

Monocotyledons

Acianthus fornicatus var. sinclairii	o	Freycinetia banksii	o
*Agrostis capillaris	lc	Gahnia lacera	l
*Anthoxanthum odoratum	lc	*Juncus effusus	l
Astelia solandri	f	J. gregiflorus	l
*Axonopus affinis	lc	Libertia grandiflora	lc
Bulbophyllum pygmaeum	o	Microlaena avenacea	o
Carex dissita	o	Oplismenus imbecillis	c
C. ochrosaccus	f	*Paspalum dilatatum	l
Collospermum hastatum	a	Pterostylis alobula	o
Cordyline australis	o	Rhopalostylis sapida	f
C. banksii	r	Ripogonum scandens	f
Corybas trilobus (M. Young pers. comm.)		Rytidosperma gracile	o
*Cyperus brevifolius	lc	*R. racemosum	o
*Dactylis glomerata	l	R. unarede	o
Dendrobium cunninghamii	o	Schoenus maschalinus	r
Drymoanthus adversus	o	Scirpus reticularis	lf
Earina autumnalis	r	*Sporobolus africanus	l
E. mucronata	c	Uncinia uncinata	o

REFERENCE

Young, A.G. 1988. The ecological significance of the edge effect in a fragmented forest landscape. Unpublished MSc thesis, University of Auckland.

Received 27 May 1988.

WATCHMAN ISLAND - WAITEMATA HARBOUR

E.K. Cameron

Watchman Island (NZMS 260 R11 649837) near the Waitemata Harbour Bridge is situated 0.6 km away from Home Bay, which is the closest land to the island. Watchman Island is uninvestigated land held in trust by the Crown and has underlying Maori ownership. On 8 November 1987 I dusted off the cobwebs from my surfboard and paddled out to the island, fighting a strong out-going tide.

The island is flat-topped, about 6 m asl, steep-sided (eroding) and composed of Waitemata sediments. An extensive shore platform is exposed at low tide, especially on the northern side. The flat top of the island is triangular in shape, measuring some 15x15 m. At the centre of the island there is a metal reflector 236 cm tall with 2 faces, each 115 cm wide (Harbour Board marker?). The only woody vegetation is seven pohutukawa, one in each corner and four others along the southern cliff edge. Most pohutukawa are in precarious positions. The one in the south-east corner has recently fallen down to the shore platform leaving

its roots exposed. The largest tree is in the south-west corner, and is 4 m tall, multi-trunked and the biggest trunk is 26 cm in diameter.

The vegetation on the flat top of the island is a low, exotic sward dominated by Plantago, Bromus diandrus, B. willdenowii, Medicago polymorpha and Lolium. The southern cliff is not bare like the other cliffs, but is carpeted by a moss (Hypnum cupressiforme) with scattered grasses (Vulpia and Bromus diandrus). Another moss, Thuidium furfurosum is common through the sward along the southern cliff top. The native geranium, Geranium retrorsum is scattered through the herbaceous sward.

Black-backed gulls, an oystercatcher and a pied shag were by the island's shoreline during the afternoon of my visit. No bird nests were seen there. Garden snails (Helix aspera) were abundant and must have a major impact on the vegetation.

The Harbour Board (B. Scott pers. comm.) occasionally give permission for school children to camp on the island. Possibly in the past old hulks were moored there allowing garden snails to reach the island. Before the harbour bridge was built (1950s and 60s) the Navy used the island as a range mark during radar calibrations but this did not involve any modification to the island (P.Y. Dennerly pers. comm.)

The top of the island has been cleared in the past resulting in the present situation of the woody vegetation reduced to one species and restricted to the cliffs. There is no evidence of stumps, so presumably this clearance happened a long time ago. Native plants number 23% of the island's vascular plant flora and Watchman Island's population of Geranium retrorsum is the best known remaining around Auckland, this species has declined in the Auckland Region (R.O. Gardner pers. comm., and see Gardner 1984). The presence of this species requires the island to have a more suitable reserve status and management.

I thank Jessica Beever for identifying the mosses which I brought back with my notebook and tape measure in a plastic bag, gripped in my teeth.

SPECIES LIST: 1. Vascular plants

Ferns

Phymatosorus diversifolius - single population, S face, pohutukawa base

Dicotyledons

Cerastium glomeratum - occasional in exotic sward

Cirsium vulgare - 1 dead adult, 1 rosette

Crassula sieberiana - on bare areas, S and SE cliffs

Disphyma australe - locally common on bare cliff tops

Foeniculum vulgare - single plant

Geranium retrorsum - scattered through sward 20403*

Medicago arabica - single plant in sward

M. polymorpha - common through sward

Metrosideros excelsa - 7 plants, cliffs

Plantago lanceolata - commonest plant, dominant in sward

Senecio lautus - mostly confined to SW end, cliff top

S. skirrhodon - single plant

Silene gallica - locally common, especially sward margin

Sonchus oleraceus - common in sward

Monocotyledons

Allium triquetrum - single small population, SW end
Bromus diandrus - common throughout sward
B. hordeaceus - mostly confined to SW end
B. willdenowii - common in sward
Dactylis glomerata - occasional in sward
Lolium perenne - frequent in sward
Poa annua - confined to SE end on bare clay
Sporobolus africanus - frequent, especially along N margin of sward
Stenotaphrum secundatum - patches along N and E cliff tops
Thelymitra longifolia - single dry plant in moss mat, S face
Vulpia bromoides - locally common, especially on sward margin

SPECIES LIST: 2. Mosses

Campylopus ?introflexus 71440*
Hypnum cupressiforme 71443
Thuidium furfurosum 71442
Trichostomum brachydontium 71439
Triquetrella papillata 71441

* AKU herbarium numbers

REFERENCE

Gardner, R.O. 1984. *Geranium solanderi* and allies in New Zealand. New Zealand Journal of Botany 22(1): 127-134.

Received 12 May 1988.

ROSEBANK ROAD BUSH, AVONDALE

R.O. Gardner

Professor Millener's note about this unique forest remnant -- the only substantial piece of bush between Henderson and the city -- was I had thought both sole description and obituary:

"coastal forest of wet ground, unfenced and invaded by many exotics ... almost certainly soon to be entirely lost [through industrialization] to Auckland. The last large pukatea (*Laurelia novae-zelandiae*), a swamp forest dominant, was destroyed only two years ago. Huge *Vitex* and *Beilschmiedia tarairi* are still present, with *Collospermum* the typical epiphyte. There are smaller *Corynocarpus*, *Knightia* and *Dysoxylum*. *Cordyline australis* reaches 70 ft in height. *Coprosma areolata* (cf. Smith's Bush) is abundant in the undergrowth: and there are thousands of *Corynocarpus* seedlings." (Millener 1965)