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.

Historic Effects of Animal Browsing and Logging on the Vegetation

Historic effects of logging and grazing is evident over much of the area. Much of the fenced bush especially the bush margins is now rank grassland and grasses are still the most prevalent ground cover under some trees such as small kauri grove knoll at the end of the walk. The native grass, meadow rice grass (*Microlaena stipoides*), is especially common in the bush edges and grasslands while bush oat grass (*Oplismenus hirtellus* subsp*. imbecillis*) is more common under the forest canopy.

These historic effects are also evident in some bush areas where there is a dense 5m understorey of ponga (*Cyathea dealbata*) that has virtually nothing below it, except for a few ferns of *Blechnum filiforme*. The elimination of other plant species through logging and animal browsing probably accounts for this dominance of ponga. Historic effects of grazing may also account for totara's particularly common occurrence, especially in younger bush areas and near forest margins. Cattle will not eat totara and its prevalence here is probably evidence of this. There is still some evidence of browsing in this bush on shrubs such as *Alseuosmia macrocarpa* this may be due to fellow deer, which are still present.

Possum have also had a considerable effect on species diversity in the area. Although today there is an effective possum control on the property as evidenced of by the prevalence of kohekohe, especially seedlings, regenerating under the bush canopy. It was implemented too late to save the last northern rata's (*Metrosideros robusta*) and tree fuchsia (*Fuchsia excorticata*) from becoming locally extinct from this bush area. To date, no northern rata nor tree fuchsia have been found on the property.

Field Trip

Our field trip excursion began with a look at a small grove of ricker kauri in which there was particularly abundant regeneration of wharangi (*Melicope ternata*). Botanising our way along and down the slope we encountered *Alseuosmia* and *Libertia grandiflora*. The maidenhair fern *Adiantum fulvum* was especially common while it's generally more common cousin *A. cunninghamii* only made an occasional appearance. In some areas *A. fulvum* formed extensive colonies, almost completely covering the ground. In the swampy gullies we encountered pukatea and putaputaweta (*Carpodetus dentatus*) and the ferns *Pneumatopteris pennigera* and *Lastreopsis* spp. We had lunch in an open grass clearing. Here we discovered bidibid (*Acaena novae zealandiae*) in the rank grassy clearing and growing on a tree a small specimen of (*Drymoanthus adversus*). Many of the trees, tree ferns and nikau palms, especially near the bush margins were heavily festooned with mosses and *Earina mucronata*.

After lunch we came to another small swampy gully in which common wetland species such as swamp millet (*Isachne globosa*), knotweed (*Persica decpiens*) and sedges *Cyperus ustulatus*, *Eleocharis gracilis* and *E. acuta* were found. From here we scrambled up the step ridge to the farm track. Along the side cuttings of the track we saw the sun orchid *Thelymitra longifolia*. It was not the flowering time for these orchids so we had to take it on expert advice that other orchids such as *Nematoceras macrantha* (syn. *Corybas macranthus)* were here. The nertera like herb *Leptostigma setulosum* was also seen here.

Some way along the track we crossed over a stile and headed into a bush gully. Along the deep sided banks of this gully were festooned with our impressive but threatened fern of vulnerable status, king fern or para. It was a sight to behold. Other ferns in this gully included *Asplenium lamprophyllum* (often in places covering the ground thickly) as well as *Blechnum chambersii* and *Leptopteris hymenophylloides*. Cameras came out, flashes recording this impressive scene. Finally we headed up the slope to the ridge top and back to the cars. On route a few explorative souls headed by Maureen Young went to investigate a kauri ricker grove. It been only been fenced for a few years and the ground was thickly covered in rank grasses and *Muehlenbeckia australis.* An important find was the natural occurrence of *Tetragonia implexicoma* normally a seaside plant it was found here growing freely under the kauri and not far away was a large pohutukawa (*Metrosideros excelsus*).

Thanks again to Mr Harper for a great day.

King fern (*Marattia salicina*) Jack Harper's bush, 17 May 2003.

Acknowledgements

I would like to thank Mr J Harper for allowing the Auckland Botanical Society to visit his property and his informed guidance through his bush; Maureen Young for providing leadership of the visit and practical assistance in identification as well as with the species list; Peter

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Appendix: List of Species seen during the Auckland Botanical Society Field Trip to Mr J Harper's Bush, J Randel Rd, Awhitu Peninsula.

