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RECORDS OF CHINSTRAP PENGUINS IN THE ROSS SEA REGION, ANTARCTICA

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This paper reports two new sightings of the Chinstrap Penguin (*Pygoscelis antarctica*) on Ross Island, Antarctica, and reviews the records of the species from the Ross Sea region.

The first new record is a Chinstrap Penguin that I observed and photographed (Fig. 1) at Cape Bird (77°13'S, 166°19'E) on 19 January 1970, in the southernmost of the three breeding grounds of Adelie Penguin (*P. adeliae*). When first seen, the Chinstrap, of unknown sex and in good physical condition, was standing between colonies of breeding Adelie Penguins; later it moved to the shore. Interaction between the Chinstrap and Adelies was not observed although the Chinstrap mingled with small flocks of Adelies moving to and from the colonies. This is the only known record of a Chinstrap Penguin at Cape Bird. I saw no others in four summers at Cape Bird (10 November 1967 to 15 January 1968; 23 October 1968 to 28 January 1969; 1 November 1969 to 21 January 1970; and 11 November 1970 to 25 January 1971) and I know of no other sightings at Cape Bird, which has been visited each summer since 1965-66.

The second new record is a Chinstrap Penguin that I observed at Cape Royds (77°33'S 166°07'E) on 27 January 1971, in the world's southernmost Adelie Penguin breeding ground. As at Cape Bird, the Chinstrap was standing between breeding colonies of Adelies. It appeared to be in good condition and was not seen to interact with other penguins. This is the second known record from Cape Royds, the first being in 1908 (probably mid-February) by Murray (1909). I saw no other Chinstraps at Cape Royds during two visits (23 January 1970 and 25 January to 30 January 1971) and know of no other records from there despite frequent visits by biologists since 1959-60.

Chinstrap Penguins have seldom been reported from the Ross Sea region. This is not surprising because their main breeding grounds are on the islands

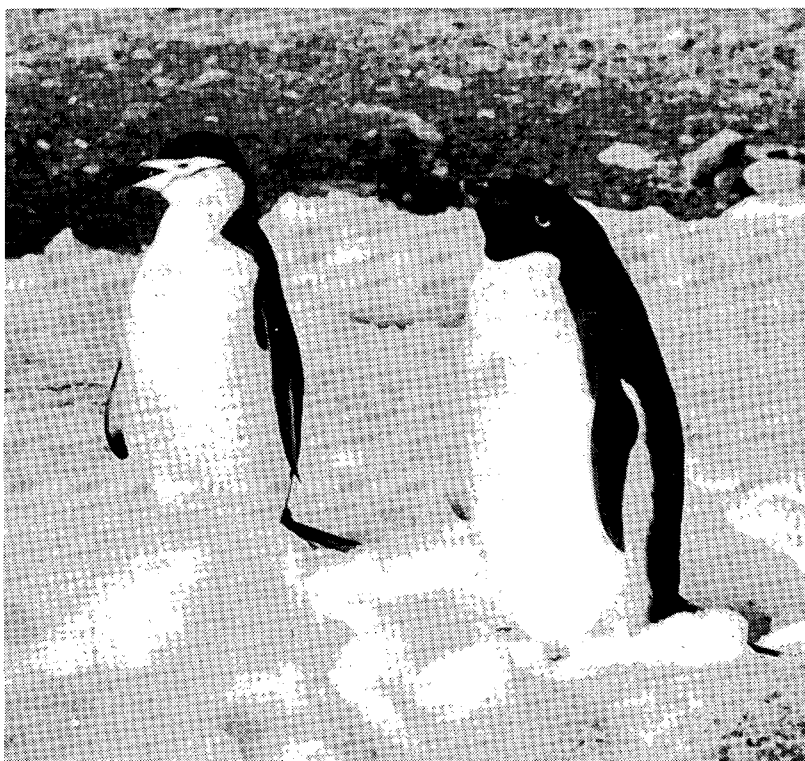


FIGURE 1 — Chinstrap Penguin (on left) standing beside an Adelie Penguin on shore, southern breeding ground, Cape Bird, Ross Island, 19 January 1970

of the Scotia Arc and the northern part of the Antarctic Peninsula in western Antarctica (Conroy 1975, Watson 1975).

