

SEABIRD ISLANDS

No. 24

Bowen Island, Jervis Bay, New South Wales

Location: 35°07' S., 150°46' E.; at the entrance to Jervis Bay.

Status: Australian Territory, under private lease and permission to land is required. A caretaker is resident on the island.

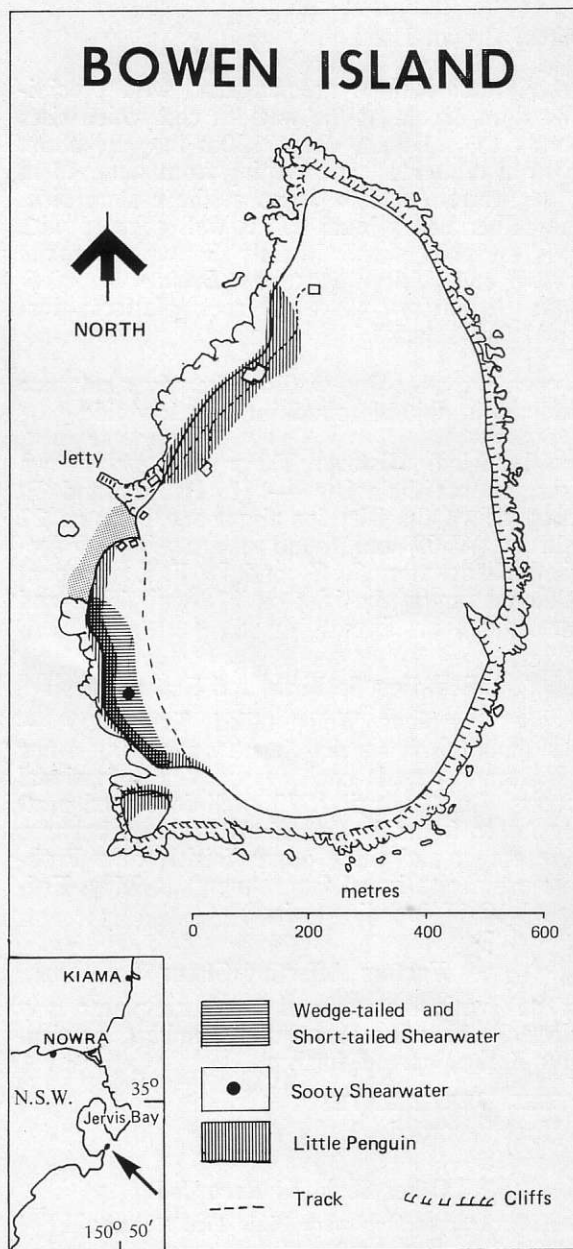
Description: 1250 m long by 750 m at the widest; 50 ha; it is pear-shaped with rugged, precipitous cliffs some 25 m to 30 m high on all but the western side. The highest parts of the island are two knolls some 40 m high near the northern end on which are sited the remains of two concrete gun emplacements complete with underground accommodation and ammunition storage bays, reminders of the 1939-1945 war. The western side is gently sloping with a rocky shoreline interspersed with sandy patches. The slopes are mostly well covered with trees with *Banksia integrifolia* predominating.

The island is formed largely of quartz, lithic quartz, sandstone and pebbly-sandstone with minor siltstone and conglomerate of the Shoalhaven Group; it is overlaid with high-level dunes and sand sheets. The centre is somewhat undulating with shallow soil in many places. Coastal heathland vegetation covers most of the area and the following are the more common of the species identified:

Acacia longifolia, *Banksia ericifolia*, *B. serrata*, *Casuarina distyla*, *Eucalyptus sieberi*, *Leptospermum squarrosus*, *L. juniperinum* and *Melaleuca capitata*.

About 10 "weekenders", one of which was formerly used as a guesthouse, are located on the western side and exotic vegetation grows in their vicinity. The grassy areas and pathways consist mainly of Kikuya *Peniosetum clandestinum*. Pig-face *Carpobrotus glaucescens* is found in these and other suitable places.

There is an old jetty near the small, sandy beaches towards the south-west end and from that area to the south end the vegetation on the sand slopes consists mostly of Mat-rush *Lomandra*



longifolia with some clumps of Inkweed *Phatolacca octandra*.

Landing: There is easy landing onto the small sandy beaches or by use of the jetty, depending on the transport and conditions.

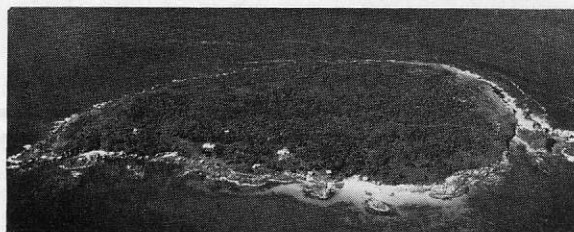
Ornithological History: There is little ornithological record for this island. In 1922, A. F. Basset Hull² wrote “. . . formerly the haunt of the Wedge-tailed Shearwater. I visited the island, but discovered nothing worth recording”. No date was given for the visit, nor were there any other ornithological details. In 1948, more than 25 years later, K. A. Hindwood¹ referred to this record and also to a newspaper report; he stated that “Little Penguins have been reported frequenting this island in large numbers, ‘thousands of them’ . . .”. The next-known ornithological report from the island resulted from a visit for this purpose by H. Battam, A. Leishman, L. F. Lane and S. G. Lane on 19 April 1975³. Nearly seven hours were spent on the island, most of it traversing the area to get as much information as possible in the time. Even then, an area at the north end of the western side was not checked, but penguins are reported to breed there.

