

South-east Rangitoto Island

E.K. Cameron

On 7 June 1992 I lead a trip from Islington Bay to Rangitoto Wharf via the narrow, mainly coastal track. Obvious around Islington Bay were many of the exotic succulent species recorded by Sykes (1992). Two native ones were also evident; Peperomia urvilleana and Crassula sieberiana. Psilotum nudum and Cheilanthes sieberi were frequent by the coast.

Native ground orchids were common too; Acianthus sinclairii which was mostly in bud with some in full flower, A. "oblongus" with leaves and sessile flower stems, and both Pterostylis alobula and P. trullifolia flowering. Thelymitra leaves were also evident.

Leaving the coast the track undulates and snakes its way through low pohutukawa dominant forest. In the hollows large bryophyte mats of mainly mosses were common with the filmy ferns Hymenophyllum sanguinolentum and Trichomanes reniforme. The encouraging sign all along this track was the large numbers of hangehange seedlings up to 25 cm tall. No adults were seen. This regeneration of hangehange is due to the poisoning of possums and wallabies by the Department of Conservation since October 1990. What a wonderful sight!

About 1 km east of Rangitoto Wharf, by the coast, was a large infestation of mile-a-minute (Dipogon lignosus), both white and dark pink flowering plants were present. This climbing pea was smothering the shoreline and adjacent forest and needs to be eradicated. Also at this (old house?) site were large plants of Agave americana.

This track is not commonly used but it is interesting and good for botanising. I thank Dee and Mike Pigneguy for transport and hospitality and the rest of the party for their enthusiasm.

REFERENCE

- Sykes, W.R. 1992. Succulent plants of Rangitoto Island. Auck.Bot.Soc. Journal 47(1): 6-16.

Native forest at the Auckland Regional Botanic Gardens, Manurewa

E.K. Cameron

These notes on the Botanic Gardens forest were compiled during a one day survey for the Auckland Regional Authority on 3 June 1975, and added to during an Auck. Bot. Soc. trip on the afternoon of 20 June 1992. A total native vascular plant species list of 152 species is appended. The species list by Gardner (1981) of the adjacent Totara Park (which also includes part of the Botanic Gardens forest) is incorporated into the appendix.

At the north end of the Botanic Gardens is native forest covering c. 10 ha which is included in the Gardens. This is contiguous with Totara Park forest (c. 20 ha) to the east which is managed by Manakau City. Most of this combined forest is on the north side of the Puhinui Stream and occupies a south-facing escarpment (40-80 asl).

Following the forest track by the Puhinui Stream are the best examples

of matai I have seen in the Auckland area. Totara, kahikatea, taraire, rimu, pukatea, titoki, karaka, kowhai and mamangi (Coprosma arborea) are all frequent by the stream. There is also a single tall kaikomako (Pennantia corymbosa) which is rare around Auckland. Three divaricating shrubs are common, Melicope simplex, Melicytus micranthus and juvenile turepo (Streblus heterophyllus); shrubs of Coprosma spathulata are frequent higher up. Wandering Jew locally formed carpets near the stream.

During the Bot. Soc. trip we were fortunate to all view a woodpigeon devouring lacebark leaves at eye level and at close proximity. Then we had an interesting discussion about a lacebark shrub on the track margin which had small juvenile leaves and larger adult leaves. Was it Hoheria populnea or H. sexstylosa? According to Allan (1961), H. populnea can sometimes have divaricating branches and small juvenile leaves. Rhys Gardner convinced me later that it is H. sexstylosa. It would appear that this specimen is planted in the bush where it is totally out of place.

We climbed up the steep bank on the circular loop track where kohekohe was abundant (though very few flowers were seen - eaten by possums). Also common on the steeper slopes were tawa, taraire and ponga. Along the flat higher ridge kanuka, mamangi and tanekaha were frequent with large vines of native passionfruit and Parsonsia heterophylla. A single kaikamako seedling was seen and although not observed during the Bot. Soc. trip the few kauri present in this bush are along these upper ridges.

