

PUTAUAKI FIELD TRIP

W.B. Shaw

A sizeable and diverse group of 27 gathered in Kawerau on a beautiful late winter morning in August 1999 for the steep climb to the summit of Putauaki. Attendance on the trip was bolstered by inclusion in the Conservation Week programme.

Putauaki is a quiescent volcano which is a prominent and distinctive landscape feature adjoining the southern side of the Rangitaiki Plains. The vegetation on Putauaki has been described and mapped in Beadel *et al.* 1996, and an earlier species list was also available (Beadel 1995).

The lower slopes are clothed with pine plantation but there is still a substantial area of indigenous vegetation on the mid-upper slopes. The mid-slopes have a thick scrub cover that includes karamu (*Coprosma robusta*), toetoe (*Cortaderia fulvida*), Spanish heath (*Erica lusitanica*), bracken (*Pteridium esculentum*), tataramoa (*Rubus cissoides*), rewarewa (*Knightia excelsa*), mahoe (*Melicytus ramiflorus*), and occasional ti kouka (*Cordyline australis*). There are local patches of bracken and pig sign was common (Putauaki has long been a popular destination for local hunters).

The scrub on upper slopes was a thick cover 2-3 metres in height and included mahoe, mapou (*Myrsine australis*), kamahi (*Weinmannia racemosa*), kapuka (*Griselinia littoralis*), toetoe (abundant), kohuhu (*Pittosporum tenuifolium*), tutu, tarata (*P. eugeniioides*), koromiko (*Hebe stricta* var. *stricta*), kiokio (*Blechnum novae-zelandiae*), and akepiro (*Olearia furfuracea*).

After lunch at the top of the climb we proceeded to the summit tarn. This is a beautiful feature, 100-150 metres across. The margins include a narrow strip of toetoe and manuka (*Leptospermum scoparium*), with occasional ti kouka. Other marginal species were

Pratia angulata, *tarata*, *Schoenus maschalinus*, lotus (*Lotus pedunculatus*), *Sphagnum* sp., *Rubus schmidelioides*, and *Baumea tenax*.

In the tarn there are beds of *Eleocharis sphacelata* and *Myriophyllum triphyllum*. *Ruppia polycarpa* was also present. In shallow water there was *Eleocharis acuta*, spearwort (*Ranunculus flammula*), and *Juncus articulatus*.

The slopes of the tarn basin are covered with indigenous forest that includes kamahi-dominant forest and a canopy of tawa (*Beilschmiedia tawa*) and tawari (*Ixerba brexioides*) with scattered emergent rimu (*Dacrydium cupressinum*), miro (*Prumnopitys ferruginea*), and Hall's totara (*Podocarpus hallii*).

Deer-palatable species are common in the forest understorey, including kanono (*Coprosma grandifolia*), mahoe, pate (*Schefflera digitata*), kamahi, *Astelia solandri*, and toropapa (*Alseuosmia macrophylla*). Other understorey species include *Blechnum chambersii*, *B. discolor*, heruheru (*Leptopteris hymenophylloides*), *Lindsaea trichomanoides*, *Hymenophyllum demissum*, and mangeao (locally common). Epiphytes include *Hymenophyllum rarum* and *Tmesipteris elongata*. There is an old record of *Dactylanthus taylorii* from the summit forest but none was seen on this visit.

We walked up to the highest point before retracing our steps for a much easier return to the base. There are fantastic views from Putauaki and the climb is worth it for the views alone. It is a pity though that human structures are now such a dominant feature of all of the high points on the mountain.

ACKNOWLEDGMENT

Fletcher Challenge Forests Ltd are thanked for providing permission to visit Putauaki.

REFERENCES

Beadel S.M. 1995: Putauaki - checklist of plant species. Unpublished Wildland Consultants Ltd species list. 5 pp. (An updated version is provided in this issue of the newsletter.)

Beadel S.M.; Townsend A.J. and Shaw W.B. 1996: Natural Heritage of the Whakatane District. *Wildland Consultants Ltd Contract Report No. 140*. 280 pp plus maps.

CHECKLIST OF VASCULAR PLANTS ON PUTAUAKI

Sarah Beadel 1999

Putauaki (also known as Mt Edgecumbe) is an andesite volcano at the northern end of the Kaingaroa Plateau in the Bay of Plenty, 300 m - 821 m, grid reference V16 381372.

The following list was compiled on field visits in November 1995 and August 1999 - the latter was a Rotorua Botanical Society field trip.

