

## Seasonal and spatial distribution of the Antarctic Fulmar in South African waters

### Introduction

The Antarctic Fulmar *Fulmarus glacialisoides* is a rare visitor to South African waters (McLachlan & Liversidge 1978). A total of nine records has been reviewed (Cooper & Elliott 1974). Subsequently, a few other records have been published. This note adds 12 recent records to the list, many of them specimens found on beach patrols of the Southern African Seabird Group (Avery 1979). The seasonal and spatial distribution of the Antarctic Fulmar in South African waters is described.

### Results and Discussion

All known records, published and unpublished, of the Antarctic Fulmar in South African waters have been combined (Table 1). A total of 25 records exists, mostly beached corpses. Only a few sightings have been made. The type specimen, collected by Andrew Smith from the "neighbourhood of the South African coasts" (Clancey 1965), has not been included in Table 1, since the precise locality and date of collection are unknown.

The spatial distribution of the Antarctic Fulmar in South African waters is shown in Fig. 1. The species is widely distributed south of 30°S, with most records being from the Indian Ocean. The clustering of beached specimens in False and Algoa Bays may reflect the intensity of beach patrols in these areas (Avery 1979). The seasonal distribution confirms and expands the pattern shown by Cooper and Elliott (1974) : records mainly occurring in the months July to January with the highest number of records for September.

Cooper & Elliott (1974) hypothesized that South African records were likely to have been of immature birds, based on their short wing length (mean 326 mm). The mean wing length of 13 records (Table 1) is  $332 \pm 11$  mm (range 317 - 357 mm). The mean wing length of breeding adults was 335 mm (females) and 345 mm (males), and of fledglings was 290 mm (Mougin 1967). Since most records fall during the breeding season, October - March (Mougin 1967), it is possible that most specimens are of young birds. No specimens examined by me showed signs of primary moult.

It is interesting to note the unevenness of records on a yearly basis. Eleven records (44%) occurred in 1978 and no records exist for 1977, although beach patrols were conducted in similar areas as in 1978 (Cooper 1978, Avery 1979). Similar "wrecks" of Antarctic Fulmars occurred in Australia and New Zealand during 1978 (Carter 1978). The Australian wreck commenced in August and September (Carter 1978). Monthly distribution of South African records in 1978 is shown in Table 2 and show a wider spread from January and July to December. It is not known whether the variation in numbers of beached specimens from year to year reflects changes in the number of Antarctic Fulmars visiting South African waters or failures in food supply causing "wrecks" at irregular intervals.

Table 1  
Records of Antarctic Fulmars in South African waters

No.	Locality	Date	Wing length (mm)	Source
1.	30 S, 15 E	24 Jan 1967	-	Bourne & Dixon (1973) (sighting)
2.	31 29S, 16 07E	27 July 1978	-	G.H. Nicholls (pers.comm.) (sighting)
3.	31 30S, 17 00E	30 Oct 1972	-	Cooper & Elliott (1974) (sighting)
4.	Elands Bay	2 Dec 1978	331	SASG beach patrol (specimen)
5.	Ysterfontein	8 July 1978	332	SASG beach patrol (specimen)
6.	Dassen Island	2 Dec 1972	312	Cooper & Elliott (1974) (found dead)
7.	Koeberg	21 Oct 1978	338	SASG beach patrol (specimen)
8.	Cape Peninsula	-	-	Watson (1971) (specimen)
9.	Muizenberg	1 Aug 1978	330	SASG beach patrol (specimen)
10.	Strandfontein	Aug 1972	-	Cooper & Elliott (1974) (found alive, died)
11.	Strandfontein	30 July 1978	334	SASG beach patrol (specimen)
12.	Strandfontein	9 Aug 1978	357	SASG beach patrol (specimen)
13.	Strandfontein	4 Nov 1978	328	SASG beach patrol (specimen)
14.	Strandfontein	7 Nov 1978	344	SASG beach patrol (specimen)
15.	Strandfontein	9 Oct 1979	-	SASG beach patrol (specimen)
16.	Off Agulhas	May -	-	McLachlan & Liversidge (1957) (sighting)
17.	Between Gamtoos & Van Stadens River mouths	19 Oct 1969	326	Ross (1971), Cooper & Elliott (1974) (specimen)
18.	The Willows	Jan 1978	-	K.Z. Edwards ( <i>in litt.</i> ) (found dead)
19.	Flat Rocks, Cape Recife	15 Sept 1978	-	A. Batchelor ( <i>in litt.</i> ) (found dead)
20.	Port Elizabeth	10 Sept 1975	-	MacGeoghegan (1975) (found dead)

