

ABS Field Trip to Moire Park, Massey East

Anne Grace

On 19 August 2000, sunny weather prevailed for a leisurely exploration of Moire Park and the West Harbour Esplanade Reserve. 21 people, including Pat Enwright, who was visiting from Wellington Botanical Society, turned out to compile a species list for the flora of the 30 hectares of regenerating native vegetation on both sides of Manutewhau Stream/ Lawsons Creek. Brian Cumber had to be the keenest participant, having walked to Massey from Glenfield.

The vegetation in the reserves has been broadly described in an ecological survey undertaken by Boffa Miskell Ltd for Waitakere City Council. From the end of Allington Road, we visited each of the 7 vegetation types identified in the survey: mangrove/estuary associations; weedfields; gumland, shrubland with kumarahou in bud; pine/kanuka/mapou/weeds; swamp/wetlands; tree-ferns/broadleaf forest; and kowhai/tawhero forest.

After viewing the mangroves from the bridge across Lawson's Creek (the name for the estuarine end of Manutewhau Stream), we made slow progress through a mown area bounded by residential properties and the associated weedfields. Our lists of adventives grew longer and longer and it was particularly heavy going for Mike Wilcox, who was recording the monocots and Alistair MacArthur who not only had the job of recording the dicot weeds, but also was expected to respond to calls from members to dig out various nasties with his "environmental spade".

For once, Sandra Jones, who had chosen to list the native ferns was out in front of the group because there were hardly any to record. By the time we had entered the pine/kanuka/mapou/weeds association she had made all sorts of discoveries. From a distance, we could hear her cries of "*Astelia grandis*!" and our pace quickened in anticipation of seeing these magnificent plants. It was a locality that I had not visited before — with a wonderful grouping of seven plants in a damp hollow. Sandra's joy soon turned to dismay as we began to encounter unnecessary and inappropriate native plantings within the bush and on the sides of tracks including flax and cabbage trees as well as so-called "canopy" trees.

We were concerned about the adverse impacts on natural biodiversity these plantings are having because they effectively introduce species that do not occur naturally in the area and there was plenty of evidence that plants had not been sourced from the immediate locality. These specimens will

interbreed with the natural indigenous vegetation, permanently and irreversibly altering the genetic makeup of the natural populations of the area. Why do people not want to acknowledge that horticultural planting interferes with natural ecological processes, and threatens significant indigenous vegetation? If the rapid development of vegetative cover was considered important to suppress weeds, then it would have been better to plant non-invasive exotic plants that could be readily identified and removed when natural regeneration of native plants had taken over. Cryptic weeds (introduced native plants) were everywhere along the track sides, and Maureen Young's attempts to compile a species list of native dicots that accurately reflected the true indigenous species composition were seriously challenged when she had to sort out what was occurring naturally and what wasn't. Nancy Pickens took a photograph of one of several karo seedlings which had obviously been introduced by birds from residential gardens or amenity plantings, there being no natural adult plants in the area.

After lunch we made our way to the Moire Road end of the bush to marvel at the potential for adverse impacts on the natural indigenous vegetation generated by the 1995 Trees for Babies planting. We pitied the children who had these environmentally damaging trees planted for them, particularly the one that had the Australian ngaio planted for it. Perhaps its parents were Australian? Fortunately for us, a New Zealand ngaio was planted alongside, so we were able to see the differences between the two species (brown leaf buds and conspicuous oil glands on the leaves of the New Zealand ngaio and green leaf buds on its Aussie cousin).

The banks of the Manutewhau Stream provided the best variety of species in a relatively picturesque setting. The more adventurous members crossed the stream into the West Harbour Esplanade Reserve to make substantial additions to our species lists for the tree fern/broadleaf/kowhai/tawhero forest. What could have been a pleasant bush foray was marred by rubbish, including broken glass, and exciting weeds like palm grass (*Setaria palmifolia*) and the fern *Pteris cretica* which seemed to cascade down the slopes from the adjoining residential properties. Alistair's environmental spade was put to good use, but there were just too many weeds for it to have any lasting effect.

