

SEABIRD RECORDS FROM THE *LINDBLAD EXPLORER* IN THE
SOUTH ATLANTIC, 1976 - 1978

M.P. HARRIS & A.L. BATCHELOR

Received 10 September 1980, accepted 29 October 1980

INTRODUCTION

This report documents sightings of seabirds made from M.S. *Lindblad Explorer* during a voyage from Cape Town to the Antarctic Peninsula (Gramhamland) via Tristan da Cunha and South Georgia, and seven additional crossings of the Drake Passage between the Peninsula and either the Falkland Islands or Cape Horn. No attempt is made to survey the scattered literature.

METHODS

The main voyages made were Cape Town to Tristan da Cunha (20 - 25 December 1976), Gough Island to South Georgia (27 - 31 December 1976), South Georgia to Laurie Island (South Orkney Islands) (5 - 7 January 1977), Laurie Island (South Orkney Islands) to Elephant Island (7 - 8 January 1977), Anvers Island (Antarctic Peninsula) to Cape Horn (16 - 17 January 1977), Falkland Islands to King George Island (South Shetland Islands) (24 - 27 January 1977), Elephant Island to Cape Horn (3 - 4 February 1977), Falkland Islands to Elephant Island (9 - 11 December 1977, 27 - 29 December 1977), and Hope Bay (north tip of Antarctic Peninsula) to Cape Horn (18 - 21 December 1977, 5 - 8 January 1978). Records were kept on most days except when sea conditions made identifications or even counting impossible. Only the briefest summary is presented here.

All observations were made by one of us from the wings of the bridge (eye level c. 11 m above sea level) covering an arc of c. 180° including the bow of the ship from c. 45° to the ship's course. The average speed of the boat during the voyage was 13 - 14 knots. Only birds detected by the naked eye were counted but identification was confirmed using binoculars. Obviously many small species occurring far from the ship will have been under-recorded. Birds following in the wake were excluded from counts and, whenever possible, birds regularly circling the ship were only counted once. The daily cumulative length of time such systematic observations were made are given in the tables but no single observer watched for more than two hours. A few records of uncommon species seen outside the watches are noted in brackets.

No attempt was made to identify specifically prions *Pachyptila* spp., diving petrels *Pelecanoides* spp. or giant petrels *Macronectes* spp. Few observations were made close to land as we tended to be busy and these are excluded since the species seen included mainly land-based birds, such as gulls *Larus* spp. and American Sheathbill *Chionis alba*, attracted to the ship. An exception is made for transects at the Antarctic Peninsula.

