OAIA ISLAND - SOUTH MURIWAI

E.K. Cameron & G.A. Taylor

On 6 March 1988 we visited Oaia Island, south Muriwai on a stormy day which was the start of cyclone Bola. The closest piece of mainland is 1.4 km to the east. Oaia is one of the few islands on Auckland's west coast. The steep, oval-shaped island covers c. 0.14 ha (smaller than shown of NZMS 260 Q11), measures c. 60 x 30 m (long axis north-south) and is c. 25 m a.s.l. It is most probably an eroded remnant of a late early Miocene pillow lava flow, dated on the adjacent Maori Bay coast at 16-17 million years old (pers. comm. B.W. Hayward, 1988). It is smooth, storm-washed and with humus restricted to cracks on the eastern side. For photographs of Oaia Island see Reed (1979) and Fleming & Wodzicki (1952).

The vascular plants form a low sparse green cover on the steep mid-eastern slope; plants on the steeper western side are very few and only occur near the summit. The lowest vascular plants occur on the eastern side, c. 7 m a.s.l. Off the north-west side there is one large stack and off the south-west side there are two small rocks, all are low and wave washed.

The main vegetation is low, scattered mats of N.Z. ice plant (Disphyma australe) and frequently associated with it is the herb, Einadia allanii. Some six, low-spreading, woody-stemmed shrubs of taupata (Coprosma repens) grow about half way up on the east and south-east part of the island. A specimen of Cook's scurvy grass (Lepidium oleraceum) collected by Wrightman in October 1953 on Oaia Island is lodged in the Auckland Museum herbarium (AK 37510) - we found no plants of this species during our visit. Lichens (crusts) and a tiny (c. 3 mm tall) green algae, Prasiola stipitata (AKU 101510) are occasional on the upper rocks. It is possible that some small plants were missed during our visit due to the time of year, not all the island being traversible, and the stormy weather. Interesting absentees from the island include glasswort (Sarcocornia quinqueflora), shore groundsel (Senecio lautus) and Spergularia media.

There were 98 nearly fledged gannet chicks present during our visit; also a few red-billed gulls and white-fronted terns and a single spotted shag. Several large native littoral earwigs (Anisolabis littorea) were found under rocks. Although fur seals frequent the island, we did not see any. No lizards were seen. Wrightman (1957) recorded on Oaia two geckos and the following birds nesting: gannets, spotted shags, white-fronted terns and a pair of starlings.

The gannetry on the island was established well before 1914. It supported c. 160 pairs of gannets in 1940; 1946/47 338 pairs; 1969/70 892 pairs; 1980/81 761 pairs (Wodzicki et al. 1984). This increase on the island to saturation of nesting gannets must have had a detrimental effect on the vegetation. Numbers of breeding gannets on Oaia Island build up before September and do not decline until March. The island is also occupied as a roost by some gannets throughout the winter (Fleming & Sibson 1947). During our visit the upper island was enriched with guano; the flattish, axial ridge was covered in nest sites and lacked vascular plants. All taupata plants were well pruned, presumably by gannets.

Moore and Wodzicki (1950) recorded 4 vascular plants, including a grass (and 10 algae) amongst gannet nest material on White Island, in the Bay of Plenty. The terrestial plants included the same 3 found growing on Oaia Island. Imagine the damage to Oaia's vegetation if most gannet nests annually have pieces of vascular plants added to them.

Cook's scurvy grass has drastically declined thoughout New Zealand; it was well known on Auckland's west coast in the 1930s and was recorded at Piha in 1948 (Esler 1975). The 1953 Oaia record of scurvy grass appears to be the last that close to Auckland. The increase of gannets may have caused the loss of scurvy grass on Oaia, but it is well suited to guano enriched islands (Ogle 1987).

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REFERENCES

Esler, A.E. 1975. Vegetation of the sand country boardering the Waitakere Range, Auckland: Piha Beach. Proceedings of the New Zealand Ecological Society 22: 52-56.

Fleming, C.A. & Sibson, R.B. 1947. Contributions to the Gannet Census I. - Oaia gannetry, Muriwai, from 1942 to 1948. Notornis 2(4): 62.

Fleming, C.A. & Wodzicki, K.A. 1952. A census of the gannet (Sula serrator) in New Zealand. Notornis 5(2): 39-78.

Moore, L.B. & Wodzicki, K. 1950 Plant material from gannets' nests. Notornis 4: 12-13.

Ogle, C.C. 1987. The retreat of Cook's scurvy grass. Forest & Bird 18(1): 26.

Reed, S. 1979. Establishment of a new gannetry. Notornis 26(1): 89-93.

Wodzicki, K.; Robertson, C.J.R.; Thompson, H.R. & Alderton, C.J.T. 1984. The distribution and numbers of gannets (Sula serrator) in New Zealand. Notornis 31: 232-261.

Wrightman, A.T. 1957. Birds on Oaia 1953-4. Notornis 7: 59-60.

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KOROMATUA BUSH, PIRONGIA HIGHWAY

P.J. de Lange

INTRODUCTION

The Koromatua Bush (NZMS S14 053710, altitude c.60 m) is situated on the Tuhikaramea Hills in the vicinity of the Mormon Temple settlement of Temple View. The land is currently leased for dairy farming. The forest was first examined by the author in early 1985 (de Lange, 1985a) because it contained large karaka trees (Corynocarpus laevigatus) mentioned by Gudex (1963). The dominance of karaka is probably due to