Then it was more *Astelia grandis*, a sampling of the estuarine associations, views of the first kowhai

blooms in the Esplanade Reserve, and back into the gumland shrubland for weeding of *Aristea ecklonii*. Throughout the day, Helen Cogle had been busy working on the mosses and lichens, but now her

“official” responsibility (compiling the list of orchids with Marjorie Newhook) came into play with the discovery of 2 species. It’s a pity there were no chocolate fish on the trip. Such patience deserved a reward!

Moire Park Indigenous Flora (excluding Monocots)

Mosses

Bryum sp. (or *Polytrichum* sp.)
Campylopus introflexus
Dicranoloma billardieri
Hypnum chrysogaster
Leucobryum candidum
Macromitrium sp.
Ptychomnion aciculare
Thuidium furfuraceum
Wijkia sp.

Hymenophyllum demissum
Hymenophyllum flabellatum
Lastreopsis glabella
Lindsaea linearis
Lycopodium deuterodensum
Lycopodium volubile
Lygodium articulatum
Paesia scaberula
Phymatosorus pustulatus
Pneumatopteris pennigera
Pteridium esculentum
Pteris tremula
Tmesipteris elongata
Tmesipteris lanceolata
Trichomanes reniforme

Coprosma lucida
Coprosma rhamnoides
Coprosma robusta
Coprosma rotundifolia
Coriaria arborea
Corynocarpus laevigatus
Cyathodes juniperina
Dodonaea viscosa
Dysoxylum spectabile
Fuchsia excorticata
Geniostoma rupestre
Hebe stricta
Hedycarya arborea
Knightia excelsa
Kunzea ericoides
Leptospermum scoparium
Leucopogon fasciculatus
Macropiper excelsum
Meliclytus ramiflorus
Myrsine australis
Nestegis lanceolata
Olearia furfuracea
Olearia rani
Pittosporum tenuifolium
Plagianthus divaricatus
Pomaderris kumeraho

Pomaderris phyllicifolia
Pseudopanax arboreus
Pseudopanax crassifolius
Pseudopanax lessonii
Rhabdothamnus solandri
Schefflera digitata
Sophora microphylla
Vitex lucens
Weinmannia silvicola

Ferns and Fern Allies

Adiantum cunninghamii
Asplenium flaccidum
Asplenium oblongifolium
Asplenium polyodon
Blechnum chambersii
Blechnum filiforme
Blechnum membranaceum
Blechnum novae-zelandiae
Cyathea dealbata
Cyathea medullaris
Deparia petersenii
Dicksonia squarrosa
Doodia australis
Gleichenia dicarpa

Gymnosperms

Dacrycarpus dacrydioides
 (seedlings)

Dicot Trees and Shrubs

Aristotelia serrata
Avicennia marina
Brachyglottis repanda
Coprosma arborea
Coprosma grandifolia

Dicot Lianes

Muehlenbeckia australis
Metrosideros perforata
Parsonia sp.
Rubus cissoides

Herbs

Centella uniflora
Drosera auriculata
Gonocarpus incanus
Haloragis erecta
Hydrocotyle sp.
Lobelia anceps
Nertera dichondrifolia
Pratia angulata

A Preliminary List of Adventives, excluding Monocots (including unnatural native introductions - native plantings * and self-introduced natives from plantings +)

Mosses

Pseudoscleropodium purum

Casuarina sp.