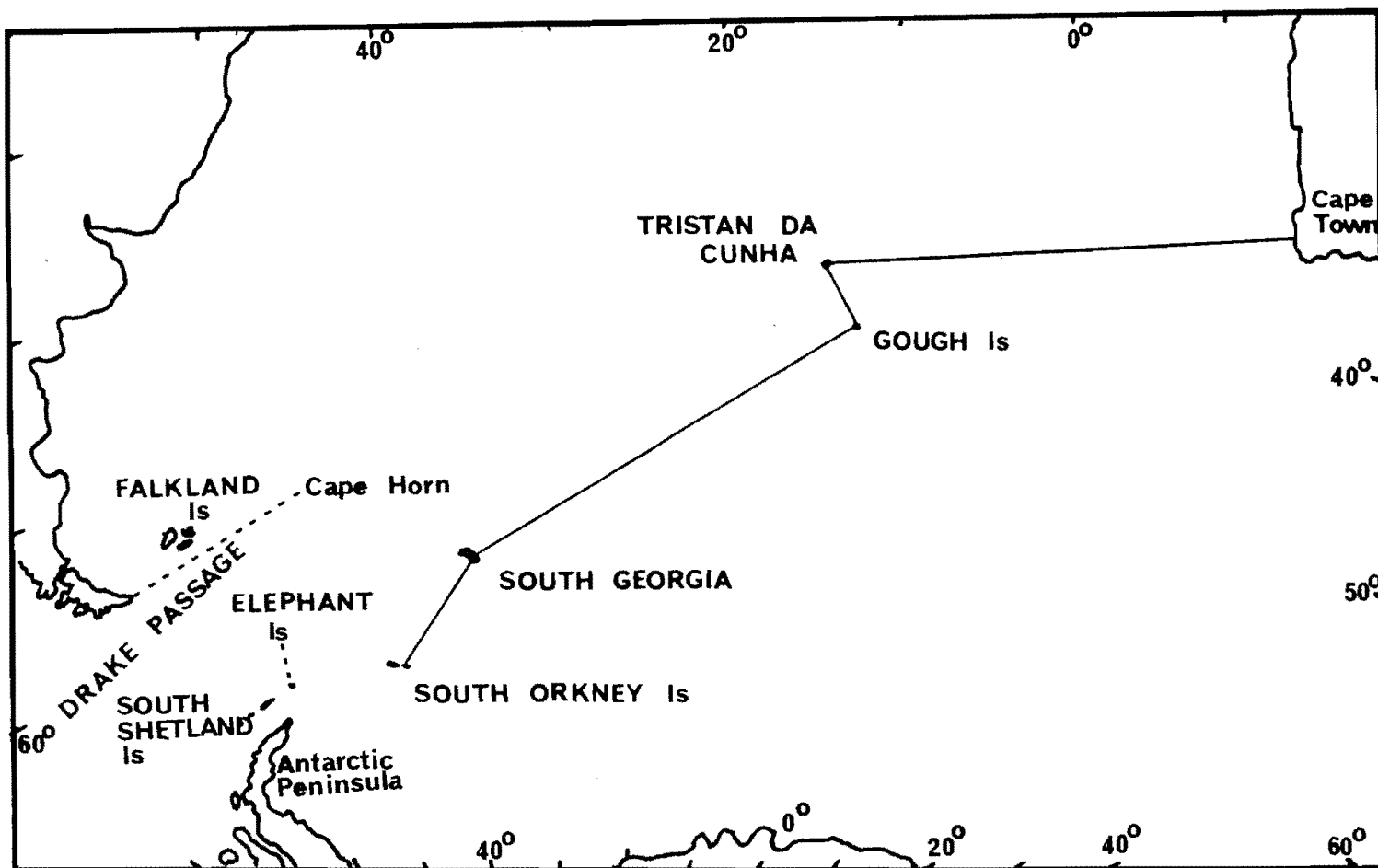


Figure 1

Route of *Lindblad Explorer* from Cape Town to South Orkney and locations of other places mentioned in the text.

RESULTS

Counts of the main species seen are given in Tables 1 and 2 and rare species are mentioned below.

Cape Town - South Orkneys

Observations started on 21 December at 34.7S, 14.6E and birds seen that day included 18 Sooty Shearwaters *Puffinus griseus*, 53 Cory's Shearwaters *Calonectris diomedea*, 4 Leach's Stormpetrels *Oceanodroma leucorhoa*, phalaropes, mostly Grey Phalaropes *Phalaropus fulicarius*, and small skuas, probably Arctic Skuas *Stercorarius parasiticus*. A single *Sterna* tern was seen the next day. Blackbrowed *Diomedea melanophris* and Shy Albatrosses *D. cauta*, were not identified en route to Tristan da Cunha, although both were present just off the African coast.

Foul weather and vast numbers of birds, especially Great Shearwaters *Puffinus gravis* and prions, prevented counts being made between Tristan da Cunha and Gough Island. South of Gough Island Greyheaded *D. chrysostoma* and Lightmantled Sooty Albatrosses *Phoebastria palpebrata* replaced Yellow-nosed *D. chlororhynchos* and Sooty Albatrosses *P. fusca* (last at 50.2S, 29.2W) and Softplumaged *Pterodroma mollis*, and Kerguelen Petrels *P. brevirostris* became abundant with the odd individual seen right up to South Georgia. The only White-headed Petrels *Pterodroma lessoni* (9), and Grey-backed Stormpetrels *Garrodia nereis* (5), were seen on 29 December between 46S, 21W and 47.5S, 23W. The first giant petrel of the cruise was also seen at the latter point. No Blue Petrels *Halobaena caerulea* were seen north of South Georgia but they and prions were abundant in the Scotia Sea south of that island.

