

WANGANUI PLANT LIST NO 105

Vascular plants and vegetation of dune lake and swampy lake margins, Lake Alice

Grid ref NZMS 260, Sheet 23/090162; alt. 100 m a.s.l. (List for permanent swamp and seasonally flooded areas only, not adjoining dry banks and pasture.)

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With assistance of members of Wanganui Botanical Group

1 February 1998

Last update (with Champion & Wells 2003 records) 4.6.04.

Converted to Word table format 8-6-2004

* denotes adventive species

Species marked (K) were listed by Kelly (1978), and those marked (K+) were listed by both Kelly (1978) and the 1998 survey. Records from Champion & Wells 2003 only are marked (C&W); those by C&W and earlier are marked (C&W+)

All 1998 records accompanied by a subjective abundance rating, as follows:

a = abundant

c = common

o = occasional

u = uncommon

l = local (common in restricted areas)

		1998 survey	Kelly 1978	C&W 2003
<u>Dicot trees and shrubs</u>				
<i>Alectryon excelsus</i>	titoki	u (1 juv.)		
* <i>Alnus glutinosa</i>	alder	u (1)		
<i>Coprosma propinqua</i>		u		
<i>C. robusta</i>	karamu	c		
<i>C. tenuicaulis</i>	swamp coprosma	a		
<i>C. propinqua</i> x <i>C. robusta</i>		u		
<i>Leptospermum scoparium</i> (Ravine 1992)	manuka			
<i>Melicytus ramiflorus</i>	mahoe	u		
<i>Olearia virgata</i>	a shrub daisy	o		
<i>Pseudopanax crassifolius</i> (Ravine 1992)	horoeka, lancewood			
* <i>Salix cinerea</i>	grey willow	c		
* <i>S. fragilis</i>	crack willow	lc		
* <i>Ulex europaeus</i>	gorse	l		
<u>Monocot tree</u>				
<i>Cordyline australis</i>	cabbage tree, ti kouka	o		

		1998 survey	Kelly 1978	C&W 2003
<u>Dicot lianes</u>				
Kunzea ericoides	kanuka	u (1m juv.)		
Muehlenbeckia australis x M. complexa	hybrid pohuehue	u		
Myrsine australis	mapou	u		
<u>Dicot herbs</u>				
* Amaranthus lividus	green amaranth	u		
* Anthemis cotula	stinking mayweed	o		
* Bidens frondosa	beggar's ticks	o		
* Callitriche stagnalis	starwort	o		C&W
* Centipeda cunninghamii 1	sneezewort	lc		
* Cirsium arvense	Californian thistle	o		
* C. vulgare	Scotch thistle	u		
* Conyza albida	fleabane	u		
* Cotula coronopifolia	batchelor's button	c		
Elatine gratioloides		la (1 area)		
* Epilobium ciliatum	willowherb	u		
E. insulare	willowherb	u		
E. pallidiflorum	willowherb	l		
Euchiton involucrata	cudweed	o		
* Galium palustre	marsh bedstraw	lc		
Hydrocotyle hydrophila		u (1 patch)		
H. moschata	hairy pennywort	u		
H. novaezeelandiae		o		
H. pterocarpa		u (1 patch)		
* Hypochoeris radicata	catsear	o		
* Lotus pedunculatus	lotus	o		
* Ludwigia palustris		lc	K+	C&W

¹ Identity should be rechecked following recognition of several more taxa in New Zealand (Walsh 2001)

		1998 survey	Kelly 1978	C&W 2003
* <i>Lythrum hyssopifolia</i>	hyssop loosestrife	o		
* <i>Mentha pulegium</i>	pennyroyal	c		
* <i>Myosotis laxa</i>	water forget- me-not	o		C&W
<i>Mirophyllum propinquum</i>	water milfoil	lc	?K+	C&W
<i>M. triphyllum</i>				C&W
* <i>Parentucellia viscosa</i>	tarweed	o		
* <i>Phytolacca octandra</i>	inkweed	u		
* <i>Plantago lanceolata</i>	narrow-leaved plantain	u		
* <i>Polygonum hydropiper</i>	water pepper	c	?K	
* <i>P. persicaria</i>	willow-weed	u		
<i>P. salicifolium</i>	willow-weed	o	?K	C&W ²
<i>Potentilla anserinoides</i>	silverweed	u (1 patch)		
<i>Pratia perpusilla</i>		u		
<i>Ranunculus amphitrichus</i>	waoriki	u		C&W
* <i>R. repens</i>	creeping buttercup	o		
* <i>R. sceleratus</i>	celery-leaved buttercup	a		
* <i>R. trichophyllus</i> (K, as <i>R. fluitans</i>)	floating buttercup		K	C&W
* <i>Rorippa microphylla</i>	watercress	u	K	C&W
<i>R. palustris</i>		la		
* <i>Rumex crispus</i>	curled dock	o		
* <i>Senecio bipinnatisectus</i>	fireweed	u		
<i>S. glomeratus</i>	fireweed	u (1)		
* <i>Solanum nigrum</i>	black nightshade	u		
* <i>Sonchus asper</i>	prickly sow- thistle	u		
* <i>Trifolium repens</i>	white clover	c		
* <i>Veronica anagallis-aquatica</i>	water speedwell	u		C&W
<u>Monocot herbs</u>				
<u>Sedges</u>				

