ADDITIONAL RECORDS OF SEABIRDS ON THE COAST OF SOUTHERN MOZAMBIQUE

R.K. BROOKE, J. COOPER & J.C. SINCLAIR

Received 27 October 1980, accepted 4 May 1981

INTRODUCTION

Ornithologically, southern Mozambique (south of the Zambezi River) is among the least known regions of zoogeographical southern Africa. Clancey (1971) lists localities at which seabirds have been reported in southern Mozambique but seldom with any statement of numbers or relative abundance, usually because his sources lacked such data. This paper brings together published and unpublished data from the coast or within sight of it to supplement those in Clancey (1971), by providing additional localities, dates and, where available, counts of birds seen.

The unpublished sources utilized are: P.L. and H.A. Britton (PLB) in litt. to RKB (the basis of Britton 1967); the MS notes of RKB who visited Beira from 16 to 22 July 1961; the MS notes of JC who visited various points on the coast between 4 and 15 December 1968 with the expedition of the Kirk Society of the University of Rhodesia (now of Zimbabwe); the MS notebooks of the late A.B. Fletcher (ABF) who visited Nova Sofala between 14 and 28 June 1959 (the notebooks are in the FitzPatrick Institute manuscripts' collection); S. Perrett in litt. to RKB who makes it clear that the data in Perrett (1966) are based almost entirely on her visit to Magaruque Island from 25 December 1965 to 1 January 1966; ringing recoveries on file at SAFRING through the courtesy of Mr T.B. Oatley, officer-in-charge; the MS notes of JCS who visited various points on the coast between 15 and 26 December 1972, Beira between 7 and 11 December 1974, Delagoa Bay and Inhaca Island between 26 October and 11 November 1976; F.V. Tuer (FVT) in litt. to RKB (the basis of Brooke & Tuer 1968); and A. Vittery (AV) in litt. to JCS. Published sources of which Clancey (1971) did not apparently make use include Bourne (1964), Collis (1968) and Perrett (1966).

In the Systematic List below for each species discussed records are given from north to south and the coordinates are given the first time a locality is mentioned. Chronological order is observed among multiple records from the same locality. After the Systematic List follows a discussion of some conclusions or statement that may be made about the marine avifauna of coastal southern Mozambique.

This paper constitutes part of the commemoration of the 21st anniversary of the establishment of the Percy FitzPatrick Institute of African Ornithology.

SYSTEMATIC LIST

Shy Albatross

Diomedea cauta

Inhaca Island (25 58S, 32 59E), where most observations were made, records in October and November 1976 (Table 1).

Yellownosed Albatross

Diomedea chlororhynchos

Inhaca Island records in October and November 1979 (Table 1).

Giant petrels

Macronectes spp.

Clancey (1971) records the Southern Giant Petrel M. giganteus based on determinations made before the northern Giant Petrel M. halli was recognized as a species. At present, records of this genus from southern Mozambique must be regarded as specifically indeterminate though both species probably occur, at least in the Delagoa Bay area (Brooke & Sinclair 1978). Araya (1973) records two Southern Giant Petrels ringed in the South Shetland Islands and recovered off Mozambique Town outside southern Africa. This record implies that they passed through the waters of southern Mozambique.

Prions

Pachyptila spp.

The National Museum of Zimbabwe, Bulawayo, has two specimens found dead on the beach north of Beira (19 51S, 34 51E) on 9 P.A. Clancey has confirmed in litt. to RKB our opinion that both are Dove Prions P. desolata desolata. the most northerly determined record of a prion on the east coast of Africa (White 1965, Clancey 1971), though there is a specifically indeterminate sight record from Tanzania in Britton Kirk (1864) reports a large wreck of P. d. banksii (1980).(probably the nominate race (Clancey 1971)) at the Zambezi estuary but it is not clear from his account whether any of the This wreck may well have taken place in material was preserved. August 1862 when there was a large prion wreck at Durban (Gurney 1864). To the northeast Sclater (1864) reports a specimen of P. d. banksii from Anjouan, Comoro Islands, in 1861: perhaps early summer in view of the migrants collected at the same time and place (Yellowbilled Kite Milvus migrans parasitus, Ruddy Turnstone Arenaria interpres, Common Sandpiper Tringa hypoleucos) and Kirk (1864) said the species was very abundant off the banks near the Seychelles though that record is ignored by Penny (1974). A wreck occurred at Praia de Sepulveda (25 07S, 33 44E) in August 1966 involving "hundreds of birds" (Collis 1968) which were not This is not the wreck in July 1959 determined to species. reported by Cole (1964) from the same place.

