

**NEW DISTRIBUTIONAL AND BREEDING RECORDS OF BIRDS IN THE AHLMANNRYGGEN,  
WESTERN DRONNING MAUD LAND, ANTARCTICA, 1991-1995**

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South Africa has been involved in research in western Dronning Maud Land, Antarctica, since 1960 (Wolmarans & Kent 1982). The area of South African research interest lies between 6°W and 3°E and includes four major mountain ranges; the Ahlmannryggen, Borgmassivet, Kirwanveggen and, to the east, separated from the other ranges by the large Jutulstraumen glacier, the H.U. Sverdrupfjella (Fig. 1). Until recently this vast inland area was visited only by earth sciences field teams. Consequently, comparatively few distributional records are available for birds in western Dronning Maud Land (e.g. La Grange 1962, Krynauw *et al.* 1983, Mehlum 1986, Ohta 1993). Ryan & Watkins (1988) summarized the known occurrence and breeding distribution of birds in this area up to the austral summer of 1987/88. Subsequently, Swart (1989) reported some bird sightings inland in western Dronning Maud Land during the 1988/89 summer.

This paper reports bird sightings by South African field parties in the Ahlmannryggen during four summer field seasons from 1991/92 to 1994/95, and presents new distributional and breeding records for this area. During the period South African biology field teams travelled widely in the Ahlmannryggen (Fig. 2), an area of some 10 000 km<sup>2</sup>, and all bird sightings were recorded.

The nunataks visited by biological field teams, together with details of their avifauna are summarized in Table 1. It is apparent that the

number of bird species recorded at any nunatak is, at least partially, a function of the time spent at the nunatak (Table 1). Only four species of birds have previously been reported inland in western Dronning Maud Land, namely Antarctic Petrel *Thalassoica antarctica*, Snow Petrel *Pagodroma nivea*, Wilson's Storm Petrel *Oceanites oceanicus* and South Polar Skua *Catharacta maccormicki* (La Grange 1962, Krynauw *et al.* 1983, Mehlum 1986, Ryan & Watkins 1988, Swart 1989, Ohta 1993). All four species were recorded during the period under review and a fifth species, the Antarctic Fulmar *Fulmarus glacialisoides*, was seen.

#### Antarctic Petrel

This species has not been recorded breeding in the Ahlmannryggen (Krynauw *et al.* 1983, Ryan & Watkins 1988, Swart 1989), and the nearest known breeding locality is some 200 km to the east at Jutulsessen (72° 03'S, 02° 32'E) in the H.U. Sverdrupfjella (Mehlum *et al.* 1988, Ohta 1993), but is frequently seen throughout the Ahlmannryggen (Table 1, Ryan & Watkins 1988).

#### Snow Petrel

Snow Petrels are seen throughout the Ahlmannryggen (Table 1, Ryan & Watkins 1988) and are known to breed at three of the nunatak groups along the northern fringe of this extensive area.

