underside of the fronds with a hand-lens. It also has internal canal systems in the stem. On the strength of the bristles and the canals a new genus, *Canalohypopterygium* was suggested for this moss, by German workers (Frey and Schaepe 1989), but this change has not been generally adopted in New Zealand.

Nearby a colony of the rather similar *Catharomnion ciliatum*, usually found on tree-fern trunks, was seen growing on the bank, as well as the much more spectacular *Hypopterygium filiculaeform*. This is perhaps the most magnificent of our umbrella mosses, with fronds up to 6 cm across.

Acknowledgements
I would like to thank both Jessica Beever and John Braggins for their additions to the list of mosses and liverworts and also the extensive notes they provided. Thank you also to Peter White and Clive Shirley for their notes regarding fungi. Finally, recognition should be made of the work on the new section of the track by local rangers including Phil Lugton.

References
McCraith, S. 2001: Wairoa Valley Field Trip, 20 September 1997 *Auckland Botanical Society Journal* Vol.52 (1): 72-76.

Field trip: Kauri Point Reserve and Wattle Downs Farm, Manurewa. 15/03/03

Rhys Gardner

Twenty BotSoc'ers gathered at Kauri Point at 10.30 am and first enjoyed the views south across the Manukau Harbour from what is a satisfactorily wide esplanade reserve. The late start meant we could botanize dryshod along the shore, with finds coming of a colony each of *Chenopodium glaucum* subsp. *ambiguum* and *Lilaeopsis novae-zelandiae*. A kowhai (*Sophora chathamica* we thought) was made much of, and a taller member pointed out the single kanuka (*Kunzea ericoides*). We were not to see more of either species.

At the Kauri Point cliff edge at one place Mike Wilcox identified some good healthy trees as mostly belonging to *Cupresssus lusitanica* (some foliage quite blue), with *C. macrocarpa* also present and thriving but of more irregular form in its trunk. We saw neither kauri nor totara. Some time was spent on the pampas grasses, and we decided that with one exception all were *Cortaderia selloana* (blue-green foliage, culm-leaf sheaths not very hairy). No more *C. jubata* plants were seen during the day; although the species surged down the Southern Motorway (in the '70s ?) it seems somehow to have failed to get westwards onto this shoreline.

Lunch was taken in a paddock of Wattle Downs Farm, among recent fellings of what had been a forest of good-sized silver wattle (*Acacia dealbata*). There were logs of c. 50 cm diam. to sit on and cut slabs for thermos rests, their silvery orange tones harmonizing with the view across to Karaka's cliffs and sand flats. This would seem to be the only place in Auckland (apart from the Hunuas) where silver wattle grows, and later on we were to see some regeneration of it in bracken and gorse along the coastal clifftop. According to Mr B. Kimpton, third-generation owner of the farm, the wattles were planted in the twenties and produced bark for the tanneries at Onehunga, but were not the right sort of wattle for this. A fringe of thin-topped silver wattles remains here along the coastal slope, but further north round Waimahia Creek (and back at Kauri Point) similar vegetation is made up almost entirely of vigorous black wattles (*A. mearnsii*).

Anne Grace connecting with mangrove (*Avicennia marina*) seedlings at the tideline, Wattle Downs, Manukau Harbour. 15 March 2003.

In the afternoon we had an easy walk north to "Gratiola Gully", off Waimahia Creek (grid ref. R12 770597). The lower hundred metres or so of this short broad creeklet is edged with tree privet (*Ligustrum lucidum*) and fallen black wattles; who would have thought it then, that centrally under some scrappy cabbage trees, on shallow peaty mud, there would be an abundance of *Gratiola sexdentata*, a native herb

not seen in Auckland since Cheeseman's time. A few colonies of *Hydrocotyle pterocarpa* were also present. The site, weedy and enriched with pasture runoff, hardly qualifies as an iconic "shy place" — perhaps to attain full biodiversity in its wetland native plantings the ARC Botanic Gardens will have to disregard Bart Simpson's advice, and buy a cow.

Then we rambled back westwards round the point of the peninsula, seeing lots of plastic-sam and monotypic shoe taxa, considerable *Suaeda novae-zelandiae* on the brown sandy strips, and one colony each of native spinach (*Tetragonia tetragonioides*) and angelica (*Angelica pachycarpa*). There were also several middens, a line of large pumice pieces in the low sea cliff, and various shore animals, all of which made for a visual treat. It's also a treat to be on Auckland's coast without seeing other footprints — perhaps this was a result of the abundance of that well-appointed guardian of shoreline morals, *Austrostipa stipoides*. It can also be noted that the flax is local but very vigorous, and that the only relic trees we saw were cabbage tree (*Cordyline australis*) and mapou (*Myrsine australis*).

We are very grateful to Mr Kimpton for giving us carte blanche over this the peninsula's last farm, which he is about to convert into a housing estate — most developers do not bother turning off electric fences even for their own ecologists. We hope that the best natural features here (the gratiola and shore vegetation of course, also a single relic totara and a group of very large multistemmed cabbage trees) can be integrated into his reserve- and landscaping-plans.

Field Trip: Jack Harper's Bush, Awhitu Peninsula. 17/05/03

Elaine J Marshall

Introduction

On Saturday the 17th May 2003, the Auckland Botanical Society monthly field trip visited Mr Jack Harper's to botanise the bush on his property. Mr Harper's property lies off J Ranall Road 1km from Awhitu Road, in the central part of Awhitu peninsula (map reference: NZMS 260 R12 553474). The bush lies along the southerly facing ridge slope and down into a steep gullies, near the head catchment of Ohiku Creek. Ohiku Creek discharges into the Manukau Harbour near the Waiuku River mouth.

Tricia Aspin, Jack Harper and Mike Wilcox. Bot soc visit to Jack Harper's bush, Awhitu Peninsula. 17 May 2003.

Mr Harper has owned the property for some 40 years and has a great understanding of native flora through his care of the land. He has progressively fenced off native bush areas on his property for over twenty five years and undertaken restoration planting in some areas. The bush area is about 6 hectares in size and is fully fenced. It is legally protected by two titles, one from the QEII Covenant trust and the other from a Franklin County Covenant.

Vegetation Description

The native bush here is mostly fine secondary regenerating mixed podocarp broadleaf forest in which there are still some impressive trees such as puriri (*Vitex lucens*), mangeao (*Litsea calicaris*) and pukatea (*Laurelia novaezealandiae*). There is a good range of the commoner northern forest trees and shrubs, and an impressive array of ferns including *Asplenium lamprophyllum*, *A. hookerianum* and our scarce king fern or para (*Marrattia salicina*).

A wide diversity of various ecological plant assemblages common to the northern region occur here. Ricker kauri (*Agathis australis*) groves can be found on the knolls, ridge tops and upper slopes. Mixed podocarp broadleaf forest occurs on the slopes and escarpments. Totara (*Podocarpus totara*) is common on the slopes especially near the bush margins, rimu (*Dacrydium cupressinum*), miro (*Prumnopitys ferruginea*), and matai (*Prumnopitys taxifolia*) are not as common but can be found throughout the bush. Kahikatea (*Dacrycarpus dacrydioides*) is common locally in the gully areas and lower slopes. Common broadleaf trees include taraire (*Beilschmiedia tarairi*), tawa (*Beilschmiedia tawa*), puriri and kohekohe (*Dysoxylum spectabile*). In the subcanopy common plant species include ponga (*Cyathea dealbata*), mahoe (*Melicytus ramiflorus*), akepiro (*Olearia furfuracea*) with locally common wharangi (*Melicope ternata*), and turepo (*Streblus heterophylla*) in some areas.