#### WANGANUI PLANT LIST NO. 67

# <u>Vascular Plants of (Higgie's) Wetlands northeast of Fordell in small tributary of Whangaehu</u> <u>River</u>

## Grid Ref. NZMS260/Sheet S22 Lower Swamp 026408; 100 m a.s.l. Upper Swamp; 0354143; 140m a.s.l.

# Colin Ogle and other members of Wanganui Museum Botanical Group 5 December 1993, 2 March 1997

## (Additions: N Singers, PNAP Surveyor, 13 February 1994)

NB: The following list is for plants of the wetlands only, not adjoining pasture or forest remnants. The two right hand columns indicate abundance in the two wetlands; L= lower, U= upper (also see Lake and Whaley 1995)

#### Abbreviations

* l = u =	denotes adventive species juvenile plants only local (common in small areas only) uncommon (only one or a very few specimens seen)	o = c = a =	occasional common abundant	
			L	U
Gymn	osperm trees			
	Dacrycarpus dacrydioides (kahikatea)		с	0
<u>Dicot</u>	trees and shrubs			
	Coprosma rhamnoides		0	
	C. rigida		u	
	C. robusta (karamu)		u	
	C. tenuicaulis		а	с
	C. propinqua x C. robusta		u	
	Elaeocarpus hookerianus (pokaka)		0	
	Fuchsia excorticata		u	
	Geniostoma rupestre (hangehange)		u	
	Hebe stricta var. stricta (koromiko)		u	
	Hedycarya arborea (pigeonwood)		u(j)	
	Hoheria populnea var. [H. sexstylosa] (lacebark)		0	
	Leptospermum scoparium (manuka)		0	а
	Leucopogon fasciculatus (mingimingi)		0	u
	Melicytus ramiflorus (mahoe)		0	u
	Myrsine australis (mapou)		u	u
	Olearia virgata (shrub daisy)		а	с
	Pseudopanax crassifolius (lancewood)		0	u
*	Salix fragilis (crack willow)		1	
	Schefflera digitata (pate)		u	

	- 2 -		
		L	$\mathbf{U}$
*	Ulex europaeus (gorse)	1	0
Dice	ot Lianes		
	Clematis foetida	u(j)	
	C. quadribracteolata <sup>1</sup>	u	
	Muehlenbeckia australis (pohuehue)	u	
	Passiflora tetrandra (NZ passionfruit)	u(j)	
	Rubus schmidelioides (bush lawyer)	0	
Mon	locot trees		
	Cordyline australis (cabbage tree)	0	0
Diac	t howho		
Dice	ot herbs		
	Acaena anserinifolia (bidibidi)		
	Callitriche muelleri		
*	C. stagnalis (starwort)	0	
	Cardamine sp. [C. debilis agg.		
	"Narrow Petal"] (bitter cress)	0	
	Centella uniflora		0
*	Cirsium palustre (marsh thistle)	0	0
*	C. vulgare (Scotch thistle)	u	
*	Epilobium ciliatum		u
	E. insulare (willow-herb)	u	u
	E. rotundifolium (willow-herb)	u	
	Galium trilobum	u	u
	Gratiola sexdentata		u
	Hydrocotyle heteromeria (pennywort)	0	
	H. moschata (pennywort)	u	
	H. novae-zeelandiae	с	
	H. pterocarpa		0
	Hypericum japonicum	1	
	Lagenifera pumila	u	
*	Lotus pedunculatus (lotus major)	u	0
*	Ludwigia palustris		1
*	Myosotis laxa (water forgetmenot)	С	u
	Myriophyllum propinquum (water milfoil)		1
*	Polygonum hydropiper (water pepper)		u
	Pratia angulata	0	
	Ranunculus amphitrichus (waoriki)	с	0
	R. macropus		1
N-	R. reflexus (bush buttercup)	0	
*	R. repens (creeping buttercup)	0	u
*	Rorippa sp. (watercress)	u	

<sup>&</sup>lt;sup>1</sup> N. Singers (13.2.94) collected a small shoot from a seedling he found in the lower half of this wetland. It will be lodged in Massey University herbarium. About 7 plants were seen on 2 March 1997, and a CHR voucher collected.

		L	U
	Senecio minimus (fireweed)	u	
	S. rufiglandulosus	1	
	Stellaria alsine (bog stitchwort)	0	
	S. decipiens (incl. S. parviflora)	u	
	S. graminea (marsh stitchwort)		u
	Trifolium repens (white clover)	u	
	Veronica serpyllifolia (turf speedwell)	0	
lon	ocot herbs		
	Grasses		
	Agrostis stolonifera (creeping bent)		u
	Anthoxanthum odoratum (sweet vernal)	0	0
	Cortaderia toetoe (toetoe)	u	
	Festuca arundinacea (tall fescue)	u	
	Glyceria declinata (floating sweetgrass)	1	1
	Poa anceps ssp. anceps	u	
	Rytidosperma racemosum (danthonia)	1	
	Sedges		
	Baumea rubiginosa	С	c
	B. tenax	0	0
	Carex dissita	С	
	C. geminata s.s. (cutty-grass)	a	0
	C. inversa	u	
	C. lessoniana	u?	с
	C. maorica	0	c
	C. ovalis	с	u
	C. secta	а	a
	C. virgata	с	0
	C. sp.	u	
	Eleocharis acuta (sharp spike-sedge)	0	0
	E. gracilis (slender spike-sedge)	1	0
	Isolepis distigmatosa		u
	I. reticularis	u	u
	Lepidosperma australe (four-square)	u	
	Schoenus maschalinus	1	
	Rushes		
	Juncus articulatus (jointed-leaved rush)	u	0
	J. effusus (soft rush)		0
	J. gregiflorus	0	0
	J. planifolius (flat-leaved rush)		u
	J. sarophorus		u