In 1975 cattle and possum damage was evident and weeds included hawthorn, blackberry, brush wattle, Asparagus scandens and woolly nightshade. Today the area is well fenced, possum damage is still evident and the most threatening weed appears to be wandering Jew. The two foot bridges built since 1975 give good access across the stream but the public should be given more encouragement to visit this fine forest.

As we walked back over the Botanic Gardens lawn there was a small (c. 10 cm across) red patch amongst the grass, was it old red carpet, was it alive? Eric McKenzie kindly identified it later as red thread (Laetisaria fuciformis) - a fungus that commonly infects lawns.

Largest diameters (dbh) for different species measured in June 1975, Botanic Gardens forest:

kahikatea	85.9 cm	miro	33.0
kaikamako	32.1	pukatea	44.6
kanuka	39.1	rimu	68.1
karaka	51.9	tanekaha	53.1
matai	70.3	taraire	51.9

Gardner (1981) recorded two species in Totara Park which appeared almost certain to be old plantings: Griselinia littoralis (one old specimen) and Nestegis cunninghamii (2 trees).

REFERENCES

- Allan, H.H. 1961. Flora of New Zealand. Vol. I. Government Printer, Wellington.
- Gardner, R.O. 1981. Some species lists of native plants of the Auckland Region. No. 9 Totara Park. Unpublished manuscript, Auckland Institute and Museum library.

Appendix: Species list of native vascular plants for natural forest at the Regional Botanic Gardens & Totara Park, Manurewa

Ferns and fern allies (38)

<i>Adiantum cunninghamii</i> G	<i>H. flabellatum</i>
<i>A. fulvum</i>	<i>Lastreopsis glabella</i>
<i>Anarthropteris lanceolata</i>	<i>L. hispida</i>
<i>Asplenium bulbiferum</i> s.s.	<i>Leptopteris hymenophylloides</i>
<i>A. flaccidum</i> s.s.	<i>Lycopodium deuterodensum</i>
<i>A. oblongifolium</i>	<i>Lygodium articulatum</i>
<i>A. polyodon</i>	<i>Paesia scaberula</i> G
<i>Blechnum chambersii</i>	<i>Phymatosorus pustulatus</i>
<i>B. discolor</i> G	(= <i>P. diversifolius</i>)
<i>B. filiforme</i>	<i>P. scandens</i>
<i>B. fluviatile</i> G	<i>Pneumatopteris pennigera</i>
<i>B. fraseri</i>	<i>Pteridium esculentum</i>
<i>B. membranaceum</i>	<i>Pteris macilenta</i>
<i>B. sp. (kiokio)</i>	<i>P. tremula</i>
<i>Cyathea cunninghamii</i> G	<i>Pyrrosia eleagnifolia</i>
<i>C. dealbata</i>	<i>Tmesipteris elongata</i> s.s.
<i>C. medullaris</i>	<i>T. lanceolata</i>
<i>Dicksonia squarrosa</i>	<i>Trichomanes elongatum</i>
<i>Doodia media</i>	<i>T. venosum</i>
<i>Hymenophyllum demissum</i>	

Gymnosperms (7)

<i>Agathis australis</i> r	<i>Podocarpus totara</i>
<i>Dacrycarpus dacrydioides</i>	<i>Prumnopitys ferruginea</i>
<i>Dacrydium cupressinum</i>	<i>P. taxifolia</i>
<i>Phyllocladus trichomanoides</i>	

Dicotyledons (67)

