

SEABIRD ISLANDS

No. 19

Little Broughton Island, New South Wales

Location: 32°37' S., 152°20' E.; off the north-east end of Broughton Island, 15 km north-east of Port Stephens, N.S.W.

Status: Nature Reserve controlled by the National Parks and Wildlife Service (N.S.W.): entry permit required.

Other Names: Outer Rock; East Head.

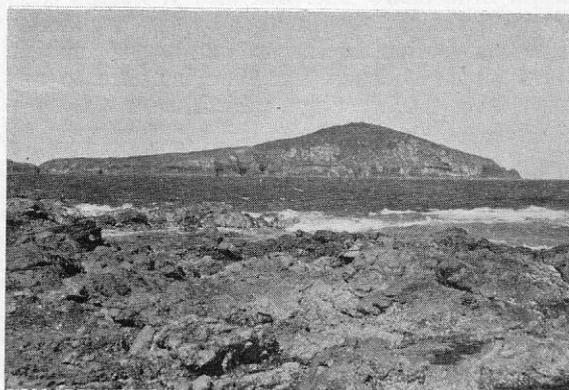
Description: 36 ha; 950 m by 400 m. Roughly oval-shaped, the island is cliff-bound and rises from some 20 m at the north-west end to a peak 98 m high near the south-east end. It is separated from the main island by a deep, narrow channel. The sandy soil supports abundant vegetation including the following:

Kangaroo Grass *Themeda australis*, Tussock Grass *Poa poiformis*, Salt Couch *Sporobolus virginicus*, Ruby Saltbush *Enchylaena tomentosa*, Glass Wort *Arthrocnemum* sp., Creeping Brookweed *Samolus repens*, Yellow Wood Sorrell *Oxalis corniculata*, Mat-rush *Lomandra longifolia*, White Correa *Correa alba*, Pigface *Carpobrotus glaucescens*, Wandering Jew *Commellina cyanea*, Bracken *Pteridium esculentum*, Red Pea Vine *Kennedea rubicunda*, Tape Vine *Stephania japonica*, Coast Tee Tree *Leptospermum laevigatum*, Tuckeroo *Cupaniopsis anacardioides* and Coast Banksia *Banksia integrifolia*.

Except for the grassed area at the north-west end, most of the island is covered with a dense growth of Mat-rush interspersed with vines which make access extremely difficult. The trees form a 'crown' towards the top of the island.

Landing: Onto rocks at the north-west corner near a tunnel and any surge makes landing difficult or dangerous.

Ornithological History: A. F. Basset Hull² (p. 103) visited this island on 12 March 1911 during his fourth visit to the Broughton Group and com-



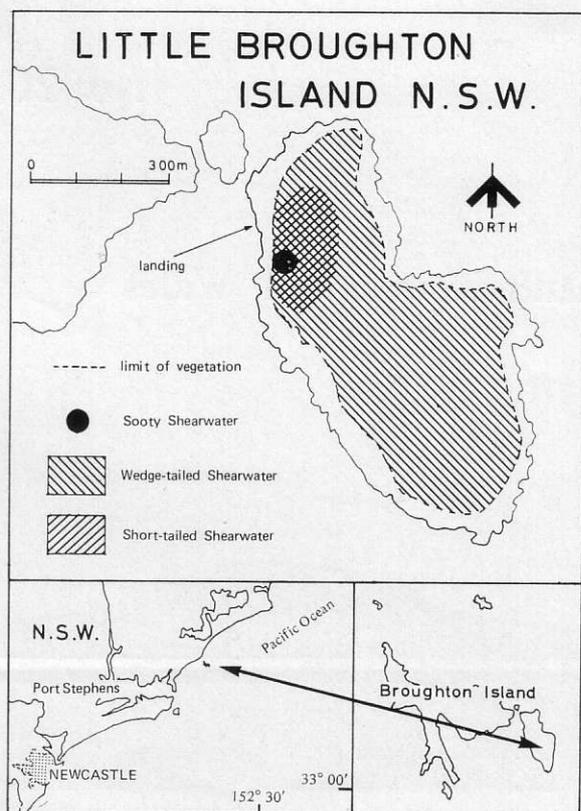
● Little Broughton Island (looking north).

Photo: K. A. Hindwood

mented on the difficulty of getting through the vegetation. He stated that the island "was positively riddled with burrows". Although he found evidence of fresh digging from the previous night he was surprised that only three Wedge-tailed Shearwaters were found during a three hour search.

A. F. D'Ombra (pers. comm.) "... visited East Head in December 1940 and found it 'honey-combed' with nesting shearwaters".

The next recorded visit by ornithologists was on 20 December 1959 when K. A. Hindwood, A. F. D'Ombra and others (including the author) found Wedge-tailed, Short-tailed and Sooty Shearwaters nesting in mixed colonies¹ (p. 149). They also said (p. 150) that "many thousands of Wedge-tailed Shearwaters must have been nesting on Little Broughton Island, which was riddled with burrows".



Two other brief visits were made by S. G. Lane and A. K. Morris on 6 December 1972 and 10 December 1973.

Breeding Seabirds and Status

Puffinus pacificus Wedge-tailed Shearwater — Breeds extensively over the island. The depth of many burrows and the thick vegetation restricts examination but ample evidence of occupation was obtained during the visits in 1959, 1972 and 1973. Present to breed probably from August to early May. Estimated 3000 to 6000 breeding pairs.

Puffinus griseus Sooty Shearwater—Two were found in burrows, without eggs, in 1959; in 1972 two more were located each brooding an egg. Probably a few pairs breed regularly on the island but the number of burrows and their depth prevents any accurate estimate of breeding pairs.

Puffinus tenuirostris Short-tailed Shearwater—In three visits, 59 Short-tailed Shearwaters have been

banded on this island, 9 in 1959, 37 in 1972 and 13 in 1973. For various reasons neither the figures nor the ratio of the numbers banded to those of the more common Wedge-tailed Shearwater are a true guide to the status of the species. However, it is obvious that it has increased in numbers since the initial discovery in 1959. Certainly this is so in the more open area where most of the banding occurred. It is possible that 1000 or more pairs may breed on the island, being present from September to May.

Factors Affecting Status

The island is rarely visited; occasionally fishermen visiting the main island land to fish off the rocks but otherwise this island has remained virtually 'untouched', with no predation evident.

OTHER VERTEBRATES

Rat *Rattus sp.* — remains found on 30 June 1974.

Other Seabirds Recorded

Undoubtedly other seabirds such as gulls, terns and cormorants visit the island but none has been recorded.

Banding

- First banding—20 December 1959.
- P. pacificus*—198 adults banded; one recovery at banding place nearly 13 years later and six one year later.
- P. griseus*—3 adults banded.
- P. tenuirostris*—59 adults banded; two recoveries at banding place one year later.

Bibliography

1. Hindwood, K. A. and A. F. D'Ombrain (1960), 'Breeding of the Short-tailed Shearwater (*Puffinus tenuirostris*) and other seabirds on Broughton Island, N.S.W.', *Emu* 60: 147-154.
2. Hull, A. F. Basset (1911), 'Avifauna of New South Wales Islands', Part 1, *Emu* 11: 99-104.
3. Hull, A. F. Basset (1922), 'The Islands of New South Wales and Their Birds', *Aust. Mus. Mag.* 1: 139-146.

Acknowledgements

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S. G. Lane,
65 Wood Street,
Lane Cove, N.S.W.

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