

**BOWENTOWN HEADS AND  
ATHENREE SAND DUNES FIELD TRIP 2010**

Sarah Beadel

On 1 May 2010 a good-sized group of keen botanists met at the Bowentown Heads to explore the botany of Bowentown headland and Anzac Cove, and, to ensure that there was plenty of habitat diversity to be seen during the day, we finished off by exploring the sand dunes. At the start of the day we walked down to the narrow beach at the tip of the Bowentown headland where, beneath the pohutukawa, we found *Tetragonia tetragonioides*, New Zealand ice plant (*Disphyma australe*), *Senecio lautus*, *Poa anceps*, *Lobelia anceps*, and New Zealand celery (*Apium prostratum*). The pohutukawa were festooned with *Astelia banksii* and there was *Peperomia urvilleana* on the rock faces.

When I first visited this area in 1992, I had seen one plant of *Pteris comans* × *P. macilenta*, and on this trip we again found one plant of this hybrid, adjacent to the track. Perhaps it was the same plant?

Walking back up the track and to the top of the headland there was a variety of sedges: *Baumea juncea*, *Lepidosperma laterale* (approaching its southern limit, and it is only known from a handful of sites in the Tauranga Ecological District), *L. australe*, *Schoenus tendo*, *Gahnia lacera*, and beneath the pohutukawa forest there were a few *Carex spinirostris*.

On top of the headland, amongst the natives, there was a variety of weeds, including brush wattle (*Paraserianthes lophantha*), gorse (*Ulex europaeus*), prickly hakea (*Hakea sericea*), Spanish heath (*Erica lusitanica*), and several hedge heath (*Erica caffra*). Also of interest were the exotic grasses along the track, including veldt grass (*Ehrharta erecta*), bay grass (*Eragrostis brownii*), ratstail (*Sporobolus africanus*), green bristle grass (*Setaria viridis*), Indian doab (*Cynodon dactylon*), and narrow-leaved carpet grass (*Axonopus fissifolius*).

At this stage we walked back to the cars, and drove to the start of the Anzac Cove track, and then walked to Anzac Cove for lunch. We were delayed at various points on the way by various interesting species, including whau (*Entelea arborescens*), fig trees (*Ficus carica*), *Carex* aff. *raoulii* ‘raotest’, and *Adiantum hispidulum*. Also present along the track was a good population of *Chionochloa flavicans* f. *flavicans*. It was good to see this population is still thriving since I first saw it in 1992. It is not known from anywhere else in Tauranga Ecological District. From there we made our way quickly down to Anzac Cove to shelter beneath the large pohutukawa at the eastern end of the Cove while there we watched a large black thunderstorm sweeping towards us over Tauranga Harbour whilst we lunched, and luckily we managed to avoid the worst of it.

After lunch and exploring the coastal cliffs, we made our way back to the cars and drove to the eastern end of Athenree Beach and explored the sand dunes for an hour or so. There was a diverse range of indigenous sand dune species, including native sand oxalis (*Oxalis rubens*), pingao (*Desmoschoenus spiralis*; classed as ‘At Risk-Relict’ in de Lange *et al.* 2009), *Carex pumila*, spinifex (*Spinifex sericeus*), a few shrubs of *Ozothamnus leptophylla*, *Calystegia soldanella*, and perehia (*Lachnagrostis billardierei*).

The presence and prominence of *Banksia integrifolia* is disturbing. Some control work had been undertaken but it appeared that herbicide had not been used and there was regrowth from the stumps. Other environmental pest plants present include Easter lily (*Lilium formosanum*), rain daisy (*Osteospermum fruticosum*), arctotis (*Arctotis stoechadifolia*), agapanthus (*Agapanthus praecox*), *Asparagus densiflorus*, smilax (*Asparagus asparagoides*), pampas (*Cortaderia selloana*), Japanese honeysuckle (*Lonicera japonica*), and in the small wetland at the back of the dunes, grey willow (*Salix cinerea*). In contrast, indigenous species present on the dunes are relatively diverse. We didn’t find the *Pimelea villosa* seen in 1983 by Peter de Lange, or *Coprosma acerosa* (classed as ‘At Risk - Naturally Uncommon’ in de Lange *et al.* 2009) (recorded by Beadel (1992)). However, as we only explored a small portion of the dunes, the *Coprosma acerosa* is likely to still be present,



