

WANGANUI PLANT LIST NO. 143

Vascular Plants of the Manawatu Estuary

Don Ravine 27/01/89

(with additions by David Havell and Colin Ogle)

Fernbird Flats GR S24 005 774

Manawatu South GR S24 995 785

This area was visited during the Ecological District PNA survey. Two main areas were surveyed: the south bank (Estuary South), and a wetland area on the true right of the river (Fernbird Flats). The south bank is a large herbfield (tens of hectares) of halfstar, shore primrose, plantain and glasswort but is being invaded by weeds such as sharp rush and tall fescue (Ravine, 1992). While *Spartina* has been a problem on this bank in past years, the Department of Conservation has been controlling it with the aim of eradication. *Spartina* has, as a result, declined throughout the whole estuary in recent years. The northern bank is dominated by saltmarsh ribbonwood with jointed wire-rush and sea rush (the largest such area in the ecological district) while sharp rush and tall fescue invade the edges (Ravine, 1992). Other ecological units include *Leptocarpus similis* on the edge of the mudflats, *Cotula coronopifolia* (bachelor's buttons) on the flats on the northern bank, *Carex pumila* with *Leptinella dioica* var *monoica* also on the northern bank.

A third area which as yet does not have a detailed plant list occurs around the northern roosting zone. Plants known to occur in this area are the same as those found in Estuary South, except that *Plagianthus divaricatus* occurs occasionally, and *Leptinella dioica* subspecies *monoica* occurs in small patches. Other dominant plants present are *Leptocarpus similis*, *Chionochloa toetoe*, *Juncus maritimus*, and *Cotula coronopifolia*. Part of this area is a major feeding and roosting zone for Pacific Golden Plover, Sandpiper species, and duck/teal species. The glasswort zone in this area is one of the roosting zones for Wrybills and Dotterels.

The fernbird population found in Estuary South is the biggest and southernmost population in the ecological district (Ravine 1992).

Selliera rotundifolia, endemic to this coast, is ranked as Vulnerable on the nationally endangered plant list. The area also contains 4 other regionally rare and endangered plants ranked from declining to threatened: *Bolboschoenus caldwellii*, *Carex litorosa*, *Leptinella dioica* subsp. *dioica* and *Ruppia polycarpa*.

Abbreviations:

* Adventive

¹ This may be *Selliera rotundifolia* as this species was not differentiated at the time of survey.

² Mentioned in Esler, A.E. 1978, Botany of the Manawatu, for the general area of the estuary and not noted at time of survey in the Estuary South or Fernbird Flats.

RUSHES		Estuary South	Fernbird Flats
* <i>Juncus acutus</i>	sharp rush	x	x
<i>Juncus caespiticius</i>			x
<i>Juncus maritimus</i> var. <i>australiensis</i>	sea rush	x	x
<i>Leptocarpus similis</i>	oi oi; jointed wire rush	x	

		Estuary South	Fernbird Flats
SEDGES			
Bolboschoenus caldwelli			X
Bolboschoenus fluviatilis ²			
Carex litorosa ²			
Isolepis nodosa		X	
Isolepis cernua	slender clubrush	X	X
*Isolepis setacea ²			
Schoenus nitens		X	X
Schoenoplectus pungens	three square		X
GRASSES			
*Agrostis stolonifera	creeping bent		X
*Cynodon dactylon	Indian doab		X
*Deyeuxia billardieri ²	sand wind grass		
*Festuca arenaria	tall fescue	X	X
*Glyceria maxima ²			
Lachnagrostis filiformis ²	wind grass		
*Parapholis incurva ²	sickle grass		
*Puccinellia fasciculata ²			
*Polypogon monspeliensis ²	beard grass		
*Spartina anglica	cord grass	X	X
HERBACEOUS DICOTS			
*Apium nodiflorum	water celery	X	X
Apium prostratum	tutae-koau, native celery		X
*Aster subulatus			X
Atriplex sp			X
Calystegia soldanella		X	
*Carpobrotus edulus	South African	X	
Chenopodium ambiguum ²			
Cotula coronopifolia	bachelor's buttons		X
*Egeria densa (foxtan loop)			X
Leptinella dioica			X
Lobelia anceps ²	punakuru, shore lobelia		
*Plantago coronopus	buck's horn plantain	X	X
*Rumex obtusifolius	broadleaf dock		X
*Ranunculus sp			X
Ruppia polycarpa	horse's mane weed		X
Samolus repens	maakoako, sea primrose	X	X
Selliera radicans ¹	remuremu	X	X
Sarcocornia quinqueflora	glasswort	X	
Triglochin striata	arrow-grass	X	X
DICOT TREES AND SHRUBS			
Coprosma propinqua	mingimingi		X
Coprosma repens	taupata	X	
Leptospermum scoparium	manuka	X	X
Olearia solandri			X
		Estuary South	Fernbird Flats

Plagianthus divaricatus	saltmarsh ribbonwood	x	x
-------------------------	----------------------	---	---

MONOCOT TREES AND SHRUBS

Cortaderia toe toe	toe toe		x
Phormium tenax	harakeke, flax	x	x
Typha orientalis	raupo	x	x