

fell, along a ridge. We saw Olearia waima in flower, and a mistletoe Loranthus micranthus, high up in a totara. On reaching the summit, we shared a whole homemade fruit cake as a reward. We were somewhat disappointed to miss the views from the top - the rain and mist enveloped us - but we were all thrilled we had made the effort. Anthony showed us a seedling Coprosma waima and explained the features which make it different from the others in the genus. It was lovely to see so many flowers on Dendrobium cunninghamii, and a rare delight was a flowering Gastrodia cunninghamii. There was talk throughout our time away, of Gastrodia and gastropoda, and while this was the only specimen of Gastrodia seen, many gastropods, mainly Paryphanta busbyi were inspected, measured and sometimes collected.

Wednesday morning dawned clear, but very windy. The sea was very rough, and the wind was blowing the tops off the breakers. The scene, from the "fountain" was quite spectacular. The proposed long walk to the lake was deemed not worth the effort (a degree of kaweruaitis was evident) but the suggestion to drive 95% of the way was greeted enthusiastically. A group of seven Spiranthes sinensis with pale pink flowers, was found in the same spot as last year, on a floating mat of rotting vegetation. Our resident pooch was the only one to venture into the inky water - he hadn't heard the gory Maori history, nor about the leeches. We then returned to base along metalled roads lined with masses of pretty blue Aristea flowers. The parasitic Cassytha pubescens, an adventive from Australia, formed tangled masses over the low roadside scrub. The horizontal Pomaderris prunifolia var. edgerleyi, with its distinctive reddish-brown tinge, drooped on clay banks. Some late-flowering Metrosideros excelsa still showed crimson blossoms. With some regret, we packed our bags and stowed the gear into our vehicles, ready to return to civilization. Botanizing didn't stop there, however, as two members were spotted in the main street of Dargaville, clutching yet more specimens - were they Typha orientalis?

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## HUKATERE SCENIC RESERVE, 17 FEBRUARY 1990

Anthony Wright & Ross Beaver

The story of the milling of New Zealand's finest timber tree and of the gumdigging industry based on the fossil resin of that tree, is eloquently told at 'The Otamatea Kauri & Pioneer Museum' in Matakoho. The museum was the assembly point for our visit to Hukatere Scenic Reserve, those arriving early spending an hour or so amongst the highly polished slabs of swamp kauri and nuggets of fossil gum. By departure time at 10.30 our ranks had swelled to 21, and an unseasonal rain shower had passed over. Dr Nigel Clunie (DSIR) had chosen the reserve for the trip as it is one of the few remaining forest remnants in the northern Kaipara region. Unfortunately he was unable to lead the trip, but armed with his account and map (from the forthcoming Rodney-Otamatea Scenic and Scientific Reserve Survey) we were well prepared. The reserve is just under 30 hectares in area and slopes away southwards from its boundary along the Tinopai Rd south of Matakoho.

Highlights of the reserve include the extensive stands of taraire interspersed by smaller stands of kauri containing some substantial individual trees, albeit not in quite the same class as their giant cousins further north. Nigel's researches indicate that most of the area was selectively logged in early times, with the western and eastern ends having been cleared more recently, and now in mature teatree. We later noticed a small midden area hinting at earlier Maori usage. In 1983 Nigel had noted that the patterns of natural regeneration had been disrupted by prolonged cattle browsing, and thus we were particularly keen to see whether the necessary fence repairs had been carried out. We entered the reserve via the short formed track, which terminates at a single large kauri. Tree seedlings and saplings, including pate and puriri, were common along the trackside indicating cattle had been effectively excluded for some time. The oak-like leaves of Alseuosmia x quercifolia were an interesting feature, and the differences between white maire (Nestegis lanceolata) and maire taiki (Mida salicifolia) stimulated discussion. To round off the maires we later found a fine specimen of maire tawake (Syzygium maire) on the edge of the main stream. This tree had a hollow trunk which appears to have encased a tree-fern trunk some 8 m high, suggesting a perching origin for the maire tawake. We left the track and headed down the stream assembling at lunch to compare records. In following down the stream it was apparent that cattle had been present in the reserve over the previous winter, but appeared to have mainly remained near their entry point, a lifted fence which the farmer had recently repaired. Unfortunately the stream passing through much of the reserve has its headwaters and a major tributary in the adjacent pasture, and it was rather more silted and eutrophied than it would have otherwise been. After following the stream for a few hundred metres we turned uphill again. Some large straggling plants of a coprosma under the shade of some of the large kauri caused many of us to hesitate, but we eventually arrived at Coprosma crassifolia, an identification later confirmed by others in the party.