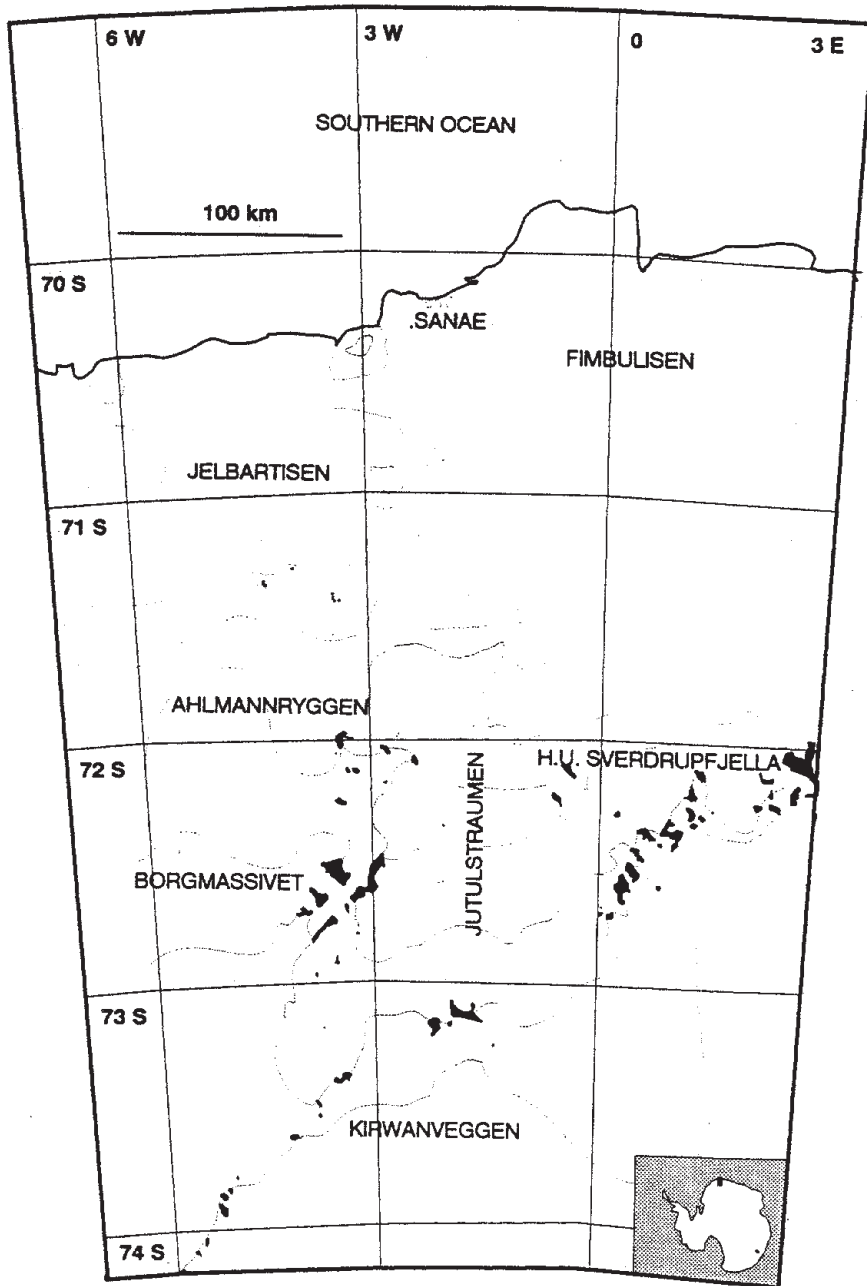


Figure 1

The mountain ranges of west-central Dronning Maud Land.

