

## Fungi

*Aleurodiscus ochraceoflavus*  
*Auricularia cornea*  
*Calvatia cyathiformis*  
*Cortinarius porphyroideus*  
*Crucibulum laeve*  
*Cyathus striatus*  
*Cyclomyces tabacinus*  
\**Favolaschia calocera*  
? *Fomes hemitephrus*  
*Ganoderma* sp. (? *australe*)  
*Hericium coralloides*  
*Hygrophorus involutus*  
*Ileodictyon cibarius*  
*Morganella pyriformis*

*Nidula niveotomentosa*  
*Plectania* sp.  
*Pluteus* sp.  
*Russula acrolamellata*  
*Scutellinia* sp.  
*Trichoglossum hirsutum*  
*Tylopilus formosus*

## Slime moulds

*Didymium squamulosum*  
*Physarum bivalve*  
*Physarum globuliferum*

## Reference

Moore, L.B.: Edgar, E. 1970: Flora of New Zealand. Vol. II. Wellington, Government Printer.

## Field Trip: Craig's Bush, Pollok, on the Awhitu Peninsula. 18/09/04

Tricia Aspin

On Saturday, 18 September 2004, seventeen members of the Auckland Botanical Society, joined by landowners Ian and Pixie Craig, gathered at Barthow Road at 10 a.m. and wrapped up warmly against the brisk westerly breeze. A short walk along the old roadway took us to the bush area. The site comprises approximately six hectares on the steep southern side of a ridge and includes bushy slopes, dripping banks and sandstone cliffs, small watercourses and marshy areas. Several of the more unusual plants for the Awhitu Peninsula are to be found here.

Members of the field trip:

Ian and Pixie Craig (landowners), Chris Ashton, Tricia Aspin (leader), Steve Benham, Ewen Cameron, Helen Cogle, Annette Lindsay, Alistair MacArthur, Elaine Marshall, John Millett, Juliet Richmond, Pat Seyb, Clive Shirley, Shirley Tomlinson, Petra White, Mike Wilcox, Tony Williams and Maureen Young.

The Craigs farm large bullocks which have access to the bush, though the steepness of the terrain allows for some disturbance without too much damage overall. Our visit coincided with the heaviest browsing by stock over the winter months.

Forest cover is mixed broadleaved trees with some conifers present. There is a predominance of kohekohe (*Dysoxylum spectabile*), tawa (*Beilschmiedia tawa*), puriri (*Vitex lucens*), karaka (*Corynocarpus laevigatus*) and mangeao (*Litsea calicaris*). Mangeao was in flower, and so was kowhai (*Sophora chathamica*) much to the delight of the many tui. There is a notable abundance and variety of ferns and native herbs. The genus *Asplenium* is especially well represented with one of the region's best populations of *Asplenium hookerianum*. The native chickweed (*Stellaria*

*parviflora*) is common. I have not noticed this species elsewhere on the peninsula.



Figure 1. Pohutukawa with *Collospermum hastatum*.

After leaving the old road we followed cattle tracks through the grassed area past some large, epiphytic-laden pohutukawas (*Metrosideros excelsa*) (Figure 1) before dropping down to the lower part of the bush slope where serious botanising began. Our presence

disturbed a couple of kereru (*Hemiphaga novaeseelandiae*) from the canopy and several noisy eastern rosellas (*Platycercus eximius*) which, evidenced by the many cracked seed shells on the ground, had been feeding on the fruits of the nikau (*Rhopalostylis sapida*). A terraced area below several sandstone cliffs provides habitat for smaller ferns (*Blechnum chambersii*, *B. membranaceum*), many of the small herbaceous plants (*Stellaria parviflora*, *Hydrocotyle* spp., *Epilobium rotundifolium*) and several orchid species. Of special note was the orchid which I have tagged *Nematoceras* "Pollok" still in flower on the main wet, mossy cliff (Figure 2). This orchid has not previously been separated from the *Nematoceras rivularis* aggregate and is different from others recorded. This is my first noting of one of the *N. rivularis* forms at Awhitu. I am supplying data to the NZNOG for critical study. Another colony at Kohekohe, six kilometres to the south, has been identified as the same taxon. *Fuchsia excorticata* was noted here, as well as a clump of the soft little *Carex inversa* and several *C. spinostris* in flower.



Figure 2. The Tasman Sea from the pa site.

Staying on the lower slopes and moving westwards we explored another damp area supporting a mat of the exotic *Carex divulsa*. We noted how the cattle had been very partial to all of the *Carex* species for winter grazing. The large liverwort *Monoclea forsteri* coated the small cliff here and nearby, out of reach of cattle, were clumps of *Carex lessoniana* and *Machaerina sinclairii*.