Total number of species 176: 153 Higher Plants + 23 Lower Plants (Fungi, Mosses, Liverworts)

Ferns and Allied Plants (38)

Adiantum cunninghamii
A. fulvum
A. hispidulum (rosy maidenhair)
Anarthropteris lanceolata
Asplenium bulbiferum subsp. *gracillimum*
A. flaccidum (raukatauri, hanging spleenwort)
A. hookerianum
A. lamprophyllum
A. oblongifolium (huruhuruwhenua)
A. polyodon
Blechnum chambersii (nini)
B. filiforme
B. membranaceum
B. novae-zelandiae (kiokio)
Cyathea dealbata (ponga)
C. medullaris (mamaku)
Deparia petersenii (syn. *Athyrium japonicum*)
Dicksonia squarrosa (wheki)
Diplazium australe (syn. *Arthryium australe*)
Doodia australis (syn. *Doodia media* subsp. *australis*)
Huperzia varia (syn. *Lycopodium varium*)
Hymenophyllum demissum
Lastreopsis glabella
L. hispida
L. microsora
Leptopteris hymenophylloides (heruheru)
Marattia salicina (para, king fern)
Microsorum pustulatus (syn. *Phymatosorus diversifolius*)
M. scandens (syn. *Phymatosorus scandens*)
Paesia scaberula (matata)
Pellaea rotundifolia (tarawera)
Pneumatopteris pennigera (pakau roharoha)
Polystichum richardii (pikopiko)
Pteridium esculentum (rahurahu)
Pteris macilenta
P. saxatilis
P. tremula (turawera)
Pyrrosia eleagnifolia (syn. *Pyrrosia serpens*)
Tmesipteris elongata
Trichomanes endlicherianum

Gymnosperms (7)

Agathis australis (kauri)
Dacrycarpus dacrydioides (kahikatea)
Dacrydium cupressinum (rimu)
Phyllocladus trichomanoides (tanekaha)
Podocarpus totara (totara)
Prumnopitys taxifolia (matai)
P. ferruginea (miro)

Dicotyledons (68)

Acaena novae zealandiae (puripuri, bidibid)
Alectryon excelsus (titoki)
Alseuosmia macrophylla (toropapa)
Beilschmiedia tarairi (taraire)
B. tawa (tawa)
Brachyglottis repanda (rangiora)
Carpodetus serratus (rutaputaweta)
Centella uniflora
Coprosma areolata
C. arborea (mamangi)
C. lucida (shining karamu)
C. macrocarpa (coastal karamu)
C. rhamnoides
C. robusta (karamu)
Coriaria arborea (tutu)
Corynocarpus laevigatus (karaka)
Dichondra repens
Dysoxylum spectabile (kohekohe)
Elaeocarpus dentatus (hinau)
Entelea arborescens (whau, planted)
Geniostoma ligustrifolium var. ligustrifolium (hangehange)
Geranium homeanum
Griselinia lucida (puka)
Haloragis erectus (shrubby toatoa)
Hedycarya arborea (porokaiwhiri, pigeonwood)
Knightia excelsa (rewarewa)
Kunzea ericoides (kanuka, syn. *Leptospermum ericoides*)
Lagenifera pumila
L. stipitata
Laurelia novae-zelandiae (pukatea)
Leptospermum scoparium (manuka)

Leptostigma setulosum (syn. *Nertera setulosa*)
Leucopogon fasciculatus (syn. *Cyathodes fasciculatas*)
Litsea calicaris (mangeao)
Lobelia anceps
Macropiper excelsum (kawakawa)
Melicope simplex (poataniwha)
M. ternata (wharangi)
Melicytus ramiflorus (mahoe, whiteywood)
Metrosideros excelsus (pohutukawa)
M. fulgens
M. perforata (akatea, white rata)
Mida salicifolia (maire taiki, willow leaf maire)
Muehlenbeckia australis
M. complexa (pohuehue)
Myrsine australis (mapou)
Nertera dichondrifolia
Nestegis lanceolata (white maire)
Olearia furfuracea (akepiro)
O. rani (heketara)
Parsonsia heterophylla
Passiflora tetrandra (NZ passionfruit)
Pennantia corymbosa (kaikomako)
Peperomia urvilleana
Persicaria decipens (syn. *Polygonum salicifolium*)
Pittosporum cornifolium
Pseudopanax arboreus (five finger)
P. crassifolius (horoeka, lancewood)
P. lessonii (houpara)
Ranunculus reflexus
Rhabdothamnus solandri (taurepo)
Rubus australis
R. cissoides
Schefflera digitata (pate)
Streblus heterophylla (turepo) (syn. *Paratrophis microphylla*)
Tetragonia implexicoma
Vitex lucens (puriri)
Wahlenbergia violacea (syn. *Wahlenbergia gracilis*)

Monocotyledons (40)