Drake Passage

Many fewer species were seen in this area but there was a fairly marked latitudinal division at the Antarctic Convergence. The bulk of the Antarctic Fulmars, *Fulmarus glacialis*, Pintado Petrels *Daption capense*, Blue Petrels and Blackbellied Storm-petrels *Fregetta tropica* were seen south of the Antarctic Convergence, as were all the Antarctic Petrels *Thalassoica antarctica*. One of the latter joined the ship just north of Elephant Island and remained with it for at least 7½ hours, another joined at 61.1S and remained for 6½ hours as the ship moved northwards. One of these was individually identifiable, the other was noted as being continuously present by a succession of bird photographers and officers of the watch. Sooty Shearwaters, Grey-headed Albatrosses and diving petrels were only seen north of the Antarctic Convergence. Scarce species seen included single Grey-backed Stormpetrels south of the Falkland Islands on 25 January and 28 December 1977, a single Royal Albatross *D. epomophora* off Cape Horn on 4 February 1977 and a Pomarine Skua *S. pomarinus* at 59.1S, 56W, about 20 miles south of the Convergence on 29 December 1977.

Two transects were also made in the far south from Anvers Island to and from the Antarctic Circle on 13 and 30 January 1977. The first transect was in the open sea to the west of the Biscoe Islands, the second was partly in the open sea and partly in the Grandidier Channel. During a total of 560 minutes' observations,

TABLE 1
 THE COMMONER SEABIRDS SEEN ON A VOYAGE FROM CAPE TOWN
 TO TRISTAN DA CUNHA, GOUGH ISLAND, SOUTH GEORGIA AND SOUTH ORKNEY ISLANDS

Date:	21 Dec 76	22 Dec 76	23 Dec 76	24 Dec 76	28 Dec 76	29 Dec 76	30 Dec 76	31 Dec 76	6 Jan 77
Minutes observations:	390	320	380	390	370	330	360	70	240
Noon position	34,7S 13,3E	35,3S 6,2E	36,0S 0,5W	36,8S 7,3W	43,6S 16,1W	47,0S 22,0W	50,5S 29,0W	54,3S 36,6W	57,0S 38,6W
Sea temperature (°C)	16	17	16	13	11	10	4	4	2
Wandering Albatross <i>Diomedea exulans</i>	9	7		4	10	7	5		4
Blackbrowed Albatross <i>D. melanophris</i>					11	16	27	18	13
Yellownosed Albatross <i>D. chlororhynchos</i>	2	2		41	1				
Greyheaded Albatross <i>D. chrysaotoma</i>	6	7	6		19	81	8	1	3
Sooty Albatross <i>Phoebastria fusca</i>					28	7	1		
Lightmantled Sooty Albatross <i>P. palpebrata</i>						6	14	2	2
Albatross unidentified	7	1	1		4	4			
Giant petrels <i>Macronectes</i> spp.						1	6	4	35
Pintado petrel <i>Daption capense</i>							8	13	21
Blue Petrel <i>Halobaena caerulea</i>									151
Prions <i>Pachyptila</i> spp.				2	39	23	17	138	570
Grey Petrel <i>Procellaria cinereus</i>		5	1	4					
Whitethinned Petrel <i>P. aequinoctialis</i>	1		2	7	1		151	11	16
Great Shearwater <i>Puffinus gravis</i>	2			3	317	170	152		
Little Shearwater <i>P. assimilis</i>	1		1	1	1	1			
Greatwinged Petrel <i>Pterodroma macroptera</i>	42	21	4	2		1			
Schlegel's Petrel <i>P. incerta</i>			1	16	22	13			
Kerguelen Petrel <i>P. brevirostris</i>					63	1	13	(1)	
Softplumaged Petrel <i>P. mollis</i>	15	5	4	20	139	110	120	2	
Unidentified Shearwater Petrels	7	3	1	6					
Wilson's Stormpetrel <i>Oceanites oceanicus</i>	9	1				4	11	28	4
Whitebellied Stormpetrel <i>Fregetta grallaria</i>	13	3		3			1		
Blackbellied Stormpetrel <i>F. tropica</i>						5	6	8	
Unidentified Stormpetrel	3								
Divingpetrels <i>Pelecanoides</i> sp.							7	6	4
Phalaropes <i>Phalaropus</i> spp.	14				10	1	1		
Subantarctic Skua <i>Catharacta antarctica</i>	3			1					2
Pomarine Skua <i>Stersorarius pomarinus</i>	2	1		5					
small skuas	8			1					