The first reported sighting of a Chinstrap Penguin in the Ross Sea region was the 1908 observation at Cape Royds by Murray (1909). The next reported sighting was not until 55 years later at Cape Crozier ($77^{\circ}27'S$, $169^{\circ}13'E$), where one was banded in 1963 (Sladen *et al.* 1968, Ainley *et al.* 1978). Since then a further 13 Chinstrap Penguins have been reported, making a total of 15 reported in the Ross Sea region (Table 1). Eight of these have been at Cape Crozier, not nine as reported by Ainley *et al.* 1978 (Ainley, pers. comm.) The most southerly and most recent, observed in 1974 by Raymond (1975), was a bird standing on the sea ice about 3 km north of McMurdo Station, near the southern tip of Ross Island.

The recent increase in reports of Chinstrap Penguins in the Ross Sea region may reflect the increased number of observers since the beginning of the International Geophysical Year in 1956-57. However, it is more likely to reflect the relatively recent establishment of Chinstrap Penguins breeding on

Chinstrap Islet (66°57'S, 163°17'E) in the Balleny Islands group about 1200 km north of Ross Island (Sladen 1964, Robertson *et al.* 1980). Sladen noted that, apart from the record at Cape Royds by Murray (1909), none of the many early expeditions in eastern Antarctica had reported Chinstrap Penguins on land or at sea, whereas the early expeditions in western Antarctica had often reported them (see references in Sladen 1964). Chinstrap Penguins have also not been reported from more recent cruises in the Ross Sea (Dell 1960, Ozawa 1967, Darby 1970, Fowler 1973, Hicks 1973, Harper & Wilson pers. comm. 1982), whereas they have been reported from other sectors of Antarctica (e.g., Ozawa 1967). The lack of sightings of Chinstrap Penguins on recent cruises in the Ross Sea is not surprising because the breeding site in the Balleny Islands is only a very small and isolated one.

Most of the sightings of Chinstrap Penguins in the Ross Sea region have been in January and February toward the end of the breeding season. Ainley *et al.* (1978) actually stated that, at Cape Crozier, Chinstraps were usually seen in late February, but this is not supported by their data. More than half the birds at Cape Crozier were first seen before 14 February and nearly half the birds in Table 1 were seen in January. The only observation of breeding behaviour is by Crawford (1974), who reported a Chinstrap

TABLE 1 — Reports of Chinstrap Penguins in the Ross Sea and McMurdo Sound, eastern Antarctica

Location	Latitude	Number of Penguins	Date of First Observation	References
Cape Hallett, Victoria Land Coast	72°19'S	1	10.1.65	Muller-Schwarze 1967 Baker 1973, Crawford 1974
		1	? .2.68	
		1	30.12.72*	
Cape Bird, Ross Island	77°13'S	1	19.1.70	Spurr, this paper
Cape Crozier, Ross Island	77°27'S	1	24.2.63	Sladen <i>et al.</i> 1968, Ainley <i>et al.</i> 1978
		1	22.2.64	
		2	15.1.65	
		1	2.2.65	
		2	13.2.66	
1	20.2.66			
Cape Royds, Ross Island	77°33'S	1	? .2.08	Murray 1909
		1	27.1.71	Spurr, this paper
McMurdo Sound, Ross Island (on sea ice)	77°50'S (approx.)	1	26.1.74	Raymond 1975

* Remained until 13.1.73

occupying nest scrapes of Adelie Penguins at Cape Hallett (72°19'S, 170°13'E) from 30 December 1972 to 13 January 1973. The Chinstraps at Cape Crozier had apparently come ashore to moult (Ainley *et al.* 1978).

Since the early 1970s, few birds have been seen probably because few people have visited penguin breeding areas toward the end of the season, when Chinstrap Penguins are most likely to be there.

My new records are further evidence of the reported extensions of the range and numbers of Chinstrap Penguins in the last few decades (Sladen 1964, Conroy 1975, Watson 1975).

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