Chrysanthemoides monilifera

Hakea sericea

Hoheria populnea *

Picris echinoides

Pinus pinaster

Senecio bipinnatisectus

Senecio mikanoides

Ferns and Fern Allies

Pteris cretica
Selaginella kraussiana

Chrysanthemum leucanthemum

Hydrocotyle tripartita
Hypericum androsaemum

Pinus radiata
Pittosporum crassifolius +
Pittosporum eugenioides *

Solanum mauritianum
Solanum nigrum

Dicots

Acacia longifolia
Acmena smithii
Agathis australis *
Ageratina riparia
Alectryon excelsus *
Aster subulatus
Beilschmiedia tarairi *
Calystegia silvatica
Cardamine sp.
Carpodetus serratus *

Cirsium vulgare
Conium maculatum
Dacrydium cupressinum *
Dacrydium dacrydioides *
Daucus carota
Duchesnea indica
Eriobotrya japonica
Eucalyptus sp.
Euonymus japonicus
Euphorbia peplus
Fatsia japonica
Foeniculum vulgare
Geranium sp.
Hakea salicifolia

Impatiens walleriana
Jasminum polyanthum
Lamium purpureum
Ligustrum lucidum
Ligustrum sinense
Linum trigynum
Lonicera japonica
Metrosideros excelsa *
Myoporum aviculare
Myoporum laetum *
Myosotis sylvatica
Paraserianthes lophantha
Passiflora mixta
Phytolacca octandra

Plantago lanceolata
Plantago major
Polygonum sp.
Pomaderris kumeraho *
Prunella vulgaris
Prunus persica
Racosperma longifolia
Racosperma mearnsii
Racosperma verticillatum
Ranunculus repens
Rosa rubiginosa
Rubus fruticosus
Salix sp.

Solanum pseudocapsicum
Sonchus asper
Sonchus oleraceus
Sophora tetraptera *
Stachys sylvatica
Ulex europaeus
Ulmus sp.
Verbena bonariensis
Vicia sp.
Vinca major
Virgilia capensis

Monocots of Moire Park, Massey East

This list was compiled from two visits – 19 August and 18 October 2000. Introduced species are marked *.

Mike Wilcox

Alliaceae

**Allium triquetrum*

**Monstera deliciosa*

**Zantedeschia aethiopica*

**Myrsiphyllum scandens* (syn.

Asparagus scandens)

Baumea juncea

Baumea rubiginosa

Bolboschoenus fluviatilis and/or
B. medianus)

Amaryllidaceae

**Agapanthus praecox* (syn. *A. orientalis*)

Areaceae (Palmae)

**Trachycarpus fortunei*

Asteliaceae

Astelia grandis

Anthericaceae

**Chlorophytum comosum*

Asparagaceae

**Myrsiphyllum asparagoides*
 (syn. *Asparagus asparagoides*)

Commelinaceae

**Tradescantia fluminensis*

Araceae

Cyperaceae

Baumea articulata

Carex dissita

**Carex divulsa* (18/10/2000)

Carex flagellifera

Carex geminata

Carex lambertiana

Carex maorica

Carex testacea

Carex virgata
 **Cyperus eragrostis*
 **Cyperus tenellus* (18/10/2000)
Eleocharis acuta
Gahnia lacera
Gahnia setifolia
Gahnia xanthocarpa
Isolepis prolifera
Lepidosperma australe
Lepidosperma laterale
Morelotia affinis
Schoenoplectus pungens (mouth
 of Lawsons Creek, Boffa
 Miskell report, 1999, but
 not seen)
Schoenus maschalinus
Schoenus tendo
Tetralia capillaris
Uncinia banksii
Uncinia uncinata

Gramineae
 **Agrostis capillaris*

**Anthoxanthum odoratum*
 **Axonopus fissifolius*
 **Briza minor* (18/10/2000)
 **Bromus willdenowii*
 (18/10/2000)
 **Cortaderia seloana*
 **Cynodon dactylon*
 **Dactylis glomerata*
 **Ehrharta erecta*
 **Eragrostis brownii*
 **Glyceria maxima*
 **Holcus lanatus* (18/10/2000)
Microlaena avenacea
Microlaena stipoides
Oplismenus hirtellus subsp.
imbecillus
 **Paspalum urvillei*
Poa anceps subsp. *anceps*
 **Poa annua*
 **Pennisetum clandestinum*
 **Schedonorus phoenix*
 **Setaria palmifolia*