TABLE 2
BIRDS SEEN DURING EIGHT CROSSINGS OF THE DRAKE PASSAGE

Date:	8 Jan 77	16-17 Jan 77	25 Jan 77	3-4 Feb 77	10-12 Dec 77	19-20 Dec 77	28-29 Dec 77	6-7 Jan 78
Minutes observations:	240	270	230	370	280	280	270	380
Route:	1	2	3	4	5	6	7	8
Adelie Penguin <i>Pygoscelis adeliae</i>	2							
Chinstrap Penguin <i>P. antarctica</i>				47	141		2	
Rockhopper Penguin <i>Eudyptes creatatus</i>				7				
Magellanic Penguin <i>Spheniscus magellanicus</i>			47		12			
Penguin unidentified	2			21		4	9	9
Wandering Albatross <i>Diomedea exulans</i>		12	10	1	8	7	3	5
Blackbrowed Albatross <i>D. melanophris</i>	1	14	41	20	52	20	18	24
Greyheaded Albatross <i>D. chrysostrama</i>		9	4	32	4	2	1	4
Lightmantled Sooty Albatross <i>Phoebastria palpebrata</i>	1	(1)		2	1			1
Giant petrels <i>Macronectes</i> spp.	4	16	18	25	11	6	14	12
Antarctic Fulmar <i>Fulmarus glacialisoides</i>	42			35	26	8	7	
Pintado Petrel <i>Daption capense</i>	112	16		145	74	73	203	40
Antarctic Petrel <i>Thalassodroma antarctica</i>		(1)		5		(1)		1
Blue Petrel <i>Halobaena caerulea</i>		24	1	1		67		59
Prions <i>Pachyptila</i> spp.	7	41	53	2	32		140	12
Whitechinned Petrel <i>Procellaria aequinoctialis</i>			1		8	1	3	5
Sooty Shearwater <i>Puffinus griseus</i>		3	32		15	12	17	35
Wilson's Stormpetrel <i>Oceanites oceanicus</i>	75	3	49	109	47	14	66	32
Blackbellied Stormpetrel <i>Fregatta tropica</i>	21	2	8	49	25	4	21	20
Divingpetrel <i>Pelecanoides</i> sp.			10			1		1
Subantarctic Skua <i>Catharacta antarctica</i>	1			6		2	6	
Tern <i>Sterna</i> sp.	4					4		

Observations were made as follows:

- Route 1 from South Orkney Islands to Elephant Island
- Route 2 from off Antarctic Peninsula (63,0S, 62,0W) to Cape Horn
- Route 3 near 55S, 59W to 57S, 57,5W
- Route 4 from Gibbs Island (Elephant Island) to Cape Horn
- Route 5 from south of Falkland Islands (at 54S, 60W) to Elephant Island
- Route 6 from north of South Shetland Islands to Cape Horn
- Route 7 from south of Falkland Islands (at 54S, 59,5W) to Elephant Island
- Route 8 from 61S, 58,5W to Cape Horn

Records in brackets were made outside the observation periods

birds seen were Adelie Penguin *Pygoscelis adeliae* (5), Chinstrap Penguin *P. antarctica* (1), unidentified penguins (4), Blackbrowed Albatross (15 - all during the first transect). Antarctic Fulmar (1 201), Antarctic Petrel (71), Snow Petrel *Pagodroma nivea* (167), Pintado Petrel (5), Wilson's Stormpetrel (224), Subantarctic Skua *Catharacta antarctica* (30), Kelp Gull *Larus dominicanus* (14), and Antarctic Tern *Sterna vittata* (6), among the highest density of birds seen anywhere during the voyages. Antarctic Fulmar was by far the commonest species this far south; a total of 665 were also seen during 110 minutes' observations slightly further north in the Gerlache Strait.

Although these records add little to the known distribution of any of the species, the transects did cross little known areas. Only by regular recording of and writing up of results by those lucky enough to visit these areas will we ever be able to determine the distribution of southern seabirds let alone the factors which control where they live.

M.P. Harris, Institute of Terrestrial Ecology, Banchory,
Kincardineshire AB4 4BY, Scotland.

A.L. Batchelor, Port Elizabeth Museum, Box 13147, Humewood 6013,
South Africa.