

SHORT NOTE

The cape petrel (*Daption capense*) around Mawson Station, East Antarctica: new breeding localities and population counts

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The cape petrel *Daption capense* is a widespread Southern Ocean procellariid, breeding around the Antarctic continent and on many sub-Antarctic islands (Marchant & Higgins 1990). Around Mawson, a permanently manned Australian station in East Antarctica (67°36'16"S, 62°52'15"E), there are 3 known cape petrel breeding colonies (Table 1) although none has been recently visited. Cape petrels were noted on a 'rock outcrop west of Forbes Glacier' on 24 Oct 1982 (unpublished Mawson Station logs) although no count was made during the visit. Two cape petrel colonies are also known from the Rookery Is; both on the main Rookery I, and on an un-named island approximately 300 m north-west of Rookery I (both records from unpublished Mawson Station logs).

While undertaking surveys of Adélie penguins *Pygoscelis adeliae* (see Wilson *et al.* 2009) between Mawson Station and Low Tongue (67°32'55", 61°59'26"), I was able to revisit these 3 known colonies and provide a current count. While traversing this area I also located 3 further colonies (Table 1), detected after observing cape petrel display flights characteristic of breeding (Marchant & Higgins 1990). It is impossible to tell whether

these 3 new sites represent recently established colonies, or historical sites which have been not been previously found or reported. All colonies were visited in Dec 2007 or Dec 2008, at a time when cape petrels are typically brooding eggs (Hodum 2002). At each colony I made a total count of apparently occupied nests (AON) from a distance to avoid any disturbance to brooding birds when checking for an egg.

Counts of AON at these sites ranged from 10 at Rookery I and at an unnamed island west of Forbes Glacier to 123 at an unnamed island in the Rookery Is group (Table 1). Two previously known sites had historical counts. Rookery I had 7 nests on 22 Dec 1958, compared to 10 nests recorded during this study (Table 1). In contrast the population on the unnamed island 300 m northwest of Rookery I has shown marked variation in the numbers of cape petrels present. This colony had 12 nests on 3 Nov 1958, 69 adults in 1977, 48 adults in 1981 and 28 adults on 27 Oct 1982 (all unpublished Mawson Station logs), compared with 123 AON in the present study. This may represent an increase in the breeding population, however different count methods and time of year for each visit make direct comparison problematic. The proportion of adults breeding in any year may also vary markedly (Hodum 2002), further hindering comparisons between years.

Cape petrel breeding colonies are uncommon along the coast either side of Mawson Station. To the west, the nearest colony is 40 km away at Kidson I (61°11'16", 67°12'52"), where there were 'fewer than

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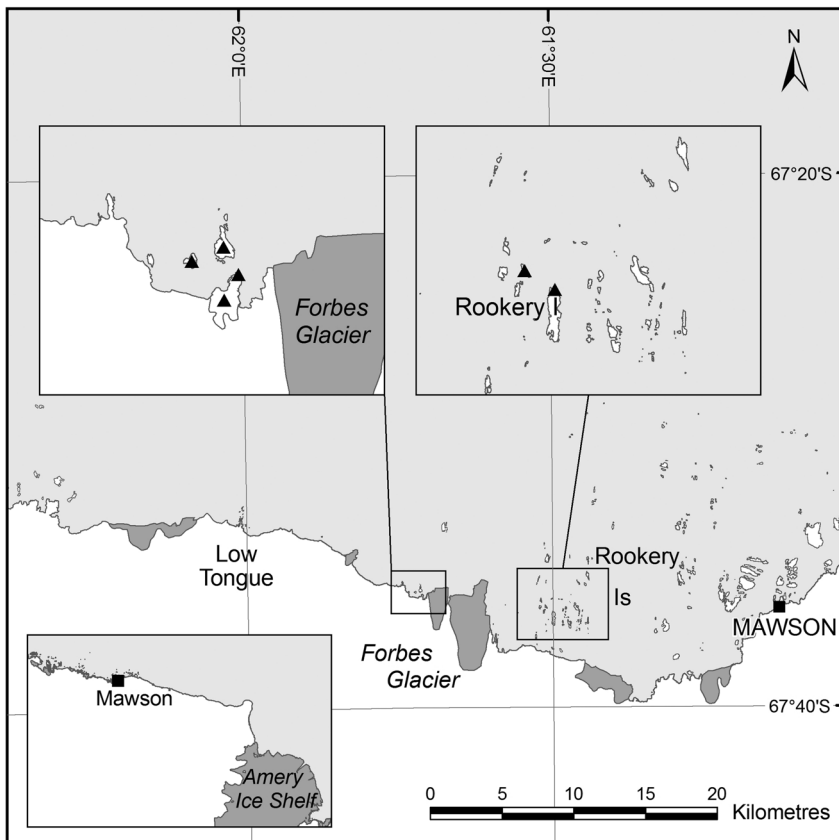


Fig. 1. Map of the Mawson area, east Antarctica. Cape petrel colonies are marked with black triangles.

Table 1. Cape petrel breeding colony locations between Mawson station and Low Tongue, east Antarctica and counts of apparently occupied nests.

Location	Latitude	Longitude	Count (apparently occupied nests)	Date of count	Colony previously known?
Continental rock west of Forbes Glacier	62°17'7"	67°35'47"	49	9 Dec 2008	Yes
Unnamed island west of Forbes Glacier	62°16'29"	67°35'39"	25	9 Dec 2008	No
Unnamed island west of Forbes Glacier	62°17'11"	67°35'44"	10	9 Dec 2008	No
Unnamed island west of Forbes Glacier	62°16'58"	67°35'35"	15	9 Dec 2008	No
Unnamed island north-west of Rookery Island	62°29'19"	67°36'14"	123	24 Dec 2007	Yes
Rookery Island	62°29'58"	67°36'28"	10	24 Dec 2007	Yes

200 pairs' in 1989 (Robertson 1991). The nearest colony east is approximately 300 km away at Scullin Monolith (66°42'00", 67°46'59"), where there were 14 pairs in 1987 (Alonso *et al.* 1987).

While I spent 30 days over 2 years between Mawson Station and Low Tongue and visited many of the intervening islands no attempt was made to completely and systematically search this

area. Cape petrels are vocal and obvious around their nest sites (*pers. obs.*), and it is unlikely that I missed any large colonies. However, cape petrels do nest singly on some occasions (Marchant & Higgins 1990) and there may well be breeding pairs or small colonies that were overlooked. To improve our knowledge of cape petrels in the Mawson area any evidence of breeding behaviour should be investigated, and counts made of known colonies when possible.

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