Indigenous

Gymnosperms

<i>Dacrydium cupressinum</i>	rimu
<i>Phyllocladus glaucus</i>	toatoa
<i>Phyllocladus trichomanoides</i>	
var. <i>trichomanoides</i>	tanekaha
<i>Podocarpus hallii</i>	Hall's totara
<i>Prumnopitys ferruginea</i>	miro

Monocot. trees and shrubs

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

Dicot. trees and shrubs

<i>Alseuosmia macrophylla</i>	toropapa
<i>Aristotelia serrata</i>	makomako, wineberry
<i>Beilschmiedia tawa</i>	tawa
<i>Brachyglottis repanda</i> s.s.	rangiora
<i>Carpodetus serratus</i>	putaputaweta

<i>Coprosma acerosa</i>	
<i>Coprosma grandifolia</i>	kanono
<i>Coprosma lucida</i>	karamu
<i>Coprosma robusta</i>	karamu
<i>Coriaria arborea</i> var. <i>arborea</i>	tutu
<i>Corokia buddleioides</i> (incl. <i>C. b.</i> var. <i>linearis</i>)	korokio
<i>Dodonaea viscosa</i>	akeake
<i>Dysoxylum spectabile</i>	kohekohe
<i>Elaeocarpus dentatus</i> (incl. <i>E. d.</i> var. <i>obvoatus</i>)	hinau
<i>Fuchsia excorticata</i>	kotukutuku
<i>Gaultheria antipoda</i>	tawiniwini
<i>Gaultheria antipoda</i> × <i>G. oppositifolia</i>	koropuka
<i>Gaultheria oppositifolia</i>	kama
<i>Geniostoma rupestre</i> var. <i>ligustrifolium</i>	hangehange
<i>Griselinia littoralis</i>	kapuka
<i>Hebe stricta</i> var. <i>stricta</i>	koromiko
<i>Hedycarya arborea</i>	porokaiwhiri, pigeonwood
<i>Ixerba brexioides</i>	tawari
<i>Knightia excelsa</i>	rewarewa
<i>Kunzea ericoides</i> var. <i>ericoides</i>	kanuka
<i>Leptospermum scoparium</i>	manuka
<i>Leucopogon fasciculatus</i>	mingimingi
<i>Leucopogon fraseri</i>	patotara
<i>Litsea calicaris</i>	mangeao
<i>Macropiper excelsum</i> var. <i>excelsum</i>	kawakawa
<i>Melicytus ramiflorus</i> subsp. <i>ramiflorus</i>	mahoe
<i>Metrosideros excelsa</i>	pohutukawa
<i>Metrosideros robusta</i>	northern rata
<i>Myrsine australis</i>	mapou
<i>Myrsine salicina</i>	toro

<i>Olearia furfuracea</i>	akepiro
<i>Olearia rani</i>	heketara
<i>Pimelea prostrata</i> s.s.	pinatoro
<i>Pittosporum eugenioides</i>	tarata
<i>Pittosporum tenuifolium</i> subsp. <i>tenuifolium</i>	kohuhu
<i>Pseudopanax crassifolius</i>	horoeka, lancewood
<i>Pseudowintera colorata</i>	horopito
<i>Quintinia serrata</i>	
(incl. <i>Q. acutifolia</i> and <i>Q. elliptica</i>)	tawheowheo
<i>Raukawa edgerleyi</i>	raukawa
<i>Schefflera digitata</i>	pate
<i>Vitex lucens</i>	puriri
<i>Weinmannia racemosa</i>	kamahi

Monocot. lianes

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

Dicot. lianes

<i>Clematis forsteri</i>	poananga
<i>Clematis paniculata</i>	puawananga
<i>Metrosideros diffusa</i>	rata
<i>Metrosideros fulgens</i>	rata
<i>Metrosideros perforata</i>	aka
<i>Muehlenbeckia complexa</i>	pohuehue
<i>Parsonsia capsularis</i>	akakiore
<i>Rubus cissoides</i>	tataramoa
<i>Rubus schmidelioides</i>	akatataramoa

Lycopods and psilopsids

<i>Huperzia varia</i>	Whiri-o-Raukatauri
<i>Lycopodium fastigiatum</i>	
<i>Lycopodium volubile</i>	waewaekoukou
<i>Psilotum nudum</i>	
<i>Tmesipteris elongata</i>	

