RESULTS OF BEACH PATROLS CONDUCTED IN SOUTHERN AFRICA IN 1979

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ABSTRACT

During 1979 regular beach patrols by the African Seabird Group extended to eight (one not included here) areas of the Cape Province and Natal, South Africa. A total of 1 461 seabirds of 38 species was found over a total distance of 3 740 km, an average of 0,39 birds per km. The most abundant species was the Cape Cormorant Phalacrocorax capensis (591 specimens, 40,5%). Records of the Antarctic Fulmar Fulmarus glacialoides, Manx Shearwater Puffinus puffinus, Little Shearwater P. assimilis and Whitebellied Stormpetrel Fregetta grallaria were made. A wreck of Prions Pachyptila spp. was recorded. Data for recoveries of ringed birds are also included. Fifty-four non-seabirds were found.

INTRODUCTION

This is the third annual report on beach patrols conducted by the African Seabird Group (Cooper 1978, Avery 1979) since 1977. It has not been possible to complete the discussion of seasonal occurrence, age groups and factors affecting density and this will go forward to 1981 as a separate report covering 1977-1980.

RESULTS

During 1979 monthly beach patrols took place at seven localities in the Cape Province and three in Natal (not separated in report) (Table 1 & Fig. 1). A.D. Boddam-Whetham reluctantly terminated his Port Alfred patrol for health reasons. A new survey was initiated by P. Ryan at Fish Hoek and while S. Baron reduced his Hawston patrol from ten to five km he initiated a new five km patrol on Die Plaat near Hermanus. The latter has been included in the 'various' category as access is not possible throughout the year. T. Oatley initiated an extensive survey of Natal coast sections being patrolled by Natal Parks Board rangers, thereby extending our coverage further eastwards. Although regular patrols were undertaken at Cape Recife it has not been possible to include the records for this area since the organizer for the first part of 1979 is now doing military service and all the data are not available. A total of 1 461 seabirds of 38 species was found over a total distance of 3 740,4 km. represents a density of 0,39 birds/km. As in previous years the density varied greatly between the areas surveyed although it is interesting to note that where comparable the density in each area remained relatively consistent. The overall density

TABLE 1
BEACH PATROLS FOR DEAD SEABIRDS IN SOUTHERN AFRICA, 1979: AREAS COVERED

Area	Length (km)	Distance covered (km)	No. seabirds	No./km	Transport	Organizer
Ysterfontein	15,0	180,0	258	1,43	Vehicle	G. Avery
Koeberg	7,0	84,0	45	0,54	Foot	G. Avery
Fish Hoek	0,8	18,4	123	6,68	Foot	P. Ryan
False Bay	20,0	240,0	496	2,07	Foot	G. Avery, R.K. Brooke
Hawston ⁺⁺	10,5	85,0	16	0,19	Foot	S. Baron
Cape Recife	(5)	(60,0)	?	3	Foot	L. Hosten, A. Peter
Rock Cliff +++	4,0	60,0	17	0,28	Foot	C.J. Vernon
Natal ++++	143,0	2 645,0	48	0,02	Vehicle	T. Oatley
Various	-	428,0	458	1,07	Foot/vehicle	-
Total	-	3 740,4	1 461	0,39	-	-

