Field Trip to Mimiwhangata, Northland.

Easter, 28 March - 1 April 2002

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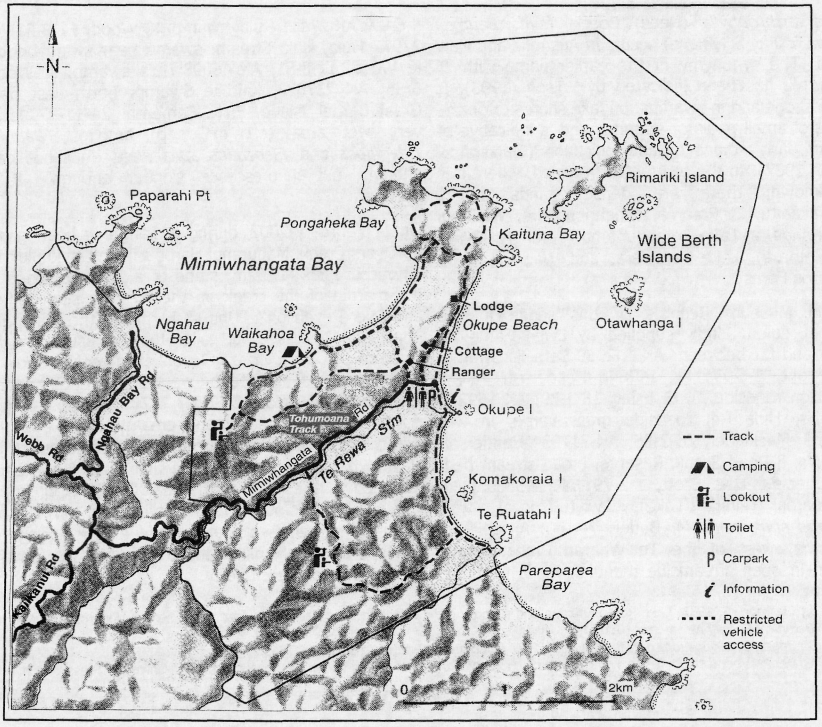
Introduction

Mimiwhangata Coastal Park is administered by the Department of Conservation, and is situated on the east coast of Northland, roughly halfway between Tutukaka and Cape Brett (NZMS 260 Sheets QO5 & QO6). It is an hour's drive from both Whangarei and Russell. Formerly owned by New Zealand Breweries, it was taken over by the Department of Lands and Survey in 1986. It covers an area of 804 ha, and consists of a small peninsula, several beaches and headlands, 3 small islets which can be accessed at low tide, and it runs back inland to a high point of 243 metres. Off shore is the larger Rimariki Island (20 ha.), also part of the coastal park, and several smaller islands and rock stacks known collectively, and no doubt appropriately, as the Wide Berth Islands.

At latitude 35° 27' S, longitude 174° 25' E it has a mild, almost subtropical climate, warm and humid. Annual rainfall exceeds 1500 mm, and rain falls c. 173 days per year. Although the prevailing winds are south-westerlies, occasional strong gales and heavy rains come from the east or north-east (Darby & Darby 1973).

The underlying rocks are folded greywacke and argillite of the Waipapa Group with a few outcrops of Horeke Basalts, and the yellow-brown earths are derived from the parent greywackes. An old beach line is evident c. 4 metres above the present beaches (Darby & Darby 1973, Geological map of NZ, North Cape, 1961). 112 archaeological sites have been identified, the majority being on the beaches or dunes (E. K. Cameron 1985-86).

Roughly half of the station is farmed, the rest being under scrub or bush cover, which is recovering from past burning and grazing. Most of the bush areas are now well-fenced. Many trees, mainly pohutukawa, are scattered over the farmland, but stock grazing precludes any chance of replacement by seedlings. Even where groups of trees have been fenced, rank growth of the dominant pasture grass, kikuyu, means there is little likelihood of seed germination. Quite a lot of planting has been done over the years, but smothering by kikuyu has slowed down growth. Of the plantings undertaken in the days when NZ Breweries owned the property, the ngaio trees all appear to be Tasmanian, and some of the



pohutukawas are from the Kermadecs. Also under this regime, areas of the foredunes were covered with a thin layer of asphalt in an attempt to stop sand drift. Thankfully, this is now breaking up and disappearing. Several ponds and dams have been formed, as this area is one of the strongholds for the scarce brown teal.