We arrived back at the cars about 3.30, and some did a brief survey of the extent of the german ivy (Senecio mikanoides) infestation near the track entrance. Eradication of the small colony would be quite feasible and very desirable, although it was too large a task for us in that herbicide will be needed where it has tangled amongst the roadside kikuyu. We did remove one large vine of moth plant (Arauja sericifera), that bane of Auckland gardeners.

One cannot but feel saddened by the decimation of the once extensive Kaipara kauri forest. The Hukatere Reserve is one of the largest remnants in the northern reaches of the Kaipara. Despite its small size it is valuable in many ways, one small illustration being the presence of a rather wide-leaved form of Pittosporum eugenioides, with leaves about 5.5 cm wide (compared with the 2.5-4 cm of the Flora). Experimental work will be needed to establish the nature of such variants, but without the existence of reserves like Hukatere we would not even be able to ask the question. The following vascular plant list includes species seen by ABS members and also species recorded by N.M.U. Clunie but not seen by us (marked †). Adventive species are marked \*.

Received 3 March 1990.

## HUKATERE SCENIC RESERVE, Kaipara Ecological District

### Ferns and Fern Allies 41

*Adiantum cunninghamii*  
*Adiantum fulvum* †  
*Adiantum hispidulum* †  
*Adiantum viridescens*  
*Anarthropteris lanceolata*  
*Asplenium bulbiferum*  
*Asplenium flaccidum*  
*Asplenium gracillimum*  
*Asplenium oblongifolium*  
*Asplenium polyodon*  
*Blechnum capense*  
*Blechnum chambersii*  
*Blechnum discolor*

### Gymnosperms 8

*Agathis australis*  
*Dacrycarpus dacrydioides*

### Dicotyledons 93

*Alectryon excelsus*  
*Alseuosmia* × *quercifolia*  
*Araujia sericifera*\*  
*Aristolelia serrata* †  
*Beilschmiedia tarairi*  
*Beilschmiedia tawa*  
*Brachyglottis repanda*  
*Callitriche muelleri*  
*Carmichaelia aligera*  
*Carpodetus serratus*  
*Centella uniflora*  
*Cirsium vulgare*\*  
*Clematis cunninghamii*  
*Clematis paniculata*  
*Collospermum hastatum*  
*Conyza albida*\*  
*Coprosma arborea*  
*Coprosma areolata*  
*Coprosma crassifolia*  
*Coprosma lucida* †  
*Coprosma macrocarpa* × *robusta*  
*Coprosma rhamnoides*  
*Coprosma robusta*  
*Coprosma spathulata*  
*Corynocarpus laevigatus*  
*Crepis capillaris*\*  
*Cyathodes fasciculata*  
*Daucus carota*\*  
*Dichondra repens*  
*Dracophyllum latifolium*

### Monocotyledons 49

*Acianthus fornicatus* †  
*Agrostis capillaris*\*  
*Anthoxanthum odoratum*\*  
*Astelia banksii* †  
*Astelia solandri*  
*Astelia trinerva*  
*Axonopus affinis*\*  
*Bulbophyllum pygmaeum*  
*Carex dissita*  
*Carex lambertiana*  
*Carex occrosaccus*  
*Carex virgata*  
*Cordyline australis*  
*Cordyline banksii* †  
*Cordyline pumilio*  
*Cortaderia seloana*\*

*Blechnum filiforme*  
*Blechnum fraseri*  
*Blechnum membranaceum*  
*Cyathea dealbata*  
*Cyathea medullaris*  
*Deparia petersenii*  
*Deparia tenuifolia*  
*Dicksonia squarrosa*  
*Diplazium australe*  
*Doodia media*  
*Hymenophyllum demissum*  
*Hymenophyllum dilatatum*  
*Hymenophyllum revolutum*  
*Hymenophyllum sanguinolentum*