twice monthly

¹⁰ km Jan to May, thereafter 5 km

^{***} sometimes twice monthly

⁺⁺⁺⁺ initiated in September, several trips per month

differs considerably, however, being much lower than previously. The relatively greater distance covered in Natal and low density of birds there clearly accounts for most of this (1,29/km excluding Natal). The exceptionally high density of seabirds recovered from Fish Hoek (6,68/km) is doubtlessly caused by physical factors resulting in their concentration. A total of 428 km was covered on nonregular patrols in the southwestern, southern and eastern Cape. This reflects a continued increase in beach patrol activity by members. The most abundant seabird found was the Cape Cormorant Phalacrocorax capensis (591 specimens, 41 %), followed by the Jackass Penguin Sphensicus demersus (146 specimens, 10 %), Whitechinned Petrel Procellaria aequinoctialis (102 specimens, 7%), Lesser broadbilled/Dove Prions Pachyptila salvini/desolata (97 specimens, 7 %; prions were 183 specimens, 13 %), Sooty Shearwater Puffinus griseus (86 specimens, 6 %), Kelp Gull Larus dominicanus (81 specimens, 6 %) and Cape Gannet Sula capensis (76 specimens, 5 %). With the exception of the prions much the same species as previously were commonest although proportions vary from year to Thus only seven species make up 81 % of the total specimens of 38 confirmed species. Only one Antarctic Fulmar Fulmarus glacialoides specimen was recovered, suggesting that wrecks of this rare species are intermittant (Cooper 1979). One Little Shearwater Puffinus assimilis was recovered. recovery of a ringed Manx Shearwater Puffinus puffinus is of note, this being the third specimen so far found on the South McLachlan & Liversidge (1978) mention one African coast. recorded from Algoa Bay and a beached specimen was recovered by the East London Museum in May 1977 from Rock Cliff (El.Mus 15284). A single specimen of the Whitebellied Stormpetrel Fregetta grallaria recovered from the west coast between Elands Bay and the Berg River mouth by D. Abernethy, M. Kotze and P. Ryan represents the first specimen on the South African coast (Brooke & Sinclair 1978).

Sooty Shearwaters continue to be wrecked in False Bay during the summer although numbers were lower than in previous years. Common Terns Sterna hirundo appear to be wrecked annually the west coast. A wreck of Cape Cormorants took place on the west coast and in False Bay during October/November, being accompanied at Bird Island, Lambert's Bay at least by large scale nest desertion. Crawford et al. (1980) comment on possible causes of such occurrences. A significant wreck of Prions Pachyptila spp. occurred over a widespread area from the southwestern Cape to Natal with a centre apparently in the eastern Cape (Cape Recife and vicinity, L. Hosten, J. Spearpoint pers. comm.) where the highest frequencies were recorded. It was possible to have experts familiar with Pachyptila spp. at their breeding islands, M.J. Imber and J.C. Sinclair, identify many of the beached prions and those in South African museum collections. These data are being written up separately. Identifications given in Table 2 were made in the field and results in the separate study will differ.

A total of four ringed birds was recovered during 1979, the most notable being the Manx Shearwater from False Bay (Table 3).

A total of 54 nonseabirds was found, 12 of which were shorebirds (Table 4). As previously members of the Columbidae were the