<i>Pseudopanax lessonii</i>	houpara
<i>Weinmannia racemosa</i>	kamahi
<b>Dicot. lianes</b>	
<i>Calystegia soldanella</i>	panahi, shore bindweed
<i>Muehlenbeckia complexa</i>	pohuehue
<b>Lycopods and psilopsids</b>	
<i>Huperzia varia</i>	Whiri-o-Raukatauri
<b>Ferns</b>	
<i>Adiantum hispidulum</i>	maidenhair fern
<i>Asplenium flaccidum</i>	makawe
<i>Asplenium oblongifolium</i>	huruhuruwhenua
<i>Blechnum discolor</i>	petipeti, crown fern
<i>Blechnum filiforme</i>	panako
<i>Blechnum novae-zelandiae</i>	kiokio
<i>Cyathea dealbata</i>	ponga, silver fern
<i>Cyathea medullaris</i>	mamaku
<i>Doodia australis</i>	pukupuku
<i>Microsorium pustulatum</i>	hounds tongue fern
<i>Pteridium esculentum</i>	rarahu, bracken
<i>Pteris tremula</i>	turawera, shaking brake
<i>Pyrrhosia eleagnifolia</i>	leather-leaf fern
<b>Orchids</b>	
<i>Earina mucronata</i>	peka-a-waka
<i>Thelymitra</i> sp.	
<b>Grasses</b>	
<i>Chionochloa flavicans</i> f. <i>flavicans</i>	
<i>Microlaena stipoides</i>	patiti, meadow rice grass
<i>Oplismenus hirtellus</i> subsp. <i>imbecillis</i>	
<i>Poa anceps</i> agg.	
<b>Sedges</b>	
<i>Baumea juncea</i>	
<i>Carex</i> aff. <i>raoulii</i> ("raotest")	
<i>Carex breviculmis</i>	
<i>Carex dissita</i>	
<i>Carex testacea</i>	
<i>Ficinia nodosa</i>	wiwi
<i>Gabnia lacera</i>	tarangarara
<i>Lepidosperma laterale</i>	

*Schoenus tendo* wiwi

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

*Arthropodium cirratum* rengarenga

*Astelia banksii* kakaha

**Dicot. herbs (other than composites)**

*Dichondra repens* Mercury Bay weed

*Gonocarpus incanus* piripiri

*Haloragis erecta* subsp. *erecta* toatoa

*Lobelia anceps* punakuru

**NATURALISED AND EXOTIC SPECIES**

**Gymnosperms**

*Pinus radiata* radiata pine

**Dicot. trees and shrubs**

*Cotoneaster glaucophyllus* cotoneaster

*Erica caffra* hedge heath

*Erica lusitanica* Spanish heath

*Ficus carica* fig

*Hydrangea macrophylla* hydrangea

*Paraserianthes lophantha* brush wattle

*Prunus* sp. ornamental cherry

*Rosa rubiginosa* sweet briar

*Rubus* sp. (*R. fruticosus* agg.) blackberry

**Dicot. lianes**

*Lonicera japonica* Japanese honeysuckle

*Vinca major* periwinkle

**Grasses**

*Agrostis capillaris* browntop

*Anthoxanthum odoratum* sweet vernal

*Cortaderia selloana* pampas

*Dactylis glomerata* cocksfoot

*Ehrharta erecta* veldt grass

*Holcus lanatus* Yorkshire fog

*Lolium perenne* rye grass

*Paspalum dilatatum* paspalum

*Pennisetum clandestinum* kikuyu grass

*Poa annua* annual poa

*Schedonorus arundinaceus* tall fescue

## **Sedges**

*Cyperus eragrostis*

umbrella sedge

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

*Canna indica*

canna lily, Indian shot

*Hedychium gardnerianum*

kahili ginger, wild ginger

*Lilium formosanum*

Formosan lily

## **Composite herbs**

*Bellis perennis*

lawn daisy

*Crepis capillaris*

hawksbeard

*Gamochaeta coarctata*

purple cudweed

*Hypochoeris radicata*

catsear

*Lactuca serriola*

prickly lettuce

*Senecio elegans*

purple groundsel

*Sonchus oleraceus*

puha, sow thistle

## **Dicot. herbs (other than composites)**

*Amaranthus* sp.