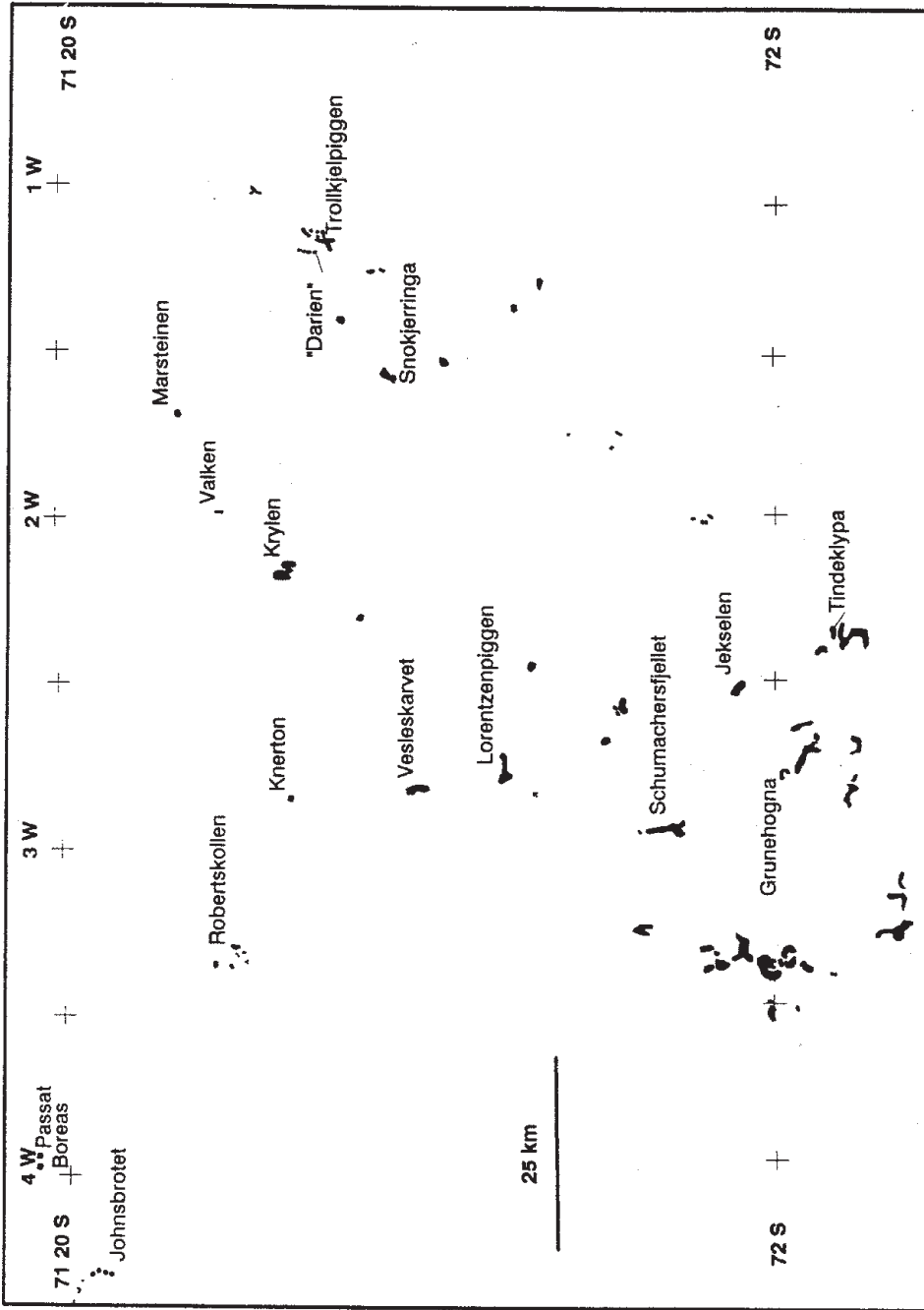


Figure 2

The Ahlmannryggen, showing nunataks surveyed between 1991/92 and 1993/94.

TABLE 1

## BIRDS RECORDED AT NUNATAKS IN THE AHLMANNRYGGEN VISITED DURING THE 1991/92 TO 1994/95 SUMMER FIELD SEASONS

Nunatak	Position	Date of visit	Duration of visit	Species*
Boreas	71° 18'S, 03° 57'W	16 Jan 1992	2 h	SP (breed)
		03 Jan 1995	4 h	SP (breed)
Passat	71° 18'S, 03° 57'W	16 Jan 1992	2 h	SP (breed)
		03 Jan 1995	4 h	SP (breed?)
"Nunatak V", Johnsbrotet	71° 20'S, 04° 10'W	31 Jan 1993	2 h	SP (breed)
"Nunatak VI", Johnsbrotet	71° 20'S, 04° 10'W	16 Jan 1992	1 h	SP (breed)
Marsteinen	71° 26'S, 01° 42'W	07 Jan 1993	4 d	AP
Robertskollen	71° 28'S, 03° 15'W	31 Dec 1991	26 d	SP (breed), AP, WSP, SPS
		27 Dec 1992	55 d	SP (breed), WSP (breed), AP, AF, SPS
		07 Jan 1994	13 d	SP (breed), WSP (breed), AP, SPS
		12 Dec 1994	32 d	SP (breed), WSP, SPS
Valken	71° 29'S, 01° 59'W	08 Jan 1993	3 h	No birds seen
"Darien", Straumnsnutane	71° 36'S, 01° 47'W	09 Jan 1993	2 h	No birds seen
Snøkjerringa	71° 39'S, 01° 34'W	21 Jan 1992	2 h	No birds seen
Vesleskarvet	71° 40'S, 02° 51'W	16 Dec 1991	7 d	AP, SP, WSP, SPS
		18 Dec 1992	6 d	AP, SP, WSP, SPS
Valterkulten	71° 54'S, 03° 13'W	01 Jan 1993	2 h	No birds seen
		05 Jan 1994	2 h	AP
Schumacherfjellet	71° 55'S, 02° 58'W	passed several times		SPS
Jekselen	71° 59'S, 02° 35'W	29 Dec 1991	2 h	AP
		21 Jan 1994	2 h	No birds seen
Grunehogna	72° 02'S, 02° 48'W	23 Dec 1991	6 d	AP, SP, WSP
		28 Jan 1992	4 d	No birds seen
		24 Dec 1992	2 d	WSP
		03 Jan 1994	4 d	AP, SP, SPS
Tindeklypa	72° 04'S, 02° 22'W	20 Jan 1994	3 d	No birds seen
		31 Jan 1992	2 h	No birds seen
		23 Jan 1994	2 h	No birds seen