The grazed hillsides carry infestations of the problem Australian giant sedge (*Carex longebrachiata*); and the terrible ageratina twins, mist flower and Mexican devil weed, are well established in places. Work to make the ponds more suitable habitat for the brown teal is hampered by the growth of the sturdy wetland grass, *Glyceria maxima*. A few patches of pampas were seen on our visit, but this is not yet troublesome, and the property seems to be too far from civilization for the common weed trees to have gained a foothold.

Day 1: 28 March 2002

As the lodge and cottages on Mimiwhangata are only available on a weekly basis, our accommodation for the weekend was to be the shearing shed, which had thankfully been cleaned of sheepy things, and is often used by workers and others. With the benefits of running water and electricity, and by careful "mouseproofing" of food, it was perfectly adequate for our needs. Six people arrived during the afternoon and evening, one bringing two kitchen sinks and a fridge! After settling in and having dinner, we set off along the shore for a moonlit walk. Rimariki Island was silhouetted against a clear, starry sky, moonlight shone on the surf and sea, and the light on the Poor Knights flashed intermittently.

Day 2: 29 March 2002

The plan for the day was to explore the peninsula and eastern shoreline, with lunch back at base to meet up with the late arrivals. So after breakfast we headed north and soon broke up and followed our own interests. The birders had a great morning at the ponds and wetlands that have been created in the hollows. A large outlet pipe with a valve has recently been installed, and it is hoped that this will enable the water to be adjusted to a level that is conducive to the needs of the brown teal. Seeing bitterns in flight was the highlight of the morning. For the more botanically inclined, exploring the bush meant scrambling on steep coastal slopes. Trees of *Pittosporum umbellatum* and whau grew here, and on a headland were *Pimelea prostrata* and good populations of the coastal tussock, *Chionochloa bromoides*. Above the reach of the tide on a rocky shore was a patch of *Scleranthus biflorus*, and a black shore skink scuttled away when a rock was lifted. A sample of mud was taken from the dried out margins of a pond, and back at HQ, with the assistance of Alistair's microscope, the green dots on the mud proved to be the tiniest of flowering plants, *Wolffia australiana*. Over the following days this plant, together with *Lemna minor*, *Spirodela punctata*, and the introduced water fern *Azolla pinnata*, kept ten year old Ian busy at the microscope for long periods of time.

After lunch, with the rest of the party now assembled, we headed southwards, botanising beaches, headlands, and the three little islets that are accessible at low tide. There were lovely rock pools to be explored, with huge crabs and an octopus, which Mark managed to capture briefly. The second islet had a tunnel through it, and the third one was the most forested, with native toetoe, *Cortaderia splendens*, at the base. We returned on an inland farm track, and were surprised to find about a dozen plants of *Myrsine divaricata*.

Day 3: 30 March 2002

After a couple of blips involving the water supply and a missing mousetrap, the group set off up the ridge behind the ranger's house and onto the Tohumoana Track. This led up through regenerating scrub to the basalt summit of a small hill, and there, straggling up through kikuyu was a wisp or two of the nationally threatened *Calystegia marginata*. On the way down a breakaway group bush crashed down a slope of mature puriri and pohutukawa trees. Where the open canopy allowed light in, mist flower and Mexican devil weed formed the ground cover, but where the canopy was thicker these disappeared. Some whau, and the little maidenhair fern *Adiantum diaphanum* were present.

Lunch was eaten on the beach at Waikahoa Bay. At Pa Point a single tree of tawapou was seen among the coastal vegetation, along with *Coprosma macrocarpa*, pohutukawa, karo and kawakawa. The round trip took in the ponds again, and Ian replenished his supply of water plants in passing.

After dinner we burnt a pile of old wood that the ranger wanted to get rid of, and had a sing song in the moonlight.

Day 4: 31 March 2002

It had rained heavily during the night, and was still showery in the morning, so it was agreed to delay the day's walk until after lunch. A small group went back to the Mimiwhangata Trig to look for *Streblus banksii*, as two trees of this were known to have grown there in the 1980s. They were not relocated, but Arthur Dunn (pers. comm.) says they are still there. Some plants of *Pteris comans* were growing under the coastal scrub. Evidently a good population of *Calystegia marginata* grows on the headland (Marcus Dill, pers. comm.), but none was seen.

