

"It Never Rains In California..."

Steve McCraith

It hadn't rained in the Hunua Ranges for close to a month. The morning of the February BotSoc trip, of course, it was raining. Even so, by 10.15am twelve keen BotSocers had turned up for a trip into the Mataitai Forest Conservation Area in Clevedon's Ness Valley. From the car park, off Ness Valley Road, the party donned wet weather gear and started up the track toward the first intersection. Due to the rain it was decided the species list would need to be committed to memory (good luck there) and recorded in drier surrounds.

From the first intersection the group proceeded east along a well-defined ex-forestry track in search of botanical marvels. A large part of the day was spent on this track beneath a canopy of mature kanuka. Initially the undergrowth either side of the track is rather open but from the first intersection it becomes increasingly dense as ferns and small shrubs become more common. The ground underfoot consists of a thin layer of topsoil overlying clay (classic, nutrient-poor Hunua soil) that, when covered in rain, makes for a gripping journey. As the group progressed along the track the bush became more diverse as we moved into more mature forest. Several open glades were passed through which supported a number of sedges. *Carex lambertiana*, *C. dissita* and *C. solandri* were all found growing together in one such spot.

At the furthestmost point of the journey (on the Puriri Track) the group investigated the bush adjacent to the track and turned up a number of exciting finds. The first (on the track margin) was a single specimen of the divaricating shrub

Raukaua anomalus (unfortunately there were no moa to be seen in the vicinity). *Raukaua anomalus* is not at all common in the Hunua Ranges with probably the highest concentration of plants occurring on the clay hills above Waharau, overlooking the Firth of Thames. A number of comb ferns (*Schizaea fistulosa*) were located beneath the canopy of kauri / tanekaha / hard beech and the epiphytic orchids *Drymoanthus adversus* and *Bulbophyllum pymaeum* were common on the trunks of a number of older trees. A large specimen of hard beech (*Nothofagus truncata*) caused some deliberation about the size of the largest specimen in the Auckland region. Further on, the highlight (at least for this botanical explorer) when it was declared we had located *Orthoceras novae-zeelandiae* (not a rhinoceros as first communicated), one of our many ground orchids. Soon after Mike Wilcox managed to locate several plants of *Schoenus apogon*, a new record for the Hunua Ecological District, while the rest of the group was busy debating over the identity of a large canopy dwelling bird (which turned out to be an "inflated" tui).

Contented that we had covered all of the habitats described in the trip description the party trotted back to the cars at double time and dispersed in search of hot showers and coffee.

The following list of higher plant records for the Mataitai Forest Conservation Area was compiled with much help from Enid Asquith, Mike Wilcox and Maureen Young.

Monocots

Astelia solandri
Astelia trinervia
Bulbophyllum pygmaeum
Carex dissita
Carex lambertiana
Carex ochrosaccus
Carex solandri
Collospermum hastatum
Cordylina banksii
Cordylina pumilio
Cyperus eragrostis
Deyeuxia avenoides
Dianella nigra
Dichelachne inaequiglumis
Drymoanthus adversus
Earina autumnalis
Freycinetia banksii
Gahnia lacera

Gahnia setifolia
Isolepis reticularis
Juncus gregiflorus
Juncus pallidus
Juncus tenuis
Lepidosperma australe
Microlaena stipoides
Morelotia affinis
Oplismenus hirtellus subsp.
imbecilis
Orthoceras novae-zeelandiae
Rhopalostylis sapida
Ripogonum scandens
Rytidosperma gracile
Schoenus apogon
Schoenus maschalinus
Schoenus tendo
Uncinia banksii

Uncinia uncinata

Ferns and Fern Allies

Asplenium flaccidum
Asplenium polyodon
Blechnum chambersii
Blechnum discolor
Blechnum filiforme
Blechnum fraseri
Blechnum novae-zeelandiae
Ctenopteris heterophylla
Cyathea dealbata
Cyathea medullaris
Cyathea smithii
Deparia petersenii subsp.
congrua
Dicksonia squarrosa
Diplazium australe
Doodia australis

Grammitis ciliata
Hyperzia varia
Hymenophyllum sanguinolentum
Hypolepis ambigua
Hypolepis distans
Lastreopsis glabella
Lastreopsis hispida
Lindsaea linearis
Lindsaea trichomanoides
Lycopodiella cernua
Lycopodium deuterodensum
Lycopodium volubile
Lygodium articulatum
Microsorium pustulatum
Paesia scaberula
Pneumatopteris pennigera
Pteridium esculentum
Pyrrhosia eleagnifolia
Rumohra adiantiformis

Schizaea fistulosa
Tmesipteris elongata
Trichomanes reniforme

Gymnosperms

Agathis australis
Dacrycarpus dacrydioides
Dacrydium cupressinum
Phyllocladus trichomanoides
Podocarpus totara
Prumnopitys ferruginea

Dicots

Acaena novae-zelandiae
Alseuosmia quercifolia
Bellschmeidia tarairi
Bellschmeidia tawa

Bellschmeidia tawaroa
Brachyglottis kirkii
Callitriche muelleri
Carpodetus serratus
Centella uniflora
Clematis paniculata
Coprosma arborea
Coprosma lucida
Coprosma rhamnoides
Corynocarpus laevigatus
Eleocharis dentata
Galium propinquum
Geniostoma rupestre var.
lingustrifolium
Gnaphallum involucreatum
Gonocarpus incanus
Haloragis erecta

Hebe macrocarpa
Hedycarya arborea
Hydrocotyle dissecta
Hypericum japonicum
Knightia excelsa
Kunzea ericoides
Lagenifera pumila
Leptocophylla juniperina
Leucopogon fasciculatus
Lobelia anceps
Meliclytus ramiflorus
Metrosideros fulgens
Metrosideros perforata
Metrosideros robusta
Mysine australis
Nertera depressa
Nertera dichondrifolia

Nestegis lanceolata
Nothofagus truncata
Olearia fufuracea
Olearia rani
Parsonia sp.
Pittosporum tenuifolium
Pseudopanax crassifolius
Ranunculus reflexus
Raukawa anomalous
Rubus cissoides
Schefflera digitata
Senecio minimus
Vitex lucens
Wahlenbergia violacea
Weinmannia silvicola



Creeping oxalis carpets on Motuihe Island

Mike Wilcox



Fig.1. Creeping oxalis, 18 March 2001.

At the northern end of Motuihe Island in the inner Hauraki Gulf, Auckland, on the site of the former Navy barracks and parade grounds, occurs spectacularly extensive carpets of creeping oxalis (*Oxalis exilis*). Tussocks of ratstail grass (*Sporobolus africanus*), and very little else, grow on the margins of the carpets. So how did this peculiar vegetation develop? The answer appears to be rabbits.

Motuihe Island is over-run with rabbits, and they hungrily eat tree seedlings, grasses, and herbaceous plants – except, apparently oxalis and mature ratstail. By eliminating plant competitors, the rabbits have allowed the oxalis to flourish to the extent that

a dense turf has been induced, several hectares in extent. Because of the rabbits, all the native bush remnants are bare underneath, and the coastal strand vegetation on the eastern side of the island (Ohinerau Beach) is also highly depleted.

Creeping oxalis is a native species, also found in Australia. It does commonly occur in suburban lawns, but not usually pure over such large areas. Perhaps this monotypic oxalis turf on Motuihe Island is unique, owing its existence to its unpalatability (and toxicity) to rabbits through the oxalic acid in the leaves.

