

A note on breeding sites of snow petrels (*Pagodroma nivea*) at Robertskollen, Boreas and Passat nunataks and Johnsbrotet, western Dronning Maud Land, Antarctica

J.R. Krynauw¹, A.R. Allen¹, S.H. Auret² and V. von Brunn¹

¹Department of Geology and Mineralogy,
University of Natal, P.O. Box 375, Pietermaritzburg

²Bernard Price Institute of Geophysics
University of the Witwatersrand, Johannesburg*

*Present address: Geological Survey, P.O. Box 2168, Windhoek

Previously unrecorded colonies of the snow petrel (*Pagodroma nivea*) are described at Robertskollen, Boreas and Passat Nunataks and Johnsbrotet in western Dronning Maud Land. A south polar skua (*Catharacta maccormicki*) was observed at Johnsbrotet and Wilson's storm petrel (*Oceanites oceanicus*) at Robertskollen. No nests of the latter two species were recognised.

Kolonies van die sneeu-stormvoël (*Pagodroma nivea*), wat nog nie vantevore opgeteken is nie, word by Robertskollen, Boreas en Passat Nunatakke, en Johnsbrotet in westelike Dronning Maudland beskryf. 'n Bruin (Suidpool) roofmeeu (*Catharacta maccormicki*) is by Johnsbrotet, en Wilson se stormvoël (*Oceanites oceanicus*) by Robertskollen waargeneem. Geen neste van laasgenoemde spesies is gesien nie.

Introduction

The distribution of the snow petrel (*Pagodroma nivea*) is limited to breeding localities in the coastal regions of the Antarctic continent and a few sub-Antarctic islands, and it seldom ranges beyond the northern limit of the pack-ice (Tuck & Heinzel 1979). The most southerly recorded breeding colony of these birds is on Mount Faraway (79°12'S, 28°49'W), in the Theron Mountains (Brook & Beck 1972).

In western Dronning Maud Land, breeding colonies have been reported at Tottanfjella (75°2'S, 12°25'W, Heimefrontfjella (74°35'S, 11°00'W), and Vestfjella (also known as the Kraul Mountains, 73°30'S, 14°10'W), where the colonies vary in size from a few pairs to more than 1 000 birds (Bowra *et al.* 1966, Somme 1977).