redroot

*Atriplex prostrata*

orache

*Cakile maritima*

sea rocket

*Centaureum erythraea*

centaury

*Daucus carota*

wild carrot

*Linum catharticum*

purging flax

*Lotus pedunculatus*

lotus

*Malva* sp.

mallow

*Plantago lanceolata*

narrow-leaved plantain

*Plantago major*

broad-leaved plantain

*Trifolium pratense*

red clover

*Tropaeolum majus*

garden nasturtium

*Veronica serpyllifolia*

turf speedwell

# CHECKLIST OF INDIGENOUS VASCULAR PLANTS OF BOWENTOWN HEADS

(NZMS 260 U13 747107)

Sarah Beadel

(based on visit in July 1992 and May 2010)

## Monocot. trees and shrubs

*Cordyline australis* ti kouka, cabbage tree

## Dicot. trees and shrubs

*Coprosma repens* taupata  
*Coprosma robusta* karamu  
*Corynocarpus laevigatus* karaka  
*Geniostoma ligustrifolium* var. *ligustrifolium* hangehange  
*Hebe stricta* var. *macroura* koromiko  
*Hebe stricta* var. *stricta* koromiko  
*Knightia excelsa* rewarewa  
*Kunzea ericoides* kanuka  
*Leptospermum scoparium* agg. manuka  
*Leucopogon fasciculatus* mingimingi  
*Macropiper excelsum* subsp. *excelsum* kawakawa  
*Melicytus ramiflorus* subsp. *ramiflorus* mahoe  
*Metrosideros excelsa* pohutukawa  
*Myrsine australis* mapou  
*Olearia furfuracea* akepiro  
*Pittosporum crassifolium* karo  
*Pseudopanax arboreus* five finger  
*Pseudopanax lessonii* houpara

## Dicot. lianes

*Rubus schmidelioides* var. *schmidelioides* bush lawyer

## Ferns

*Adiantum cunninghamii* maidenhair fern  
*Asplenium oblongifolium* huruhuruwhenua  
*Blechnum novae-zelandiae* kiokio  
*Cyathea medullaris* mamaku  
*Doodia australis* pukupuku  
*Polystichum* sp.  
*Pteridium esculentum* rarahu, bracken  
*Pteris comans* × *P. macilenta*  
*Pyrrhosia eleagnifolia* leather-leaf fern

### **Orchids**

*Microtis unifolia* agg.  
*Thelymitra longifolia*

maikaika  
maikuku

### **Grasses**

*Chionochloa flavicans* f. *flavicans*  
*Microlaena stipoides*  
*Poa anceps* agg.

meadow rice grass

### **Sedges**

*Baumea juncea*  
*Carex testacea*  
*Cyperus ustulatus* f. *ustulatus*  
*Ficinia nodosa*  
*Gahnia lacera*  
*Isolepis cernua*  
*Lepidosperma laterale*  
*Machaerina sinclairii*  
*Morelotia affinis*

toetoe, upokotangata  
wiwi  
tarangarara  
  
tuhara

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

*Arthropodium candidum*  
*Arthropodium cirratum*  
*Astelia banksii*  
*Dianella nigra*

repehina-papa  
rengarenga  
kakaha  
turutu

### **Composite herbs**

*Senecio lautus* var. *lautus*

### **Dicot. herbs (other than composites)**

*Apium prostratum* subsp. *prostratum* var. *filiforme* New Zealand celery  
*Dichondra repens* Mercury Bay weed  
*Disphyma australe* subsp. *australe* horokaka  
*Gonocarpus incanus* piri-piri  
*Haloragis erecta* subsp. *erecta* toatoa  
*Lobelia anceps* punakuru  
*Peperomia urvilleana*  
*Tetragonia tetragonoides* kokihi