A long spur leads up through the bush to the next terrace. Partway up was a dense carpet of an umbelliferous herb, later identified as *Schizeilema trifoliolatum*, the subject of much interest. We headed westwards again across a small boggy area to a steep

basin and the grand display of many *Asplenium* species. Of note was a fine specimen of *A. bulbiferum* x *A. flaccidum* displaying large flaccidum-like fronds with several bulbils present.



Figure 3. *Griselinia lucida* on kohekohe.

A final climb brought us to a delightful lunch spot out of the wind on the ridge at the edge of the bush. Here the totara (*Podocarpus totara*) are much-branched and somewhat stunted due to the constant battering from the sou'westers straight off the Tasman Sea. Large old pohutukawas are dominant on the fringes of the forested area and in the surrounding valleys.

Surprisingly, the tiny orchid, *Ichthyostomum pygmaeum* grows on several of these exposed trees and the little filmy fern *Hymenophyllum rarum* was found nestled in the base of one of the trunks. This area is favoured by several shrubby species, among them, *Corokia cotoneaster*, *Carmichaelia australis*, and *Coprosma lucida*.

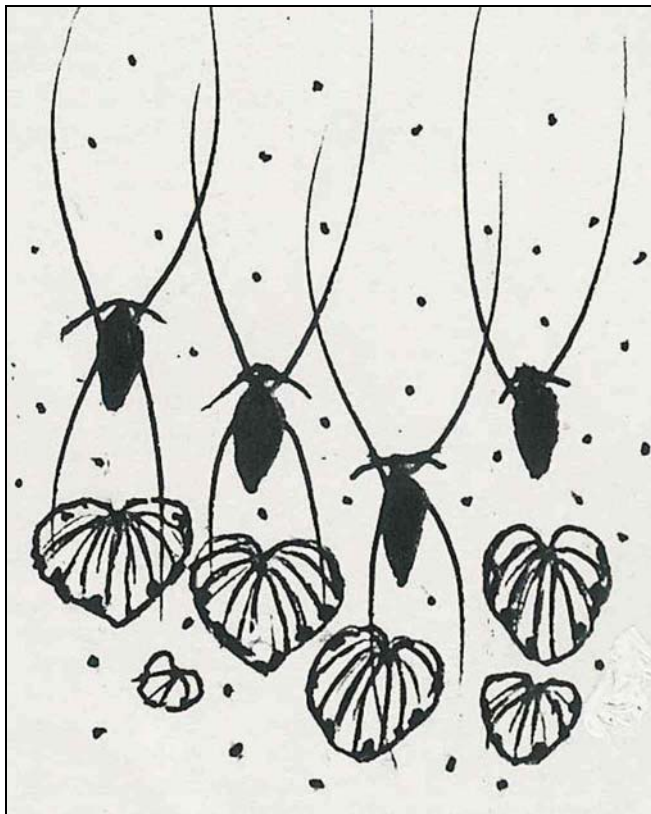


Figure 4. *Nematoceras rivularis* agg. (N. "Pollock").

The return was made along the ridge top past the ancient pa site and along the more gentle slopes of the northern fringe of the bush (Figure 2). Kowhai is common on this upper part. Many of the kohekohe trees are the preferred host for *Drymoanthus adversus*

#### Acknowledgements

Thanks to Ian and Pixie Craig for the privilege of exploring their bush, and Shirley Tomlinson for her sketches.

#### Species list

##### Ferns & fern allies

*Adiantum cunninghamii*  
*Adiantum fulvum*  
*Asplenium bulbiferum*  
*Asplenium flaccidum*  
*Asplenium flaccidum* x *A. bulbiferum*  
*Asplenium hookerianum*  
*Asplenium gracillimum* ("laxum")  
*Asplenium gracillimum* ("tripinnatum")  
*Asplenium lamprophyllum*  
*Asplenium oblongifolium*  
*Asplenium polyodon*  
*Blechnum chambersii*  
*Blechnum discolor*  
*Blechnum filiforme*  
*Blechnum membranaceum*

with one supporting an especially strong colony in bud. *Lophomyrtus* species prefer here where there is more light. Ramarama, (*Lophomyrtus bullata*) and rohuu, (*L. obcordata*) occur side by side with an intermediate form close by. There is a mature kohuhu (*Pittosporum tenuifolium*), one of the few recorded in the wild on the peninsula, and a spectacular puka (*Griselinia lucida*) enveloping a kohekohe tree (Figure 3). On the ground were several colonies of *Nematoceras triloba* with maturing seed capsules (not often seen), a carpet of *Diplodium alobulum* rosettes and a few late flowers intermingled with the native grass *Poa pusilla*, at the base of a pohutukawa, (a downed branch of the same tree had a smattering of *Ichthyostomum pygmaeum*) and scattered *Pterostylis cardiostigma* (just as common as *P. banksii* in these parts). Close inspection of a grassy bank revealed several of last season's seed heads of the hedgehog grass, *Echinopogon ovatus*.

