

any size here. Next in sequence is a mosaic of sea rush (*Juncus kraussii*) and oioi (*Apodasmia similis*), grading into *Baumea juncea*. The low bank on the edge of the island supports a marginal band of saltmarsh ribbonwood (*Plagianthus divaricatus*) with occasional *Ficinia nodosa* and *Muehlenbeckia complexa*.

The surprise to me was that the dominant vegetation on the raised part of the island consists of many, many bushes of *Olearia solandri* and *Coprosma propinqua*.

Vascular plant list of Oakleigh Saltmarsh Island

a = abundant
c = common
o = occasional
l = local
s = scarce
x1 = only one seen
* = exotic

Ferns & fern allies

Pteridium esculentum o

Gymnosperms

Dacrycarpus dacrydioides o

Podocarpus totara o

Dicots

Avicennia marina c

Calystegia sepium s

**Cirsium vulgare* x1

Coprosma propinqua a

Leptospermum scoparium c

Lobelia anceps x1

**Lonicera japonica* c

Muehlenbeckia complexa a

Myoporum laetum l

Myrsine australis c

**Oenanthe pimpinelloides* c

Olearia solandri a

Plagianthus divaricatus c

**Psoralea pinnata* l

**Rubus fruticosus* agg. c

About halfway along the southern edge are a few stunted trees of ngaio (*Myoporum laetum*). At the higher north-eastern end are a few trees emerging from the surrounding vegetation – kahikatea, totara, mapou and manuka. On the northern side is a patch of dally pine (*Psoralea pinnata*). The ground cover is a thick sward of tall fescue (*Schedonorus phoenix*) and buffalo grass (*Stenotaphrum secundatum*) among the sedge/restiad cover, with some Japanese honeysuckle (*Lonicera japonica*) and blackberry (*Rubus fruticosus*).

Samolus repens a
Sarcocornia quinqueflora a
**Ulex europaeus* c

Monocots

Apodasmia similis a

Austrostipa stipoides x1

Baumea juncea a

Cordyline australis o

**Cortaderia* sp. s

**Carex divulsa* x1

Carex flagellifera x1

**Crocasmia x crocosmiiflora* l

Cyperus ustulatus o

**Gladiolus undulatus* c

Ficinia nodosa o

Juncus kraussii c

Juncus pallidus s

Oplismenus hirtellus s

Phormium tenax o

**Schedonorus phoenix* a

**Stenotaphrum secundatum* a

Field trip North Manukau Harbour, 18 August 2007

Rhys Gardner

We began at Halsey Drive, Lynfield, where numerous little brown mistletoes (*Korthalsella salicornioides*) grow on the manuka that ring the upper edge of this forested valley (Manukau Domain Reserve). The host bushes are in good shape, but it is worrying that the younger manuka here are not being colonized at all. One could mutter too about the state of this edge in general. Bared by herbicide (except where kikuyu grass is invading) and vilely littered by humans and dogs, it needs to be weeded, mulched, and restored with gumland species.

A short way down the track we passed an exceptionally fine pohutukawa (c. 2 m dbh), and then a streamside titoki, which at almost 60 cm dbh must be one of Auckland's largest. Most of the larger trees in the valley though are puriri of only medium size. The valley opens out at the shore into a tall scrub of *Pseudopanax lessonii* | *Phormium tenax* | *Gahnia lacera*.

The upper beach here consists of a metre-high set of terraces of Pacific oyster shells, perhaps too loosely aggregated at the moment to make a habitat suitable for any native beach species. On the damp shaded foot of the sandstone cliffs Mike Wilcox showed us the

several kinds of algae (two reds and three greens) that are ubiquitous around this part of the Manukau. A single toetoe (*Cortaderia splendens*) flourishes here at a convenient level for its distinguishing features to be readily appreciated, unlike a lone *Blechnum* high on the cliff that could possibly have been *B. triangularifolium*, the Green Bay blechnum. Mountain flax (*Phormium cookianum*) is plentiful, but renga lily (*Arthropodium cirratum*) is absent.

At the top of the upward climb on the south side of the valley we saw a couple of trackside colonies of *Pterostylis graminea*, and then, under open old manuka, extensive growths of our finest-stemmed leafless sedge, *Tetraria capillaris*.