Table 1 (continued)

No.	Locality	Date	Wing length (mm)	Source
21.	Algoa Bay	22 Aug 1958	329	Ross (1971), Cooper & Elliott (1974) (specimen)
22.	Algoa Bay	20 Sept 1958	320	Cooper & Elliott (1974) (specimen)
23.	Algoa Bay	10 Sept 1959	329	Cooper & Elliott (1974) (specimen)
24.	Near Bird Island	6 Dec 1960	340	Cooper & Elliott (1974) (specimen)
25.	Off Durban	10 Sept 1974	-	Clancey (1976) (sighting)

Table 2

## Seasonal occurrence of the Antarctic Fulmar in South African waters

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
1978 records	1	0	0	0	0	0	3	2	1	1	2	1	11
All records	2	0	0	0	1	0	3	4	5	4	2	3	24

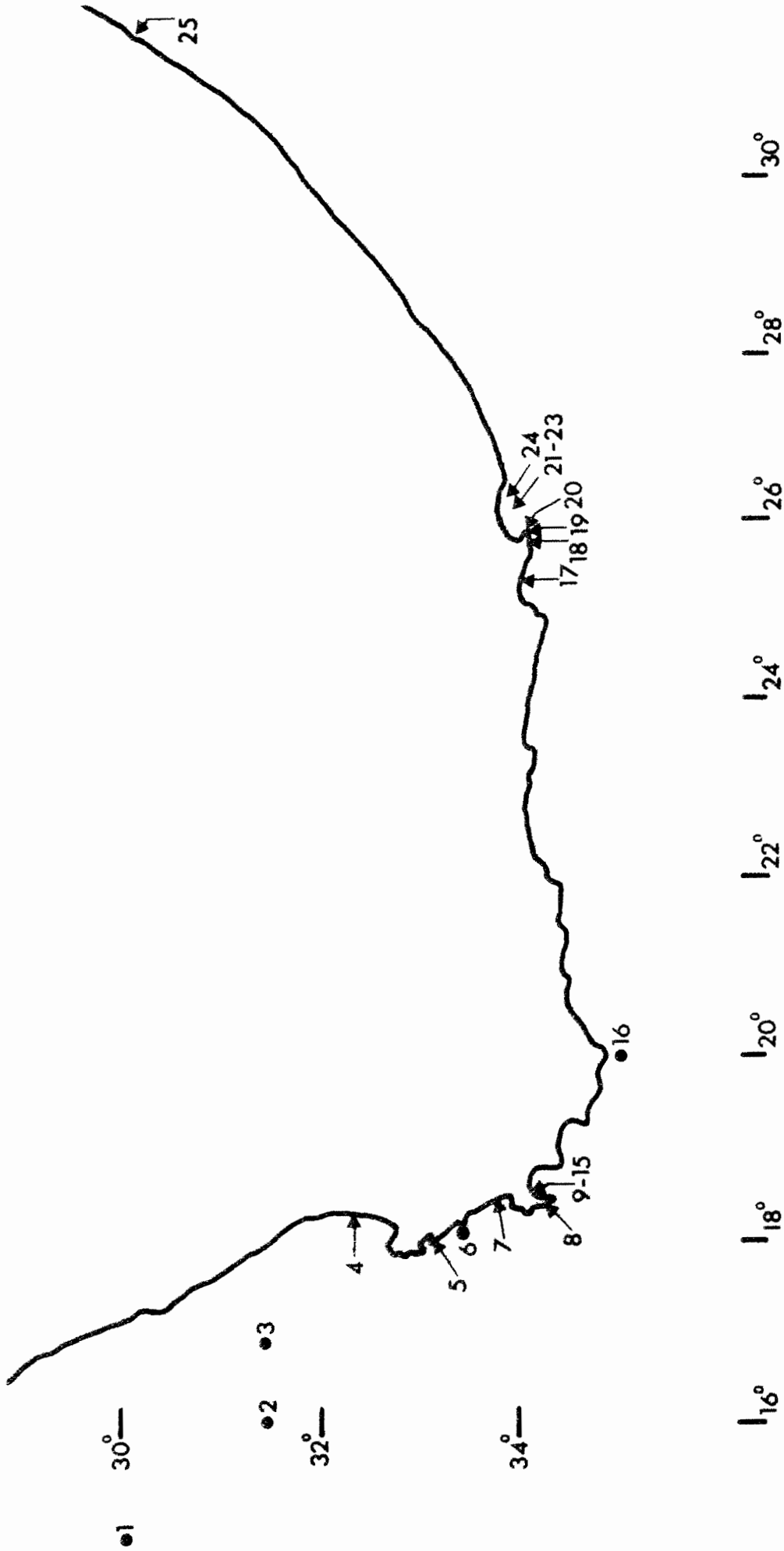


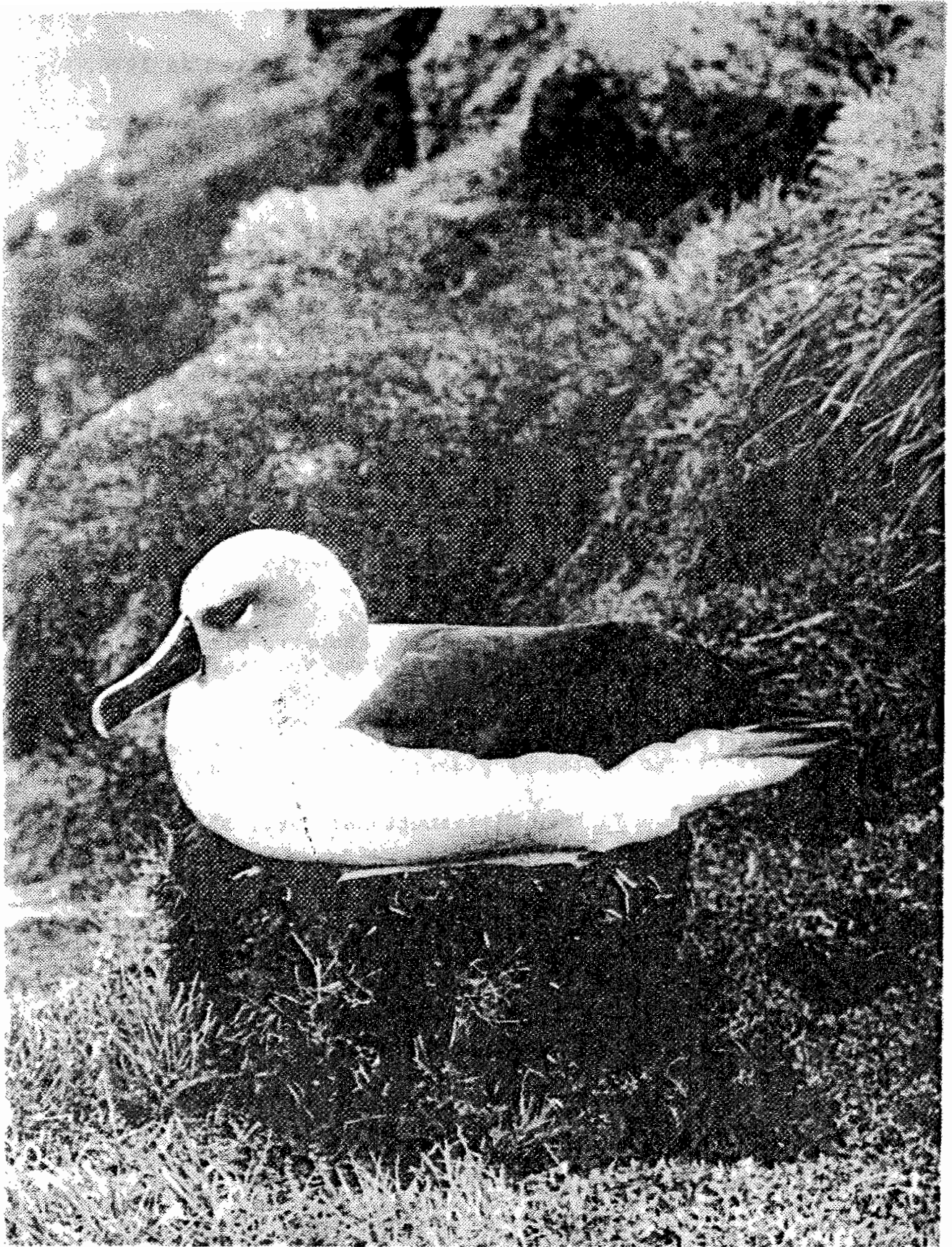
Figure 1

Spatial distribution of the Antarctic Fulmar in South African waters

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Greyheaded Albatross *Diomedea chrysostoma* on Marion Island, 1976

Photographed by E. de Beer