TABLE 2
BEACH PATROLS FOR DEAD SEABIRDS IN SOUTHERN AFRICA, 1979 : SPECIES COMPOSITION

4, 5

	Number									
Species	Ysterfontein	Koeberg	Fish Hoek	Palse Bay	Hawston	Cape Recife +	Rock Cliff	Natal	Various	Total
Jackass Penguin Spheniscus demersus	61	12	5	34	2		3	0	29	146
Wandering Albatross Diomedea exulans	0	0	0	0	0		0	0	1	1
Blackbrowed Albatross D. melanophris	2	0	7	3	0		0	0	1	13
Yellownosed Albatross D. chlororhynchos	0	0	0	1	0		0	0	0	1
Shy Albatross D. cauta	1	0	1	0	0		0	0	4	6
Albatross indet.	0	0	0	7	0		0	1	7	15
Giant Petrels Macronectes spp.	2	1	0	0	0		0	0	2	5
Pintado Petrel Daption capense	0	0	1	0	0		0	0	3	4
Antarctic Fulmar Fulmarus glacialoides	0	0	0	1	0		0	0	O	
Greatwinged Petrel Pterodroma macroptera	0	0	0	0	0		0	0	1	1
Softplumaged Petrel P. mollis	1	0	0	0	0		0	0	1	2
Blue Petrel Halobasna caerulea	0	0	0	0	0		0	0	2	2
Broadbilled Prion Pachyptila forsteri	0	0	0	0	0		0	0	2	2
Dove Prion P. desolata	0	0	0	0	0		5	44	0	49
Lesser Broadbilled/Dove Prion P. salvini/desolata	8	3	11	34	2		0	0	39	97
Slenderbilled Prion P. belcheri	2	1	4	0	o		o	0	2	9
Prion indet.	2	٥	8	5	0		0	0	11	26
Whitechinned Petrel	5	· 1	26	51	0		1	0	18	102
Procellaria aequinoctialis	•									
Petrel indet.	0	0	0	1	0		0	1	1	3
Great Shearwater Puffinus gravis	1	0	0	0	0		0	0	0	1
Cory's Shearwater P. diomedea	1	0	0	1	o		0	0	2	4
Manx Shearwater P. puffinus	0	0	0	1	0		0	0	0	1
Little Shearwater P. assimilis	1	0	0	0	0		0	0	0	1
Sooty Shearwater P. grissus	1	0	11	71	0		1	0	2	86
British Stormpetrel Hydrobates pelagicus	0	0	1	1	0		0	0	1	3
Whitebellied Stormpetrel Fregetta grallaria	0	0	0	0	0		0	0	1	1
White Pelican Pelecanus oncorotalus	0 20	0	0 5	1 27	0 7		0	2	0 12	1 76
Cape Gannet Sula capensis Whitebreasted Cormorant Phalacrocorax carbo	0	2	0	3	0		0	0	7	12
Cape Cormorant P. capensis	64	13	38	213	4		1	0	258	591
Bank Cormorant F. neglectus	1	13	90	3	0		0	0	230	7
Crowned Cormorant P. coronatus	1	ō	0	0	o		o	o	ō	1
Cormorant indet.	2	0	o	0	0		0	0	3	5
Grey Phalarope Phalaropus fulicarius	0	0	0	1	0		٥	0	0	1
Subantarctic Skua Catharacta antarctica	0	0	0	0	ō		0	0	1	1
Kelp Gull Larus dominicanus	19	7	1	26	1		1	0	26	81
Hartlaub's Gull L. hartlaubii	13	0	2	2	0		0	0	4	21
Sabine's Gull L. sabini	9	0	0	0	. 0		0	0	0	9
Common Tern Sterna hirundo	36	2	1	6	0		3	0	11	59
Common Arctic Tern S. hirundo/paradisasa	0	0	0	1	o		1	o	0	2
Antarctic Tern S. vittata	. 3	0	o	0	o		0	0	0	3
Arctic Tern S. paradisasa	1	0	0	0	0		0	0	2	3
Sandwich Tern S. sandwicensus	1	0	0	0	0		0	0	1	2
Swift Tern S. bergii	0	0	1	0	0		0	0	1	2
Unidentifiable	0	0	0	2	0		0	0	1	3
Total	258	45	123	496	16		17	48	458	1 461

⁺ data not yet received

TABLE 3
RECOVERY OF RINGED BIRDS ON BEACH PATROLS IN SOUTHERN AFRICA DURING 1979

Species	Number	Ringing site and date	Recovery site	Date
Jackass Penguin Spheniscus demersus	P 1392	Dassen Is., 16 May 1972	Koeberg	27 Jan 1979
	т 2119	Marcus Is., 7 Jun 1978	Elands Bay	15 Dec 1979
Manx Shearwater Puffinus puffinus	Brit. Mus. EB-53812	Copeland Is., County Downs, Ireland, 4 Aug 1978	False Bay	9 Jan 1979
Swift Tern Sterna bergii	5 69303	Marcus Is., 16 Apr 1979	Sea View- Sardinia Bay	11 Jul 1979

TABLE 4
NONSEABIRDS FOUND DURING BEACH PATROLS IN SOUTHERN AFRICA, 1979

Species		Number
Ostrich		l chick
Struthio camelus		
Greatcrested Grebe		2
Podiceps cristatus		
Hamerkop		1
Scopus umbretta		7
Sacred Ibis		1
Threskiornis aethiopicus		1
Egyptian Goose Alopochen aegyptiacus		
Redeyed Pochard		1
Netta erythrophthalma		
Rock Kestrel		1
Falco tinnunculus		-
Jackal Buzzard		1
Buteo rufofuscus	•	
African Marsh Harrier		1
Circus ranivorus		
American Purple Gallinule		1
Porphyrula martinica		_
Black Korhaan		1
Supodotis afra		•
Turnstone		2
Arenaria interpres		4
Whitefronted Sandplover Charadrius marginatus		4
Curlew Sandpiper		2
Calidris ferruginea		2
Sanderling		1
C. alba		
Blackwinged Stilt		1
Himantopus himantopus		
Cape Dikkop		1
Burhinus capensis		
Domestic Pigeon		13
Columba livia		
Rock Pigeon		3
Columba guinea		_
Pigeon indet.		7
Oove indet. Cockatiel	•	3
wl indet.		1 1
African Black Swift		i
pus barbatus		+
ried Crow		1.
Sorvus albus		-1-
European Starling		1
Sturnus vulgarus		_
Total		54