On the final small spur before returning to the open farmland we observed *Metrosideros carminea* struggling to survive on what appeared to be a dead *Leucopogon fasciculatus*. It was pleasing to find a more robust specimen below a small cliff nearby. On this cliff, out of reach of the cattle was *Alseuosmia macrophylla* sporting several creamy-pink flowers.

On returning to the cars we were able to add another 29 species to the original list. Of special note was the reporting of a young wineberry (*Aristotelia serrata*). Although a few of the older residents recall it once being quite common, this species has seemingly disappeared from the peninsula.

Further additions, to include lichen and fungi were later forwarded for listing. In all, there is a surprisingly large number of different species for a relatively small area.

*Blechnum novae-zelandiae*  
*Cyathea dealbata*  
*Cyathea medullaris*  
*Deparia petersenii*  
*Dicksonia squarrosa*  
*Doodia australis*  
*Huperzia varia*  
*Hymenophyllum demissum*  
*Hymenophyllum rarum*  
*Hymenophyllum sanguinolentum*  
*Lastreopsis glabella*  
*Lastreopsis hispida*  
*Microsorium pustulatum*  
*Microsorium scandens*  
*Paesia scaberula*  
*Pneumatopteris pennigera*



*Polystichum neozelandicum* subsp. *neozelandicum*  
*Pteridium esculentum*  
*Pteris macilentata*  
*Pteris saxatilis*  
*Pteris tremula*  
*Pyrrosia eleagnifolia*  
*Tmesipteris lanceolata*

#### **Gymnosperms**

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

#### **Dicotyledons**

*Acaena novae-zelandiae*  
*Alectryon excelsum*  
*Alseuosmia macrophylla*  
*Aristotelia serrata*  
*Bellschmidia tarairi*  
*Bellschmidia tawa*  
*Brachyglottis repanda*  
*Calystegia tuguriorum*  
*Callitriche muelleri*  
*Cardamine debilis*  
*Carmichaelia australis*  
*Carpodetus serratus*  
*Centella uniflora*  
*Clematis paniculata*  
*Coprosma arborea*  
*Coprosma lucida*  
*Coprosma macrocarpa* subsp. *minor*  
*Coprosma rhamnoides*  
*Coprosma robusta*  
*Coriaria arborea*  
*Corokia cotoneaster*  
*Corynocarpus laevigatus*  
*Dichondra repens*  
*Dysoxylum spectabile*  
*Elaeocarpus dentatus*  
*Epilobium rotundifolium*  
*Fuchsia excorticata*  
*Galium propinquum*  
*Geniostoma ligustrifolium*  
*Geranium homeanum*  
*Griselinia lucida*  
*Haloragis erecta*  
*Hebe macrocarpa*  
*Hedycarya arborea*  
*Hydrocotyle heteromeria*  
*Hydrocotyle novae-zelandiae*  
*Knightia excelsa*  
*Kunzea ericoides*  
*Laurelia novae-zelandiae*  
*Leptecophylla juniperina*  
*Leptospermum scoparium*  
*Leucopogon fasciculatus*  
*Litsea calicularis*  
*Lobelia anceps*

*Lophomyrtus bullata*  
*Lophomyrtus obcordata*  
*Lophomyrtus bullata* x *L. obcordata*  
*Melicope ternata*  
*Melicytus ramiflorus*  
*Metrosideros carminea*  
*Metrosideros excelsa*  
*Metrosideros fulgens*  
*Metrosideros perforata*  
*Macropiper excelsa*  
*Muehlenbeckia australis*  
*Muehlenbeckia complexa*  
*Myrsine australis*  
*Nestegis lanceolata*  
*Olearia furfuracea*  
*Olearia rani*  
*Parietaria debilis*  
*Parsonsia heterophylla*  
*Passiflora tetrandra*  
*Peperomia urvilleana*  
*Pittosporum tenuifolium*  
*Pomaderris* aff. *phylicifolia*  
*Pseudopanax crassifolius*  
*Pseudopanax lessonii*  
*Pseudopanax crassifolius* x *P. lessonii*  
*Rhabdothamnus solandri*  
*Ranunculus reflexus*  
*Schefflera digitata*  
*Schizeilema trifoliolatum*  
*Senecio minimus*  
*Solanum americanum*  
*Sophora chathamica*  
*Stellaria parviflora*  
*Streblus heterophyllus*  
*Vitex lucens*

