats to drivers please.**

### Reminder to trip leaders

Please remember to take a first aid kit. You are also responsible for delegating the writing up of the trip report or writing it yourself and getting it to the editor within four weeks of the trip. A very brief report is much better than no report! Please send to Susan Emmitt: [susan.carrodus@gmail.com](mailto:susan.carrodus@gmail.com).

## January 30 - 1st February 2016 - Mt Whareorino & Waikawau Beach Headland

**Leader:** Thomas Emmitt Ph: 021 152 3030 Email: [temmitt@doc.govt.nz](mailto:temmitt@doc.govt.nz)

**Meet:** Outside Waikawau School on Waikawau Road at 10am on Saturday 30<sup>th</sup> January.

**Grade:** Medium-hard

Mount Whareorino summit sits at 649 metres above sea level and represents some of the oldest exposed rocks of its type in the Waikato. The summit is dominated by *Dracophyllum traversii*, *Quintinia* and kamahi with the surrounding slopes being a mix of coastal broadleaf species such as kohekohe and puriri. Gully tree fern *Cyathea cunninghamii* appears to be the dominant species of tree fern in the area. We will be accessing the mountain through Nukuhakari Station. For those who wish to stay for the weekend we will be camping at Waikawau and exploring Ngarupupu Point and other locations on the Sunday and Monday (Auckland Anniversary weekend). Ngarupupu Point is home to the threatened forget-me-not *Myosotis pansa* var. *praeceps*.

Contact the organiser to register and to arrange camping and carpooling details.

**Bring:** Lots of water, tent, good footwear, dinner & breakfast & a fishing rod if you want to have a go surfcasting off the beach.



## 20th February 2016 - Whakamarama Wetlands (combined with Rotorua Botanical Society)

**Leader:** Kerry Jones Ph: 07 855 9700 / 027 747 0733 Email: [km8j1s@gmail.com](mailto:km8j1s@gmail.com)

**Host:** Anne Mackersey

**Meet:** Whakamarama Hall at 9:30 (Opposite the school).

To get the Whakamarama Hall head north from Tauranga on SH2, go through Te Puna and then over the Te Puna Stream Bridge. After the bridge turn left on to Barrett Road. Then left on to Old State Highway and then right on to Whakamarama Road. The Whakamarama Hall is about 4.5 km up Whakamarama Road (Opposite the school).

The first wetland is about 10 minutes from the carpark which is 1km into the Forest Park from the end of the Whakamarama Rd. It has a boardwalk through the middle of it where an old tramway used to pass. Spaghnum moss and *Astelia* have dominated the area in the past but now a range regenerating podocarps and vegetation is emerging. Fernbird may be present. The second wetland is about one hour walk in. The walk is mostly along old tramways with two easy river crossings. This is more a 'hanging' swamp with the Ngamuwahine River flowing on the periphery and below it.

## 12th March 2016 - *Hebe Speciosa* site North of Aotea Harbour

**Leader:** Mike Paviour Ph: 027 801 9452, Email: [mpaviour@doc.govt.nz](mailto:mpaviour@doc.govt.nz)

Rocky coastline north of Aotea Harbour, accessed over private farmland. You need a four wheel drive to get across the farm so numbers are needed, as are four wheel drives.

**Meet:** End of Phillips Road. Please let Mike know that you are coming so we can arrange car pooling with four-wheel drive vehicles to the site.

**Grade:** Hard. The site is quite challenging as there is steep gullies, climbing, small streams, a real adventure that people need to be relatively fit for and not too creaky.

**Bring:** Bring sturdy foot wear, clothing that you can climb through bush, streams and steep areas, and whatever the weather is forecasting.

## Saturday 19th March– Mt Tarawera (Combined with Forest and Bird and Waikato Botanical Society) (Sunday 20th March reserve day if Saturday is wet)

**Leader:** Paul Cashmore **Contact:** Sandra Goodwin Ph: 07 362-8865 Email: [sgoodwin@actrix.co.nz](mailto:sgoodwin@actrix.co.nz)

**Meet :** Te Puia Carpark (southern end) (ex Maori Arts and Crafts Institute) at the South end of Rotorua on SH30 just north of the SH 5 (Old Taupo Rd) intersection at 8:30am or DOC Ashpit Road campground, Lake Rerewhakaaitu at 9:15am.