	L	τ
Others (other than grasses, sedges, rushes)		
Astelia fragrans	0	
Corybas rivularis agg.? (spider-orchid)	1	
Dianella nigra (turutu, blue-berry)		0
Earina mucronata (perching orchid)	u	
Lemna sp. [L. minor of NZ authors)	1	C
Microtis unifolia (onion-leaved orchid)	u	
Phormium sp. (NZ flax)	1	
Pterostylis banksii (greenhood orchid)	u	
P. montana s.l. <sup>2</sup>	u	
Ferns		
Asplenium flaccidum (hanging spleenwort)	0	(
A. oblongifolium (shining spleenwort)	u	
A. polyodon	0	ι
Blechnum chambersii	u	
B. fluviatile	0	
B. minus	С	C
B. penna-marina	1	
B. sp. [unnamed, B. capense agg.] (kiokio)	1	ι
Cyathea dealbata (ponga, silver fern)	u(j)	
Dicksonia fibrosa (wheki-ponga)	0	
D. squarrosa (wheki)	0	(
Histiopteris incisa (water fern)	0	ι
Hypolepis ambigua	0	(
H. distans	u	(
H. rufobarbata?	u	
Paesia scaberula (ring fern)	u	(
Phymatosorus pustulatus (hound's tongue)	u	(
Pteridium esculentum (bracken)	1	(
Pyrrosia eleagnifolia (leather-leaf fern)	u	(
Rumohra adiantiformis	u	

# Vegetation

## 1. Lower Wetland (S22/026408) (= Higgie's Wetlands A, in Lake and Whaley [1995])

The lower wetland is in two parts, an almost circular patch in the upper catchment, and a narrower strip downstream. The upper patch is sparse-to-dense, medium age kahikatea standing in apparently

 $<sup>^{2}</sup>$  Dr B Molloy (Landcare Research, Lincoln) advises that a specimen I collected on 5.12.93 is not <u>P. montana</u> in the strict sense, but a very similar unnamed taxon covered currently by the name <u>P. montana</u>. True <u>P. montana</u> is insect pollinated and has no bulging stigma whereas the plants at Fordell have a bulging stigma and may be self-pollunated.

water 10-30 cm deep in December 1993, though no surface water was present in February 1994. The understorey is dense scrub of <u>Olearia virgata</u> and <u>Coprosma tenuicaulis</u>, the shrubs being 2.5-4 m tall. Much of the <u>Olearia</u> has decumbent branches; these and the bases of the shrubs and trees provide terrestrial habitats for numerous sedges and other herbaceous plants.

The lower swamp had little or no surface water during the December 1993 visit, and the ground was more densely covered in young shrubs, sedges and herbs. The dominant tree and shrub species are similar to the upper swamp.

Although the edges of both swamps were trampled by livestock in 1993 - 94 they retained a high proportion of native plants. Fencing then subsequent pint planting on slopes surounding the wetlands have removed the stock impacts. The wetland composition varies, but on softer ground the sedges <u>Carex geminata</u> and <u>Baumea rubiginosa</u> are common, with interspersed <u>Eleocharis</u> spp., other <u>Carex</u> spp, and exotic grasses and weeds. Unlike most wetlands of the region, raupo is absent, and flax and toetoe are very rare. A comparatively low fertility state in these wetlands may be an explanation.

2. Upper Wetland (S22/035413) (=Higgie's Wetlands B, in Lake and Whaley [1995]) Manuka and <u>Olearia virgata</u> with several slender kahikatea, emergent over a <u>Carex</u>-dominant swamp (especially <u>C. secta</u>), with <u>Sphagnum</u> moss the main cover in places. Remnant standing water, though levels fluctuate seasonally. Young pines (1995?) surrounding.

#### Notable Species

- 1. Co-occurrence of the two <u>Baumea</u> species, both relatively rare in the region.
- 2. Presence of <u>Olearia virgata</u> and <u>Coprosma tenuicaulis</u>, both of scattered distribution in the region, but seldom in such an intact and dense stand as here.
- 3. Uncommon or rare plants in the region include <u>Galium trilobum</u>, the native <u>Hypericum</u>, <u>Pterostylis montana</u> s.l, <u>Hypolepis distans</u>, <u>Sphagnum moss</u>, <u>Hydrocotyle pterocarpa</u>, <u>Dianella</u> growing in a wetland.
- 4. Presence of <u>Clematis quadribracteolata</u>, known from only one other site (Waverley) in the North Island south of Ngaurukehu (near Mataroa).

### Reference:

Lake CM and KJ Whaley. 1995. Rangitikei Ecological Region. Survey report for the protected natural areas programme. NZ PNAP No. 32. Dept of Conservation, Wanganui. 316p.