Whitechinned Petrel

Procellaria aequinoctialis

Inhaca Island records in October and November 1976 (Table 1).

Wilson's Stormpetrel

Oceanites oceanicus

One flew on board a ship patrolling off Beira on 12 April 1967 (Tuck 1970) and a few were seen off Beira in May 1972 (Bourne & Dixon 1975).

TABLE 1
SEABIRDS OBSERVED IN DALAGOA BAY, CHIEFLY AROUND INHACA ISLAND, 26 OCTOBER - 11 NOVEMBER 1976 BY JCS

									ate								
Species	_		0cto	ber								Nov <u>e</u>					
	26	27	28	29	30	31	1	2	3	4	5	- 6	7	8	9	10	11
Shỳ Albatross Diomedea cauta			2											1			
Yellownosed Albatross D. chlororhynchos			1					-						2			
Whitechinned Petrel Procellaria aequinoctialis	2				1								2	6			
Pinkbacked Pelican Pelecanus rufescens		5	2		1		1		6		2		1		2		1
Cape Gannet Morus capeneis	40	2	14	2	10	2	2	40	6		4	10	6	18			
Whitebreasted Cormorant Phalacrocorax carbo	10	4	10	6		6	6	20	4	35	10	15	12		28		19
Cape Cormorant P. capensis	1				14		2	1		7	2	1	3		3	,	1
Reed Cormorant P. africanus					7		12	40		20	16	2	28		12		3
Arctic Skua Stercorarius parasiticus	4											1		2			
Kelp Gull Larus dominicanus			1						1				1			:	1
Lesser Blackbacked Gull L. fuscus			1		•												1
Greyheaded Gull L. cirrocephalus	350	4	3		3	5		15		2	4	5	1		2	5	1
Caspian Tern Sterna oaspia	2	40	45	. 6	250	30	80	60	20	150	. 20	40	120	1	.80	120	90
Swift Tern S. bergii	20	150	150	20	300	20	25	200	80	100	4	160	100	2	00	250	180
Lesser Crested Tern S. bengalensis	. 3		. 4		2			4	. 1	2	1	3	3		1	15	3
Sandwich Tern S. sandvicensis	80		200		450	100	15	140	45	200			150	1	40	350	130
Common Tern S. hirundo	400	4					40	350	20		90	2000	18		14	12	60
Blacknaped Tern S. sumatrana	- 3-2	·														4	3
Scoty Term S. fuscata			4								1					-	_
Little Tern S. albifrons	ĸ	100	3		120	1	. 2	150	12	40	6	60	4		80	70	40
Mitewinged Black Tern Chlidonias leucopterus	٠	_50	-			•	-			2	v		1		- -		10