Ferns

<i>Adiantum cunninghamii</i>	huruhuru tapairu
<i>Anarthropteris lanceolata</i>	
<i>Asplenium bulbiferum</i> s.s.	mouku
<i>Asplenium flaccidum</i> s.s.	makawe
<i>Asplenium oblongifolium</i>	huruhuruwhenua
<i>Asplenium polyodon</i>	petako
<i>Blechnum chambersii</i>	rereti
<i>Blechnum discolor</i>	petipeti, crown fern
<i>Blechnum filiforme</i>	panako
<i>Blechnum fluviatile</i> agg.	kiwikiwi
<i>Blechnum membranaceum</i>	
<i>Blechnum novae-zelandiae</i> s.s.	kiokio
<i>Blechnum procerum</i>	
<i>Blechnum vulcanicum</i>	korokio
<i>Ctenopteris heterophylla</i>	
<i>Cyathea dealbata</i>	ponga
<i>Cyathea medullaris</i>	mamaku
<i>Cyathea smithii</i>	katote
<i>Dicksonia fibrosa</i>	wheki-ponga
<i>Dicksonia squarrosa</i>	wheki
<i>Doodia australis</i>	pukupuku
<i>Grammitis</i> sp.	
<i>Histiopteris incisa</i>	matata

<i>Hymenophyllum demissum</i>	irirangi
<i>Hymenophyllum dilatatum</i>	matua mauku
<i>Hymenophyllum multifidum</i>	mauku
<i>Hymenophyllum rarum</i>	mauku
<i>Hymenophyllum revolutum</i>	mauku
<i>Hymenophyllum sanguinolentum</i>	piripiri
<i>Hypolepis ambigua</i>	
<i>Lastreopsis glabella</i>	
<i>Lastreopsis hispida</i>	
<i>Leptopteris hymenophylloides</i>	heruheru
<i>Lindsaea trichomanoides</i>	
<i>Microsorium novae-zelandiae</i>	
<i>Microsorium pustulatum</i>	kowaowao
<i>Microsorium scandens</i>	mokimoki
<i>Paesia scaberula</i>	matata
<i>Pellaea rotundifolia</i>	tarawera
<i>Pneumatopteris pennigera</i>	pakau
<i>Polystichum richardii</i>	pikopiko
<i>Polystichum vestitum</i>	puniu
<i>Pteridium esculentum</i>	rarahu
<i>Pteris macilenta</i>	
<i>Pteris tremula</i>	turawera
<i>Pyrrhosia eleagnifolia</i>	
<i>Rumohra adiantiformis</i>	
<i>Trichomanes reniforme</i>	konehu

Orchids

<i>Drymoanthus adversus</i>	
<i>Earina autumnalis</i>	raupeka
<i>Earina mucronata</i> s.s.	peka-a-waka

<i>Microtis unifolia</i>	
<i>Thelymitra hatchii</i>	
<i>Thelymitra longifolia</i>	maikuku
<i>Winika cunninghamii</i>	

Grasses

<i>Cortaderia fulvida</i>	toetoe
<i>Deyeuxia avenoides</i> (incl. <i>D. a.</i> var. <i>brachyantha</i>)	
<i>Dichelachne crinita</i>	patiti
<i>Hierochloe redolens</i>	karetu
<i>Lachnagrostis filiformis</i>	
<i>Microlaena avenacea</i>	bush rice grass
<i>Microlaena stipoides</i>	patiti
<i>Oplismenus imbecillis</i>	
<i>Poa anceps</i> subsp. <i>anceps</i>	
<i>Poa</i> sp.	
<i>Rytidosperma gracilis</i>	
<i>Rytidosperma</i> sp.	

Sedges

<i>Baumea tenax</i>	
<i>Carex breviculmis</i>	
<i>Carex secta</i>	purei
<i>Carex virgata</i>	purei
<i>Eleocharis acuta</i>	
<i>Eleocharis gracilis</i>	
<i>Eleocharis sphacelata</i>	
<i>Gahnia pauciflora</i>	takahikahi
<i>Isolepis nodosa</i>	
<i>Morelotia affinis</i>	

Schoenus maschalinnus

Uncinia scabra matau

Uncinia uncinata kamu, matau a Maui

Uncinia gracilentia

Rushes

Juncus gregiflorus wi

Luzula picta var. *picta*

Monocot. herbs (other than orchids, grasses, sedges and rushes)

Astelia solandri kowharawhara

Collospermum hastatum kahakaha

Collospermum microspermum

Dianella nigra turutu

Libertia grandifolia mikoikoi

Ruppia sp.

