

R. griseoviridis
Scleroderma bovista
Tylopilus formosus

Fungi

Found in association with *Nothofagus*

Chamonixia pachydermis
Cortinarius hebelomaticus
Lactarius tawai

Saprophytic fungi

Agaricus sp.(possibly undescribed)
Agaricus sp.(possibly undescribed)
Entoloma sp.
Favolaschia calocera
Nidula niveotomentosa
Ramaria sp. (possibly undescribed)

From Beach to Beeches – a Botanical Transect at Whakatiwai, Firth of Thames, 18 May 2007

Bec Stanley

Attendance: Tricia Aspin, Enid Asquith, Paul Asquith, Jonathan Boow (ARC co-leader), Jan Butcher, Lisa Clapperton, Brian Cumber, Gabriel Daniels, Bev Davidson, Kelvin Floyd, Melinda Habgood, Leslie Haines, Emma Hawcridge (ARC), Marcel Horvath, John Kendrick, Sam Ko, Sun Ko, 2 Ko children, Scott Kusabs (ARC), Phil Lugton (ARC), Helen Lyons, Christine Major, Elaine Marshall, Joanna Meys (ARC), Monica Peters (Waikato Bot Soc), Helen Preston Jones, Juliet Richmond, John Rowe, Stella Rowe, Bec Stanley (ARC, co-leader and recorder), Alison Wesley, Mike Wilcox, Tony Williams, Maureen Young.

On a clear winters day on 18 May 2007 35 bot soccers explored Whakatiwai, a narrow ARC managed Regional Park bordering the Firth of Thames, 5km north of Kaiaua. The park forms a transect from the saltmarsh up to the forested Hunua Ranges.

Promised a day of 'botanical curiosity' we began by examining some "planted" green mistletoe (*Ileostylus micranthus*) on *Coprosma propinqua*, and *C. propinqua* × *C. robusta* near the coast. The mistletoe had green fruit on it. The mistletoe, and its hosts, were sourced by Kelvin Floyd from the Miranda population a few kilometres south. Hosts were grown from both seed and from cuttings. Mistletoe seed was placed on the potted hosts in the Auckland Botanic Gardens. Two mistletoes were observed infecting the hosts and growing while still in the nursery and these were planted at the Botanic Gardens. The others were planted by ARC (with no sign of mistletoe infection) at Whakatiwai in 1996 (Kelvin Floyd *pers. comm.*). More mistletoe seed was also placed on the hosts once they were at Whakatiwai. In 2003 an ARC survey counted 43 mistletoe had established on nine hosts (Tim Lovegrove *pers. comm.*) as a result,

however a storm a few years later killed many hosts and now only 7 hosts and 17 mistletoe remain (Jo Meys & Bec Stanley *pers. obs.* 2007).

Almost an hour was spent fossicking in the saltmarsh. Maureen discovered a patch of the rare herb *Mimulus repens* (Rated Nationally "sparse" de Lange et al. 2004 and "Regionally Endangered" Stanley et al 2005), which was followed by a sighting of a second patch soon after. *Mimulus repens* has been known on the Miranda coast since at least 1943 (AK 21157). Regionally there is also a report of it from Duder Regional Park (east of Mararetai), and specimens collected on the Kaipara south head (AK 221741), at Traherne Island near Point Chevalier (AK 228528), and on the shores of the Manukau including the Puhinui saltmarsh. There are very old collections from Thomas Kirk of *Mimulus* growing at Onehunga.

Other botanical curiosities included finding one each of NZ ngaio (*Myoporum laetum*) and Australian ngaio (*Myoporum* aff. *insulare*) which was very handy for discussing their differences, the key one of which is the brown-black leaf buds of NZ ngaio compared with the green ones of Australian ngaio.

We then leapt the fence into the dense thickets of blackberry on the gravel ridges. The ridges were formed in front of the original coastal cliffs by cobbles, from rivers, which have been pushed southwards by the sea (Cameron et al. 1998). The vegetation has been mostly destroyed by farming. A glimpse of what the vegetation might have been like has been preserved in two small patches of (pure) kowhai (*Sophora chathamica*) forest. As small as they seem today, they have actually expanded in area over the last 10 years (Kelvin Floyd *pers. comm.*). The kowhai seems to be protected by the blackberry which forms a

nurse crop under which kowhai regenerates. Rabbits are also controlled at this site to protect seedlings. The kowhai bark, and the gravel around the drip line of the outside ring of trees, is covered in many lichen species (listed by Rogan 2000). Several patches of *Psilotum nudum* were located (spurred on by the promise of chocolate fish, which were delivered at lunch). We also saw a regionally uncommon fireweed *Senecio quadridentatus* (Stanley et al. 2005). Mike was particularly concerned about the weedy exotic sedge *Carex divulsa* and recommended control. Paul noted the burgeoning shag roost which could kill one of the largest kowhai. If there was anything good about seeing smilax (*Asparagus asparagoides*) it was that it was found with the small orange pustules of smilax rust (confirmed later in a sample sent to Landcare Research). This biocontrol agent (called in Australia "bridal creeper rust") was released in Australia and made it to NZ, presumably of its own accord, and has been spreading naturally since. Under a discarded sack we found a small population of the introduced cellar glass snail (*Oxychilus cellarius*).