<i>Acaena</i> sp. G	<i>Hoheria populnea</i>
<i>Alectryon excelsus</i>	<i>Hydrocotyle ? elongata</i> G
<i>Beilschmiedia tarairi</i>	<i>H. moschata</i> G
<i>B. tawa</i>	<i>Knightia excelsa</i>
<i>Brachylottis repanda</i>	<i>Kunzea ericoides</i>
<i>Callitriche muelleri</i> G	<i>Laurelia novae-zelandiae</i>
<i>Carmichaelia aligera</i>	<i>Leptospermum scoparium</i>
<i>Carpodetus serratus</i>	<i>Leucopogon fasciculatus</i>
<i>Centella uniflora</i>	<i>Lobelia anceps</i> *
<i>Clematis paniculata</i>	<i>Macropiper excelsum</i>
<i>Coprosma arborea</i>	<i>Melicope simplex</i>
<i>C. grandifolia</i>	<i>Melicytus micranthus</i>
<i>C. lucida</i>	<i>M. ramiflorus</i>
<i>C. robusta</i>	<i>Metrosideros diffusa</i>
<i>C. spathulata</i>	<i>M. fulgens</i>
<i>Corynocarpus laevigatus</i>	<i>M. perforata</i>
<i>Dichondra repens</i> G	<i>M. robusta</i> r
<i>Dysoxylum spectabile</i>	<i>Mida salicifolia</i>
<i>Fuchsia excorticata</i> G	<i>Muehlenbeckia australis</i> G
<i>Geniostoma rupestre</i>	<i>Myrsine australis</i>
<i>Gonocarpus incanus</i>	<i>Nertera dichondrifolia</i>
<i>Griselinia lucida</i>	<i>Nestegis lanceolata</i>
<i>Haloragis erecta</i>	<i>Olearia furfuracea</i>
<i>Hebe ? stricta</i> G	<i>O. rani</i>
<i>Hedycarya arborea</i>	<i>Parsonsia heterophylla</i>

Passiflora tetrandra	R. cissooides
Pennantia corymbosa r	Schefflera digitata
Pittosporum cornifolium r	Senecio minimus
P. tenuifolium	Solanum aviculare G
Pratia angulata G	Sophora microphylla
Pseudopanax arboreus* r	Streblus heterophyllus
P. crassifolius	Vitex lucens
Ranunculus reflexus G	Wahlenbergia gracilis G
Rubus australis	

Monocotyledons (40)

Acianthus sinclairii*	G. xanthocarpa G
Astelia grandis G	Isolepis ? inundata G
A. solandri	I. reticularis G
A. trinervia	Juncus australis G
Carex dissita*	J. gregiflorus G
C. geminata agg. G	J. planifolius G
C. lambertiana	Lemna minor G
C. ochrasaccus G	Microlaena avenacea
C. solandri	M. stipoides
C. virgata	Oplismenus imbecillis
Collospermum hastatum	Phormium tenax G
Cordyline australis	Poa anceps s.s.
C. banksii	Rhopalostylis sapida
Dianella nigra	Ripogonum scandens
Drymoanthus adversus r	Schoenus tendo
Earina mucronata	Thelymitra sp. G
Freycinetia baueriana	Uncinia banksii
Gahnia lacera	U. distans G
G. pauciflora*	U. uncinata
G. setifolia G	U. zotovii G

r = rare (less than 5 plants seen)

* = Bot. Soc. additions to the 1975 list

G = additions from Gardner (1981)

Private forest remnants at Brookby, south-east Auckland

E.K. Cameron

Auckland Bot. Soc. visited the Reid property for 2 hours at Kimpton Rd, Brookby on 20 June 1992 (map reference 260 R11 893682 40 m asl). It was a clear winter's day with a good turn out of 23 members. We were greeted by two large woodpigeons devouring tree privet fruit on the front hedge, and by Corrine and Doug Reid.

The Papakura Stream winds through the property which contains 3 small forest remnants, wholly or partly on the stream's flood plane. The narrow stream is prone to flooding and partly passes through the first bush remnant that was fenced just over 15 years ago when it was completely grazed by stock. The tall canopy is dominated by taraire, kahikatea and titoki; the kahikatea still looks youthful (see Appendix for native plants seen). The understorey on the flood plane is dense in places with fantastic regeneration of pigeonwood, nikau, ponga and karaka mainly about 2 m tall. The nikau are locally very dense,