

UPPER RANGITĀIKI WETLANDS AND FROST FLATS

Sarah Beadel

On a clear early winter day - 9 June 2012 - a keen group of botanists in 4WD vehicles from several parts of the mid-North Island gathered at Waiotapu to explore some of the special natural areas within Kāingaroa Forest.

The first stop was one of the several wetlands adjacent to the Rangitāiki River, which proved to be very interesting. The vegetation was manuka-(monoao)-(*Coprosma dumosa*)/ *Lepidosperma australe*-*Machaerina rubiginosa*-harakeke shrubland with local *Machaerina arthrophylla*, *Carex echinata*, *Carex geminata*, and toetoe (*Austroderia fulvida*). It was interesting to see burr reed (*Sparganium subglobosum*) here, locally in the wetland. This is the first record of this species in Kāingaroa Ecological District (see Wildland Consultants 1997, and Beadel *et al.* 2009). The presence of several *Machaerina* species - *M. arthrophylla*, *M. rubiginosa*, and *M. tenax*) was cause for lively discussion, and it was useful to observe the differences between *M. arthrophylla* and *M. rubiginosa* in close proximity, particularly given that the seed heads were well past their best, with virtually no seeds found, and “easy” characteristics for identification could not be used: nut colour orange in *M. rubiginosa* and white in *M. arthrophylla*). Other characteristics were used for identification, such as differences in leaf colour (*M. rubiginosa* is blue-green); and the characteristically longer (up to 40 cm) inflorescence of the *M. arthrophylla* with a drooping lowest ‘branchlet’, compared with *M. rubiginosa* which has an inflorescence *c.* 20 cm long.

Another interesting find was *Ranunculus macropus*, classified as Data Deficient by de Lange *et al.* 2009. We also found a couple of plants of *Lycopodiella lateralis*, known from only one other site in Kāingaroa Ecological District. It was also interesting to see *Olearia virgata* alongside the river. Another highlight was hearing, and then sighting, a

fernbird (At Risk-Sparse, Miskelly *et al.* 2008) at this site. Some of the exotic species present included *Juncus bulbosus*, *Carex ovalis*, and spearwort (*Ranunculus flammula*). Near where the vehicles were parked, we found *Leucopogon fraseri*, *Pimelea prostrata*, Spanish heath (*Erica lusitanica*), and heather (*Calluna vulgaris*).

After a quick lunch we proceeded to the Otangimoana Stream where we visited mature *Olearia virgata* forest, with some of the trees up to 30 cm DBH. Other species present were native broom (*Carmichaelia australis*), *Corokia cotoneaster*, *Aristotelia fruticosa*, *Myrsine divaricata*, *Raukawa anomalus*, and *Lindsaea trichomanoides*. Whiteheads (*Mohoua albicilla*) were present.

Next we had a brief stop at the Otamatea frost flats, walking through low monoao shrubland, with coral lichen (*Cladia retipora*), *Poa cita*, and occasional *Coprosma propinqua*, to an area of taller kanuka/monoao scrub. Wilding lodgepole pine (*Pinus contorta*) had been felled here a few years ago, however there were local seedlings and small trees of *contorta* up to 2 m tall, providing evidence of re-establishment. Other species seen in the frost flats included *Androstoma empetrifolia*, *Pimelea prostrata*, *Muehlenbeckia axillaris*, *Uncinia rubra*, and *Celmisia gracilentia*.

We made one more brief stop, to look at bog pine and monoao scrub, but did not have time to reach the bog pine forest, which was found in 1995 (Wildland Consultants 1997), and which will be the focus of another trip to Kāingaroa Forest, next year.

A list of plant species seen at the wetland, Otangimoana, and the small part of the Otamatea frost flats visited is attached. In total we recorded 73 indigenous species and 21 exotic species.

ACKNOWLEDGMENTS

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VASCULAR PLANT SPECIES OBSERVED DURING THE UPPER RANGITĀIKI WETLANDS AND FROST FROST FLAT FIELD TRIP

9 June 2012
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Species	Common Name	Wetlands	Otangimoana	Frost Flat
INDIGENOUS SPECIES				
Monocot. trees and shrubs				
<i>Cordyline australis</i>	ti kouka, cabbage tree		✓	
Dicot. trees and shrubs				
<i>Androstoma empetrifolia</i>				✓
<i>Aristotelia fruticosa</i>			✓	
<i>Carmichaelia australis</i>	makaka, maukoro		✓	
<i>Coprosma</i> × <i>cunninghamii</i>		✓		✓
<i>Coprosma dumosa</i>		✓	✓	✓
<i>Coprosma propinqua</i> var. <i>propinqua</i>	mingimingi	✓	✓	✓
<i>Corokia cotoneaster</i>	korokio		✓	
<i>Dracophyllum subulatum</i>	monoao		✓	✓
<i>Hebe stricta</i> var. <i>stricta</i>	koromiko		✓	✓
<i>Kunzea ericoides</i>	kanuka		✓	✓
<i>Leptospermum scoparium</i> agg.	manuka	✓		✓
<i>Leucopogon fraseri</i>	patotara	✓ ¹		✓
<i>Myrsine divaricata</i>			✓	
<i>Olearia virgata</i>		✓	✓	
<i>Pimelea prostrata</i>	pinatoro	✓ ¹		✓
<i>Raukawa anomalus</i>			✓	
Dicot. lianes				
<i>Muehlenbeckia australis</i>	puka		✓	
<i>Muehlenbeckia axillaris</i>	pohuehue			✓
Lycopods and psilopsids				
<i>Lycopodiella lateralis</i>		✓		

¹ Present on wetland margins.

