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ADELIE PENGUINS BREEDING IN EASTERN ENDERBY LAND, ANTARCTICA

The present and historical distribution and abundance of penguins on sub-Antarctic islands and the Antarctic coastline have been reviewed recently (Horne 1983; Wilson 1983). Neither gave records of Adelie Penguins *Pygoscelis adeliae* breeding in eastern Enderby Land, Antarctica (50°-55°E), both overlooking the accounts of Mawson (1932) and Falla (1937).

In this note I give details of a visit to eastern Enderby Land, apparently the first ornithological visit since that of the British, Australian and New Zealand Antarctic Research Expedition (BANZARE) in 1930 (Mawson 1930, 1932; Falla 1937).

RESULTS AND DISCUSSION

On 17 April 1984 I visited a small part of the coast of eastern Enderby Land, by helicopter from the M V S4 *Agulhas*, overflying the coast from Cape Batterbee (65°51'S, 53°48'E) to the Aargaard Islands (65°51'S, 53°35'E), a distance of c 12.5 km, and landing at Proclamation Island (65°51'S, 53°41'E) for approximately 1.5 hours. Proclamation Island is a small, steep island close to the continental ice shelf. Due to the lateness of the season no live Adelie Penguins were seen. However, at Proclamation Island, the presence of nest mounds, copious guano deposits and the frozen bodies of downy and feathered chicks (of which eight were collected) showed that Adelie Penguins had recently bred there. On defrosting, chicks were found to be rotten but not mummified, strongly suggesting that Adelie Penguins had bred there in the 1983/84 summer. The presence of moulted feathers and bile-stained excreta also suggested that moulting adults had only recently departed from the colony. The stomachs of the chicks collected were mostly empty, containing only a number of stones and a few fragments of crustacean exoskeletons.

The colony occupied a gently-sloping area in the south-western part of the island. Based on the spacing of nest mounds and a rough pacing-out of the colony, I estimated, very crudely, that the colony had supported

about 5,000 pairs of Adelie Penguins. The only live birds present were several hundred Snow Petrels *Pagodroma nivea* and a few Antarctic Petrels *Thalassoica antarctica*, which flew around the higher parts of the island, but were not seen to land.

On flying over Proclamation Island, the grey guano-stained deserted colony was most obvious from the air. Several such grey areas were seen from the air at Cape Batterbee. It is therefore likely that Adelie Penguins had also bred at this locality earlier in the summer. An impression was gained from the air that the colonies at Cape Batterbee were smaller in area than at Proclamation Island. No signs of penguin colonies were seen on the tiny Aagaard Islands to the west of Proclamation Island.

Sir Douglas Mawson sailed past Cape Batterbee in the S Y *Discovery* on 13 January 1930 and landed at Proclamation Island on the same day, where he proclaimed Enderby Land for the British Crown (Mawson 1932, p 110). During his visit he reported that "...rookeries of Adelie penguins occupy the lower slopes of Proclamation Island and other low, rocky islets and rock outcrops on the coast at Cape Batterbee". Falla (1937, p 29) gave further details, stating that "The first two hundred feet (of Proclamation Island) took us through the most crowded part of an Adelie penguin rookery. A few birds were still incubating eggs, but the majority had chicks, ...". Falla (1937, p 61) collected at least four Adelie Penguins on 13 January in Enderby Land, presumably from this locality. Other species breeding at Proclamation Island on 13 January 1930 were Snow Petrels, Antarctic Petrels and Cape Petrels *Daption capense* (Falla 1937, p 29). Southern Fulmars *Fulmarus glacialis*, Wilson's Storm Petrels *Oceanites oceanicus* and Southern Skuas *Stercorarius maccormicki* were also present and were most likely breeding (Falla 1937, pp 29-30).

Unfortunately, neither account (Mawson 1932; Falla 1937) gave quantitative estimates of the sizes of the

Adelie Penguin colonies at Proclamation Island and Cape Batterbee. However, from their descriptions of the former locality (quoted above) it seems that a sizeable colony existed in 1930, especially since Falla (1937, p 68) described the Proclamation Island colony as "large" and elsewhere (p 86) stated that "Capes and islets of the Enderby Land coast also supported large rookeries" (of Adelie Penguins).

Farther east, near Cape Ann (66°09'S, 51°27'E), two Adelie Penguins were seen ashore on 22 December 1929 by members of the "Norvegia" Antarctic Expedition (Riiser-Larsen 1930). At nearby Mt Biscoe (66°14'S, 51°27'E) Sir Douglas Mawson, using a telescope on 14 January 1930 (Falla 1937, p 157), reported its "...northerly face is encrusted with guano, for countless flocks of Antarctic petrels and other sea birds resort there during the nesting season." (Mawson 1930, p 550). It is probable, but remains unproven, that Adelie Penguins breed at Mt Biscoe.

Visits earlier in the summer season are required to obtain accurate census data, meanwhile Proclamation Island and Cape Batterbee may be added to those

localities listed for western Enderby Land (45°-50°E) by Horne (1983) and Wilson (1983) as supporting breeding colonies of Adelie Penguins.

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