We moved on to lunch at the similarly situated coastal forest on the eastern side of Blockhouse Bay (Avondale South Domain Reserve). Large pines and wattles form its canopy, but the wattles at least are being "managed" - may pohutukawa grow on their stumps. (It could be conceded that these exotics have some historic interest, since they are likely to be the offspring of plantings of 19th C. businessman Thomas Gittos, who established a tannery at the foot of the stream running into Flounder Bay). The understory contains no regenerating native forest-canopy trees apart from a few totara and tanekaha; fortunately, acmena seems to be absent.

Along the top of the coastal cliffs are a good number of large pohutukawa, and a scattering of smallish to medium-sized towhai (*Weinmannia silvicola*). The ecological status of towhai here parallels that of *Nothofagus truncata* on the North Shore: both populations consist mostly of ageing trees confined to the most favourable (cool) sites, and regeneration is virtually absent (one towhai seedling, on a silver tree fern base, was noted).

A rather exposed headland on the east side of Sandy Bay has a good piece of coastal scrub, containing stout treelets of *Dracophyllum sinclairii* and manuka, and also bracken, *Schoenus tendo*, plenty of *Hebe macrocarpa* (but no *H. stricta*), and a dozen or so small plants (including seedlings) of *Pimelea longifolia*. The latter was recently found further west in a similar situation at Kauri Point, Laingholm, and also opposite on the Awhitu Peninsula.

Field trip participants: Tricia Aspin, Enid Asquith, Paul Asquith, Colleen Brewer, Warren Brewer, Jan Butcher, Lisa Clapperton, Brian Cumber, Pam Dale, Rhys Gardner (leader), Sharen Graham, Leslie Haines, Peter Hutton, Barrie McLeay, Christine Major, John Millett, Helen Preston Jones, Juliet Richmond, Pat Seyb, Alison Wesley, Mike Wilcox, Maureen Young.

Mt Rowe: a chunk of south Westland in the Coromandel

Matt Renner

Mt Rowe is the domed summit of the small plateau immediately North-East of Table mountain which is a continuation of that rock formation. Like Table Mountain the plateau has reasonably flat relief (being part of an old eroded rhyolitic crater lake), and at 720-760 m, similar climate. The flat relief and high precipitation (probably upwards of 2000 mm) have contributed to the accumulation of the same boggy soils as found on Table Mountain. These soils are dramatically different from the well drained, relatively fertile colluvial soils found on sloped sites in the Coromandel, and they support vegetation which is also dramatically different from surrounding sites. The forest on Mt Rowe is dominated by *Lepidothamnus intermedius*, with *Ixerba brexioides*, *Weinmannia silvicola*, *Metrosideros umbellata*, *Dacrydium cupressinum*, *Phyllocladus* aff. *alpinus*. There are a few mature *Agathis australis* present as emergents. The understory is dominated by *Epacris sinclairii* on raised sites, and *Gahnia procera* and *Gahnia xanthocarpa* in depressions. The forest is relatively open such that a thick layer *Gahnia* often develops in parts. Within the context of the Coromandel range this community is relatively uncommon, and around the Kauarenga Valley is restricted to the summits of Table Mountain, Mt Rowe, and another site at the

head of the valley near the Pinnacles hut. Mt Rowe is one of the most "bryogeographically" surprising places I have ever wandered into.

In this article I report five new northern limits, one putative southern limit, an additional locality for ten species with restricted distributions in the upper North Island, and the finding of three totally new species of liverwort (not formally described here) on Mt Rowe. I provide a species list for liverworts with voucher numbers (Appendix). Vouchers are held at the Auckland Herbarium (AK).

New Northern Limits

Megalembidium insulanum

At up to 30 mm high, *Megalembidium insulanum* is the largest member of the Lepidoziaceae subfamily Lembidioideae (*sensu* Schuster & Engel 1987). *Megalembidium* is monotypic and is endemic to New Zealand. *Megalembidium* was placed into its own subfamily by Engel & Braggins (2005), however this placement has not been substantiated (Heslewood & Brown, 2007). The distribution of *Megalembidium* was given as South Island only by Engel & Braggins (2005). This species has a scattered distribution along