**CHECKLIST OF INDIGENOUS VASCULAR PLANTS  
ATHENREE SAND DUNES**

**Sarah Beadel**  
(Based on visits in July 1992 and May 2010)

**Monocot. trees and shrubs**

*Cordyline australis* ti kouka, cabbage tree

**Dicot. trees and shrubs**

*Coprosma acerosa* s.s sand coprosma, tarakupenga

*Coprosma macrocarpa*

*Coprosma repens* taupata

*Macropiper excelsum* subsp. *excelsum* kawakawa

*Metrosideros excelsa* pohutukawa

*Myoporum laetum* ngaio

*Myrsine australis* mapou

*Pittosporum crassifolium* karo

**Dicot. lianes**

*Calystegia soldanella* panahi, shore bindweed

*Muehlenbeckia complexa* pohuehue

**Ferns**

*Pteridium esculentum* rarahu, bracken

**Grasses**

*Lachnagrostis billardierei* perehia

*Microlaena stipoides* patiti, meadow rice grass

*Spinifex sericeus* kowhangatara, spinifex

*Zoysia pauciflora*

**Sedges**

*Baumea juncea*

*Carex pumila*

*Carex testacea*

*Cyperus ustulatus* f. *ustulatus* toetoe, upokotangata

*Desmoschoenus spiralis* pingao

*Ficinia nodosa* wiwi

**Rushes**

*Apodasmia similis* oioi

*Juncus pallidus* wi

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

<i>Triglochin striata</i>	arrow grass
<i>Typha orientalis</i>	raupo

**Dicot. herbs (other than composites)**

<i>Apium prostratum</i> subsp. <i>prostratum</i> var. <i>filiforme</i>	New Zealand celery
<i>Lobelia anceps</i>	punakuru
<i>Oxalis rubens</i>	sand oxalis
<i>Tetragonia implexicoma</i>	

**PLANTED**

<i>Metrosideros excelsa</i>	pohutukawa
<i>Pseudopanax lessonii</i>	houpara

**1983 RECORD**

<i>Pimelea villosa</i> s.s. (P. de Lange pers. comm.)	autetaranga
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**PROMINENT WEED SPECIES****Gymnosperms**

<i>Pinus radiata</i>	radiata pine
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**Monocot. trees and shrubs**

<i>Phoenix canariensis</i>	Phoenix palm
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**Dicot. trees and shrubs**

<i>Banksia integrifolia</i>	banksia
<i>Lupinus arboreus</i>	lupin
<i>Salix cinerea</i>	grey willow
<i>Ulex europaeus</i>	gorse

**Monocot. lianes**

<i>Asparagus asparagoides</i>	smilax
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**Dicot. lianes**

<i>Lonicera japonica</i>	Japanese honeysuckle
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**Grasses**

<i>Ammophila arenaria</i>	marram
<i>Cortaderia selloana</i>	pampas
<i>Paspalum vaginatum</i>	saltwater paspalum

**Composite herbs**  
*Osteospermum fruticosum*  
*Senecio elegans*

*Gazania* sp.  
 rain daisy, dimorphotheca  
 purple groundsel

**Dicot. herbs (other than composites)**  
*Cakile maritima*  
*Carpobrotus edulis*

sea rocket  
 ice plant

**Monocot. herbs (other than orchids, grasses, sedges, and rushes)**  
*Agapanthus praecox*  
*Asparagus densiflorus*

agapanthus

## Illustrated guide to New Zealand sun orchids, *Thelymitra* (Orchidaceae)

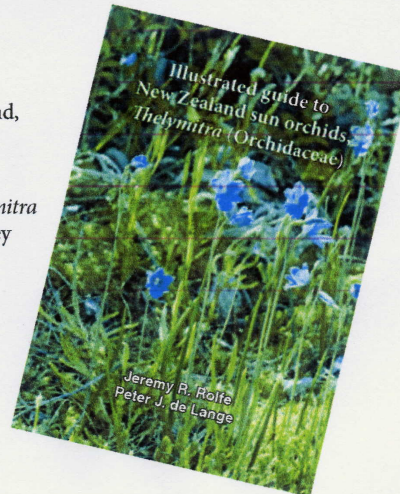
by Jeremy Rolfe and Peter de Lange

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