FIRST RECORD OF A CHINSTRAP PENGUIN PYgoscelis antarctica BREEDING IN ADELIE LAND, ANTARCTICA

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 Ninety-nine per cent of the world population of the Chinstrap Penguin Pygoscelis antarctica breeds in the region of the Antarctic Peninsula and at sub-Antarctic islands in the South Atlantic Ocean (from 65°52'S to 60°31'S, Poncet & Poncet 1987, Woehler 1993). On the opposite side of the Antarctic Continent, a few pairs breed occasionally at Balleny Island (Robertson et al. 1980). The distribution overlaps that of Adélie Penguins P. adeliae and arriving Chinstrap Penguins are known to compete with Adélie Penguins for nest sites in mixed colonies (Trivelpiece & Volkman 1979). Nonbreeding Chinstrap Penguins have been recorded up to 3200 km from known breeding areas (Szijj 1967), from the Ross Sea to Australia (at least eight localities in Marchant & Higgins 1990 and Woehler 1992).

In the Pointe Géologie Archipelago (66°39'S, 140°01'E), Adélie Land, nonbreeding Chinstrap Penguins have been recorded 40 times between 1976 and 1986, most sightings occurring in January during the moult (Thomas & Bretagolle 1988). During summer 1988, one adult was seen building and defending a nest in an Adélie Penguin colony on Bernard Island (66°39.45'S, 140°01.40'E, N. Sadoul pers. comm.). During two visits to the nearby Port-Martin Archipelago on 28 January 1991 and 27 January 1992, 10 and seven nonbreeding Chinstrap Penguins, respectively were located on Nunatak and Phoques and Empereur Islands.

Furthermore, during the January 1991 visit, we saw an adult Chinstrap Penguin defending a empty nest in a colony of Adélie Penguins at 'Mont du Sphinx' (66°49'S, 141°24'E) on Port-Martin Nunatak. During the January 1992 visit, a single emancipated silvery-grey chick (Fig. 1) was observed in the same area of the colony and identified as a Chinstrap Penguin in secondary down from Harrison (1983). This is the first report of definite breeding by the Chinstrap Penguin in Adélie Land.

Since the population of this species is increasing rapidly (up to 500% during the last 20 years on islands of the Scotia Arc, Rootes 1988, Woehler 1993), the occurrence of sightings outside the present breeding area may concern 'pioneer individuals' of expanding populations. It may reflect recent warming of waters used by Chinstrap Penguins in winter (Fraser et al. 1992). Adélie Land may be a new step in the colonization process of this species.

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REFERENCES

populations: reduced competition with whales or a loss of sea ice due to environmental warming? *Polar Biol.* 11: 525-532.