Pelecanus rufescens

Pinkbacked Pelican

This species should have been included in Brooke & Sinclair's (1978) list of southern African seabirds on the basis of Clancey's (1971) statements. The following records confirm the status of the Pinkbacked Pelican as a seabird in Mozambique. Approximately 25 birds roosted at dusk and at high tide on the rigging of a wrecked sailing ship among the mangroves of Beira harbour on 17 July 1961 (RKB) and in 1964 one was seen there on 22 May, six on 23 May, four on 24 May, six on 7 August and seven on 8 August (PLB). Six were seen there on 15 December 1972 At Nova Sofala (20 09S, 34 44E) in late June 1959 small groups of Pinkbacked Pelicans fed close inshore, usually at low tide, and five roosted in a Baobab tree Adansonia digitata by the In mid December 1968 10 birds roosted in a Baobab camp (ABF). at Nova Sofala but foraged in the mangrove lagoon and the open sea during the day (JC, Cooper 1969: we are satisfied that the roosting habits determine the species seen as the Pinkbacked Pelican and not the Great White Pelican P. onocrotalus as originally claimed). Present in small numbers at Magaruque Island (21 58S, 35 26E) in the last week of December 1965 (Perrett 1966). Inhaca Island records in October and November 1976 (Table 1).

Cape Gannet

Morus capensis

Ringing recoveries from Beira southwards to the Natal border are given in Table 2. These records fall between April and November and most are of birds of less than two years old. Several immatures were seen off Maputo (25 58S, 32 36E) on 5 May 1962 (Bourne 1964). PLB recorded an adult flying north off Maputo on 8 September 1965. Inhaca Island records in October and November 1976 (Table 1).

Whitebreasted Cormorant

Phalacrocorax carbo

Present on Lake Inhampavala (24 55S, 34 O4E), a coastal lagoon, on 14 September 1971 (Milstein in press). Inhaca Island records in October and November 1976 (Table 1).

Cape Cormorant

Phalacrocorax capensis

Inhaca Island records in October and November 1976 (Table 1).

Reed Cormorant

Phalacrocorax africanus

In Beira harbour 14 were seen on 15 December 1972 and parties of four to six birds at Maxixe (23 525, 35 21E) on 26 December 1972 (JCS). Abundant in the Morrumbene estuary (23 395, 35 21E) and the Baia de Inhambane (23 485, 35 42E) in early December 1968 (JC). Inhaca Island records in October and November 1976 (Table 1). The Reed Cormorant is clearly a seabird in Mozambique as Pinto (1958) makes clear in discussing Inhaca Island and the species should have been included in Brooke & Sinclair (1978).

Greater Frigatebird

Fregata minor

An adult female seen off Maputo on 1 February 1976 (AV): the first record of this genus in southern Mozambique confidently placed to species (Clancey 1971).

 ${\small \textbf{TABLE}} \quad \textbf{2} \\ \\ \text{RECOVERIES OF RINGED SEABIRDS ON THE SOUTHERN MOZAMBIQUE COAST : DATA FROM SAFRING} \\ \\$

Ring Number	Date of Ringing	Place of Ringing	Date of Recovery	Place of Recovery	Source		
A. Cape Gan	net Morus capensi	8					
B-02341	19 Jan 52	Lamberts Bay, CP	07 Aug 54	Beira	Ashton (1956)		
536-02799	25 Mar 54	Bird Island, Algoa Bay	11 Nov 57	Beira			
536-09100	25 Feb 54	Lamberts Bay	09 Jun 54	Bazaruto Island			
536-09607	25 Feb 54	Lamberts Bay	15 Apr 54	near Maputo			
536-05167	25 Feb 54	Lamberts Bay	11 May 54	near Maputo	Ashton (1954)		
536-03885	24 Feb 54	Lamberts Bay	15 Jun 54	near Maputo	Ashton (1956)		
536-05038	24 Feb 54	Lamberts Bay	15 Jun 54	near Maputo	Ashton (1956)		
526-02355	05 Apr 53	Lamberts Bay	19 Jul 54	near Maputo	Ashton (1956)		
526-02913	05 Apr 53	Lamberts Bay	15 Sep 54	near Maputo	Ashton (1956)		
536-06336	25 Mar 54	Bird Island	1955	near Maputo			
14457	22 Apr 58	Bird Island	15 Apr 62	near Maputo			
01450	10 Apr 56	Lamberts Bay	15 Sep 62	near Maputo			
14450	22 Apr 58	Bird Island	22 Sep 62	near Maputo			
B. Greyheade	d Gull Larus cirr	oosphalus					
A-03797	28 Jul 57	Benoni, Transvaal	12 May 59	near Maputo	Erwee (1960)		
553-04582	06 Jul 58	Benoni	11 Jan 61	near Maputo			
635-00229	18 May 63	Benoni	18 Mar 64	near Maputo	Erwee (1964)		
635-00187	18 May 63	Benoni .	05 Jul 64	near Maputo			
634-07564	20 Jun 70	Benoni	13 Aug 71	near Maputo	Schmitt (1971)		
5-06445	15 May 71	Benoni	05 Aug 72	near Maputo	Schmitt (1973)		
C. Common To	ern Sterna hirund	o ,					
A2-01658	20 Jun 64	Jacobstad, Finland	15 May 65	near Maputo	·		
D. Arctic To	ern Sterna paradi	s ae a					
A3-05515	08 Jul 66	Helsinki, Finland	03 Jul 67	near Maputo			