After lunch we were ferried by 4 wheel drive to an old skid site where we saw a large population of *Pomaderris hamiltonii* rated Nationally & regionally Sparse (de Lange et al. 2004, Stanley et al. 2005) which was lovely to see off its more usual (and precarious) roadside habitat. Also in the gumland were *Pomaderris amoena* (long known here as *Pomaderris phyllicifolia* var. *ericifolia*), *Schizaea bifida*, *Morelotia affinis* and last years stems of *Thelymitra carnea*.

We then wandered, at botanical pace, up to a slip site where we admired views over to Coromandel. On the way we passed a spectacular floral display of *Brachyglottis kirkii* var. *angustior* (which created a long photograph queue), several hard beech, and a few tiny orchids on the track cuttings. Himalayan fairy grass, *Miscanthus nepalensis*, was spotted by Bev (and removed). Later Ewen told us that this weedy grass had only been found once before in the Hunua Ranges (Wairoa Reservoir area, in April 2006).

References

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- Rogan, D. 2000: The non-vascular flora of Whakatiwai Regional Park Stonefields. *Auckland Botanical Society Journal* 55: 95-97.
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Acknowledgements

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Appendix 1. Whakatiwai Regional Park Flora Species List (Plants recorded during the field trip)

P=Planted

*=Exotic

Lycopods

Huperzia varia
Lycopodiella cernua
Lycopodium deuterodensum
Lycopodium scariosum
Lycopodium volubile

Ferns

Asplenium polyodon
Blechnum discolor
Blechnum fraseri
Blechnum novae-zeelandiae
Cardiomanes reniforme
Cyathea dealbata
Cyathea medullaris

Cyathea smithii
Dicksonia squarrosa
Gleichenia microphylla
Lygodium articulatum
Paesia scaberula
Microsorium pustulatum
Psilotum nudum
Pteridium esculentum
Pyrrosia eleagnifolia
Schizaea bifida
Sticherus cunninghamii

Gymnosperm trees and shrubs

Agathis australis
Dacrydium cupressinum

Phyllocladus trichomanoides
*Pinus radiata**
Podocarpus cunninghamii
Podocarpus totara
Prumnopitys ferruginea

Dicot trees and shrubs

Alectryon excelsus
Beilschmiedia tawa
*Berberis glaucocarpa**
Brachyglottis kirkii var. *angustior*
Brachyglottis repanda
Carpodetus serratus
Coprosma grandifolia
Coprosma lucida
Coprosma propinqua
Coprosma propinqua × *C. robusta*
Coprosma rhamnoides
Coprosma robusta
Coprosma spathulata
Corynocarpus dentatus
*Crataegus monogyna**
Dodonaea viscosa
Dysoxylum spectabile
Elaeocarpus dentatus
Geniostoma ligustrifolia
Griselinia lucida
Hebe macrocarpa
Hebe stricta
Hedycarya arborea
Ileostylus micranthus
Knightia excelsa
Kunzea ericoides
Leptospermum scoparium
Leucopogon fasciculatus
*Leycesteria formosa**
Melicytus ramiflorus
Metrosideros robusta
Myoporum aff. *insulare** (P)
Myoporum laetum
Myrsine australis
Myrsine salicina
Nestegis lanceolate
Nothofagus truncate
Olearia furfuracea
Phormium tenax
Pittosporum crassifolium (P)
Pittosporum eugenioides
Pittosporum tenuifolium
Plagianthus divaricatus
Pomaderris amoena
Pomaderris hamiltonii
Pseudopanax arborea
Pseudopanax crassifolius
*Salix babylonica**
Schefflera digitata
Sophora chathamica
Vitex lucens
Weinmannia silvicola

Lianes, climbers, scramblers

*Araujia sericifera**
*Asparagus asparagoides**
Calystegia sepium
Clematis paniculata
Freycinetia banksii
Metrosideros fulgens (in flower)
Metrosideros perforata
Muehlenbeckia complexa
*Passiflora ? tarminiana** (AK 299430)
Ripogonum scandens
Rubus cissoides
*Rubus fruticosus** agg.