Composite herbs

Celmisia gracilentia pekapeka

Euchiton involucratus

Euchiton audax

Helichrysum filicaule

Lagenifera pumila papataniwhaniwha

Senecio minimus

Vittadinia australis

Dicot. herbs (other than composites)

Acaena anserinifolia piripiri

Cardamine sp. (*C. debilis* agg.) panapana

Epilobium nummulariifolium

<i>Epilobium pedunculare</i>	
<i>Geranium potentilloides</i> var. <i>potentilloides</i>	
<i>Gratiola sexdentata</i>	
<i>Haloragis erecta</i> subsp. <i>erecta</i>	toatoa
<i>Hydrocotyle microphylla</i>	
<i>Myriophyllum triphyllum</i>	
<i>Nertera depressa</i>	
<i>Pelargonium inodorum</i>	kopata
<i>Pratia angulata</i>	panakenake
<i>Ranunculus reflexus</i>	maruru
<i>Stellaria decipiens</i> (incl. <i>S. minuta</i> and <i>S. parviflora</i>)	kohukohu
<i>Wahlenbergia violacea</i>	

Adventive Plants

Gymnosperms

<i>Pinus radiata</i>	radiata pine
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Dicot. trees and shrubs

<i>Albizia lophantha</i>	brush wattle
<i>Buddleja davidii</i>	buddleia
<i>Cytisus scoparius</i>	broom
<i>Erica lusitanica</i>	Spanish heath
<i>Hydrangea macrophylla</i>	hydrangea
<i>Ligustrum sinense</i>	Chinese privet
<i>Lupinus arboreus</i>	lupin
<i>Rosa rubiginosa</i>	sweet brier
<i>Rubus</i> sp. (<i>R. fruticosus</i> agg.)	blackberry
<i>Teline monspessulana</i>	Montpellier broom

Ulex europaeus gorse

Dicot lianes

Lonicera japonica Japanese honeysuckle

Grasses

Agrostis capillaris browntop

Anthoxanthum odoratum sweet vernal

Bromus willdenowii prairie brome

Cortaderia selloana pampas

Eragrostis brownii bay grass

Festuca arundinacea tall fescue

Festuca rubra subsp. *rubra* red fescue

Holcus lanatus Yorkshire fog

Lolium perenne rye grass

Miscanthus nepalensis Himalaya fairy grass

Paspalum dilatatum paspalum

Rytidosperma racemosum

Sporobolus africanus ratstail

Sedges

Cyperus congestus

Rushes

Juncus acuminatus

Juncus tenuis track rush

Composite herbs

Achillea millefolium yarrow

Aster subulatus sea aster

<i>Cirsium arvense</i>	California thistle
<i>Cirsium vulgare</i>	Scotch thistle
<i>Conyza albida</i>	fleabane
<i>Crepis capillaris</i>	hawksear
<i>Gamochaeta spicata</i>	cudweed
<i>Hypochoeris radicata</i>	catsear
<i>Mycelis muralis</i>	wall lettuce
<i>Senecio jacobaea</i>	ragwort
<i>Sonchus asper</i>	prickly puha
<i>Sonchus oleraceus</i>	puha

Dicot. herbs (other than composites)

<i>Acaena agnipila</i>	Australian sheep's bur
<i>Acaena novae-zealandiae</i>	piripiri
<i>Anagallis arvensis</i>	scarlet pimpernell
<i>Centaurium erythraea</i>	centaury
<i>Cerastium fontanum</i>	mouse-ear chickweed
<i>Cynoglossum amabile</i>	Chinese forget-me-not
<i>Dianthus armeria</i>	Deptford pink
<i>Digitalis purpurea</i>	foxglove
<i>Echium vulgare</i>	viper's bugloss
<i>Galium aparine</i>	cleavers
<i>Galium</i> sp.	
<i>Lepidium</i> sp.	
<i>Lotus pedunculatus</i>	lotus
<i>Myosotis</i> sp.	forget-me-not
<i>Phytolacca octandra</i>	inkweed
<i>Plantago lanceolata</i>	narrow-leaved plantain
<i>Prunella vulgaris</i>	selfheal
<i>Ranunculus repens</i>	creeping buttercup

<i>Rumex acetosella</i>	sheep's sorrel
<i>Sagina procumbens</i>	pearlwort
<i>Solanum nigrum</i>	black nightshade
<i>Verbascum thapsus</i>	woolly mullein
<i>Verbena bonariensis</i>	purpletop

Planted

Monocot. trees and shrubs

<i>Phormium cookianum</i>	wharariki, mountain flax
<i>Phormium tenax</i>	harakeke, flax

Dicot. trees and shrubs

<i>Carpodetus serratus</i>	putaputaweta
<i>Coprosma lucida</i>	karamu
<i>Hebe</i> sp.	koromiko
<i>Kunzea ericoides</i> var. <i>ericoides</i>	kanuka
<i>Leptospermum scoparium</i> cv "pink-flowered"	
<i>Weinmannia racemosa</i>	kamaha

Grasses

<i>Chionochloa conspicua</i>	tussock
<i>Poa cita</i> (planted?)	silver tussock

REFERENCES

Clarkson B.D. 1979: Mt Edgecumbe, 23 September 1979. *Unpublished species list.*