**Grade:** Medium-Hard and in particular confident walking on steep mobile scoria slopes and along high and sharp ridges.

**Registration:** Minimum age 14 years old. Maximum of 30 people on trip on a first come basis but must register first with Sandra Goodwin by Monday 14 March at latest.

**Cost:** Free

**Bring:** Minimum two litres water, lunch and snacks, wet weather and warm gear, sun hat, sunblock, boots or sturdy shoes, gaiters and/or leggings an advantage for loose scoria, gloves for pulling out pines.

We will be driven to the top of Mt Tarawera by 4WD bus and vehicle to the crater rim and hear a bit about the history and ecological values of the mountain. We will be led by staff from Kaitiaki Tours with assistance from Ruawahia trustees and DOC staff while we take in the stunning views. This year we will climb onto the edge of Ruawahia or Tarawera domes with time to take in the flora, fauna and 360 degree views of the Bay of Plenty. We will then spend the rest of the day helping to handpull wilding conifer seedlings to assist the Ruawahia Wilding Conifer Project which aims to control the spread of wilding conifers in order to protect the unique values on the mountain.

## 25th June - Whewells bush and Tamahere Gully

**Leader:** Kerry Jones Ph: 07 855 9700 / 027 747 0733 Email: [km8j1s@gmail.com](mailto:km8j1s@gmail.com)

**Grade:** Easy

**Meet:** Whewells Bush Gate Entrance at 10:00 on Swallow Lane (off Tauwhare Road) halfway between Tamahere and Matangi.

Whewells Bush is a DOC Scientific Reserve. It is 11ha of remnant kahikatea. We may combine this trip with a Whewells Bush weeding group working bee. Afterwards we may have a look at one of the Tamahere gullies.

## 17th September 2016 - Moanatuatua Peat Bog

**Leader:** Kerry Jones Kerry Jones Ph: 07 855 9700 / 027 747 0733 Email: [km8j1s@gmail.com](mailto:km8j1s@gmail.com)

**Grade:** Easy

**Meet:** Ohaupo at 10:00

Moanatuatua is an 8500 ha peat bog administered by DOC as a Scientific Reserve between Ohaupo and Cambridge. Here we will see *Sporodanthus* and *Epacris pauciflora*. Fernbird are also present.

## 1st and 2nd October 2016 - Waitete Bay

**Leader:** Dell Hood Email: [dhood@xtra.co.nz](mailto:dhood@xtra.co.nz)

Ron and Dell invite members to stay at their place at Waitete Bay, just south of Colville, as a base to visit a very neglected Thames Coromandel District Council reserve on the Colville Hill. This 14 ha forest remnant deserves some care and more information about its botanical diversity might be helpful in achieving this.

As well as the reserve, there are adjacent privately protected forests we are welcome to visit, as well as our own little (8 ha) QEII covenant which is still in the early stages of regeneration. Local environmental enthusiasts are keen to join us.

**Accommodation options:** We have two spare bedrooms, lots of squabs and living room floor, and for those who'd prefer a little more privacy there is public accommodation at Amodeo Bay 2km south of Waitete, and at Colville, 10km north. On quiet nights kiwi can usually be heard in this area.

## 12th November – Piggott Wetland

**Leader:** Paula Reeves Ph 021 267 5802 Email: [pnreeves42@gmail.com](mailto:pnreeves42@gmail.com)

**Meet:** 9am at the Landcare Research carpark off Silverdale Rd, Hamilton or at 10am on the corner of Buckland Road and Parker Lane, north of Tuakau

Piggott Wetland is a 53 ha block near Tuakau, which is owned by Auckland / Waikato Fish and Game Council. It is a floodplain wetland with several large kahikatea stands typical of the Waikato River Delta. Fish and Game have been restoring habitat at this reserve which we will view along with the kahikatea stands. A great chance to see this type of habitat that is not usually accessible.

### Waikato Botanical Society

**President:** Kerry Jones [km8j1s@gmail.com](mailto:km8j1s@gmail.com)

**Newsletter Editor:** Susan Emmitt [susan.carrodus@gmail.com](mailto:susan.carrodus@gmail.com)

**Website:** <http://waikatobotsoc.org.nz/>

**Postal address:** The University of Waikato C/o- Department of Biological Sciences Private Bag 3105 HAMILTON

**Email:** [secretary@waikatobotsoc.org.nz](mailto:secretary@waikatobotsoc.org.nz)