

Breeding Sea-birds on Bird Island, Norah Head, N.S.W.

By S. G. LANE

Bird Island is situated about one mile off the coast and four miles north of Norah Head lighthouse on the central coast of New South Wales. It is aptly described by K. A. Hindwood (1948: 74) as "an elevated plateau of about 30 acres; roughly circular in shape and surrounded by cliff faces that fall abruptly to the sea."

Ornithological visits to the island have been few. Hindwood (*loc. cit.*) states that Rohu was on the island on January 10, 1914, while he himself visited it for about one and a half hours on October 26, 1947.

The precipitous nature of the island makes landing very difficult except in calm weather. On three out of the four visits that I have made to the island it has been necessary to swim the last ten or fifteen yards from the launch to the rocks when landing and the reverse when leaving.

These visits were made for the purpose of carrying out a continuing banding programme of nesting sea-birds on N.S.W. coastal islands, particularly those islands now proclaimed Faunal Reserves. The programme aims jointly at providing data on the breeding sea-birds as well as information on their status, etc., on the reserves for the Fauna Protection Panel.

Unfortunately, time spent on the island at any one visit is invariably much shorter than desired, and due to prevailing weather conditions is usually limited to approximately four hours.

The following table gives details of birds banded on each of the four visits and the names of the personnel who participated:

Species	5.12.58	27.11.60	17.12.61	12.12.63	TOTAL
Wedge-tailed Shearwater <i>Puffinus pacificus</i>	10	17	35	19	81
Short-tailed Shearwater <i>Puffinus tenuirostris</i>	—	—	—	5	5
Sooty Shearwater <i>Puffinus griseus</i>	—	—	—	2	2
White-faced Storm-Petrel <i>Pelagodroma marina</i>	32 (20)*	51 (13)*	51 (36)*	77 (31)*	211 (100)*
Reef Heron <i>Egretta sacra</i>	—	—	1	—	1
	42	68	87	103	300
Personnel	G. K. Lane S. G. Lane	F. J. Hersey G. K. Lane S. G. Lane J. Tasker	G. K. Lane S. G. Lane R. G. Lonnon	H. Battam S. G. Lane T. J. Lane	

* Number of nestlings banded.

All the shearwaters banded were adults, most of which were brooding an egg.

Two Wedge-tailed Shearwaters have been recovered away from the breeding island and a third at the banding site:

- 160-04848 banded 5.12.58; found dead on Corrimal Beach, N.S.W., on 21.3.63—88 miles S.S.W.
- 160-05141 banded 27.11.60 (adult on egg); caught off Long Reef, N.S.W., on 5.3.63 alive and healthy; released with band—39 miles S.S.W.
- 160-05148 banded 27.11.60 (adult on egg); found again on 17.12.61 (on egg).

One White-faced Storm-Petrel has been retrapped on the island: 050-07784 banded 5.12.58 (adult on egg); retrapped 27.11.60.

It is unfortunate that the only size 5 bands available in 1958 and 1960 were made of aluminium. These wear rapidly and are not likely to last beyond a maximum of three years. Band no. 050-07784 was replaced on 27.11.60 due to its worn condition. However, monel bands were used in 1961 and 1963.

The solitary Reef Heron banded on December 17, 1961, and not yet quite able to fly, was caught on the rocks near the nest it had recently vacated. The same nest had contained three eggs on November 27, 1960.

The Little Penguin, *Eudyptula minor*, is the only other sea-bird recorded breeding (Hindwood 1948: 75). Because of the steepness of the rocks, access by these birds to suitable nest sites is extremely difficult. During one visit, two Penguins were seen under a rock approximately 50 feet above water level. To reach this spot, it was apparently necessary for the birds to force their way upwards through narrow vertical crevices.

During the most recent visit on December 12, 1963, in company with H. Battam and my son Trevor, we had the good fortune to locate both Short-tailed and Sooty Shearwaters breeding, in addition to *pacificus*. These birds were discovered in an area not examined on previous visits (due to lack of time).

The details of these two species are set out below:

Short-tailed Shearwater.

- 2 burrows contained a bird brooding an egg (one of these measured 78 x 45 mm.);
- 1 burrow contained two adults but no egg;
- 1 burrow contained an adult but no egg could be found due to depth of burrow.

Sooty Shearwater.

- 1 burrow contained a bird brooding egg (80 x 48 mm.);
- 1 burrow contained an adult but no egg could be found, again due to depth of burrow.

Resulting from these discoveries, Bird Island now becomes the third known island on which the Sooty, Short-tailed and Wedge-tailed Shearwaters have been found breeding together. The three species were found breeding on Broughton Island in December 1959 (Hindwood and D'Ombraïn 1960) and on Montagu Island in March 1962 (Robinson 1964: 305). It is also an addition to the known breeding islands of the two former species in N.S.W. These are summarized below:

Short-tailed Shearwater:

Tollgates Is. (Davies 1959)
Broughton Is. (Hindwood & D'Ombraïn 1960)
Five Is. (Lane 1961)
Montagu Is. (Robinson 1962)
Brush Is. (Lane 1962)
Bird Is.

Sooty Shearwater:

Broughton Is. (Rohu 1914)
Lion Is. (Keast & McGill 1948)
Montagu Is. (Robinson 1964)
Bird Is.

Other species recorded from Bird Island are the Black Cormorant, *Phalacrocorax carbo*, Little Black Cormorant, *P. sulcirostris*, Little Pied Cormorant, *P. melanoleucos*, White-breasted Sea-Eagle, *Haliaeetus leucogaster* (feathers found by Hindwood), Whistling Eagle, *Haliastur sphenurus*, Peregrine Falcon, *Falco peregrinus*, Welcome Swallow, *Hirundo neoxena*, Little Grassbird, *Megalurus gramineus*, Australian Pipit, *Anthus australis*, and Australian Raven, *Corvus coronoides*.

I wish to express my appreciation to Mr R. T. Pearson, our boatman on each occasion.

REFERENCES

- Davies, S. J. J. F. 1959. A note on the shearwaters breeding on the Tollgates Islands, N.S.W. *Emu* 59: 287-8.
Hindwood, K. A. 1948. Notes on the sea-birds breeding on the coastal islands of N.S.W. *Emu* 48: 73-81.
Hindwood, K. A. and D'Ombraïn, A. F. 1960. Breeding of the Short-tailed Shearwater *Puffinus tenuirostris* and other sea-birds on Broughton Island, N.S.W. *Emu* 60: 147-54.
Keast, J. A. and McGill, A. R. 1948. The Sooty Shearwater in Australia. *Emu* 47: 199-202.
Lane, S. G. 1961. Nesting of the Short-tailed Shearwater on Five Islands, N.S.W. *Emu* 61: 65-6.
Lane, S. G. 1962. Nesting of the Short-tailed Shearwater on Brush Island, and other coastal islands of N.S.W. *Emu* 62: 181-3.
Robinson, F. N. 1962. Shearwaters nesting on Montague Island, N.S.W. *Emu* 61: 292-3.
Robinson, F. N. 1964. The breeding of the Sooty Shearwater on Courts Island, Tasmania and Montagu Island, N.S.W. *Emu* 63: 304-6.
Rohu, S. E. 1914. Eggs of *Puffinus sphenurus*. *Emu* 14: 97.

65 Wood Street, Launceston, N.S.W.
Manuscript received May 12, 1964.