

WANGANUI PLANT LIST 113

Vascular Plants of Carrington Road C ¹, New Plymouth Properties of A Barrett and H Emeny Listed as RAP 10 in Egmont Ecological district

Surveyed by Members of Wanganui Botanical Group, 27 March 1999;
A Dijkgraaf², D Caskey³ & C Ogle⁴, 23 Sept 2004.

Compiled by C C Ogle

Last revised 23 Sept 2004

The 1999 survey concentrated on the upper third of the forest patch on Mr Barrett's land (right side of the fence). The 2004 survey traversed the lower end of the forest, from Mr Emeny's to Barrett's side, and noted species as occurring in the upper third (nearest the road) and lower third.

* = adventive species; species listed as (u) = uncommon; (j) = only juvenile plants seen

Plants recorded in swamp areas adjoining the forest in the upper zone are marked "s" and by "+s" if they were in both swamp and forest.

Latin name	Common name	Upper	Lower
Gymnosperm Trees			
Dacrycarpus dacrydioides	kahikatea	j (1)	
Dacrydium cupressinum	rimu	j	√
Podocarpus hallii	Hall's totara	j	
Prumnopitys ferruginea	Miro	u	√
Dicot Trees and Shrubs			
Alseuosmia macrophylla	karapapa	√	√
Aristotelia serrata	wineberry	u	√
Beilschmiedia tawa	tawa	√	√
* Berberis glaucophylla	barberry	u	
Brachyglottis repanda	rangiora	u	
Carpodetus serratus	putaputaweta	√	
Coprosma grandifolia	raurekau	√	√
Coprosma lucida	shining karamu	√	u
Coprosma robusta	karamu		u
Coprosma tenuifolia		√	u
Coprosma sp. (unnamed; species "t" of Eagle 1982)		(+s)	
Elaeocarpus dentatus	hinau	√	√
Fuchsia excorticata	kotukutuku, tree fuchsia	u	√
Gaultheria antipoda	snowberry	s, u	

¹ Name used in "Egmont Ecological Region survey report for the NZ Protected Natural Areas Programme" (Bayfield and Benson 1986)

² Dept of Conservation, Wanganui Conservancy

³ Dept of Conservation, Stratford Area Office

⁴ 22 Forres St Wanganui

Wanganui plant list 113: Carrington Road, New Plymouth (RAP 10)

Latin name	Common name	Upper	Lower
<i>Geniostoma rupestre</i> ssp. <i>ligustrifolium</i>	hangehange	√	√
<i>Griselinia littoralis</i>	papaumu, broadleaf	u	
<i>Griselinia lucida</i>	puka, broadleaf	u	u
<i>Hebe stricta</i> var.	koromiko		u
<i>Hedycarya arborea</i>	pigeonwood	√	√
<i>Knightia excelsa</i>	rewarewa	√	√
<i>Laurelia novae-zelandiae</i> (u)	pukatea	u	√
<i>Leptospermum scoparium</i> ⁵	manuka		
* <i>Leycesteria formosa</i>	Himalayan honeysuckle		u
<i>Melicytus lanceolatus</i>	mahoe wao	u	
<i>Melicytus ramiflorus</i>	mahoe	√	√
<i>Metrosideros robusta</i>	northern rata	√	u
<i>Myrsine salicina</i>	toro	√	u
<i>Nestegis cunninghamii</i>	black maire	√	
<i>Pseudopanax arboreus</i>	fivefinger	√	u
<i>Pseudopanax crassifolius</i>	lancewood	√	√
<i>Pseudowintera axillaris</i>	horopito, pepperwood	u	
<i>Pseudowintera colorata</i>	horopito, pepperwood		u
<i>Schefflera digitata</i>	pate	√	√
<i>Raukaua</i> (<i>Pseudopanax</i>) <i>edgerleyi</i>	raukawa	√	u
<i>Solanum laciniatum</i>	poroporo		u
<i>Syzygium maire</i>	maire tawake, swamp maire	u	
* <i>Ulex europaeus</i>	gorse	√	√
<i>Weinmannia racemosa</i> ssp. <i>racemosa</i>	kamahi	√	√
Dicot lianes			
<i>Clematis paniculata</i>	puawananga	√	√
<i>Metrosideros diffusa</i>	white rata vine	√	√
<i>Metrosideros fulgens</i>	scarlet rata vine	√	√
<i>Metrosideros perforata</i>	white rata vine	√	√
<i>Parsonsia heterophylla</i>	NZ jasmine	j	u
<i>Muehlenbeckia australis</i>	pohuehue	u, s	u
<i>Rubus australis</i>		s	u
<i>Rubus cissoides</i> var. <i>cissoides</i>	bush lawyer	√	√
* <i>Rubus fruticosus</i> agg.	blackberry	√	√
<i>Rubus australis</i> x <i>R. cissoides</i>		u	