Generally the island is unsuited to seabird breeding except for small, restricted areas. On 19 April two shearwater burrows were found in a sandy slope above the cliff in the north-east corner. This was part of an area which had been burnt a year or two previously and prior to that time it would have been unsuitable for shearwaters because of the thick vegetation. One burrow, apparently occupied, was too deep to determine the contents but the second was found to contain a large nestling Wedge-tailed Shearwater.

No other burrows were found during difficult access through the thick cliff-top vegetation or through the equally thick but taller vegetation in the centre of the island. A sedge and grass area at the eastern side of the southern end was equally unproductive; the soil was very shallow and considerable seepage had resulted from the recent heavy rain. Two Little Penguins in fresh plumage after moulting were found in a burrow on the adjacent and almost isolated outcrop at the south-western corner. This outcrop was largely bare rock but the north-west part was well covered with sandy soil and densely growing *Mat-rush*. Among the clumps, penguin tracks were



● Bowen Island with Jervis Bay in the background (looking south-west).



● Another view (looking east); some of the dwellings are visible in the foreground.

Photos: RAN

numerous and there was ample evidence of a nesting colony with many burrows and cavities, most indicating recent occupation.

On the island proper, from this spot almost to the site of the jetty, there was similar evidence of penguin breeding. Feathers from recently moulted birds were in “burrows”, under tussocks and on the tracks. In the same area but most a few metres further up the slope, were numerous burrows usually with smaller entrances, which contained nesting shearwaters. Generally these burrows were very deep, mostly in excess of one metre or more but the actual length was not determined. Three species of shearwaters were found in this area in nearly 200 burrows searched. Some of these were empty, some contained birds which could not be captured and many were too deep to determine the contents. In all, 8 Wedge-

tailed, 1 Sooty and 14 Short-tailed Shearwater nestlings were caught.

Breeding Seabirds and Status

Eudyptula minor Little Penguin—Reported to be present in thousands¹. In April 1975 there was ample evidence of regular breeding in good numbers, but an estimate might be far from accurate as some potential locations were not searched. Estimated 1000 breeding pairs.

Puffinus pacificus Wedge-tailed Shearwater—Present in small numbers; large nestlings still in down were present in April 1975. Estimated 100 breeding pairs.

Puffinus griseus Sooty Shearwater—One large nestling still in down was found in April 1975. Estimated possibly 10 breeding pairs.

Puffinus tenuirostris Short-tailed Shearwater — Also present in small numbers in April 1975 with the nestlings mostly still in down; one was almost completely feathered with very little down remaining. Estimated 200 breeding pairs.

Factors Affecting Status

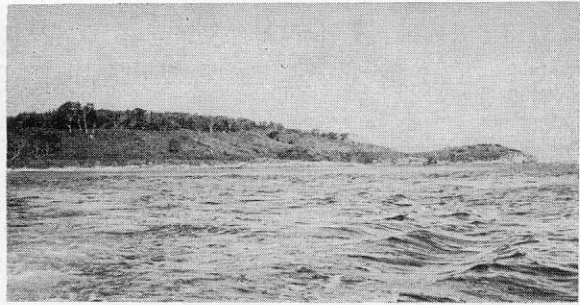
OTHER VERTEBRATES

Skinks *Egernia sp.*, Rabbits *Oryctolagus cuniculus*, Goat *Capra hircus*, Rats *Rattus sp.* and snakes.

Skinks were very common and evidence of rabbits was seen in all of the more open areas. The resident caretaker had a tethered goat and said that rats were numerous about the dwellings. Snakes are reported to be present. The remains of a "holed" egg was seen on 19 April 1975. The rabbits were reported to be affected by Myxomatosis and probably cause little trouble to the breeding seabirds but the same might not apply with the rats.

Other Seabirds Recorded

Phalacrocorax melanoleucos Little Pied Cormorant
Phalacrocorax carbo Black Cormorant
Larus novaehollandiae Silver Gull
Sterna bergii Crested Tern



● The shearwater breeding area at the southwestern end of the island.

Banding

One visit on 19 April 1975.

- P. pacificus*—8 nestlings.
- P. griseus*—1 nestling.
- P. tenuirostris*—14 nestlings.

Bibliography

1. Hindwood, K. A. (1948), 'Notes on the Sea-birds Breeding on the Coastal Islands of New South Wales', *Emu* 48: 73-81.
2. Hull, A. F. Basset (1922), 'The Islands of New South Wales and their Birds', *Aust. Mus. Mag.* 1: 139-146.
3. Lane, S. G. (1975), 'Breeding Shearwaters on Bowen Island, Jervis Bay, N.S.W.', *Aust. Birds* 9: 100.

Acknowledgements

I wish to thank Messrs M. J. Fuller (Lessee) and G. McKinley (Resident Caretaker) for their helpful co-operation, and Mr A. J. Leishman for arranging identification of vegetation species.

Date compiled:
 27 April 1975

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