

## A Moss List for Moturemu Scenic Reserve, Kaipara Harbour

Jessica E. Beaver

Moturemu is a small, coastal forest and scrub covered island, about 5 ha in area, lying at 36° 25' S 174° 24' E in the Kaipara Harbour, North Auckland. Steeply cliffed, it rises 46 m above the sea, and is approximately 2 km from the nearest land, at Karaka Point on the Okahukura Peninsula. Its chief botanical claim to fame is as a locality for kaka beak, Clianthus puniceus, being one of the few remaining sites for this beautiful native shrub in the wild.

The vascular plant vegetation of the island has been surveyed by Esler (in preparation) and by the Auckland Botanical Society (Cameron and Beard, 1990). A small group visited the island in April 1990 to check on the status of Clianthus seedlings seen by the Botanical Society the previous August, and to add to the vascular plant records (Wright, 1991). During this visit of approximately 4 hours the present moss species list was made.

Conditions were extremely dry. A circumnavigation of the island at the base of the sea-cliff revealed no active seepages, although an area of cliff below a small gully at the south-west end of the island supported sheets of Bryum erythrocarpoides, clumps of Fissidens asplenioides, and a few tufts of Philonotis tenuis, indicating that this area may often be moist. Most of the top of the island supports a regenerating canopy of pohutukawa, houpara and mahoe, with much rotting wood on the ground, and extensive areas of bare, friable, bird-burrowed soil. Mosses noted to be common under this canopy were Sematophyllum amoenum and Rhynchostegium muriculatum on rotting wood and tree bases; the very small Fissidens, F. humilis var. allisonii, forming extensive sheets on areas of compacted bare soil; and, on steeper soil slopes, pottiaceous species tentatively identified as Hymenostomum patulum. A steep open area at the south-west of the island supported luxuriant growth of two moss species: Hypnum cupressiforme and Campylopus clavatus, the latter bearing numerous capsules.

The lack of free water on the island, and the periods of drought to which the vegetation is no doubt subjected, are reflected in the moss species list, which is short at 18 species, and lacks any aquatic species.

### MOSS SPECIES LIST

Vouchers of all species have been placed in the herbarium of DSIR Land Resources (CHR).

J.E. Beaver Collection Number

<u>Bryum dichotomum</u> Hedw.	58-38
* <u>B. erythrocarpoides</u> C. Muell. & Hampe	58-34a
<u>B. sauteri</u> B.S.G.	58-33
<u>Calypstrochaeta brownii</u> (Dix.) J. K. Bartlett	58-42b
<u>Camptochaete pulvinata</u> (H. f. & W.) Jaeg.	58-40
* <u>Campylopus clavatus</u> (R. Br.) Wils.	58-50b
* <u>Eurhynchium muriculatum</u> (H. f. & W.) Jaeg.	58-44
<u>Fissidens asplenioides</u> Hedw.	58-51
* <u>F. humilis</u> Dix. & Watts var. <u>allisonii</u> Dix. & Sainsb.	58-48
<u>F. leptocladus</u> C. Muell. & Rodw.	58-45a
* <u>F. pungens</u> C. Muell. & Hampe	58-49
<u>F. taylorii</u> C. Muell.	58-45b

*? <u>Hymenostomum patulum</u> (Knight) Dix.	58-41
<u>Hypnum cupressiforme</u> Hedw.	58-50a
<u>Philonotis tenuis</u> (Tayl.) Reichdt.	58-34b
* <u>Rhynchostegium tenuifolium</u> (Hedw.) Reichdt.	58-43
* <u>Sematophyllum amoenum</u> (Hedw.) Mitt.	58-39
<u>Trichostomiopsis australasiae</u> Card.	58-34c

\* indicates that capsules were seen

#### ACKNOWLEDGEMENT

I thank Anthony Wright for his skilled work as bosun (Heinemann NZ Dictionary: 'a seaman in charge of a ship's rigging, boats and anchors').

#### REFERENCES

- Cameron, E.K. and Beard, C.M. 1990. Moturemu Island - Kaipara Harbour. Auckland Botanical Society Journal 45(1): 5-8.
- Esler, A.E. (in prep) in Clunie, N.M.U. and Esler, A.E. 'The Rodney-Otamatea Area of southern Northland Scenic and Scientific Reserves'. Dept. of Conservation Biological Survey of Reserves Series.
- Wright, A.E. 1991. Moturemu Island revisited. Auckland Botanical Society Journal 46(1): 9.

### Field trip report : Brynderwyn Hills, Mangawhai

Sandra Jones

Twenty-six members ignored the threatening skies and were rewarded with and **almost** rainless day. We were welcomed to the Mangawhai Forest Preservation Company's block in the Brynderwyn Hills by Pat and John Morton who had kindly invited us to explore the 1,000 acre property which was purchased 3 years ago and is now owned by a company of 16 shareholders. Each has the right to build a house on a designated plot within 100 acres of former farmland. The whole property is protected by a Queen Elizabeth II National Trust covenant.

An initial list of 135 species had been compiled by the Mortons and the Jones, but there were some surprising omissions. Incentives were offered, in the form of chocolate fish, to anyone who could find Bulbophyllum, five-finger (Pseudopanax arboreus), kowhai (Sophora microphylla), and a Pittosporum or a Hebe of any kind. In the event, Bulbophyllum pygmaeum, Pseudopanax arboreus and Pittosporum eugenioides were discovered, but it wasn't until the next day that Pat Morton found Hebe stricta and Pittosporum tenuifolium. Kowhai has remained elusive. At the end of the day, the species list had grown by one-third, to 180.

We spent some time in a magic patch of regenerating bush (kauri, rimu, kahikatea, tanekaha, Mida, Coprosma arborea) near the entry gate. We had barely started exploring when Maureen Young identified Corybas unguiculatus. There was lots of it, some in flower, some still in bud. Maureen and Frank Hudson had found this species a few years ago at Woodcocks Reserve near Warkworth, but it was not known elsewhere in the area, so this was quite a find. ["Unguiculatus" means "fingernail",