By afternoon the drizzle had lifted, so the party drove a short way up the road and then headed up the Puriri Track. On the edges of the clay track were three lycopods, *Lycopodiella cernua*, *Lycopodium deuterodensum*, and *L. volubile*, umbrella fern, *Gleichenia microphylla*, and comb fern, *Schizaea fistulosa*. One of the common understorey plants was the intriguing little *Alseuosmia banksii*, a few of which bore red fruit. Some sharp eyes spotted a green frog

on the trackside, and a soft, limey green flatworm wrapped around a branch caused much comment. The puriri tree that the track was named for was found, and the platform that once nestled in its branches is now dismantled. Nearby were found *Cordyline pumilio, Libertia grandiflora* and *Drymoanthus adversus*. Under the kanuka on the way down was the little hairy daisy, *Lagenifera lanata*.

Day 5: 1 April 2002

After cleaning the quarters, and bearing in mind the inevitable heavy traffic, a start was made for home.

Footnote

On returning from this trip and speaking to Arthur Dunn, who has visited Mimiwhangata on several occasions, I was told of a good population of king fern (Marattia salicina) growing in a gully near the water tank.

Acknowledgements To Lisa Forester for organising the accommodation, and for her support. To Doc Ranger Chris Moretti for his co-operation and time, especially during a reconnaissance visit. To Shirley Smith for the sketch.

References

Cameron, E.K. 1986: Vascular Flora and Vegetation of Rimiriki and Associated Islands, Mimiwhangata, North-East New Zealand. Tane Vol 31: 47 – 74.

Darby, J. and Darby, M. 1973: Mimiwhangata Ecological Report. Unpublished report commissioned by NZ Breweries.

Appendix 1

Species of birds seen or heard during the fieldtrip. Listed in Checklist order by Paul Asquith.

Australasian Gannet	Grey Teal	NZ Dotterel	Kingfisher	Silvereye
Black Shag	Brown Teal	Spur-winged Plover	Skylark	Tui
Pied Shag	Australasian Shoveller	Black-backed Gull	Welcome Swallow	Yellowhammer
White-faced Heron	Australasian Harrier	Red-billed Gull	NZ Pipit	Goldfinch
Australasian Bittern	Pheasant	Caspian Tern	Blackbird	House Sparrow
Black Swan	Spotless Crake	White-fronted Tern	Song Thrush	Starling
Paradise Shelduck	Pukeko	NZ Pigeon	Grey Warbler	Myna
Mallard	Variable Oystercatcher	Eastern Rosella	Fantail	White-backed Magpie
Grey Duck	Pied Stilt	Morepork	Pied Tit	

Beach wrecks included Little Blue Penguin, Flesh-footed Shearwater, Fluttering Shearwater, Bullers Shearwater, Gannet and Black-backed Gull.

Appendix 2

Checklist of vascular indigenous plants seen during the Easter 2002 trip, previous records (referenced), and a search of the AK Herbarium database.

Key

B = Beaches
H = Headlands
W = Wetlands This includes the artificial wetlands on the peninsula, and a small wetland at the base of the Tohumoana hill. This, being a natural wetland, is more species rich than the former.
I = Islets
TT = Tohumoana Track
PT = Puriri Track
MP = Mimiwhangata Peninsula
V = Herbarium voucher specimen in AK Herbarium.
x^1 = seen by MEY 1985
x^2 = seen by Arthur Dunn. Voucher specimen collected by BW McKay, 1997.
x^3 = growing on the roadside
x4 = growing on the edge of Okupe River, Okupe Beach
x5 = probably planted
x6 = on farmland
x7 = seen by Marcus Dill and Arthur Dunn. Voucher specimen collected by AJ Dunn, 1994

Apart from *Myrsine divaricata*, the trees growing on the farmed land are not recorded separately, and all the species seen there are recorded in other areas. The planted vegetation is not recorded, apart from the doubtful records marked x5. Of these, most of

the pingao and spinifex are obviously planted, as they grow in neat lines, but there may be some natural growth. Toatoa is recorded by Darby and Darby as being commonly seen from the road, but none was seen on this trip, despite close observation. Their species list is disregarded, as it seems to be mostly guesswork, listing several species, such as *Cordyline indivisa*, that do not grow in the north. Searching the AK Herbarium database turned up some interesting records that are not listed in the checklist as they probably grow outside the Park. They include:

AK 22312 *Fuchsia procumbens* KP Olsen, 1946, between Helena Bay and Mimiwhangata.
AK 155130 *Hebe speciosa* KP Olsen, 1948, Mimiwhangata Bay.
AK 246075 *Bulbophyllum tuberculatum* MJ Thorsen, 1999, Hansens Hill.
AK 255489 *Microlaena polynoda* EK Cameron, 2002, west side of Ngahau Bay.

