

Banding Giant Petrels on Frazier Islands, Antarctica

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The first sign of impending arrival at Casey, Antarctica is the sighting of the Frazier Islands (66° 14' S., 110° 34' E.) past which the ship changes course to the south-east and enters Newcomb Bay where the station stands on the Bailey Peninsula.

The Frazier Islands, a group within the Windmill Islands, lie some 13 km off shore and comprise three islands, Nelly, Dewart and Charlton, on all of which the Southern Giant Petrel *Macronectes giganteus* breeds. These islands, which are the only breeding sites in the Windmill Islands, were visited for short periods on 20 and 21 January 1972 to band chicks and to recapture banded adults.

The ice or rock cliffs rise steeply from the sea, so there are few landing places for small boats. Helicopters eliminated such problems, and landings were made reasonably close to the nesting areas using an approach path which did not disturb the birds. Nests were made of pebbles, many were unoccupied, and those with chicks were well spaced, the nearest being about 7m apart. All chicks were downy and a few



- Aerial photograph of the Frazier Islands, Antarctica. The smallest, Charlton Island, is in the foreground, Dewart Island is in the middle distance behind which is Nelly Island, the largest, with its high peak. Giant Petrels nest on the exposed ridges. See map page 50.

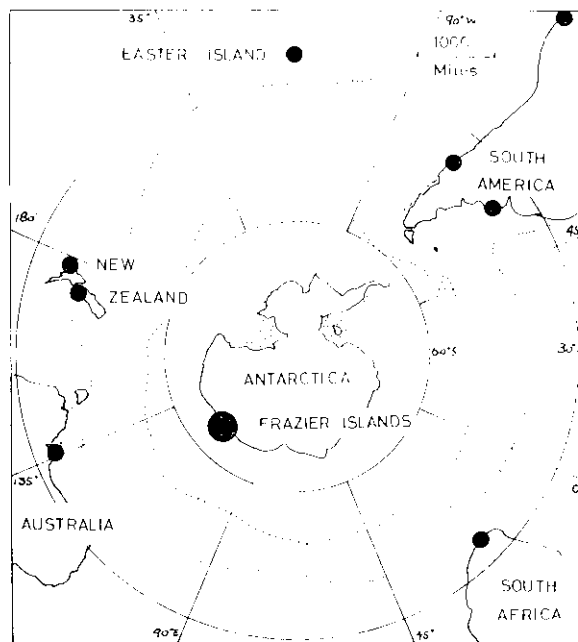
ANARE photograph by M. D. Murray

were too young to band. Six of 7 chicks on the north-eastern ridge of Nelly Island were banded, 27 of 29 were banded on the central ridge, 4 on the south-western ridge and 12 on the north-western ridge". The giant petrels were more concentrated on Dewart Island which was by far the easiest island on which to work. There were 29 chicks on the north-eastern ridge of which 27 were banded, all of the 24 chicks on the central ridges were banded, and there was none on the south-western ridge. Deteriorating weather necessitated a rapid departure so although chicks were seen on the north-western ridge they were not counted; there were probably about 20. Charlton Island was not visited but aerial reconnaissance and photographs indicated that there were about 10 to 20 nests.

One banded adult was seen but it flew away before capture. Some left their nests readily, others with younger chicks were very protective and had to be guided off the nest so that the chick could be banded. The procedure for banding was to deflect the bill to one side with the back of the mittened hand before the chick vomited, roll it onto its side, and hold it firmly. In all 100 chicks were banded of an estimated total of 130-150. Thus the population of breeding adults was about 300. Non-breeding adults were seen resting around the nesting area and on the nearby snow slopes and many had a darker plumage. No birds with the white plumage phase were seen.

Southern Giant Petrels have been banded before on the Frazier Islands. In 1958-59, W. J. L. Sladen banded 76 chicks and 7 adults, and W. Bryden banded 25 chicks; in 1959-60, R. L. Penney banded 46 chicks, and in March 1961 M. N. Orton banded 44 chicks. There have been 10 recoveries from these 191 chicks. Orton (1963) and Sladen, Wood and Monaghan (1968) have reported the full details of 8. All were recovered within 9 months and their dispersal is shown in Fig. 1. An additional two chicks have been recovered. One, 130-16119, was banded by W. Bryden on 27 January 1959 and caught and released with band 8 km south of Puerta Quequen, Argentina (38° 30' S., 58° 40' W.) on 19 October 1959, the second recovery from this locality. The second chick, 130-16133, banded on the 21 March 1961 by M. N. Orton was recaptured and released with band on 16 December 1968 by R. A. Mackenzie at Shirley Island, about 1 km from Casey Station. The dispersal

* One of these chicks has now been recovered in New Zealand—see Recovery Round-up, page 63.



● Figure 1. Places of recovery of Giant Petrels banded as chicks less than nine months previously on the Frazier Islands. The Antarctic and Subtropical Convergences are indicated.

of young has thus been circumpolar, and one chick has been recaptured 6 years 9 months later during the breeding season within a few kilometres of its birthplace.

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References

- Orton, M. N. (1963), 'Movements of Young Giant Petrels Bred in Antarctica,' *Emu*, 63: 260.
 Sladen, W. J. L., Wood, R. C., and Monaghan, E. P. (1968), 'The USARP Bird-banding Program 1958-65', in O. L. Austin Jr (Ed.), "Antarctic Bird Studies" (Antarctic Research Series) vol. 12, pp 213-262, American Geophysical Union, Washington, D.C.

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