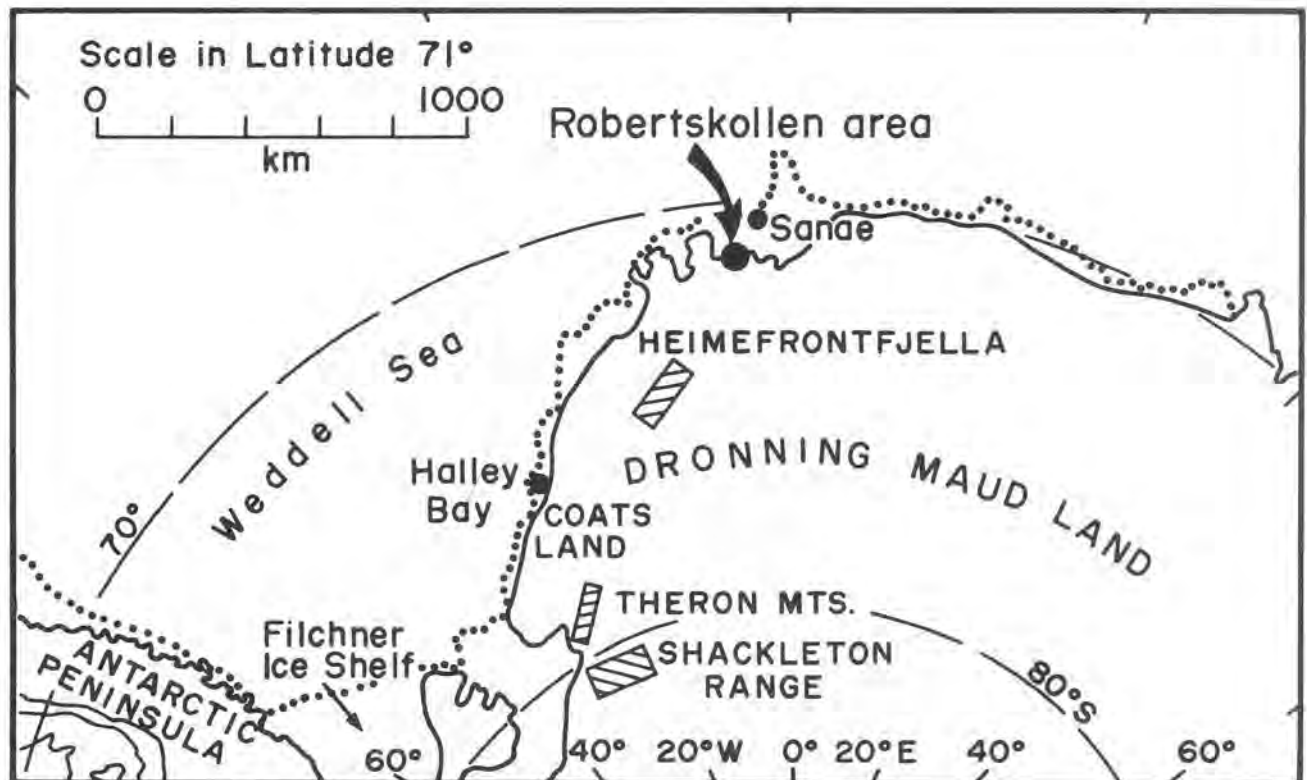


Fig. 1. Locality map.

This paper documents the existence of previously unrecorded breeding colonies at Robertskollen (71°27'S, 03°15'W), Boreas and Passat Nunataks (71°18'S, 03°57'W) and Johnsbrotet (71°20'S, 04°10'W), approximately 130 km south of Sanae (Fig. 1).

Observations

About 100 to 150 snow petrels were noted when Boreas and Passat nunataks, Johnsbrotet and Robertskollen were investigated in the first half of November 1960 during the first South African National Antarctic Expedition. Although many of the birds were perched on rocks and in crevasses in the rocks, neither eggs nor chicks were observed. At Johnsbrotet two birds, noted to be "squabbling" in mid-flight, tumbled to the snow surface whereupon one bird fed the other (Fig. 2). Several other snow petrels exhibited great interest in this apparent courtship display. The heads and beaks of both birds were covered by a yellow substance, probably regurgitated oil derived from the food. A south polar skua (*Catharacta maccormicki*) was also observed at Johnsbrotet at the time.

As far as is known none of these nunataks has been visited in the interim, until January 1982 when four geologists spent about ten days at Robertskollen. Between 19 and 28 January a number of abandoned, and three occupied, nests were noticed on the three largest nunataks in the area. Owing to time limitations no count was done, but it is estimated that there were at least 400 to 500 nests.

It was decided not to disturb any birds on nests because none of the geologists had ornithological training. However, it was seen that at least one bird had a chick in the nest.

Most of the nests were found on north-facing cliffs and scree slopes (Fig. 3), although one occupied nest (Fig. 4) was found in a boulder-filled, southeast-facing gully. These nests were situated under rocks as described by Somme (1977) at Vestfjella. Pryor (1965) described burrows in the shelter of

boulders, and Barruel (1973) published a photograph of a snow petrel in a snow nest. No evidence of burrowing was observed at Robertskollen. The floor of the scrapes was lined with pebbles, and numerous dead chicks and unhatched eggs were found in and around abandoned nests (Fig. 5). However, it was not possible to determine whether they represent mortalities of the 1981/82 breeding season, or previous seasons.

Subsequent to the visit to western Dronning Maud Land it was found that a small and a large form of snow petrel exists (Isenman 1970). Unfortunately the form or forms present at Robertskollen, Boreas and Passat, and Johnsbrotet, were not identified in the field.

Two specimens of Wilson's storm petrel were seen at Robertskollen on 19 January 1982, but no nests belonging to these birds were identified.



Fig. 2. Courtship display, Johnsbrotet.



Fig. 3. North-facing scree slope at Robertskollen. Person (circled) sitting next to nest.



Fig. 4. Snow petrel in nest. Note unhatched egg in foreground.



Fig. 5. Nest with unhatched eggs.

Conclusions

Somme (1977) noted that chicks at Vestfjella were hatched by mid-January of the 1976/77 breeding season, and parents remained on the nests until 20-25 January. It was obvious at Roberts-kollen that most birds had left the area by 19 January. Possibly the timing of the breeding season could vary from locality to locality, and also from year to year, depending on local weather conditions.

It seems that a study of the breeding colonies at Roberts-kollen, Boreas and Passat Nunataks and Johns-brotet should commence as early as October and be completed by February.

The presence of Wilson's snow petrel and south polar skuas may suggest that these birds also nest in the area.

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