Dicot herbs

Alternanthera aff. *sessilis*
Centella uniflora
Epilobium cinereum
*Foeniculum vulgare**
*Galega officinalis**
Gaultheria antipoda
Gonocarpus incana
Gonocarpus micrantha
Haloragis erecta
Hypericum japonicum
Hydrocotyle novaezeelandiae
Lagenifera pumila
Lobelia anceps
Mimulus repens
Nertera depressa
Oxalis exilis
Oxalis rubens
Ranunculus sp.
Samolus repens
Senecio hispidulus
Senecio quadridentatus
*Senecio skirrhodon**

Monocot trees and shrubs

Cordyline australis
Cordyline banksii
Rhopalostylis sapida

Monocot herbs

*Aristea ecklonii**
Astelia trinervia
Collospermum hastatum
Dianella nigra

Sedges & rushes

Apodasmia similis
Baumea juncea
Bolboschoenus medianus
*Carex divisa**
*Carex divulsa**
Cyperus ustulatus
*Cyperus eragrostis**
Eleocharis acuta
Ficinia nodosa
Gahnia pauciflora
Gahnia setifolia
Juncus australis
*Juncus effusus**

Juncus edgariae
Juncus kraussii
Juncus maritimus
Juncus sarophorus
Lepidosperma australe
Lepidosperma laterale
Morelotia affinis
Schoenus tendo
Typha orientalis

Grasses

Deyeuxia quadrisetata
Isachne globosa

Microlaena stipoides
*Pennisetum clandestinum**

Orchids

Acianthus sinclairii
Diplodium trullifolium
Earina autumnalis
Earina mucronata
Ichthyostomum pygmaeum
Orthoceras novae-zeelandiae
Thelymitra carnea
Winika cunninghamii

Atuanui – Mt Auckland, 16 June 2007

Lisa Clapperton

Those attending were: Enid & Paul Asquith, Harry Beacham, Ross Beever (leader), Colleen and Warren Brewer, Jan Butcher, Lisa Clapperton, Helen Cogle, Brian Cumber, Bev & Geoff Davidson, Neil Davies, Jarrod Erceg, Cara, Margot & Rhys Gardner, Ruth Griffin, Leslie Haines, Fran Hintz, Richard Hursthouse, Sandra Jones, Hanna, Sam, Sue, & Sun Ko, Elaine Marshall, Barrie & Gretta McLeay, Josh Salter, Clive Shirley, John, Linda, & Thérèse Oliver, Sharon Osman, Mathew Swinburne, Ron & Toni Sylvester (Oneriri), Alison Wesley, Mike Wilcox, Tony Williams, Maureen Young.

It was a beautiful clear crisp day, with the hint of fresh snow in the middle of the North Island and a very good turn out of Bot Soccers. The valley to the north of Kaipara Hills Rd has almost a monoculture of cabbage trees (*Cordyline australis*) of roughly 3-4 m in height (calculated looking down the gully while driving past), and was commented on by a number of the trip participants. Ross Beever gave us an introduction to the recent history of the area with reference to his family connections to an adjacent farm.

The canopy was dominated by taraire (*Beilschmiedia tarairi*) with a number of large puriri (*Vitex lucens*). Medium-sized rimu (*Dacrydium cupressinum*) occurred along the ridges with some excellent large kauri (*Agathis australis*) on the slopes. A particularly noteworthy kauri was growing on the way down to the gully where a healthy population of king fern (*Marattia salicina*) has established with abundant parataniwha (*Elatostema rugosum*). The small plants of king fern about 30 cm showed signs of having been browsed. *Libertia ixioides* was common along the ridge line as was the autumn flowering rata vine (*Metrosideros fulgens*) which was abundant, growing at ground level through into the canopy, still with some flower remaining. Several *Drymoanthus adversus* were seen growing on a rimu immediately adjacent to the track. *Diplodium alobulum* was also in flower.

A good view of the Kaipara Harbour and the Hoteo River was had from the look out. The well preserved kumara pit nearby was also viewed before heading back the way we had come.

Checklist of Vascular Indigenous Plants of Atuanui (Mt Auckland) Scenic Reserve

Map Ref: NZMS 260 Q09/410270

Compiled by Maureen Young (23 May 1992, 15 – 17 January 2002) and Auckland Botanical Society 16 June 2007

Ferns & Fern Allies

Adiantum cunninghamii
Adiantum fulvum
Anarthropteris lanceolata
Arthropteris tenella
Asplenium bulbiferum
Asplenium flaccidum
Asplenium gracillimum
Asplenium lamprophyllum
Asplenium oblongifolium
Asplenium polyodon
Blechnum chambersii

Blechnum discolor
Blechnum filiforme
Blechnum fraseri
Blechnum membranaceum
Blechnum novae-zeelandiae
Cardiomanes reniforme
Cyathea cunninghamii
Cyathea dealbata
Cyathea medullaris
Dicksonia squarrosa
Huperzia varia
Hymenophyllum demissum