

Pūtauaki (Mt Edgecumbe) summit and wetland

Mieke Kapa

Fourteen people decided to explore the world famous (in the Eastern Bay of Plenty) Pūtauaki. Driving to the top of the maunga was an experience in itself for some. Once organised, and after a view of the Rangitāiki Plains and Kawerau, the trip leader (Mieke Kapa) talked about the work Ngā Maunga Kaitiaki Trust have been doing to restore and manage this iconic landscape. The Trust, together with Bay of Plenty Regional Council and others, are putting in considerable time and effort into removing pest plants and exotic species to restore the cloak of indigenous vegetation over the maunga. Eventually, the Trust's aspiration is to have the maunga fully covered in indigenous species once again. In addition to the pest plant work, pest animal work includes an extensive bait station network within tall forest and mustelid and feral cat control around the maunga and up access roads.

We wandered down the access road a little and then entered onto one of the bait station tracks that follows around the wetland. Several members commented on the variety of species within the understorey including lots of *Alseuosmia macrophylla*, *Coprosma autumnalis*, tarata (lemonwood) and raukawa.



Rotorua Botanical Society exploring Pūtauaki. Photo: Mieke Kapa

The sub-montane vegetation type here included scattered podocarps (rimu, Hall's tōtara, and miro) over the top of a tāwari – tawa – kamahi – rewarewa dominant canopy. While walking in this area we kept an eye out for pua o te reinga (wood rose) as there had been an old record of this species near the top of Pūtauaki. Although the timing was right to see the flowers and there were some host trees around, we unfortunately didn't come across any plants.

While it probably took an hour to get to the wetland it was worth the wait. The open water was mostly covered by kuta (tall spike sedge), just starting to take on that beautiful golden look. Around the outside the herb-field sedgeland was mostly comprised of *Juncus bulbosus*, *Lobelia angulata*, *Eleocharis gracilis*, and *Gratiola sexdentata*. Unfortunately, it appeared that pig and deer had been in the area as kuta around the margins had been squashed and trampled over. A few Chinese privet and Japanese honeysuckle plants were cut and pasted but it was decided that the small amount of grey willow, pampas and blackberry will need further follow-up by a contractor. The all-important lunch break was taken looking across the wetland up into the forest – absolutely stunning.



Open water of the wetland, surrounded by a band of kuta. Photo: Mieke Kapa

After we left the wetland, we walked back up the access road and followed the ridge around the wetland area. The tāwari forest here also included displays of flowering *Earina autumnalis* and *Libertia grandiflora* that had not long finished flowering.

Other species of note included *Corokia buddelioides* and epiphytic tawheowheo (quintinia).

The bait station line followed the ridgeline back to the access road at the perfect time and spot for the group to then walk up to the trig at a non-botanising speed. The views were worth the hike up and getting there definitely ticked a few people's bucket list of things to do. At the top there was a discussion around the attributes of *Gaultheria oppositifolia* and the trees around the fire lookout which included tawari, kāmahi and kāpuka (broadleaf).

After a quick walk down from the trig and back to the vehicles the group drove slowly and carefully down the mountain. The day was enjoyed by all, we were able to drive to the top, the promised rain didn't eventuate, we saw a number of different vegetation types, we got to climb to the trig, newbies were able to learn a lot, and, we saw heaps more that needs exploring. Thanks to Ngā Maunga Kaitiaki Trust and Māori Investments Ltd for allowing access and permits.

Pūtauaki (Mt Edgecumbe) summit forest, trackside and lake

Graeme Jane, Gael Donaghy

Compiled from visit 28 March 2021 and visits by SM Beadel 1995 & 1999

*= exotic species

Psilopsids, Lycopods & Quillworts

Lycopodium volubile

Phlegmariurus varius

Blechnum fluviatile

Blechnum minus

Blechnum novae-zelandiae

Cyathea dealbata

Cyathea medullaris

Cyathea smithii

Dicksonia squarrosa

Diplazium australe

Histiopteris incisa

Hymenophyllum demissum

Hymenophyllum dilatatum

Hymenophyllum multifidum

Hymenophyllum nephrophyllum

Hymenophyllum rarum

Ferns

Asplenium appendiculatum subsp.
appendiculatum

Asplenium bulbiferum

Asplenium bulbiferum x *A. flaccidum*

Asplenium flaccidum

Blechnum chambersii

Blechnum colensoi

Blechnum deltooides

Blechnum discolor

Blechnum filiforme

Hymenophyllum revolutum
Hymenophyllum sanguinolentum
Hypolepis ambigua
Leptopteris hymenophylloides
Lindsaea trichomanoides
Microsorium novae-zelandiae
Microsorium pustulatum subsp.
pustulatum
Notogrammitis angustifolia subsp.
nothofageti
Notogrammitis billardierei
Notogrammitis billardierei
Notogrammitis ciliata
Notogrammitis heterophylla
Paesia scaberula
Pneumatopteris pennigera
Polystichum vestitum
Pteridium esculentum
Pteris macilenta
Pyrrosia elaeagnifolia
Rumohra adiantiformis
Tmesipteris elongata
Tmesipteris tannensis
Trichomanes venosum

Gymnosperm trees and shrubs

Dacrydium cupressinum
Phyllocladus toatoa
Podocarpus laetus
Prumnopitys ferruginea

Dicotyledonous trees and shrubs

Alseuosmia macrophylla
Aristotelia serrata
Beilschmiedia tawa
Brachyglottis repanda
* *Buddleja davidii*
Carpodetus serratus
Coprosma autumnalis
Coprosma lucida