² Recorded by C&W as *Persicaria decipiens*

		1998 survey	Kelly 1978	C&W 2003
<i>Carex lessoniana</i>		c		
<i>C. maorica</i>		lc		
<i>C. secta</i> var. <i>secta</i>		lo		C&W
<i>C. virgata</i>		c		
* <i>Cyperus ustulatus</i>		o		
<i>Eleocharis acuta</i>	spike sedge	o	K+	C&W
<i>E. gracilis</i>	slender spike sedge	u		
<i>E. sphacelata</i>	bamboo spike sedge	l	K+	C&W
<i>Isolepis distigmata</i>		u		
<i>Schoenoplectus tabernaemontani</i>	kapungawha	lc	K+	C&W
<u>Grasses</u>				
* <i>Agrostis stolonifera</i>	creeping bent	la		
* <i>A. sp.</i> (unidentified)		l		
* <i>Alopecurus geniculatus</i>	kneed foxtail	o		
<i>Cortaderia toetoe</i>	toetoe	o		
* <i>Echinochloa crus-galli</i>	barnyard grass	u		
* <i>Glyceria declinata</i>	floating sweetgrass	u		C&W
* <i>Lolium multiflorum</i>	Italian ryegrass	u		
* <i>Paspalum distichum</i>	Mercer grass	lc		C&W
<u>Rushes</u>				
* <i>Juncus articulatus</i>	jointed-leaved rush	o		
* <i>J. bufonius</i>	toad rush	l		
<i>J. distegus</i>		u		
* <i>J. effusus</i>	soft rush	u		
<i>J. gregiflorus</i>		c		
<i>J. pallidus</i>		u (1)		
<i>J. sarophorus</i>		c		
<u>Monocots other than sedges, grasses, rushes and orchids</u>				

		1998 survey	Kelly 1978	C&W 2003
Lemna sp [L. minor of NZ authors]	duckweed	lc	K+	C&W
* Ottelia ovalifolia	swamp lily		K	C&W
Phormium tenax	harakeke, NZ flax	a	K+	
Potamogeton cheesemanii	pondweed		K	C&W
* P. crispus	curled pondweed		K	C&W
P. ochreatus	blunt pondweed		K	C&W
* Sisyrrinchium 'blue'		o		
* Spirodela punctata	purple-backed duckweed	lc	K+	C&W
Typha orientalis	raupo	o	K+	C&W
Wolffia australiana	water meal	u	K+	C&W
<u>Ferns</u>				
Asplenium flaccidum	hanging spleenwort	u		
A. oblongifolium	shining spleenwort	u		
Azolla filiculoides ssp. rubra	floating waterfern	lc		C&W
Blechnum minus (of NZ authors)	swamp kiokio	o		
B. novae-zelandiae	kiokio	u		
Dicksonia squarrosa	wheki	u		
Histiopteris incisa	water fern, mata	u		
Hypolepis ambigua		o		
H. distans		u (1 plant)		
Microsorium pustulatum	hound's tongue	u		
Pteridium esculentum	bracken	u		
Pyrrhosia eleagnifolia	leather-leaf fern	l		

Total of indigenous species of lake and wetland = 59 (and two hybrids)

Total of adventive species of lake and wetland = 51

Vegetation

Dune lake with swamp vegetation on most fringes and in shallow gullies running from lake into the marine terrace. Mostly flax/*Carex secta*, with occasional *Coprosma tenuicaulis*, *Olearia virgata*; scattered cabbage trees and toetoe. Some parts heavily infested with grey willow. Edges dominated by *Carex secta*. Areas without swamp vegetation in the floor of some small gullies were dry at time of survey (Feb. 1998) but would seem to have shallow water much of the year. These had turf plants, including the regionally rare native species, *Elatine gratioloides* and *Pratia perpusilla*. Kelly (1978) recorded a number of aquatic plants which we did not see in 1998. We did see a lot of unidentified leafless stems in the drift, probably the result of heavy browsing by waterfowl.

This is currently one of four known sites for *Pratia perpusilla* in Wanganui Conservancy of DoC. It was recorded somewhere between the Turakina and Rangitikei Rivers by B C Aston in 1910, and is still at Tunnel Hill, just south of the Turakina River, Lake Pauri, L Westmere. The very few earlier records for the Manawatu and Horowhenua regions were summarised by Esler (1978) and Duguid (1990), respectively. L. Alice is the only known site for *Elatine* in the Wanganui Conservancy; it was not recorded at all by Esler (1978).

Other regionally uncommon plants at L. Alice are *Hypolepis distans*, *Hydrocotyle hydrophila*, *H. pterocarpa* and *Eleocharis sphacelata*.

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