Arctic Skua

Clancey (1971) regarded the discovery of this species in Mozambique as nearly inevitable. Sight records from Inhaca Island in October and November 1976 are given in Table 1. In addition, in January 1976 cyclone Danae swept a bird inland across Mozambique to fall near Orpen Camp (24 29S, 31 24E) in the Kruger National Park, Transvaal, South Africa (Joubert 1977).

Pomarine Skua

Stercorarius pomarinus

One seen at Maputo on 29 January 1976 caught up in cyclone Danae (AV): the first record for Mozambique (Clancey 1971).

Kelp Gull

Larus dominicanus

Inhaca Island records in October and November 1976 are given in Table 1. We have no evidence that, as discussed under the next species, the Kelp Gull occurs north of Delagoa Bay.

Lesser Blackbacked Gull

Larus fuscus

Donnelly (1974b) has discussed the records of the Lesser Black-backed Gull in southern and central Africa and has, correctly in our opinion, placed all sight records from Beira of blackbacked gulls as L. fuscus. The months involved have been January, March, May, July, August, November and December. Seventeen were seen at Beira on 7 December 1974 (Sinclair 1979). For Inhaca Island records in October and November 1976 see Table 1.

Blackheaded Gull

Larus ridibundus

Donnelly (1974a) records a White-eyed Gull L. leucophthalmus seen at Beira on 12 March 1972, the previous record from there being a sight record by Benson (1948). We are not confident that either bird was correctly identified and indeed doubt that the White-eyed Gull ever comes south of the equator (cf. Britton 1980). In South Africa alleged White-eyed Gulls are probably always Franklin's Gulls L. pipixean (Sinclair in prep.) while the Beira birds are probably Blackheaded Gulls L. ridibundus. A Blackheaded Gull was seen in nuptial plumage but obviously sickly at Beira on 7 December 1974 (Sinclair 1979). This is the most southerly record of the Blackheaded Gull on the eastern side of Africa (White 1965) and the first for southern Mozambique (Clancey 1971).

Greyheaded Gull

Larus cirrocephalus

In pairs and singletons at Beira harbour in mid July 1961 (RKB) but c. 300 on 7 December 1974 (Sinclair 1979). At Estoril beach, Beira, c. 15 present in late May and early August 1965 (PLB). None was present at Nova Sofala in late June 1959 (ABF) or mid December 1968 (JC). Small numbers at Magaruque Island in late December 1965 (Perrett 1966), eight at Vilanculos (22 OOS, 35 19E) on 24 December 1972 (JCS) and small numbers at Inhambane harbour in early December 1968 (JC). For Inhaca Island records in October and November 1976 see Table 1. Ringing recoveries from Sul do Save are given in Table 2.

Caspian Tern

Sterna caspia

At Beira 12 were seen on 11 December 1974 (JCS). Flocks of up

to 50 birds roosted on the sand at low tide at Nova Sofala in late June 1959 where it was the commonest tern present (ABF) and small numbers were seen there in mid December 1968 (JC). A few pairs at Zavora (24 31S, 35 12E) in mid April 1968 (Collis 1968). At Inhaca Island four in late February 1967 (FVT) and many in October and November 1976 (Table 1).