#### **Monocotyledons**

*Acianthus sinclairii*  
*Astelia banksii*  
*Astelia solandri*  
*Carex inversa*  
*Carex lessoniana*  
*Carex spinirostris*  
*Collospermum hastatum*  
*Cordyline australis*  
*Cordyline banksii*  
*Dianella nigra*  
*Diplodium alobulum* (*Pterostylis alobula*)  
*Drymoanthus adversus*  
*Earina mucronata*  
*Echinopogon ovatus*  
*Freycinetia banksii*  
*Gahnia lacera*  
*Isolepis reticularis*  
*Juncus australis*  
*Ichthyostomum pygmaeum* (= *Bulbophyllum pygmaeum*)  
*Machaerina sinclairii*  
*Microlaena stipoides*  
*Microtis unifolia*  
*Nematoceras macrantha* (*Corybas macranthus*)

*Nematoceras* "Pollok" (*Corybas rivularis* agg.)  
*Nematoceras triloba* "pygmy" (*Corybas trilobus*)  
*Oplismenus hirtellus* subsp. *imbecillis*  
*Phormium tenax*  
*Poa anceps*  
*Poa pusilla*  
*Pterostylis banksii*  
*Pterostylis cardiostigma*  
*Rhopalostylis sapida*  
*Ripogonum scandens*  
*Uncinia banksii*  
*Uncinia unciniata*  
*Winika cunninghamii*

#### Fungi

*Auricularia cornea*  
*Cordyceps* sp. (on spider)  
*Coprobria granulata*  
*Crucibulum laeve*  
*Daldinia* sp.

*Favolaschia calocera* (exotic)

#### Myxomycetes

*Physarum lateritium*  
*Pluteus raediarum*

#### Lichens

*Chrysothrix candelaris*  
*Ramalina celastri*  
*Rimelea reticulata*  
*Usnea* sp.  
*Xanthoria parietina*

#### Bryophytes (under-recorded)

*Achrophyllum dentatum*  
*Cyathophorum bulbosum*  
*Lepidolaena taylorii*  
*Monoclea forsteri*  
*Plagiochila* cf. *gregaria*  
*Schistochilus balfouriana*

## Field Trip: Kopouatai Peat Dome, Hauraki Plains 16/10/04

Mike Wilcox

Auckland Bot Soc visited the Kopouatai Peat Dome on the Hauraki Plains on Saturday 16 October 2004. Our group was: Doug Ashby, Tricia Aspin, Enid Asquith, Jan Butcher, Lisa Clapperton, Brian Cumber, Bev Davidson, Geoff Davidson, Gael Donaghy, Leslie Haines, Graeme Hambly, Jane Hart, Rosa Henderson, Graeme Jane, Anthony Keen, Joan Kember, Alistair MacArthur, Juliet Richmond, Clive Shirley, Shirley Tomlinson, Alison Wesley, Mike Wilcox and Maureen Young. We assembled in Ngatea at 10 am, but it took some time to get everyone together as the annual "big day out" was on in town, with hundreds of people milling about and stalls selling country things. After negotiating the crowds we headed down Kaihere Road beside the canal and after 20 km got to the end of Awaiti Canal Road, from where it was a half-hour walk along the Tee Canal embankment to the Elstow Canal which we crossed by a weir to the eastern margin of the peat dome (Map Reference: 260-T13, 383 194).

Kopouatai Peat Dome is a huge expanse covering c.9000 ha. It is a restiad bog sitting on a great accumulation of peat. The ground moves when you jump on it. The fringes of the dome have 6 m tall manuka (*Leptospermum scoparium*), with some *Dracophyllum lessonianum*, but the dome itself is covered in quite short vegetation 1-3 m tall, dominated by *Sporadanthus ferrugineus* in dense stands, abundant wire rush (*Empodisma minus*), *Schoenus brevifolius* and *Baumea teretifolia*, and with scattered shrubs of manuka and *Epacris pauciflora* – this latter in full bloom and much admired. The flora is not particularly rich, but nonetheless distinctive and of

great interest, as well described by Regnier and Champion (1986) and Clarkson *et al.* (2002).

The Tee and Elstow canals and adjoining swamps have several plants we did not see in the Kopouatai Peat Dome or the manuka fringe. These include *Carex scoparia*, *Eleocharis acuta*, *Glyceria maxima*, *Isolepis prolifer*, *Juncus sarophorus* and *Ranunculus flammula*.

Our observations of the Kopouatai Peat Dome flora are summarised in the following brief profiles of the species present (\* = introduced plants).



Figure 1. A busy group in the Peat Dome (Photo: Alistair MacArthur)