⁵ Reported by Bayfield and Benson (1986)

Wanganui plant list 113: Carrington Road, New Plymouth (RAP 10)

Latin name	Common name	Upper	Lower
Monocot lianes			
<i>Freycinetia banksii</i>	kiekie	√	√
<i>Ripogonum scandens</i>	supplejack	√	√
Fern allies			
<i>Lycopodium varium</i>	clubmoss	√	
<i>Lycopodium volubile</i>	waewaekotuku, climbing clubmoss		u
<i>Tmesipteris elongata</i>		√	√
<i>Tmesipteris tannensis</i>		√	
Ferns			
<i>Asplenium bulbiferum</i>	hen and chicken fern	√	√
<i>Asplenium flaccidum</i>	hanging spleenwort	√	√
<i>Asplenium gracillimum</i> ?			√
<i>Asplenium polyodon</i>	sickle spleenwort	√	u
<i>Blechnum chambersii</i>		√	√
<i>Blechnum colensoi</i>		√	u
<i>Blechnum discolor</i>	crown fern	√	√
<i>Blechnum filiforme</i>	climbing blechnum	u	√
<i>Blechnum fluviatile</i>		√	√
<i>Blechnum membranaceum</i>			u
<i>Blechnum novae-zelandiae</i>	kiokio	√	√
<i>Ctenopteris heterophylla</i>		√	
<i>Cyathea medullaris</i> (u)	mamaku, black tree fern	u	√
<i>Cyathea smithii</i>	katote, soft tree fern	√	√
<i>Dicksonia squarrosa</i>	wheki	√	√
<i>Grammitis billardierei</i>		√	
<i>Histiopteris incisa</i>	water fern	(+s)	√
<i>Hymenophyllum demissum</i>	filmy fern	√	√
<i>Hymenophyllum dilatatum</i>	filmy fern	√	√
<i>Hymenophyllum ferrugineum</i>	filmy fern		√
<i>Hymenophyllum flabellatum</i>	filmy fern	√	√
<i>Hymenophyllum multifidum</i>	filmy fern	(+s)	
<i>Hymenophyllum rarum</i>	filmy fern	√	
<i>Hymenophyllum revolutum</i>	filmy fern	√	√
<i>Hymenophyllum sanguinolentum</i>	filmy fern	√	u
<i>Hymenophyllum scabrum</i>		√	
<i>Lastreopsis hispida</i>		√	√
<i>Leptopteris hymenophylloides</i>		√	√

Wanganui plant list 113: Carrington Road, New Plymouth (RAP 10)

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<i>Microsorium pustulatum</i>	hound's tongue	√	√
<i>Microsorium scandens</i>			√
<i>Paesia scaberula</i>	ring fern	√	√
<i>Pneumatopteris pennigera</i>		(+s)	√
<i>Polystichum vestitum</i>		u	
<i>Pteridium esculentum</i>	bracken	(+s)	u
<i>Pyrrosia eleagnifolia</i>	leatherleaf fern		u
<i>Rumohra adiantiformis</i>		√	√
<i>Trichomanes elongatum</i>	bristle fern	√	
<i>Trichomanes reniforme</i>	kidney fern	√	√
<i>Trichomanes venosum</i>	filmy fern	√	√
Monocot Herbs			
<i>Astelia fragrans</i>		√	
<i>Astelia solandri</i>	perching lily	√	√
? <i>Caladenia</i> sp. (unidentified)		u, s	
<i>Carex solandri</i> (?)		u	
<i>Carex virgata</i>			√
<i>Collospermum hastatum</i>	perching lily	√	√
<i>Collospermum microsperrum</i>	perching lily	√	√
<i>Earina autumnalis</i>	Easter orchid	√	√
<i>Earina mucronata</i>			√
<i>Eleocharis gracilis</i>	slender spike sedge	s	
<i>Isolepis reticularis</i>		s	
* <i>Juncus articulatus</i>	jointed-leaved rush	√	u
* <i>Juncus effusus</i>	soft rush	√	
<i>Juncus edgariae</i> (used to be <i>gregiflorus</i>)		√	
<i>Juncus planifolius</i>		√	u
<i>Juncus prismatocarpus</i>		√	
<i>Juncus sarophorus</i>		√	
<i>Luzula picta</i> s.s.	wood-rush	√	
<i>Microlaena avenacea</i>	bush ricegrass	√	√
<i>Pterostylis banksii</i> (?)	green hood orchid	u	
<i>Schoenus maschalinus</i>		u	
<i>Uncinia angustifolia</i>	hooked sedge	√	
<i>Uncinia uncinata</i>	hooked sedge		√
<i>Winika cunninghamii</i> (u)	lady's slipper orchid	√	u
Dicot Herbs			
<i>Acaena anserinifolia</i>	piripiri, bidibid	√	√
<i>Anaphalioides trinervis</i>	everlasting daisy	√	√