Swift Tern Sterna bergii

At Beira up to six birds daily in late May and c. 20 daily in early August 1965 (PLB), 30 on 9 December and 18 on 10 December A few were seen with Caspian Terns at Nova Sofala 1974 (JCS). in late June 1965 (ABF) and in large numbers there in mid December 1968 (JC). At Vilanculos 40 were seen on 23 December and 12 at Maxixe on 26 December 1972 (JCS). They were numerous in mid April 1968 at Zavora (Collis 1968). It was the commonest tern roosting at low tide on the sandstone reefs at Cabo das Correntes (24 06S, 35 30E) just south of Praia de Jangamo in early December 1968 (JC). It was abundant at Inhaca Island in October and November 1976 (Table 1) and many prebreeding displays and copulations were seen though no breeding These birds had the pale upper parts of S. b. site was found. enigma (Clancey 1979), the presumably summer tropical breeding race also discussed by Clancey (1971 sub nom. S. maxima, 1975). This race is probably always present on the coast of southern Mozambique even though some nonbreeding birds in winter move south to the Natal coast. The nominate race which breeds in winter on the islands off Namibia and the Cape Province of South Africa also visits Mozambique in summer but we have no evidence that it occurs much north of Delagoa Bay (Clancey 1975).

Lesser Crested Tern

Sterna bengalensis

At Beira in 1965 numbers present varied daily: seven on 22 May, c. 20 on 23 May, c. 40 on 24 May, three on 7 August, none on 8 August (PLB). One was seen there on 9 December 1974 (JCS). Not present at Nova Sofala in late June 1959 (ABF) but numerous in mid December 1968 (JC). Three at Vilanculos on 24 December 1972 (JCS). Common on Magaruque Island in late December 1965 (Perrett 1966), likewise at the Morrumbene estuary, Inhambane and Cabo das Correntes in early December 1968 (JC) and at Zavora in mid April 1968 (Collis 1968). For Inhaca Island records in October and November 1976 see Table 1.

Sandwich Tern

Sterna sandvicensis

At Beira 60 were seen on 15 December 1972 and four on 10 December 1974 (JCS). Although White (1965) knew of no records further north on the east coast of Africa Britton (1980) gives a few for the coasts of Tanzania and Kenya made in the 1970s. For Inhaca Island records in October and November 1976 see Table 1.

Common Tern

Sterna hirundo

There is one ringing recovery from Sul do Save in May (Table 2). For Inhaca Island records in October and November 1976 see Table 1.

Arctic Tern

Sterna paradisaea

Clancey (1971) knew of no records of the Arctic Tern in Mozambique

but suspected its occurrence in view of its being a regular summer visitor to Natal. The only record known to us is one ringing recovery in Table 2 from Sul do Save in July.

Roseate Tern

Sterna dougallii

One seen off Inhaca Island on 28 November 1976 (AV).

Blacknaped Tern

Sterna sumatrana

Not recorded for southern Mozambique by Clancey (1971) but seen at Inhaca Island in November 1976 (Table 1).

Sooty Tern

Sterna fuscata

In January 1976 cyclone Danae swept a great many Sooty Terns inland across Mozambique and some were recovered in Zimbabwe (Irwin 1977) and the eastern Transvaal (Hall 1976, Joubert 1977). AV observed that this cyclone brought Sooty Terns to Maputo (four adults, four immatures) and found eight dead in a 200 m stretch of shore of a coastal lagoon, Bileve, near Sao Martinho (25 17S, 33 15E). Extrapolating to the length of shore he estimated that there were c. 200 dead Sooty Terns there. For Inhaca Island records in October and November 1976 see Table 1.

Bridled Tern

Sterna anaethetus

Clancey (1971) suspected that this species ranged at least into the northern sectors of southern Mozambique. Tuck (1970) reports that one flew onto a ship patrolling off Beira on 12 February 1967. Cyclone Danae brought this species to Maputo (AV): five adults flying strongly on 29 January 1976 and one found dead on 31 January at the Bileve lagoon, Sao Martinho.