**Sieglingia decumbens*
 (18/10/2000)
 **Vulpia bromoides* (18/10/2000)

Iridaceae
 **Aristea ecklonii*
 **Crocasmia x crocosmiiflora*
 **Gladiolus undulatus*
 **Watsonia meriana* cv.
 Bulbillifera

Juncaceae
Juncus articulatus
Juncus gregiflorus
Juncus kraussii var. *australiensis*
Juncus planifolius
Juncus tenuis

Lomandraceae
Cordyline australis
Cordyline pumilio

Orchidaceae

Pterostylis graminea
Thelymitra longifolia
 (19/10/2000)

Pandanaceae
Freycinetia baueriana subsp.
banksii

Phormiaceae
Dianella nigra
Phormium tenax

Restionaceae
Apodasmia similis

Ripogonaceae
Ripogonum scandens

Typhaceae
Typha orientalis

Zingiberidaceae
 **Hedychium gardnerianum*



A Coastal Turf Community at Cannibal Creek

Cameron Kilgour & Bec Stanley

On 18 October 2000 we visited the mouth of the Cannibal Creek in the Waitakere Ranges. Bot Soc last visited Cannibal Creek in 24th May 1994, but whereas that trip led the group up the stream, turning right when the track from Anawhata met the creek, we turned left and followed the stream to the sea. The creek flows through a shrubland of predominantly flax, manuka, gorse and an impressive stand of mairehau (*Phebalium nudum*) where it widens and becomes a series of waterfalls and pools before entering the ocean from a large and impressive platform typical of the west coast.

The surrounding terrain is steep and rocky (See Fig. 1 opposite) and is covered by secondary vegetation composed of stunted scrubland of flax, manuka, tauhinu *Ozothamnus leptophyllus* p.p. and gorse. The turf community is fairly extensive and covers the landward margin of the rock platform, stream

and pool margins and surrounding rocky coast. We have listed the plant species at the turf and in the surrounding shrubland community is also described. No threatened taxa were recorded.

Coastal turfs are communities of salt tolerant low growing herbs, sedges and grasses which grow on the coast in the influence of salt water and high exposure. Turfs occur only on a small fraction of the total coastline in NZ (Rogers 1999) but there are a few other turf communities in Auckland. A narrow coastal turf consisting mainly of *Sellieria radicans* can be seen growing at the ecotone between mangrove and grass along the side of the northern motorway south of the eastern part of Smith's Bush. Coastal turf of sorts also exists near the Onewa off-ramp, but unfortunately these are both likely to be damaged by development, along with shell banks and mangroves.

Species List: * denotes a naturalised plant

Shrubland Community
 Ferns
Adiantum cunninghamii
Asplenium oblongifolium
Polystichum richardii
 Grasses
Austrostipa stipoides
Cortaderia splendens
 Rushes & sedges
Leptocarpus similis
 Herbs
Celmisia major var. *major*
 (streamside)
Linum monogynum

Shrubs
Leptospermum scoparium
Olearia solandri
Ozothamnus leptophyllus p.p.
Phormium tenax
Turf Community
 Rushes & sedges
Carex sp.
Isolepis cernua
 **Sagina procumbens*
 Grasses
 **Dactylis glomerata*
 **Paspalum vaginatum*
 **Holcus lanatus*

Herbs
Apium prostratum
Crassula sieberiana
Disphyma australe subsp. *australe*
Lobelia anceps
 **Lotus suaveolens*
 **Plantago australis*
Samolus repens
Sarcocornia quinqueflora
Sellieria radicans
Senecio lautus var. *lautus*
 **Sonchus asper*
 **Sonchus oleraceus*
Taraxacum sp.
Tetragonia trigyna
 **Vellereophyton dealbatum*