Acianthus sinclairii
Astelia solandri
Baumea rubiginosa
Carex lessoniana (rautahi)
Carex solandri
Carex virgata (purei)
Collospermum hastatum (kahakaha, tank lily)
Cordyline australis (ti kouka, cabbage tree)
Cordyline banksii (ti ngahere, planted)
Cyperus ustulatus
Dianella nigra (turutu)
Drymoanthus adversus
Earina mucronata
Eleocharis acuta
E. gracilis
Freycinetia banksii (kiekie)
Gahnia lacera (tarangarara)
G. setifolia (mapere)
Isachne globosa
Isolepis profiler
Lepidosperma laterale
Libertia grandiflora
Machaerina sinclairii (tuhara)
Microlaena stipoides (patiti)
Microtis unifolia
Nematoceras macrantha (syn. *Corybas macranthus*)
N. triloba (syn. *Corybas trilobus*)
Oplismenus hirtellus subsp. *imbecillis* (bush oat grass)
Phormium tenax (harakeke, planted)
Poa pusilla
Pterostylis banksii (tutukiwi)
P. cardiostigma
Rhopalostylis sapida (nikau)
Ripogonum scandens (kareao, supplejack)
Schoenoplectus tabernaemontani
Schoenus maschalinus
Singularybas oblongus (syn. *Corybas oblongus*)
Thelymitra longifolia
Typha orientalis (raupo)
Uncinia banksii
U. uncinata (hook grass)

Fungi (18)

Agrocybe parasitica (tawaka, poplar mushroom)
Auricularia polytricha (hakeka, ear fungus)
Clavatia cyathiformis (lilac puffball)
Entoloma sp.
Favolaschia calocera (orange pore fungus)
Ganoderma sp.
Hygrocybe cantharellus (scarlet wax gill)
Hypholoma fasciculare (sulphur tuft)
Ileodictyon cibarium (white basket fungus)
Lycoperdon perlatum (puffball)
Mycena austrororida
Mycena mariae
Oudemansiella australis
Phellinus ?wahlbergii
Pluteus velutinornatus
Ramaria sp.
Trametes versicolor (rainbow bracket fungus)
Weraroa virescens (pale blue pouch fungus)

Mosses (3)

Not well recorded
Hypnodendron sp. (? H. colensoi) (umbrella moss)
Leptostomun macrocarpum (pin cushion moss)
Thuidium furfurosum

Lichens (2)

Chrysothrix candelaris
Usnea sp.

Weeds & Exotics (8)

Not well recorded, the major pest weeds in bush areas include
Apium nodiflorum
Axonopus fissifolius

Carex brevifolius
C. punctata
Cyperus congestus
Duchesnea indica
Erica lusitanica
Leycesteria formosa
Ludwigia palustris
Paspalum dilatatum
Phytolacca octandra
Prunella vulgaris
Selaginella kraussiana
Solanum mauritianum
S. chenopodioides
Tradescantia fluminensis
Ulex europaeus
Veronica plebeia

Spragg's Bush Fungi Additions. 18 May 2003

Clive Shirley

On 18 May 2003 I had the opportunity to go to Spragg's Bush Reserve with Peter Buchanan from Landcare Research and Forest and Bird's North Shore Branch of the Kiwi Conservation Club, foraging for fungi. Several species have now been added to the previously published record by Fran Hintz (2002).

Geastrum saccatum (earthstar)
Hygrocybe pura (wax gill)
H. procera (wax gill)
H. lilaceolamellata (wax gill)
Laccaria sp.
Mycena austrororida
M. ura
Podoscypha petalodes (wine glass fungus)
Ramariapsis antillarum (confirmed)
Russula griseoviridis (green russula)
Russula macrocystidiata (purple russula)
Weraroa novaezelandiae

Reference

Hintz, Fran 2002: Sharp's Bush and Spragg's Bush Reserves. *Auckland Botanical Society Journal* 57(2): 97-99.

The 17th NZ Fungal Foray, Kaimai Forest Park, 5 – 10 May 2003

Peter White

Introduction

The New Zealand Fungal Foray is an annual event held in May each year at a different site in the country. It is intended for both amateur and professional mycologists. The amateurs range from members of the public with a general interest in natural history, to photographers, to gastronomes, to those with an extensive knowledge on New Zealand's fungi.

Initiated in 1986 with a foray at Kauaeranga Valley, Coromandel Peninsula, the event has since been held in such varying places as Tangihua, the Catlins, Wanganui, Ruatahuna and Haast. The Foray is organised by a loose group of people, the organising group often changing from year to year. It has always been strongly supported by the mycologists at Landcare Research.

The Foray has three main aims:

- to better understand the diversity and distribution of New Zealand's native fungi
- to increase public understanding and appreciation of New Zealand's fungi
- to provide a forum for anyone in New Zealand interested in fungi to meet informally at least once a year.

This year's Foray, the 17th, was held from 5-10 May in the Kaimai Ranges, Bay of Plenty. Accommodation was at the Aongatete Lodge, Kaimai Outdoor Centre, 18km from Katikati. There were between 20-40 people on the Foray, depending on the day and activities.

Day 1: 5 May, The Arrival

For me getting to the Foray meant an early start – 5.30am to catch a 7.15am bus to the 8am boat to Auckland, where Clive Shirley was waiting to pick me up for the drive to Katikati. We arrived at Aongatete Lodge around 3pm after a couple of stops along the way to hunt for fungi. The first stop was Broken Hill on the Tairoa River, where we saw a lovely display of *Dawsonia superba*, in one place densely packed like a