

## New Records for Australian Antarctic Stations

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Since 1954 the Australian National Antarctic Research Expeditions have maintained scientific and weather stations on the Antarctic continent, and made survey voyages along its coast every summer. Both at the stations and on ships, members of the expeditions keep biological logs. Although only three biologists have spent a year at Australian stations in Antarctica, several other men are experienced part-time Antarctic naturalists.

The following records were made at Mawson ( $67^{\circ} 37' S$ ,  $62^{\circ} 52' E$ ), the main Australian station, occupied since February 1954, and at Lewis Island ( $66^{\circ} 6' S$ ,  $134^{\circ} 22' E$ ), site of an automatic weather station, which was visited once or twice every summer from 1956-60. Figure 1 shows the localities mentioned in the text.

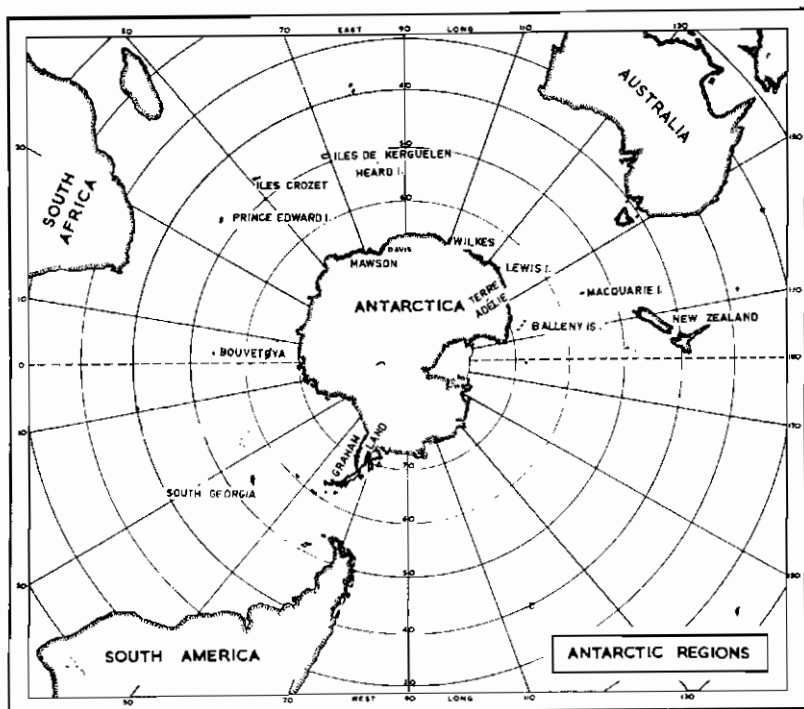


FIG. 1

*Pygoscelis antarctica* (Forster). Chinstrap Penguin.

At Mawson Dr. R. L. Willing recorded one that came ashore for a few hours on February 17, 1957 (a kodachrome

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photograph by D. R. Callow is in the Antarctic Division's records). At Lewis Island one was captured on January 7, 1956, by J. S. Bunt; the specimen is now in the National Museum of Victoria. On February 28, 1960, W. R. J. Dingle noted three among the moulting Adélie Penguins (*P. adeliae*) there; all were in advanced moult and without tail feathers.

This penguin has apparently been extending its range eastward during the last 15 years. Previously it bred on antarctic islands in the American quadrant, as far east as Bouvetoya ( $3\frac{1}{2}^{\circ}$  E). Murphy (1936) gives the extreme eastern limits of pelagic sight records as  $27^{\circ}$  E. It was not recorded by any scientific expedition in the Australian quadrant, e.g. the "Gauss" expedition (1901-03), the Australasian Antarctic Expedition (1911-13), or the British, Australian and New Zealand Antarctic Research Expedition (1929-31). But in 1946-47 Routh (1949) recorded five Chinstraps at sea between  $55^{\circ}$  S,  $44^{\circ} 31'$  E and  $64^{\circ} 17'$  S,  $106^{\circ} 8'$  E. During the ANARE occupation of Heard Island ( $53^{\circ}$  S,  $73\frac{1}{2}^{\circ}$  E) in 1948-55, they were seen every year, and it seemed to be only a matter of time before a breeding colony was established (Downes, *et al.*, 1959). Individuals have twice reached Terre Adélie on the Antarctic Continent, in  $140^{\circ} 1'$  E and  $141^{\circ} 24'$  E (Jouanin and Prévost 1953), and three times reached Macquarie Island in  $54\frac{1}{2}^{\circ}$  S,  $159^{\circ}$  E (Keith and Hines 1958; unpublished ANARE record by S. E. Csordas). Finally, in 1958 Sladen discovered two pairs at empty nests on Sabrina Island in the Balleny group,  $66^{\circ} 55'$  S,  $163^{\circ} 20'$  E (Sladen and Friedmann 1961). None had been seen by Australian and French expeditions in 1948 and 1949.