Little Tern

Sterna albifrons

At Beira 20 were seen on 15 December 1972 and four on 10 December 1974 (JCS). Present at Nova Sofala in mid December 1968 in large numbers (JC). A flock of 12 was photographed at Inhambane in late April 1968 (Collis 1968). Roosted in large numbers at Cabo das Correntes in early December 1968 (JC).

Whitewinged Black Tern

Chlidonias leucopterus

For Inhaca Island records in November 1976 see Table 1.

DISCUSSION

No seabird is yet known to breed on the coast or offshore islands of southern Mozambique although a survey of the smaller islands might produce evidence of terns or gulls breeding: the most probable species is the Swift Tern S. b. enigma. Clancey (1971) and this paper list between them 42 species of seabirds as occurring on the coast of southern Mozambique and waters within sight of the coast either as regular visitors or vagrants. Of these 19 are migrants from the south (Tables 3A & B), nine are migrants from the tropics (Table 3C), nine are migrants from the Palaearctic (Table 3D) and six are inland breeding species in Mozambique and adjacent countries. Obviously, further work will reveal the presence of additional species, both regular visitors and vagrants, but the proportions of cold southern, tropical and

SOUTHERN MOZAMBIQUE SEABIRDS ANALYSED BY ORIGIN

A. Species breeding in southwestern Africa

Spheniscus demersus Morus capensis Phalacrocorax capensis Larus dominicanus Sterna bergii in part

B. Species breeding in the Subantarctic and Antarctic zones

Diomedea exulans
D. cauta
D. melanophris
D. chlororhynchos
Phoebetria fusca
Daption capense
Petrodroma macroptera

Pterodroma mollis
Pachyptila vittata
P. desolata
Procellaria aequinoctialis
Oceanites oceanicus
Pelagodroma marina
Catharacta antarctica

C. Species breeding in the tropical zone

Sula leucogaster
Fregata minor
Sterna bergii in part
S. bengalensis
S. dougallii

Sterna sumatrana
S. fuscata
S. anaethetus
S. albifrons

D. Species breeding in the Palaearctic

Hydrobates pelagicus
Stercorarius parasiticus
S. pomarinus
Larus fuscus
L. ridibundus

Sterna sandvicensis S. hirundo S. paradisaea Chlidonias leucopterus

E. Species breeding in the interior of Mozambique and adjacent countries

Pelecanus onocrotalus P. rufescens Phalacrocorax carbo Phalacrocorax africanus Larus cirrocephalus Sterna caspia cold northern species is not likely to be much affected. The waters of southern Mozambique are indubitably tropical but the majority of seabird species which frequent them come from colder regions. It should also be noted that most of the visitors from cold southern waters do not occur regularly north of 25°S. A list of seabirds found north of the Save estuary at 21°S would contain a very much smaller proportion of cold southern species.

