

THORNTON DUNES AND WHAKATANE NURSERY

FIELD TRIP 2010

Sarah Beadel

A relatively large group of keen botanists met at the mouth of the Rangitaiki River on 23rd May 2010 to explore the vegetation along the dunes. We left one car at the Walker Road end to shuttle back. The first stop, after leaving the carpark, was the restoration plantings in the area previously mined for sand. Species such as Thornton kanuka (*Kunzea* aff. *ericoides* (d)) and *Muehlenbeckia complexa* had been planted 2-3 years previously, and were starting to establish and spread naturally on the site. From there we moved to the foredune and found common indigenous duneland species such as spinifex (*Spinifex sericeus*), *Muehlenbeckia complexa*, and *Ficinia nodosa*. Here we also saw some pingao (*Desmoschoenus spiralis*; classed as 'At Risk-Relict' in de Lange *et al.* 2009), a few plants of *Coprosma acerosa* (classed as 'At Risk-Naturally Uncommon' in de Lange *et al.* 2009), *Oxalis rubens*, *Deyeuxia billardierei*, and a few plants of *Ozothamnus leptophylla*, along with akeake (*Dodonaea viscosa*) and African boxthorn (*Lycium ferocissimum*).

The surprise of the day was the relative abundance of coastal mahoe (*Melicactus novae-zealandiae*). This species was only recently discovered at this site (P. Cashmore pers. comm.). It is well established and appears to be spreading, with many small seedlings and small shrubs seen. It appears to establish in the shelter of individual boxthorn trees, and then spread from there. We also saw several plants of *Carex* aff. *raoulii* ("raotest") (regionally uncommon) in this area. We then made our way down to the stands of Thornton kanuka (classed as 'Taxonomically Indeterminate - Threatened-Nationally Vulnerable' in de Lange *et al.* 2009). We walked through the Thornton kanuka forest most of the way to Walker Road. Amongst the kanuka we found a small number of larger coastal mahoe and also seedlings. It is likely that the seedlings and small plants have established since grazing was removed a few years ago.

The discovery of coastal mahoe within and around the kanuka stands extended the known extent of this population considerably. Prior to the field trip it was only known from sites closer to the mouth of the Rangitaiki River.

The understorey and groundcover beneath the twisted kanuka stems is very sparse, with few other species present. These include *Microlaena stipoides* and a few very local *Asplenium flaccidum*, *A. polyodon*, and shrubs of mingimingi (*Leucopogon fasciculatus*) and prickly mingimingi (*Leptecophylla juniperina* subsp. *juniperina*). One akeake and one karo were also seen in the kanuka-dominant canopy. As we were walking back along the track we saw a native broom (*Carmichaelia australis*) and a *Coprosma robusta* (karamu).

After we shuttled back to the cars, and some of the less prepared botanists reconnected with their lunches, we proceeded to the Whakatane branch of Naturally Native Nurseries where Jo Bonner showed us around the nursery. The health and vigour of the nursery plants was impressive, and also the diverse range of colours in the foliage and the various *Carex* species, pingao, *Coprosma acerosa*, taupata, and harakeke. Jo showed us the obvious visual differences in appearance of the ‘Eastern’ spinifex and the ‘Western’ spinifex, and also the different forms of *Coprosma acerosa* collected from different locations. It was interesting to see some of the special plants that Jo has cultivated from various parts of the Bay of Plenty and elsewhere, including *Olearia pachyphylla* and *Tecomantbe speciosa*.

Jo informed us of some of the techniques she used to germinate seeds and successfully raise some source of the more temperamental native species, and finished by showing us edible New Zealand natives such as New Zealand celery (*Apium prostratum*), giant cress (*Rorippa divaricata*), spinach (*Tetragonia implexicomata*), and Cook’s scurvy grass (*Lepidium oleraceum*; classed as ‘Threatened-Nationally Vulnerable in de Lange *et al.* 2009), and wrapped up a very interesting day by giving us some examples of the edible plants to

<i>Muehlenbeckia australis</i>	puka
<i>Muehlenbeckia complexa</i>	pohuehue
<i>Muehlenbeckia australis</i> × <i>M. complexa</i>	

Ferns

<i>Asplenium flaccidum</i>	makawe
<i>Asplenium polyodon</i>	petako
<i>Microsorium pustulatum</i>	hound's tongue fern
<i>Pteridium esculentum</i>	rarahu, bracken
<i>Pyrrosia eleagnifolia</i>	leather-leaf fern