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	Latin name	Common name	Upper	Lower
	Cardamine sp. (unnamed) [C. debilis agg., C. 'Broad Style' of Pritchard 1957]			√
	Centella uniflora		√	
*	Cirsium palustre	marsh thistle	√	u
*	Cirsium vulgare	Scotch thistle	√	√
*	Digitalis purpurea	foxglove	√	√
	Dichondra sp. (D. brevifolia agg.)	Mercury Bay weed	√	
	Epilobium nerteroides	willowherb		u
	Epilobium pedunculare	willowherb	√	
	Euchiton involucrata (Gnaphalium involucratum)	NZ cudweed	√	
	Gonocarpus micranthus		√	
*	Geranium robertianum	herb Robert		√
	Hydrocotyle dissecta			u
	Hydrocotyle heteromeria	waxweed	(+s)	√
	Hydrocotyle microphylla	pennywort	√	√
	Hydrocotyle moschata	hairy pennywort	u	
	Leptostigma setulosum (= Nertera setulosa)		√	
*	Lotus pedunculatus	lotus major	√	
	Oxalis exilis	creeping oxalis		u
	Nertera depressa		√	√
	Nertera villosa		√	
*	Phytolacca octandra	inkweed		u
*	Plantago lanceolata	narrow-leaved plantain	√	√
*	Plantago major	broad-leaved plantain	√	
	Pratia angulata agg.		(+s)	
*	Prunella vulgaris	selfheal	√	√
	Ranunculus reflexus	bush buttercup	√	
*	Ranunculus repens	creeping buttercup	√	√
	Senecio minimus	fireweed	√	√
*	Solanum nigrum	black nightshade	√	u
*	Stachys sylvatica	hedge woundwort		u
	Stellaria decipiens	NZ chickweed	√	
	Viola filicaulis	creeping violet	√	
	Wahlenbergia violacea	harebell	u	

Total species	157
Native species	139
Adventive species	18

On 27 March 1999 only a small portion of the 100ha block of forest was surveyed. This was on the eastern margin and included parts of the Te Maketu Stream, comprising two narrow valleys with bouldery streambeds. The forest was dominated by kamahi, with several young rimu and Hall's totara, and scattered canopy trees of tawa, pukatea, hinau and rewarewa. Seen mostly as edge trees were raukawa, miro, pigeonwood, toro, five finger. Forest along the eastern edge is severely stock-browsed, with supplejack as the main understorey, but west of the first stream there is an intact, sometimes dense understorey of small *Coprosma* species, hangehange, and the soft tree fern, katote. Shrubs seen mainly close to the streams included wineberry and tree fuchsia.

Of particular note was the wide variety and massed displays of ferns. These included 12 filmy fern species, of which *Trichomanes elongatum* is probably the rarest in the Egmont region. *Blechnum nigrum* was locally common in the dark gullies.

The area we surveyed in March 1999 lay between 390m and 420m. This is around the upper altitudinal limit for typical lowland species of the region, like rangiora, tawa, pukatea, climbing blechnum, *Griselinia lucida*, mamaku, black maire, hangehange, rewarewa but within the range of species typical of upland forest, like raukawa, toro, Hall's totara and *Rubus australis*. The two *Collospermum* species occurred here together, *C. hastatum* being typically lowland and *C. microspermum* of higher altitudes, confirming this forest as being a transition between altitudinal zones. The forest block continues down-slope to 320m but, as seen on 23 Sept 2004, does not differ markedly in species composition. The plant list shows plant presence separately for the upper third of the altitudinal range and the lowermost third. It had been anticipated that some species seen in or near the upper end of the forest (near Carrington Road) might not occur at the lower end, to be replaced by lowland species. However, plants such as the two *Collospermum* species, one montane and one lowland, still occurred together along the lowermost boundary. In fact, in the lowest altitude forest we added the cool-climate species *Pseudowintera colorata*. Several upland species, including Hall's totara and the fern *Polystichum vestitum*, were not found in the lower altitude forest. A more detailed survey of the forest block might reveal further examples. In the meantime, we found only a weak indication of an altitudinal gradient of species within Carrington Road C forest – the main gradient change occurs around Carrington Road itself. This means that, because of its lower altitude, Carrington Road C forest is different from the forest in Egmont National Park (i.e. the toeslopes of the Pouakai Range) adjoining.