REFERENCES

- ARAYA, B. 1973. Recaptura de Petreles Gigantes anillados in Isla Nelson, Antartica Chilena. Rev. Biol. Mar. Valparaiso 15: 111-114.
- ASHTON, E.H. 1954. Fourth progress report: bird ringing 1952 1953. Ostrich 25: 130-138.
- ASHTON, E.H. 1956. Fifth progress and ringing report. Ostrich 27: 5-13.
- BENSON, C.W. 1948. Notes from a sea voyage: December 1946 January 1947. Ostrich 19: 150-151.
- BOURNE, W.R.P. 1964. Observations of sea birds. Sea Swallow 16: 9-40.
- BOURNE, W.R.P. & DIXON, T.J. 1975. Observations of seabirds 1970 1972. Sea Swallow 24: 65-88.
- BRITTON, P.L. 1967. Some records from Mozambique. Ostrich 38: 46-47.
- BRITTON, P.L. (Ed.) 1980. Birds of East Africa. Nairobi: E. Afr. Nat. Hist. Soc.
- BROOKE, R.K. & SINCLAIR, J.C. 1978. Preliminary list of southern African seabirds. Cormorant 4: 10-17.
- BROOKE, R.K. & TUER, F.V. 1968. Additional records from Inhaca Island, Mozambique. Ostrich 39: 266.
- CLANCEY, P.A. 1971. A handlist of the birds of southern Mozambique. Mem. Inst. Invest. Cient. Mocambique ser. A, vol. 10: 145-303.
- CLANCEY, P.A. 1974. Sterna bergii and Sterna maxima in the South African sub-region, with observations on their relationship. Durban Mus. Novit. 10: 191-206.
- CLANCEY, P.A. 1979. A name for an undescribed subspecies of Sterna bergii Lichtenstein. Durban Mus. Novit. 12:. 6.
- COLE, D.T. 1964. Dead sea birds at Praia de Sepulveda, P.E.A. Ostrich 35: 298.
- COLLIS, D. 1968. The southern Mozambique coast, April May 1968. Honeyguide 56: 13-15.
- COOPER, J. 1969. Roosting in the White Pelican. Honeyguide 58: 34.
- DONNELLY, B.G. 1974a. A further record of the White-eyed Gull Larus leucophthalmus from Beira, Mocambique. Bull. Brit. Orn. Club 94: 62-63.

- DONNELLY, B.G. 1974b. The Lesser Black-backed Gull Larus fuscus in southern and central Africa. Bull. Brit. Orn. Club 94: 63-68.
- ERWEE, A. 1960. Bird ringing recoveries. Wits Bird Club News Sheet 33: 2-4.
- ERWEE, A. 1964. Ringing and recoveries. Wits Bird Club News Sheet 47: 6-8.
- GURNEY, J.H. 1864. A sixth additional list of birds from Natal. *Ibis* ser. 1, vol. 6: 346-361.
- HALL, D. 1976. Sea terns 330 kilometres inland. Wits Bird Club News Sheet 92: 16.
- IRWIN, M.P.S. 1977. Some little-known and inadequately documented Rhodesian birds. Honeyguide 90: 9-15.
- JOUBERT, S.C.J. 1977. Avian marine vagrants to the Kruger National Park. Koedoe 20: 185.
- KIRK, J. 1864. On the birds of the Zambesi region of eastern tropical Africa. *Ibis* ser. 1, vol. 6: 307-339.
- MILSTEIN, P. le S. in press. A waterfowl survey in southern Mocambique, with conservation implications. In: Ledger, J. (Ed.) Proc. V Pan-Afr. Orn. Congr.
- PENNY, M. 1974. The birds of Seychelles. London: Collins.
- PERRETT, S. 1966. The bird life of Magaruque Island. Honeyguide 49: 20-21.
- PINTO, A.A. da R. 1958. A contribution towards the study of the avifauna of the island of Inhaca. Bol. Soc. Estud. Prov. Mocambique 112: 29-62.
- SCHMITT, M. 1971. Ringing. Wits Bird Club News Sheet 76: 7.
- SCHMITT, M. 1973. Interesting ringing recoveries in 1973. Wits Bird Club News Sheet 81: 19.
- SCLATER, P.L. 1964. On the birds of the Comoro Islands. *Ibis* ser. 1, vol. 6: 292-301.
- SINCLAIR, J.C. 1979. Birds at sea in the Indian Ocean. Cormorant 7: 7-10.
- TUCK, G.S. 1970. Extracts from the meteorological logs of British merchant ships. Sea Swallow 20: 21-24.
- WHITE, C.M.N. 1965. A revised check list of African nonpasserine birds. Lusaka: Government Printer.
- R.K. Brooke & J. Cooper, Percy FitzPatrick Institute of African Ornithology, University of Cape Town, Rondebosch 7700, South Africa.
- J.C. Sinclair, Durban Museum, Box 4085, Durban 4000, South Africa.