\*SP = Snow Petrel; AP = Antarctic Petrel; AF = Antarctic Fulmar; WSP = Wilson's Storm Petrel; SPS = South Polar Skua

The breeding of Snow Petrels has previously been reported at both Boreas and Passat (Dalenius & Wilson 1958, La Grange 1962). During a walked circuit of Boreas on 16 January 1992, 36 Snow Petrel nests were counted from the edge of the windscoop (c. 200 m away) and several birds were seen or heard calling. However, during an ascent of this peak carried out simultaneously with this count 32 nests, of which only seven were occupied, were noted on the narrow transect covered by the route (D.A. Balfour pers. comm.). This shows that little information is obtained by counts of Snow Petrel colonies from comparatively distant vantage points as the number of nests is greatly underestimated and it is not possible to determine the proportion of occupied nests. Although short searches of Passat found no Snow Petrel nests (Table 1), four carcasses of adults were found and a bird was heard to call in 1992, indicating that a small number of birds probably breeds at this nunatak.

La Grange (1962) reported Snow Petrels breeding at two of the nunataks in the Johnsbrotet group, nunataks "III" and "V". On 31 January 1993 a total of 81 Snow Petrel nests was counted on "Nunatak V", of which 29 were occupied, 27 were unoccupied and 25 were inaccessible and their contents could not be checked. During the period under review it was not possible to visit "Nunatak III" to confirm La Grange's (1962) record of breeding Snow Petrels. La Grange did not visit "Nunatak VI" at Johnsbrotet where 28 Snow Petrel nests were found on 16 January 1992. Of these nests, six were occupied by incubating adults, nine were unoccupied and the remainder were inaccessible and could not be visually checked.

An estimated 500 pairs of Snow Petrels breed at Robertskollen (Krynauw *et al.* 1983, Ryan & Watkins 1989, WKS unpubl. data) and the species was seen on all days spent at this site.

Ryan & Watkins (1988) reported that Brattskarvet (72° 07'S, 01° 25'E) in the H.U. Sverdrupfjella

was "probably" a breeding locality for Snow Petrels, whereas breeding has previously been confirmed at this site (Mehlum 1986).

#### Antarctic Fulmar

On 1 January 1993 an Antarctic Fulmar was seen flying very low over "Ice Axe Peak" (see Ryan *et al.* 1989) at Robertskollen. The bird circled the peak for almost 20 minutes before disappearing northwards. Later, on 21 January 1993, two Antarctic Fulmars were seen flying over "Ice Axe Peak". These sightings add a fifth species to the published list of birds observed over the inland nunataks of the Ahlmannryggen. Although the cliffs over which the birds circled were thoroughly searched, no evidence of breeding by the species was found and it is not thought likely that Antarctic Fulmars breed at Robertskollen.

#### Wilson's Storm Petrel

Individual Wilson's Storm Petrels are likely to be seen throughout the Ahlmannryggen as far south as Grunehogna (Table 1). Wilson's Storm Petrels were frequently seen at Robertskollen, most often during fine weather in the evening (17h00 to 22h00 GMT). However, birds were almost always present at the northern cliff face of "Petrel's Rest" (see Ryan *et al.* 1989), Robertskollen, and a small breeding colony was discovered on this slope in early January 1993 by D.A. Balfour. The colony was again visited on 12 January 1993, when five occupied nest-chambers were counted, and at regular intervals thereafter. It was only possible to see into the nest in one of the chambers and on 12 and 20 January this was occupied by an adult incubating an egg. On 27 January an unattended chick was present. The final visit to the nest was on 19 February when flight feathers were apparent on the chick's wings. This is the first confirmed breeding locality for this species in the Ahlmannryggen. Wilson's Storm Petrels were seen flying and landing briefly at this locality in

the 1994/95 season, but breeding was not confirmed.

In all four seasons, up to three Wilson's Storm Petrels at one time were also seen flying and landing briefly at "Cairn Peak", Robertskollen.

#### South Polar Skua

South Polar Skuas are present at a low density throughout the Ahlmannryggen (Table 1, Ryan & Watkins 1988) and may breed at some of the nunataks supporting breeding colonies of Snow Petrels, although nests have yet to be found.

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