Collema sp., 2004
Stereocaulon ramulosum, 2002

LIVERWORTS (25)

Archilejeunea olivacea, 2004
Bazzania hochstetteri, 2004
Bazzania tayloriana, 2004
Cheilolejeunea comitans, 2004
Cheilolejeunea sp. A*,* 2004
Cheilolejeunea sp. B*,* 2004
Cheilolejeunea sp. C*,* 2004
Chiloscyphus helmsianus., 2004
Frullania patula, 2004
Frullania rostellata, 2004
Frullania ?*spinifera,* 2004
Harpalejeunea latitans, 2004
Heteroscyphus sp., 2004
Lejeunea flava, 2004
Lopholejeunea sp., 2004
Marsupidium knightii, 2004
Metalejeunea cucullata, 2004
Metzgeria sp., 2004
Plagiochila stephensoniana, 2004
Porella elegantula, 2004
Radula allisonii, 2004
Radula marginata, 2004
Schistochila balfouriana, 2004
Symphyogyna tenuinervis, 2004
Telaranea tetrapila, 2004

Field Trip: Waharau Regional Park, Hunua Ranges, Saturday 21 April 2007

Melinda Habgood and Sophie Williams

Field trip participants:
Kerry Bodmin, Jan Butcher, Rosemary Gatland, Melinda Habgood (recorder), Leslie Haines, Kristy Hall, Marcel Horvath, Peter Hutton, Jonathan Larsen, Helen Lyons, Steve McCraith (leader), Elaine Marshall, Sharon Osman, Suman Pancha, Clive Shirley, Rachel Smith, Alison Wesley, Mike Wilcox, Sophie Williams (recorder), Tony Williams.

Waharau Regional Park provides easy access to eastern portion of the Hunua Ranges. We explored the park starting at the western carpark. The lower slopes of the park are largely young regenerating bush (scrubby tea tree, sedges and fern) following the farming-related bush clearances of the late 19th and early 20th centuries. Historically, many kauri were removed from this area for ship building and both kauri and beech were taken for use in the Coromandel gold mining industry in the mid 19th century. Steve McCraith told us that many of the loop tracks near the lower carpark provide excellent viewing for lichens of the genera *Cladonia*, and *Cladia*. We moved through tanekaha/kanuka dominated forest with an understorey containing relatively common plants such as *Olearia furfuracea* and *O. rani, Leptecophylla juniperina*, *Leucopogon fasciculatus*, *Pseudopanax crassifolius, Gleichenia dicarpa* and *Gleichenia microphylla.* Mike Wilcox stopped to explain to us the morphological differences between *Lycopodiella cernua, Lycopodium deuterodensum and Lycopodium volubile*.

Species diversity in this area seemed high, especially for ground cover species. The only environmental weeds recorded were hakea (*Hakea sericea*), pampas, blackberry and gorse.

Further up, the steep clay tracks ascended into mature rewarewa, tanekaha, kauri and hard beech-clad ridges, along with a sprinkling of hinau. In season, abundant ground orchid populations can be found along here. The valleys and eastern ridges support tawa. Prominent plants in the understorey were *Astelia trinervia*, *Coprosma spathulata*, *Cordyline banksii* and *Alseuosmia quercifolia*. As we reached the lookout (our highest point for the day) we were lucky enough to observe climbing rata (*Metrosideros fulgens*) in flower.

On the walk back down to the carpark via the southern loop track, we traversed an area of vegetation reminiscent of gumland scrub, a highlight here was finding the comb fern (*Schizaea fistulosa*), while Kerry managed to spot a *Brachyglottis kirkii* at the side of the track.

Another highlight of the day was Clive Shirley's knowledge of the local fungi. Despite it being early in the fungi season, and unusually dry, a few fungi species were noted. Most specimens noted are ones that are mycorrhizal with *Leptospermum*, the main species that dominates the lower levels of the park, or *Nothofagus truncata* (hard beech) which is more common higher up on the ridges.

Species List for plants and fungi seen during the field trip, Waharau Regional Park, Hunua Ranges.

*= Exotic

Ferns and Fern Allies (28)

Asplenium flaccidum
A. oblongifolium
A. polyodon
Blechnum discolor
B. fraseri
B. novae-zelandiae
Cardiomanes reniforme
Cyathea dealbata
C. medullaris
C. smithii
Doodia australis
Gleichenia dicarpa
G. microphylla
Hymenophyllum dilatatum
H. flabellatum
Lindsaea trichomanoides
Lycopodiella cernua
Lycopodium deuterodensum
L. volubile
Lygodium articulatum
Microsorum pustulatum
Paesia scaberula
Pteridium esculentum
Pyrrosia eleagnifolia
Schizaea fistulosa
Sticherus cunninghamii
Tmesipteris sp.

Gymnosperms (5)

Agathis australis
Dacrydium cupressinum
Phyllocladus trichomanoides
Podocarpus totara
Prumnopitys ferruginea

Dicotyledons (45)

Alseuosmia macrophylla
A. quercifolia
Brachyglottis kirkii
B. repanda
Carpodetus serratus
Centella uniflora
Clematis paniculata
Coprosma grandifolia
C. lucida
C. rhamnoides
C. robusta
C. spathulata
Elaeocarpus dentatus
Elatostema rugosum
Geniostoma ligustrifolium
Gonocarpus incanus
Griselinia lucida
**Hakea sericea*
Hebe macrocarpa
Hedycarya arborea
Knightia excelsa
Kunzea ericoides
Lagenifera pumila
Leptospermum scoparium
Leptecophylla juniperina
Leucopogon fasciculatus
Melicytus ramiflorus
Metrosideros fulgens
M. perforata
Mida salicifolia
Muehlenbeckia australis
Myrsine australis
M. salicina
Nertera dichondrifolia
Nestegis lanceolata
Nothofagus truncata
Olearia furfuracea
O. rani
Pomaderris amoena
Pseudopanax crassifolius
Quintinnia serrata
Ranunculus reflexus
Rubus cissoides
**R. fruticosus*
Schefflera digitata
**Ulex europaeus*
Vitex lucens
Weinmannia silvicola

Monocotyledons (16)

Astelia trinervia
Carex solandri
Collospermum hastatum
Cordyline banksii
**Cortaderia* sp.
Dianella nigra
Earina autumnalis
Freycinetia banksii
Gahnia pauciflora
G. setifolia
Lepidosperma australe
Microlaena sp.
Morelotia affinis
Oplismenus hirtellus
Rhopalostylis sapida
Ripogonum scandens
Rytidosperma sp.
Schoenus tendo
Thelymitra sp.
Uncinia uncinata

Fungi
Found in association with *Leptospermum*

Amanita taiepa
A. nothofagi
Boletus leptospermi
Russula acrolamellata

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