Of potential botanical interest were several boggy areas near Carrington Road, although stock trampling and weed invasion have altered these bogs. Sphagnum moss is locally dominant, and several native vascular plant species were seen here only (see annotations in plant list).

The present levels of possum control have enabled vigorous growth of possum-preferred plants such as *Pseudopanax arboreus*, broadleaf, toro and raukawa. The last-named was listed as having a conservation status of 'Gradual Decline' by de Lange et al. (2004).

Bird species noted on 23 Sept 2004

Conditions were not ideal for recording birds although a reasonable number were recorded.

Species and numbers recorded in the bush were:

Native:	Number observed
Tomtit	5
Grey Warbler	15+
Whitehead	9+
Fantail	11+
Tui	1

Bellbird	4
Kereru	2
Silvereye	4
Harrier	1
Introduced:	
Magpie	4
Chaffinch	1
Thrush	1
Blackbird	4

It is likely that species present and numbers recorded would be greater in better conditions. It is not impossible although unlikely that kiwi are present in the bush.

Other notes (Dean Caskey)

No reptiles were seen on the day (23 Sep 2004) although only a small effort was spent looking for them. Ideally the area should be spotlighted for geckos in summer to see what is around. This could be undertaken later this year if required. In 2001 Tony Whitaker and I conducted a couple of quick checks along the Carrington road and located 3 geckos although only one was able to be caught and identified. This animal was a Forest Gecko and was found less than a kilometre from this bush. It is likely that a few species of reptiles are present and the habitat is extensive.

The small streams in the bush were of interest. The Te Maketu Stream on the true right side of the bush flows into the Kiri Stream above Kirihau road. Surveys for large galaxiids 3 to 4 years ago located very good populations in the Oakura catchment including the Te Maketu Stream lower down. Considering the condition of the stream and type of habitat in Barretts and Emeny's I would expect good populations of threatened large galaxiids to be present (Shortjawed Kokopu, Banded Kokopu, Koaro and possibly Giant Kokopu) as well as other species of native fish. A spotlight survey would be required to confirm this and would be best if the streams were low and clear.

The Te Maketu Stream is about 5 metres average width at the lower end of the property and over 2 kilometres of stream is contained within the bush. The larger stream on Emeny's side is about 2.5 metres average width and again over 2 km's is within the bush as well as a couple of other small creeks. All streams have very stable beds and high water quality which would ensure a high and diverse aquatic invertebrate population is present. Protection of this type of habitat would be supported by the "Large Galaxiid Recovery Plan".

All the streams have extensive riparian vegetation due to the bush and this is essential to keeping good water quality and premium galaxiid habitat (see pic's attached). The Proposed fence line would ensure the riparian vegetation remains intact protecting these valuable habitats forever.

Other notes (Astrid van Meeuwen-Dijkgraaf)

My impression was (in note from and no particular order)

- Good piece of bush, stock damage in the outer fringes but little or no damage in the interior
- Has been logged in the past - a notable absence of large timber trees such as rimu, totara, kahikatea (need to check with Jim Clarkson whether lack of these species is 'normal' for this altitude and side of ENP).
- Moderate numbers of rimu saplings and at least one kahikatea sapling indicate forest is regenerating nicely.
- Some faces of recent secondary forest (20-30yr poss.)

- Very little weed encroachment in to interior, although a few Himalayan Honeysuckle plants need to be dealt with before they become a bigger problem. The interior of the 'to be fenced off' area is likely to regenerate through a gorse phase
- Good possum control currently, as indicated by low levels of browse on five-finger, seven-finger, toro
- Dean found some goat tracks (and stoat/ferret tracks too)

Significant features

- the two larger streams - Dean thought that these would be good galaxiid habitat and is keen to spotlight the streams. Did see koura (fresh water crayfish), and Mr Emeny talked about eel and large 'trout-like' fish in nearby streams. - Culvert under the road needs to be modified to allow for fish passage upstream from proposed new reserve into ENP.
- Saw one swamp maire on a tributary stream in to the area that is going to be fenced - probably requires a more detailed survey to discover if there area further swamp maire - swamp maire is rare in the district (? Colin)
- Very large toro (*Myrsine salicina*) trees in good health
- Nice little sphagnum bog (outside of the area to be fenced)

References

Bayfield, M A and Benson, M A (1986) Egmont Ecological Region survey report for the NZ Protected Natural Areas Programme. Dept of Lands and Survey, Wellington.

de Lange, P. J.; Norton, D. A.; Heenan, P. B.; Courtney, S. P.; Molloy, B. P. J.; Ogle, C. C.; Rance, B. D.; Johnson, P. N.; Hitchmough, R. (2004): Threatened and uncommon plants of New Zealand. *NZ Journal of Botany* 42: 45-76.