*Dacrydium cupressinum*  
*Phyllocladus trichomanoides*  
*Podocarpus hallii* †

*Duchesnea indica*\*  
*Dysoxylum spectabile*  
*Elatostema rugosum*  
*Epilobium rotundifolium*  
*Fuchsia excorticata*  
*Geniostoma rupestre.ligustrifolium*  
*Gonocarpus incanus*  
*Gnaphalium simplicicaule*\*  
*Griselinia lucida*  
*Hedycarya arborea*  
*Hypochoeris radicata*\*  
*Knightia excelsa*  
*Kunzea ericoides*  
*Lapsana communis*\*  
*Laurelia novae-zelandiae*  
*Leptospermum scoparium*  
*Lobelia anceps*  
*Lotus pendunculatus*\*  
*Litsea calicaris*  
*Macropiper excelsum*  
*Meliccytus macrophyllus*  
*Meliccytus micranthus*  
*Meliccytus ramiflorus*  
*Melilotus sp.*\* †  
*Mentha pulegium*\*  
*Metrosideros diffusa*  
*Metrosideros fulgens*  
*Metrosideros perforata*  
*Microlaena avenacea*  
*Mida salicifolia*  
*Muehlenbeckia australis*

*Corybas macranthus* †  
*Corybas oblongus*  
*Corybas trilobus* †  
*Cyperus eragrostis*\*  
*Cyperus ustulatus*  
*Dactylis glomerata*\*  
*Dianella nigra*  
*Earina mucronata*  
*Echinopogon ovatus*  
*Festuca arundinacea*\*  
*Freyinetia baueriana.banksii*  
*Gahnia lacera*  
*Gahnia pauciflora*  
*Gahnia setifolia*  
*Gahnia xanthocarpa*  
*Holcus lanatus*\*  
*Isolepis inundata*

*Lastreopsis glabella*  
*Lastreopsis hispida*  
*Lastreopsis microsora*  
*Lycopodium varium*  
*Lygodium articulatum*  
*Paesia scaberula*  
*Phymatosorus diversifolius*  
*Phymatosorus scandens*  
*Pneumatopteris pennigera*  
*Pteridium esculentum*  
*Pteris macilentata*  
*Pteris tremula*  
*Pyrrhosia eleagnifolia*  
*Tmesipteris elongata*

*Podocarpus totara*  
*Prumnopitys ferruginea*  
*Prumnopitys taxifolia*

*Myosotis laxa*\*  
*Myrsine australis*  
*Myrsine salicina*  
*Nertera dichondraefolia*  
*Nestegis lanceolata*  
*Olearia furfuracea*  
*Olearia rani*  
*Parsonia heterophylla*  
*Passiflora tetrandra*  
*Pittosporum cornifolium*  
*Pittosporum eugenioides*  
*Plantago lanceolata*\*  
*Pomaderris phyllicifolia.ericifolia*  
*Prunella vulgaris*\*  
*Pseudopanax crassifolius*  
*Ranunculus reflexus*  
*Ranunculus repens*\* †  
*Rubus australis*  
*Rubus cissoides*  
*Rubus fruticosus* agg.\*  
*Rumex conglomeratus*\*  
*Schefflera digitata*  
*Senecio bipinnatisectus*\*  
*Senecio jacobaea*\*  
*Senecio mikanioides*\*  
*Solanum americanum*\*  
*Sonchus asper*\*  
*Sophora microphylla*  
*Streblus heterophyllus*  
*Syzygium maire*  
*Vitex lucens*

*Isolepis sepulchralis*\*  
*Juncus articulatus*\*  
*Juncus effusus*\*  
*Luzula picta.picta*  
*Oplismenus imbecillis*  
*Pennisetum clandestinum*\*  
*Phormium tenax*  
*Poa annua*\*  
*Pterostylis graminea.rubicaulis* †  
*Pterostylis trullifolia* †  
*Rhopalostylis sapida*  
*Ripogonum scandens*  
*Rytidosperma biannulare*  
*Uncinia banksii* †  
*Uncinia uncinata*  
*Uncinia zotovii*