Species	Common Name	Wetlands	Otangimoana	Frost Flat
<i>Lycopodium fastigiatum</i>	maatukutuku			✓
Ferns				
<i>Asplenium flaccidum</i>	makawe		✓	
<i>Blechnum chambersii</i>	rereti		✓	
<i>Blechnum fluviatile</i>	kiwikiwi		✓	
<i>Blechnum membranaceum</i>			✓	
<i>Blechnum minus</i>	swamp kiokio	✓		
<i>Blechnum novae-zealandiae</i>	kiokio		✓	
<i>Blechnum penna-marina</i> subsp. <i>alpina</i>		✓	✓	
<i>Gleichenia microphylla</i>	waewaekaka, swamp umbrella fern		✓	
<i>Hymenophyllum demissum</i>	irirangi, filmy fern		✓	
<i>Hymenophyllum rarum</i>	mauku, filmy fern		✓	
<i>Hymenophyllum sanguinolentum</i>	piripiri, filmy fern		✓	
<i>Lindsaea trichomanoides</i>			✓	
<i>Microsorium pustulatum</i>	kowaowao, hound's tongue fern		✓	
<i>Polystichum vestitum</i>	puniu, prickly shield fern		✓	
<i>Pyrrhosia eleagnifolia</i>	leather-leaf fern		✓	
<i>Sticherus cunninghamii</i>	waekura		✓	
Grasses				
<i>Austroderia fulvida</i>	toetoe	✓	✓	
<i>Deyeuxia avenoides</i>		✓ ¹		✓
<i>Hierochloa redolens</i>	karetu		✓	
<i>Poa cita</i> s.l.	silver tussock, wi		✓	✓
Sedges				
<i>Carex breviculmis</i>			✓	
<i>Carex echinata</i>		✓		
<i>Carex geminata</i> agg.	rautahi	✓		
<i>Carex secta</i>	purei	✓	✓	
<i>Carex subdola</i>		✓		
<i>Eleocharis acuta</i>	spike sedge	✓		
<i>Eleocharis gracilis</i>		✓		
<i>Isolepis reticularis</i>		?		

Species	Common Name	Wetlands	Otangimoana	Frost Flat
<i>Lepidosperma australe</i>			✓	✓
<i>Machaerina arthropphylla</i>		✓		
<i>Machaerina rubiginosa</i>		✓		
<i>Machaerina tenax</i>		✓		
<i>Uncinia rubra</i>				✓
<i>Uncinia scabra</i>	matau		✓	
Monocot. herbs (other than orchids, grasses, sedges, and rushes)				
<i>Lemna minor</i>	karearea		✓	
<i>Phormium tenax</i>	harakeke, flax	✓		
<i>Sparganium subglobosum</i>	maru, burr reed	✓		
Composite herbs				
<i>Celmisia gracilentia</i>	pekapeka			✓
Dicot. herbs (other than composites)				
<i>Acaena anserinifolia</i>	piripiri		✓	
<i>Chaerophyllum ramosum</i>			✓	
<i>Geranium potentilloides</i> var. <i>potentilloides</i>			✓	
<i>Gonocarpus incanus</i>	piripiri			✓
<i>Gonocarpus micranthus</i>	piripiri	✓		
<i>Hydrocotyle novae-zeelandiae</i> var. <i>novae-zeelandiae</i>		✓		
<i>Hydrocotyle pterocarpa</i>		✓		
<i>Lobelia angulata</i>	panakenake	✓		
<i>Ranunculus amphitrichus</i>	kawariki	✓		
<i>Ranunculus glabrifolius</i>	kawariki	✓		
<i>Ranunculus macropus</i>		✓		
<i>Ranunculus reflexus</i>	maruru		✓	
<i>Ranunculus amphitrichus</i> × <i>R. macropus</i>		✓		
Mosses				
<i>Sphagnum cristatum</i>		✓		
EXOTIC SPECIES				
Gymnosperms				
<i>Pinus contorta</i>	lodgepole pine	✓		✓
Dicot. trees and shrubs				
<i>Calluna vulgaris</i>	heather	✓ ¹		
<i>Erica lusitanica</i>	Spanish heath	✓		
<i>Rubus</i> sp. (<i>R. fruticosus</i>)	blackberry		✓	

Species	Common Name	Wetlands	Otangimoana	Frost Flat
agg.)				
Grasses				
<i>Agrostis capillaris</i>	browntop	✓		
<i>Agrostis stolonifera</i>	creeping bent	✓	✓	
<i>Anthoxanthum odoratum</i>	sweet vernal	✓		
<i>Holcus lanatus</i>	Yorkshire fog	✓		✓
Sedges				
<i>Carex ovalis</i>	oval sedge	✓		
Rushes				
<i>Juncus acuminatus</i>	sharp-fruited rush	✓		
<i>Juncus articulatus</i>	jointed rush	✓		
<i>Juncus bulbosus</i>	bulbous rush	✓		
Composite herbs				
<i>Conyza sumatrensis</i>	broad-leaved fleabane	✓		
<i>Hieracium pilosella</i>	mouse-ear hawkweed		✓	✓
<i>Hypochaeris radicata</i>	catsear			✓
<i>Mycelis muralis</i>	wall lettuce		✓	
<i>Senecio</i> sp.		✓		
Dicot. herbs (other than composites)				
<i>Epilobium ciliatum</i>	tall willow herb	✓		
<i>Nasturtium microphyllum</i>	one-rowed watercress	✓	✓	
<i>Ranunculus flammula</i>	spearwort	✓		
<i>Ranunculus trichophyllus</i>	water buttercup		✓	

FAUNA

Birds

Hirundo neoxena neoxena

welcome swallow

Rhipidura fuliginosa

piwakawaka, fantail

Tadorna variegata

putangitangi; pari; paradise shelduck

Animals

Oryctolagus cuniculus

European rabbit

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