Collections from Rimariki and associated islands are not recorded.

	B	H	W	I	TT	PT	MP	V
Ferns & Fern Allies								
Adiantum cunninghamii		x		x			x	
Adiantum diaphanum					x		x	
Adiantum hispidulum		x			x	x	x	
Adiantum viridescens						x	x	
Asplenium bulbiferum					x			
Asplenium flaccidum					x	x	x	
Asplenium gracillimum (var. *laxum*)						x		
Asplenium haurakiense							x[1]	
Asplenium oblongifolium				x	x	x		
Asplenium polyodon					x	x	x	
Blechnum chambersii					x			
Blechnum discolor						x		
Blechnum filiforme					x	x	x	
Blechnum fraseri						x		
Blechnum membranaceum					x	x		
Blechnum novae-zelandiae					x	x		
Cyathea dealbata					x	x	x	
Cyathea medullaris				x	x	x	x	
Deparia petersenii					x	x		
Dicksonia squarrosa					x			
Diplazium australe						x		
Doodia australis		x		x	x	x	x	
Gleichenia microphylla						x		
Histiopteris incisa					x			
Huperzia varia					x		x	
Hymenophyllum demissum					x	x		
Lastreopsis glabella					x			
Lastreopsis microsora					x			
Lycopodiella cernua						x		
Lycopodium deuterodensum						x		
Lycopodium volubile					x	x		
Lygodium articulatum					x	x		
Marattia salicina x[2]								
Microsorum pustulatum	x				x	x		
Microsorum scandens					x			
Paesia scaberula					x	x		
Pneumatopteris pennigera					x	x		
Pteridium esculentum		x		x	x	x	x	
Pteris comans							x	
Pteris macilenta					x	x	x	
Pteris tremula		x		x	x	x	x	
Pyrrosia eleagnifolia		x		x	x	x	x	
Schizaea fistulosa						x		
Tmesipteris lanceolata					x			

	B	H	W	I	TT	PT	MP	V
Gymnosperms								
Agathis australis						x		
Dacrycarpus dacrydioides					x	x		
Dacrydium cupressinum					x	x		
Phyllocladus trichomanoides					x	x		
Podocarpus totara		x		x	x	x	x	
Prumnopitys ferruginea						x		
Prumnopitys taxifolia						x		
Dicotyledons								
Ackama rosifolia x[3]								
Alseuosmia banksii						x		256227
Apium prostratum		x					x	
Beilschmiedia tarairi					x	x	x	
Beilschmiedia tawa					x	x		
Callitriche muelleri					x	x		
Calystegia marginata					x		x[7]	214651 256230
Calystegia sepium	x				x			
Calystegia soldanella	x	x		x			x	
Carmichaelia australis				x	x		x	
Carpodetus serratus					x	x		
Centella uniflora					x	x		
Clematis paniculata					x	x	x	
Coprosma arborea					x	x	x	
Coprosma areolata					x	x	x	
Coprosma lucida						x		
Coprosma macrocarpa		x		x	x		x	
Coprosma repens		x		x			x	
Coprosma rhamnoides					x	x	x	
Coprosma spathulata						x		
Coriaria arborea x[3]								
Corynocarpus laevigatus		x			x	x	x	
Cotula coronopifolia	x[4]							
Dichondra repens				x	x	x	x	
Disphyma australe		x		x			x	
Dracophyllum latifolium						x		
Dysoxylum spectabile					x	x		
Elatostema rugosum						x		
Entelea arborescens					x		x	
Epilobium nummularifolium								155125
Galium propinquum					x	x		
Geniostoma rupestre var. *ligustrifolium*		x			x	x	x	
Geranium sp.				x	x			
Gonocarpus incanus						x		
Griselinia lucida					x			
Haloragis erecta		x			x		x	
Hebe stricta						x	x[5]	