Coprosma robusta
Coriaria arborea var. *arborea*
Corokia buddleioides
* *Cotoneaster glaucophyllus*
* *Cytisus scoparius*
Elaeocarpus dentatus var. *dentatus*
* *Erica lusitanica*
Gaultheria antipoda
Gaultheria oppositifolia
Geniostoma ligustrifolium var.
ligustrifolium
Griselinia littoralis
Griselinia lucida
* *Hakea salicifolia*
Hebe stricta var. *stricta*
Hedycarya arborea
* *Hypericum androsaemum*
Ixerba brexioides
Knightia excelsa
Leptospermum scoparium var.
scoparium
Leucopogon fasciculatus
* *Ligustrum sinense*
Litsea calicaris
Lophomyrtus bullata
Meliccytus ramiflorus subsp. *ramiflorus*
Metrosideros robusta
Myrsine australis
Myrsine salicina
Olearia furfuracea
Olearia rani var. *colorata*
Pimelea prostrata subsp. *thermalis*
Piper excelsum subsp. *excelsum*
Pittosporum eugenioides
Pittosporum tenuifolium
* *Prunus campanulata*
Pseudopanax arboreus
Pseudopanax crassifolius
Pseudowintera axillaris
Pseudowintera colorata

Quintinia serrata
Raukava edgerleyi
* *Salix cinerea*
Schefflera digitata
* *Ulex europaeus*
Weinmannia racemosa

Dicotyledonous lianes and related trailing plants

Clematis forsteri
Clematis paniculata
* *Lonicera japonica*
Metrosideros diffusa
Metrosideros perforata
Muehlenbeckia australis
Rubus cissoides
* *Rubus fruticosus*

Daisy-like herbs

* *Bidens frondosa*
* *Cirsium vulgare*
* *Crepis capillaris*
* *Erigeron sumatrensis*
Euchiton audax
Euchiton japonicus
Euchiton limosus
Euchiton sphaericus
* *Gamochaeta coarctata*
* *Hypochaeris radicata*
* *Jacobaea vulgaris*
Lagenophora pumila
* *Leontodon saxatilis*
* *Leucanthemum vulgare*
* *Mycelis muralis*
Senecio bipinnatisectus
Senecio hispidulus
* *Symphyotrichum subulatum*

Dicotyledonous herbs other than Daisies

Acaena anserinifolia

* *Acaena novae-zelandiae*
Cardamine dolichostyla
Cardamine forsteri
* *Centaureum erythraea*
* *Cerastium fontanum* subsp. *vulgare*
* *Daucus carota*
Dichondra brevifolia
* *Digitalis purpurea*
* *Echium vulgare*
Epilobium rotundifolium
* *Euphorbia peplus*
Geranium potentilloides
Gratiola sexdentata
Haloragis erecta subsp. *erecta*
Hydrocotyle microphylla
Hydrocotyle moschata var. *moschata*
* *Hypericum perforatum*
Hypericum pusillum
Lobelia angulata
* *Lotus pedunculatus*
* *Lysimachia arvensis* subsp. *arvensis*
var. *arvensis*
* *Myosotis laxa* subsp. *caespitosa*
Myriophyllum propinquum
Nertera depressa
* *Ornithopus pinnatus*
* *Plantago australis*
* *Plantago lanceolata*
* *Plantago major*
* *Prunella vulgaris*
* *Ranunculus flammula*
Ranunculus membranifolius
* *Ranunculus repens*
* *Sagina apetala*
Stellaria parviflora
* *Trifolium arvense*
* *Trifolium pratense*
* *Trifolium repens*
* *Verbena bonariensis*
* *Veronica serpyllifolia*

Wahlenbergia violacea

Monocotyledonous trees and shrubs

Cordyline australis

Monocotyledonous lianes

Freycinetia banksii

Ripogonum scandens

Sedges

Carex banksiana

Carex flagellifera

Carex healyi

Carex imbecilla

Carex secta

Carex silvestris

Carex uncinata

Carex virgata

Carex zotovii

Eleocharis acuta

Eleocharis gracilis

Eleocharis sphacelata

Gahnia pauciflora

Gahnia setifolia

Machaerina tenax

Morelotia affinis

Schoenus maschalinus

Rushes and allied plants

* *Juncus bulbosus*

Juncus edgariae

Juncus pauciflorus

* *Juncus tenuis* subsp. *tenuis*

Luzula picta var. *picta*

Grasses

* *Agrostis capillaris*

* *Agrostis stolonifera*

* *Anthoxanthum odoratum*

Austroderia fulvida

* *Bromus valdivianus*

Chionochloa conspicua subsp.
cunninghamii

Deyeuxia avenoides

* *Eragrostis brownii*

* *Festuca rubra* subsp. *rubra*

Hierochloa redolens

* *Holcus lanatus*

Lachnagrostis elata

Microlaena avenacea

* *Miscanthus nepalensis*

Poa anceps subsp. *anceps*

Rytidosperma gracile

* *Rytidosperma racemosum*

Remaining Monocotyledonous herbs

Astelia hastata

Astelia microsperma

Astelia solandri

Dianella nigra

Libertia grandiflora

Phormium cookianum subsp.
cookianum

Phormium tenax

Orchids

Corybas macranthus

Dendrobium cunninghamii

Earina autumnalis

Earina mucronata

Microtis unifolia

Thelymitra longifolia