

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,

trunkless and with fronds up to 2 m long. There is a single tall northern tree rata with many epiphytes including Astelia solandri, Collospermum hastatum and puka. Rimu, pukatea, rewarewa and matai are occasional in the canopy. On the house side of the bush several ferns, shrubs and trees have been planted (many are recorded in the Appendix). Wheki trunks bought commercially and laid out recently to form a path contained 3 epiphytes not seen elsewhere: pate, Rumohra adiantiformis and Pseudopanax edgerleyi. A single ginger plant (Hedychium ? gardnerianum) some 40 cm tall was observed epiphytically growing from a high tree fork, presumably grown from bird excreted seed. Wandering Jew formed carpets near the stream which had been "raked" over by pukeko. Small shrubs of Jerusalem cherry were frequent.

Less than 100 m downstream was a smaller forest remnant (c. 0.5 ha) which was fenced 1 year ago. We did not enter this one, titoki were common. Between these two remnants amongst the pasture was kanuka, matai and a very large Melicactus micranthus measuring 4.5 m tall, 5.5 m wide and with a basal diameter of 30 cm.

The third bush remnant (almost 1.5 ha) almost joins the second and is due to be fenced next summer. The forest begins by the stream and runs up a south-facing bank. Titoki is common with a pure stand of it on the eastern side of the bush. The only toro and tanekaha seen were in this remnant, plus the largest kohekohe and the only sizeable totara. The paucity of totara in such a suitable site is presumably due to past logging. Leather fern (Pyrrhosia eleagnifolia) and Earina mucronata were abundant epiphytes throughout with some titoki upper branches smothered by leather fern.

Immediately above the Reid property are goldfish breeding ponds which have been the source of many aquatic weeds into the upper Papakura Stream. An unusual one we saw was an adventive daisy, Senegal tea (Cymocoronis spilanthoides) resprouting in the stream. Doug said that it was emergent over 1 m tall last summer and so dense you could walk on it. Its eradication was attempted but some small clumps remain. The Papakura Stream is the first NZ locality for Senegal tea to be recorded wild, no viable seed has been found, MAF have recommended that it be gazetted as a noxious plant and that it be eradicated from its only known field site (P.D. Champion pers. comm.). To save the stream there is a move to close the fish breeding operation.

I thank Corrine and Doug Reid for inviting us to visit their property, Paul Champion for his waterweed comments and Bot. Soccors for their field observations. Members were very impressed by the effort the Reids have made to save their bush and stream.

Appendix: Species list of native vascular plants for three forest remnants on the Reid property at Brookby

Ferns

<u>Asplenium flaccidum</u> s.s. o	<u>Lastreopsis glabella</u> c
<u>A. polyodon</u> o	<u>Leptopteris hymenophylloides</u> r
<u>Blechnum chambersii</u> l	<u>Lycopodium varium</u> r
<u>B. filiforme</u> c	<u>Paesia scaberula</u> o
<u>B. fluviatile</u> P	<u>Phymatosorus pustulatus</u>
<u>B. sp. (kiokio)</u> o	(= <u>P. diversifolius</u>) c
<u>Cyathea dealbata</u> a	<u>P. scandens</u> o
<u>C. medullaris</u> o	<u>Pneumatopteris pennigera</u> r
<u>Deparia petersenii</u> r	<u>Pyrrhosia eleagnifolia</u> a
<u>Dicksonia squarrosa</u> r,B	<u>Pteris tremula</u> o
<u>Diplazium australe</u> r	<u>Rumohra adiantiformis</u> B
<u>Doodia media</u> o	

Gymnosperms

Agathis australis P
Dacrycarpus dacrydioides a
Dacrydium cupressinum o
Librocedrus plumosa P

Phyllocladus trichomanoides r
Podocarpus totara r
Prumnopitys ferruginea r
P. taxifolia o

Dicotyledons

Acaena novae-zelandiae o
Ackama rosifolia P
Alectryon excelsus a
Aristotelia serrata l
Beilschmiedia tarairi a
B. tawa o
Brachyglottis repanda r
Coprosma rhamnoides r
C. lucida r
C. robusta r
Corynocarpus laevigatus c
Dysoxylum spectabile r
Entelea arborescens r
Geniostoma rupestre o
Griselinia lucida r
Haloragis erecta l
Hedycarya arborea a
Knightia excelsa o
Kunzea ericoides o
Laurelia novae-zelandiae o

Leucopogon fasciculatus ?P
Macropiper excelsum o
Melicytus micranthus r
M. ramiflorus o
Metrosideros diffusa o
M. fulgens o
M. perforata c
M. robusta r
Muehlenbeckia australis o
Myrsine australis o
M. salicina r
Nothofagus menziesii P
Parsonsia sp. c
Passiflora tetrandra o
Pittosporum eugenioides P
Pseudopanax edgerleyi B
Rubus cissoides r
Schefflera digitata B
Solanum aviculare o
Vitex lucens o

Monocotyledons

Astelia solandri o
Carex dissita o
C. lambertiana r
C. virgata o
Collospermum hastatum c
Cyperus ustulatus o
Dendrobium cunninghamii r

Drymoanthus adversus o
Earina mucronata a
Freycinetia baueriana o
Microlaena stipoides c
Oplismenus imbecillis o
Rhopalostylis sapida a
Ripogonum scandens o

a = abundant

c = common

o = occasional

l = local

r = rare (less than 5 plants seen)

B = brought in on wheki trunks

P = planted

Waitakere Range: additions and comments

E.K. Cameron

ADDITIONS TO THE NATIVE VASCULAR FLORA OF GARDNER (1982)

Ranunculus glabrifolius (Cameron 5329b, AKU 23009) from a freshwater area near Pararaha Point on the sand amongst oioi (Leptocarpus similis), Glossostigma elatinoides and Utricularia gibba (= U. biflora) on 8 Feb. 1991. The Waitakere collection of R. glabrifolius extends the known New Zealand, northern geographical limit for this species from the Volcanic