

WANGANUI PLANT LIST NO. 221

Vascular plants and vegetation of Te Awamate Swamp, Forest Road, Bulls

Grid ref NZMS 260, Sheet 23/013030; < 20 m a.s.l.

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21 March 2007

* denotes adventive species

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

a = abundant

c = common

o = occasional

u = uncommon

ll = local (common in small areas)

Dicot trees and shrubs		
* <i>Salix cinerea</i>	grey willow	u ¹
Monocot tree		
<i>Cordyline australis</i>	cabbage tree, ti kouka	u
Dicot lianes		
<i>Calystegia sepium</i> ssp. <i>roseum</i>	convolvulus	ll
<i>Muehlenbeckia complexa</i>	small-leaved pohuehue	u
* <i>Rubus fruticosus</i>	blackberry	o
* <i>Solanum dulcamara</i>	bittersweet	u
Dicot herbs		
* <i>Apium nodiflorum</i>	water celery	lc
* <i>Aster subulata</i>	sea aster	o
* <i>Bidens frondosa</i>	beggar's ticks	o-lc
* <i>Cirsium arvense</i>	Californian thistle	u
* <i>Epilobium ciliatum?</i>	willow-herb	u
<i>Epilobium pallidiflorum</i>	NZ swamp willow-herb	u
* <i>Epilobium parviflorum</i>	American willow-herb	o
* <i>Galium palustre</i>	marsh bedstraw	la
<i>Hydrocotyle novaezeelandiae</i>		lc
* <i>Lotus pedunculatus</i>	lotus	u
* <i>Myosotis laxa</i>	water forget-me-not	u
* <i>Polygonum persicaria</i>	willow-weed	u
<i>Polygonum salicifolium</i>	NZ willow-weed	c-la
* <i>Ranunculus repens</i>	creeping buttercup	lc
* <i>Ranunculus sceleratus</i>	celery-leaved buttercup	o

¹ Few young ones in wetland but many trees along south-west margin

* <i>Rorippa nasturtium-aquaticum</i>	two-row watercress	o
* <i>Rumex crispus</i>	curled dock	o
<i>Urtica linearifolia</i> ²	swamp nettle	u
Monocot herbs		
Sedges		
<i>Bolboschoenus fluviatilis</i>	marsh clubrush, kukuraho	lc
<i>Carex geminata</i> agg.	cutty-grass	
<i>Carex maorica</i>		o
<i>Carex secta</i> var. <i>secta</i>		o-lc
<i>Cyperus ustulatus</i>	mariscus	u
<i>Eleocharis acuta</i>	spike sedge	lc
<i>Isolepis prolifer</i>		o-lc
<i>Schoenoplectus tabernaemontani</i>	kapungawha	o-lc
Grasses		
* <i>Agrostis stolonifera</i>	creeping bent	c-la
* <i>Cortaderia selloana</i>	pampas grass	c (edge)
* <i>Paspalum distichum</i>	Mercer grass	lc
* <i>Schedonorus phoenix</i>	tall fescue	lc-la
Rushes		
* <i>Juncus articulatus</i>	jointed-leaved rush	
Monocots other than sedges, grasses, rushes		
<i>Lemna</i> sp. [unnamed; <i>L. minor</i> of NZ authors]	duckweed	l
* <i>Spirodela punctata</i>	purple-backed duckweed	l
<i>Wolffia australiana</i>	watermeal	l
<i>Phormium tenax</i>	harakeke, NZ flax	o
<i>Typha orientalis</i>	raupo	a

Total of indigenous species of wetland = 19

Total of adventive species of wetland = 23

Vegetation

At the time of survey, there was a pool of open water at the western (upper) end of the swamp and the remaining area was vegetated in emergent swamp species; only a little water was on the surface among the plants though the substratum was waterlogged silty-peat. In several places there were floating duckweeds (mixed *Lemna*, *Spirodela* and *Wolffia*). The wettest sites had extensive beds of

² *Urtica linearifolia* is listed as a nationally threatened species by de Lange et al. (2004); it is rated 'Chronically Threatened – Gradual Decline). About 7 plants were found in Te Awamate, all near the margin adjoining the pine forest.

native willow-weed and/or the low-growing, looping sedge *Isolepis prolifer*. Most of the area was a mosaic of plant communities, variously dominated by raupo, *Carex secta* or exotic grasses, especially creeping bent. Scattered, but conspicuous by their tall stature, were clumps of two native sedges, kapungawha (*Schoenoplectus tabernaemontani*) and kukuraho (*Bolboschoenus fluviatilis*), and harakeke (flax). Pines bordered the northern boundary with mixed plantings of willows and poplars along the southern border of the swamp. Only grey willow was found in the swamp, as small shrubs, and these should be removed or poisoned. The presence of mature grey willows along the edge is an on-going threat.

In terms of rarity, the native swamp nettle (*Urtica linearifolia*) is the most significant species present. About seven plants were found along some 50-70 m of swamp edge below the forest road the lies between the pines and swamp. Swamp nettle is a soft scrambling herb whose leaves and stems are clothed in stinging hairs. It has declined markedly over the past few decades and is known to me in this region from about three other sites. It seems the area with it at Te Awamate is not close to any proposed excavation but neither should it be used to dump excavated material. Peter Taylor of Fish & Game saw the plants with me and agreed to mark the area with swamp nettle before any excavation begins.

In general, the swamp is low in its variety of native species (and also of weeds). This may be because it was dominated by raupo until quite recently; dense raupo would have inhibited growth of other plants, though it is possible that raupo control eliminated or greatly reduced some plants.

References

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