

Follow the Band!

LIGHT-MANTLED SOOTY ALBATROSSES ON MACQUARIE ISLAND

Light-mantled Sooty Albatrosses *Phoebastria palpebrata* have been banded on Macquarie Island since 1951 and bands provided by the Australian Bird-banding Scheme have been used since 1954. The following summarizes the banding carried out and focuses on observations on three banded birds which serve to illustrate the longevity and the faithfulness to mate of this species. These birds, 120-00110, 120-00141 and 120-00142, have the longest elapsed time from banding to recovery of any individual of any species in the Australian Bird-banding Scheme.

Since 1949, the Australian National Antarctic Research Expeditions (ANARE) have occupied a research station on Macquarie Island (45° 30' S., 158° 57' E.) situated close to the Antarctic convergence, approximately 1300 km south-east from the southern tip of Tasmania. There are no permanent human inhabitants and the 12-18 scientists and support staff who maintain the station are exchanged annually. Since 1951, a programme of bird-banding has been undertaken and a member of each expedition, often the medical officer or a professional biologist, is appointed to this task.

Initially several different types of bands were used (see review by Howard, 1954) but the use of these was discontinued in 1954 in favour of the aluminium bands supplied by the newly formed Australian Bird-banding Scheme. Among the several species of birds to be banded, was the Light-mantled Sooty (or Light-mantled) Albatross. The breeding population of this species is in the vicinity of 500-700 pairs, but unfortunately for the bander, nests are scattered along the steep tussock-covered hillsides and cliffs of the entire 85 km of coastline. Mostly the nests are in ones or twos and are often difficult to find and even harder to reach. Thus although these birds show very little fear of man and can usually be approached even away from the nest and caught by hand, the total number of birds banded annually is usually small. Since 1954, 247 adults and 279 nestlings have been banded; of these, 133 and 208 respectively have been banded since 1969 when a detailed study of the breeding biology of this species was initiated.

Very few of the bands used prior to 1954 have been recovered. One notable exception was a bird retrapped in November 1970, carrying a wrap-around ring. This was made of 1/8 inch wide aluminium strip and was stamped "Inform ANARE Australia 0806". This bird was banded in the 1951-52 or 1952-53 season and therefore would be at least 17 years old, but exact details are not known. Of the birds banded since 1954 a gratifyingly high number of recoveries has been made despite the paucity of banded individuals. However, there have been no recoveries of these birds away from Macquarie Island.

The following reports the histories of three of the ten birds banded by M. Taylor in the 1954-55 breeding season. These (120-00110, 120-00141 and 120-00142), like most of the others, were all banded at the north end of the island in the vicinity of the ANARE station at Buckles Bay. The elapsed time between banding and the most recent retrapping of these three birds is over 17 years, which is the longest elapsed time for any species under the present Australian Bird-banding Scheme*.

120-00110 was banded on 9 October 1954 in the vicinity of "North Head" (see Fig. 1) as an adult of unknown breeding status. It was not seen again until 10 November 1971 when it

* This is the longest elapsed time recorded since the commencement of the Australian Bird-banding Scheme. But there are "older" birds such as the Short-tailed Shearwaters banded by Dr Serventy prior to the commencement of the present national Scheme. See vol. 8 no. 3, p. 61 (Sept. 1970).—Hon. Editor.

was found incubating on a nest above Secluded Beach, very close to its site of banding.

120-00141 and 120-00142 were banded as a pair in Gadget Gully in October 1954 and were later observed with a chick. They were not seen during the following season (1955-56) but were again observed breeding in 1956-57. This time the nest was in First Gully located about 150 m north of Gadget Gully. Later in the season the egg was lost. They were not seen again until the present breeding season 1971-72 when on the 6 November, 120-00141 was observed incubating on a nest again in Gadget Gully. The mate, 120-00142, was observed on the nest 20 days later following a changeover of incubation. Sometime between 19 May and 1 June this year the fledgling offspring of this pair, 120-64264, departed the nest.

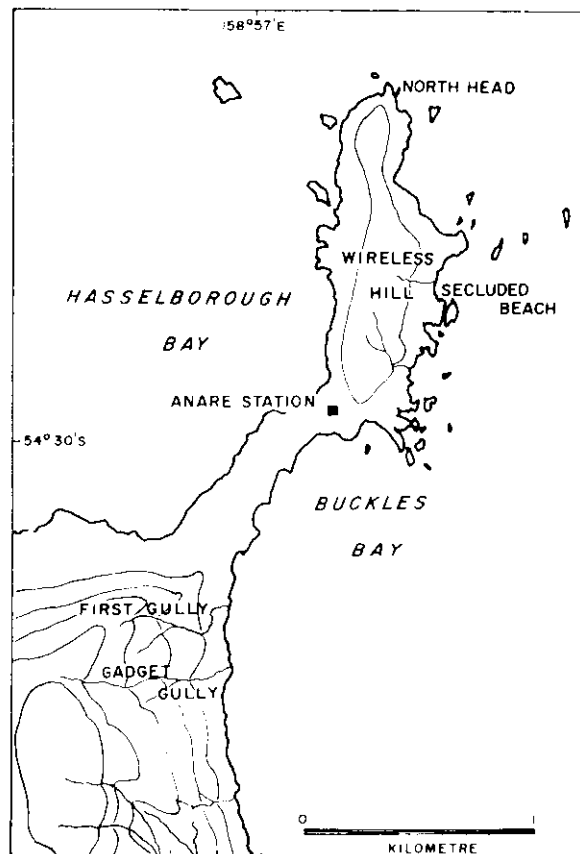
The life span of the Light-mantled Sooty Albatross is not known nor is the age at which it first breeds. The youngest known-age bird breeding at Macquarie Island was a female 120-08124 banded as a nestling in February 1963 and recorded incubating in November 1970. A non-breeding six year old (120-45894) was also re-trapped in the same season (1970-71) and during the following season two seven year old birds (120-45881, 120-45883) were re-trapped but were not breeding. These recoveries were out of a total of 13 banded as nestlings in the season 1962-63 and 16 in 1963-64.

It seems likely therefore, that in keeping with the smaller albatrosses of the genus *Diomedea*, the Light-mantled Sooty Albatross does not start to breed until at least five to six years of age. An early report by Sorensen (1950) of a Grey-mantled Albatross breeding at the age of two years on Campbell Island was later considered by him to be of doubtful validity (Bailey and Sorensen, 1962). Thus the mated pair 120-00141 and 120-00142 which have been breeding for 17 years or more are probably 22-24 years of age or older.

It is interesting to note that aluminium bands put on the birds in 1954 were still in such excellent condition in 1971 that it was considered unnecessary to replace them.

Acknowledgements

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● Figure 1. North-eastern corner of Macquarie Island showing location of features mentioned in the text. The contour interval is 50 m. Macquarie Island is approximately 35 km long and 3-5 km wide. The highest peak is 433 m and the average altitude approximately 300 m.

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- K. R. Kerry, Antarctic Division, 568 St Kilda Road, Melbourne, Vic.
- G. C. Colback, c/- Post Office, Thornlie, W.A.