	B	H	W	I	TT	PT	MP	V
Hedycarya arborea					x	x	x	
Hoheria populnea					x	x		
Hydrocotyle elongata					x	x		
Knightia excelsa					x	x	x	
Kunzea ericoides					x	x	x	
Lagenifera lanata						x		256231
Laurelia novae-zelandiae						x		
Leptecophylla juniperina						x		
Leptospermum scoparium		x			x	x	x	
Leucopogon fasciculatus					x	x	x	
Lilaeopsis novae-zelandiae	x[4]							
Lobelia anceps		x		x		x	x	
Macropiper excelsa		x			x		x	
Melicytus ramiflorus					x	x	x	
Metrosideros excelsa	x	x		x	x		x	
Metrosideros fulgens						x		
Metrosideros perforata				x	x	x	x	
Metrosideros robusta					x			
Muehlenbeckia complexa	x	x		x	x		x	
Myrsine australis				x	x	x	x	
Myrsine divaricata x[6]								247732/3 256229
Nertera depressa					x			
Nertera dichondrifolia					x	x		
Nestegis lanceolata					x	x		
Olearia furfuracea					x		x	
Olearia rani					x			
Peperomia urvilleana				x	x		x	
Pimelea prostrata								x
Pittosporum crassifolium		x		x			x	
Pittosporum eugenioides						x		
Pittosporum umbellatum							x	
Plagianthus divaricatus	x[4]							
Pomaderris phylicifolia						x		
Pouteria costata		x						
Pseudopanax crassifolius					x	x		
Pseudopanax lessonii		x		x	x		x	
Pseudopanax crassifolius x lessonii					x	x	x	
Ranunculus reflexus					x			
Rhabdothamnus solandri					x	x		
Rubus australis					x	x		
Rubus cissoides					x	x		
Samolus repens		x		x			x	
Sarcocornia quinqueflora				x			x	
Schefflera digitata					x			
Scleranthus biflorus							x	256228
Selliera radicans	x[4]							
Senecio lautus				x			x	
Solanum aviculare						x		
Sophora microphylla					x		x	
Streblus banksii							x[6]	230960
Streblus heterophyllus					x	x		
Vitex lucens		x			x	x	x	
Wahlenbergia violacea					x	x		
Weinmannia silvicola					x	x		

	B	H	W	I	TT	PT	MP	V
Monocotyledons								
Arthropodium cirratum				x			x	
Astelia banksii		x		x			x	
Astelia solandri					x		x	
Austrofestuca littoralis								248039
Austrostipa stipoides				x				
Bolboschoenus fluviatilis			x					
Bolboschoenus medianus	x							
Bulbophyllum pygmaeum						x		
Carex breviculmis							x	
Carex dissita					x	x	x	
Carex flagellifera		x				x		
Carex lambertiana						x	x	
Carex pumila	x							
Carex secta			x					
Carex virgata			x					
Chionochloa bromoides		x					x	156323
Collospermum hastatum		x			x	x	x	
Cordyline australis				x			x	
Cordyline banksii						x		
Cordyline pumilio						x		
Cortaderia splendens				x				
Cyperus ustulatus			x		x	x		
Desmoschoenus spiralis	x[5]							
Dianella nigra					x	x	x	
Drymoanthus adversus						x		
Earina mucronata						x		
Freycinetia banksii					x	x		
Gahnia lacera					x	x	x	
Gahnia setifolia					x	x		
Isachne globosa			x					
Isolepis cernua						x	x	
Isolepis nodosa	x	x		x			x	
Isolepis reticularis					x			
Juncus edgariae							x	
Juncus krausii var. australiensis	x[4]							
Juncus planifolius			x					
Juncus sp.			x					
Lachnagrostis billardierei							x	
Lemna minor			x					
Libertia grandiflora						x		
Microlaena stipoides					x	x		
Oplismenus hirtellus subsp. *imbecillis*					x	x	x	
Phormium tenax	x	x		x			x	
Poa anceps							x	
Rhopalostylis sapida					x	x	x	
Ripogonum scandens					x	x		
Schoenoplectus tabernaemontani			x					
Schoenus maschalinus					x	x		
Schoenus tendo						x		
Spinifex sericeus	x[5]							155126
Thelymitra sp.						x		
Triglochin striata	x[4]							
Typha orientalis			x					
Uncinia banksii					x	x		
Uncinia uncinata					x	x	x	
Winika cunninghamii						x		
Wolffia australiana			x					