Probably all these Chinstraps have travelled from Bouvetoya or farther west, with the circumpolar West Wind Drift. Although it would be possible for young birds from Balleny Islands to travel west with the current along the coast of Antarctica, or even north to Macquarie Island, there is no evidence that this colony is large enough to produce numbers of widely-ranging young.

#### *Larus dominicanus* Lichtenstein. Dominican Gull.

One was seen several times at Mawson on December 12, 1958, and on January 31, 1959, by A. Bolza, D. A. Brown and H. Tschuffert. The two former had previous experience of Dominicans at Macquarie Island. Brown described it as being in the last immature plumage, with a brownish tinge on the black wings and mantle, and an irregular dark terminal bar on the upper side of the rectrices. Attempts made to secure it as a specimen failed, and after a blizzard at the beginning of February it was not seen again.

The Dominican Gull is widely distributed in the southern temperate and sub-antarctic regions. It is apparently seden-

tary, but no geographical subspecies have been described. The nearest breeding station to Mawson is Heard Island, about 1000 miles to the north, but the strong winds of the Westerly Zone make the Crozets or the Prince Edward Islands, farther to the north-west, more probable sources.

This is the third recent record of Dominican Gulls reaching the Antarctic Continent (excluding Graham Land). C. R. Eklund (personal communication) obtained one at Wilkes (66° 15' S, 110° 37' E) in 1957, and Korotkevich (1958) includes it in a species list for Russian stations in 1956-57 as a rare visitor.

There is little evidence from banding on the mobility of these gulls. Those banded as chicks in New Zealand are usually sedentary, though there have been rare coastwise movements of up to 100 miles (Kinsky 1960). Recent records from eastern Australia (Gwynne and Gray 1959) suggest that they are capable of crossing the Tasman Sea.

It is clear that the Dominican Gull is capable of long-distance flight on occasion, and this makes it possible that there is a continual slight mixing of the different populations, enough to prevent subspeciation.

#### REFERENCES

- Downes, M. C., Ealey, E. H. M., Gwynn, A. M., and Young, P. S., 1959. The Birds of Heard Island. *ANARE Rep. (B)*, 1: 30-34.
- Gwynne, A. J., and Gray, D. F., 1959. Breeding of the Southern Black-Backed Gull on Moon Island, N.S.W. *Emu*, 59: 141.
- Jouanin, C., and Prévost, J., 1953. Captures des manchots inattendus en Terre Adélie et considérations systématiques sur *Eudyptes chrysolophus schlegeli* Finsch. *Oiseau*, 23: 281.
- Keith, K., and Hines, M. P., 1958. New and rare species of birds at Macquarie Island during 1956 and 1957. *C.S.I.R.O. Wildl. Res.*, 3: 50.
- Kinsky, F. C., 1960. 9th Annual Report of the Banding Committee, Ornithological Society of New Zealand, Inc., for the year ending 31st March, 1959.
- Korotkevich, E. S., 1958. (Observations on birds during the first wintering of the Soviet Antarctic Expedition, 1956-1957). *Inf. Bull. Sov. Ant. Exped.*, 3: 83 (In Russian).
- Murphy, R. C., 1936. *Oceanic Birds of South America*. American Museum of Natural History, New York.
- Routh, M., 1949. Ornithological observations in the Antarctic seas, 1946-47. *Ibis*, 91: 577.
- Sladen, W. J. L., and Friedmann, H., 1961. Antarctic ornithology. Science in Antarctica, Part 1, The Life Sciences in Antarctica. *U.S. Nat. Acad. Sci. Nat. Res. Coun. Publ.*, 839: 62.