

BIOLOGICAL OBSERVATIONS FROM THE McMURDO SOUND REGION, ANTARCTICA

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During the 1968-69 and 1969-70 Antarctic summer field seasons, Victoria University expedition (VUWAEs 13 and 14) completed a programme of geological investigations in the McMurdo Sound region. A number of observations were made which may be of use to ornithologists investigating these areas in the future.

The first camp site during the 1969-70 summer was at Cape Barne, an ice-free cape about 30 kms north of Scott Base. From 18/12/69 to 25/12/69, about a dozen pairs of skua *Catharacta maccormicki* were nesting in the seaward valley behind and to the north of the cape. As far as could be determined only one egg had been laid at this skuary prior to our departure. The expedition then visited Cape Bird, Cape Crozier and the west side of McMurdo Sound. On 17th December, two of the party walked from Lake Vanda to the Labyrinth. They found two mummified Adelie Penguins *Pygoscelis adeliae* in the Labyrinth, 66 kms inland, at an altitude of 1000 m (see Fig. 1). Barwick and Balham (1967) have already

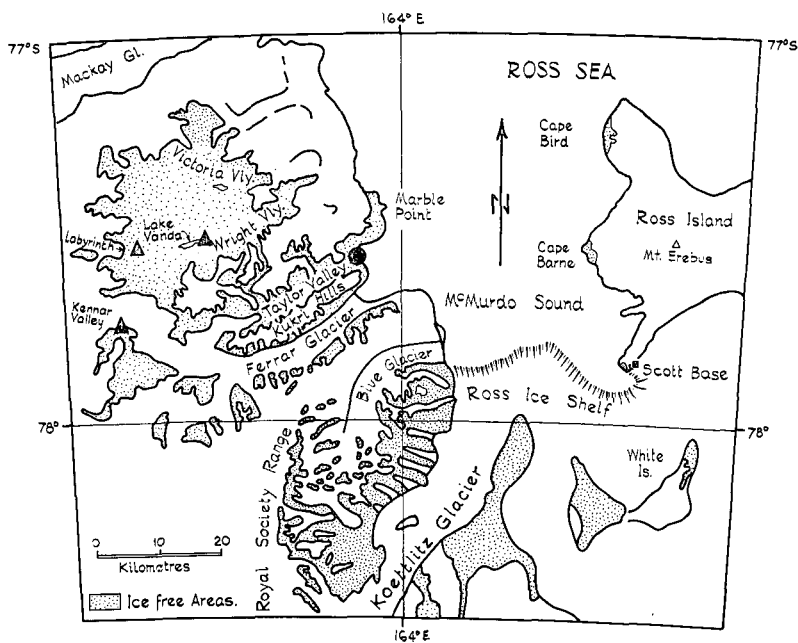


FIGURE 1 — Locality map, McMurdo Sound. Triangles represent Adelie Penguin localities; circle indicates mummified Emperor Penguin.

plotted the distribution of mummified penguins and crabeater seals found in the Dry Valleys, up to 1960. They record two Adelie Penguin remains, one in the South Fork of the Wright Valley, 63 kms inland (and C 14 dated as 560 years old) and one at the foot of the Lower Wright Glacier, 16 kms inland. Mr. Kohn reports that an Adelie Penguin was found by Victoria's 1968-69 expedition in Kennar Dry Valley, a dry valley on the southern side of the Upper Taylor Glacier at a height of 1550 m (see Fig. 2). The shortest distance to the coast is 80 kms via the Taylor Valley. This is the furthest point inland that we know of Adelie Penguins. On previous visits to the area, an additional 3 Adelie Penguins were found by the authors at the eastern end of Lake Vanda.



FIGURE 2 — Adelie Penguin remains in Kennar Valley, 80 kms inland from McMurdo Sound. Length from beak to hind leg — 0.5 metres.

From 18th to 31st December 1969, two of the party studied soils and raised marine deposits at the mouth of the Lower Taylor Valley. In the westernmost corner of New Harbour, 1 km from the coast, on hummocky moraine near sea level, a decapitated skeleton of an Emperor Penguin *Aptenodytes forsteri* was discovered. The headless skeleton is about 1 m long. Except for the scaly feet which are still attached to the bones, most of the tissue has disappeared. This is the first record we know of an Emperor Penguin being found in the Dry Valleys. What is probably its head was found about 1.5 kms away. Decapitated Adelie Penguin carcasses were also seen at the larger rookeries on Ross Island, and the decapitation was probably caused by skua gulls. A recently dead Adelie Penguin and numerous penguin footprints below high water mark at the mouth

of the Taylor Valley show that penguins do live on the western side of the Sound, although it is open water for only a few weeks of the year.

McCraw (1967) reported that "not more than a dozen patches of moss, . . . were seen" in the Taylor Dry Valley. Between 40 and 50 mats of mosses were observed in the Lower Taylor Valley. They were found along meltwater streams draining towards the coast, and under stones at altitudes greater than about 270 m. Most were located in the extremely wet environment alongside the principal flow of waters and in sites of snow patches. The distribution of the mosses is directly controlled by available water. McCraw (1967) also noted "skua gulls . . . bathing in ponds in the valley, but no nests were found." During our stay from 18/12/69 to 31/12/69 about 10 pairs of skua were observed, nesting along the northern and western sides of New Harbour, at the mouth of Taylor Valley. Most pairs were guarding 2 eggs per nest, and the egg shell colours ranged from grey to olive green, with irregular brown spots. Whilst passing one bird guarding a nest on 22/12/69, a chick was heard chirping and later was seen emerging from one of the eggs. This was the only chick noted at this skuary during our stay.

We thank Dr. R. W. Balham for informative comments whilst preparing this paper.

REFERENCES

- BARWICK, R. E., and BALHAM, R. W., 1967: Mummified seal carcasses in a deglaciated region of South Victoria Land, Antarctica. *Tuatara* 15 (3): 165-80.
- MCCRAW, J. D., 1967: Soils of Taylor Valley, Victoria Land, Antarctica, with notes on soils from other localities in Victoria Land. *N.Z. Jl. Geol. Geophys.* 10 (2): 498-539.



SHORT NOTE

WELCOME SWALLOWS AT CHATHAM ISLANDS

While waiting at the Te Hapupu Airstrip, Chatham Islands, on 11/6/70, my attention was drawn by a local farmer to what he described as strange birds that had arrived in the vicinity. The birds were Welcome Swallows and several counts revealed that there were ten birds in the flock.

In discussion with Mr. D. Reid, Resident Commissioner, Chatham Islands, I was informed that the birds had arrived at the Airstrip some three weeks previously and had been identified locally as "Bull Finches." Mr. Reid had written to the Wildlife Service endeavouring to describe the birds for identification. The Wildlife Service provided the following information.

"On May 12, a group of half a dozen strange birds were seen at Hapupu by several people, including D. Reid and L. Smylie. A description was sent to B. D. Bell who identified the birds as Welcome Swallows. A letter received subsequent to F. Hollay's visit reported that a good dozen had been seen at times and that they were observed feeding on midges.

More recently a report from fishermen at Pitt Island records that a Swallow was seen on that Island in December 1970."

— F. G. HOLLAY