Grasses

<i>Lachnagrostis billardierei</i>	perehia
<i>Microlaena stipoides</i>	patiti, meadow rice grass
<i>Oplismenus hirtellus</i> subsp. <i>imbecillis</i>	
<i>Spinifex sericeus</i>	kowhangatara, Spinifex

Sedges

<i>Baumea juncea</i>	
<i>Carex</i> aff. <i>raoulii</i> ("raotest")	
<i>Carex pumila</i>	
<i>Carex testacea</i>	
<i>Cyperus ustulatus</i> f. <i>ustulatus</i>	toetoe, upokotangata
<i>Desmoschoenus spiralis</i>	pingao
<i>Eleocharis sphacelata</i>	giant spike sedge, ngawha
<i>Schoenoplectus tabernaemontani</i>	kapungawha

Composite herbs

<i>Pseudognaphalium luteoalbum</i> agg.	pukatea
<i>Senecio biserratus</i>	
<i>Senecio glomeratus</i>	pukatea

Dicot. herbs (other than composites)

<i>Haloragis erecta</i> subsp. <i>erecta</i>	toatoa
<i>Oxalis rubens</i>	sand oxalis

NATURALISED SPECIES

Dicot. trees and shrubs

<i>Berberis glaucocarpa</i>	barberry
<i>Chamaecytisus palmensis</i>	tree lucerne
<i>Lupinus arboreus</i>	lupin
<i>Lycium ferocissimum</i>	boxthorn

<i>Rosa rubiginosa</i>	sweet briar
<i>Rubus fruticosus</i> agg.	blackberry
<i>Ulex europaeus</i>	gorse

Monocot. lianes

<i>Asparagus asparagoides</i>	smilax
-------------------------------	--------

Grasses

<i>Ammophila arenaria</i>	marram
<i>Anthoxanthum odoratum</i>	sweet vernal
<i>Briza maxima</i>	large quaking grass
<i>Bromus willdenowii</i>	prairie grass
<i>Cortaderia selloana</i>	pampas grass
<i>Cynodon dactylon</i>	Indian doab
<i>Dactylis glomerata</i>	cocksfoot
<i>Digitaria sanguinalis</i>	summer grass
<i>Ehrharta erecta</i>	veldt grass
<i>Elytrigia pycnantha</i>	sea couch
<i>Festuca rubra</i> subsp. <i>commutata</i>	chewings fescue
<i>Lagurus ovatus</i>	harestalk
<i>Paspalum dilatatum</i>	paspalum
<i>Pennisetum clandestinum</i>	kikuyu grass
<i>Poa pratensis</i>	Kentucky bluegrass
<i>Schedonorus arundinaceus</i>	tall fescue
<i>Setaria pumila</i>	yellow bristle grass
<i>Sporobolus africanus</i>	ratstalk

Rushes

<i>Juncus acuminatus</i>	sharp-fruited rush
--------------------------	--------------------

Monocot. herbs (other than orchids, grasses, sedges, and rushes)

<i>Gladiolus undulatus</i>	gladiolus
----------------------------	-----------

Composite herbs

<i>Achillea millefolium</i>	yarrow
<i>Conyza sumatrensis</i>	broad-leaved fleabane
<i>Lactuca serriola</i>	prickly lettuce
<i>Mycelis muralis</i>	wall lettuce
<i>Osteospermum fruticosum</i>	rain daisy, dimorphotheca
<i>Sonchus oleraceus</i>	puha, sow thistle

Dicot. herbs (other than composites)

<i>Aphanes arvensis</i>	parsley piert
<i>Cakile maritima</i>	sea rocket

<i>Foeniculum vulgare</i>	fennel
<i>Fumaria muralis</i>	scrambling fumitory
<i>Galium aparine</i>	cleavers bedstraw
<i>Galium palustre</i>	marsh bedstraw
<i>Lepidium africanum</i> agg.	pepper cress
<i>Oenothera stricta</i>	evening primrose
<i>Orobanche minor</i>	broomrape
<i>Paronychia brasiliiana</i>	Brazilian whitlow
<i>Phytolacca octandra</i>	inkweed
<i>Plantago lanceolata</i>	narrow-leaved plantain
<i>Portulaca oleracea</i>	wild portulaca
<i>Ranunculus flammula</i>	spearwort
<i>Raphanus raphanistrum</i> subsp. <i>maritimus</i>	sea raddish
<i>Silene gallica</i>	catchfly
<i>Solanum chenopodioides</i>	velvety nightshade
<i>Stellaria media</i>	chickweed