most abundant (46 %). Many of the shorebirds came from False Bay during a single month and their occurrence is thought to be related to the Strandfontein Sewage Works, the outfall of which flows into the bay. A notable recovery was that of an American Purple Gallinule Porphyra martinica from Blouberg by P. & S. Silbernagl.

DISCUSSION

The relatively low density of seabirds in most localities varies considerably from locality to locality and these observations further support the contention that physical factors play an important part in their occurrence. It is also becoming apparent that moult and breeding stress should be added to postfledging mortality (Cooper 1978) as factors causing mortality. The periodic wrecking of certain species, especially of the Procellariidae, still requires explanation although it is likely that physical factors are important. It is notable that the species composition remains consistent and still reflects the relative abundance of different species off the coast. clear that regular surveys continue to provide information on birds which were previously considered rare. More regular surveys are essential, especially in areas not yet covered. Instructions how to go about conducting beach patrols were given in Cormorant 2: 30, and beach patrol forms and further information are readily available from the author.

The following members of the African Seabird Group and their friends took part in beach patrols in 1979; apologies to anyone cmitted: D. Abernethy, A. Adonis, J. Allen, M.C. Arter, D.M. Avery, G. Baron, S. & H.E. Baron, A. Bartlett, A. Berruti, R.K. Brooke, P. Brown, A. Burger, J. Carter, R. Conroy, J. Cooper, F. Darling, G. de Roos, J. Dolman, B. Every, D. Gianakouras, Capt. H.G. Goodbody, G. Grant, A. Griffiths, P. Hall, P. Haarhoff, P. & C. Hockey, L. Horwitz, L. Hosten, J.H. Korf, M. Kotze, L. Lawrence, A.R. Leakey, P. Lindsay, R. Lombard, M.A. Milton, P. Morant, B. Ney, G. Odgers, A. Ogden, G. Portland, A. Peter, D. Roberts, F. & V. Roux, P. Ryan, T. Salinger, R. Schmidt, M. Schramm, L. Scott, P. Shelton, E. Silbernagl, M. Silbernagl, P. & S. Silbernagl, W. Silbernagl, J. Spearpoint, M. Thake, J. Ullyett, G. Underhill, L. & J. Underhill, N. Uys, D. van der Heyde, C.J., D.S. & S. Vernon, V.P. Volker, E. Wessels, V.B. Whitehead, A.J. Williams, R. Williamson, R. Wilson, R.H. Woodward.

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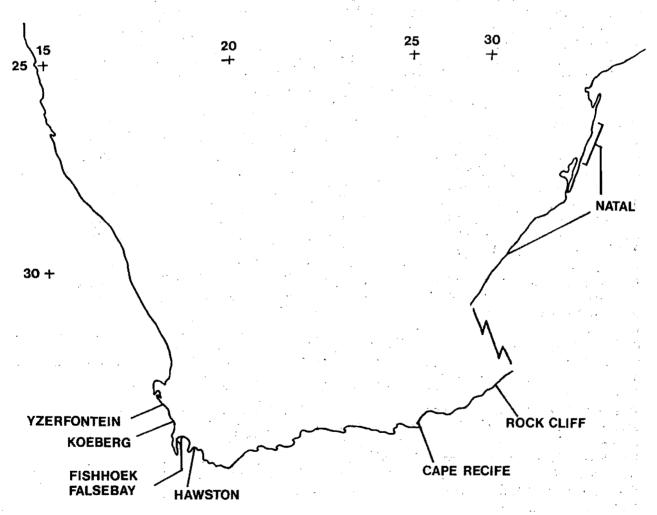


Figure 1

Localities of regular monthly patrols in Southern Africa in 1979 '