

June counts of waders, waterbirds and seabirds on Inhaca Island, Mozambique

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Inhaca Island (26° S, 33° E; Fig. 1) lies 35 km east of Mozambique's capital city, Maputo. The island, along with the Machangulo Peninsula, forms the eastern boundary of the Bay of Maputo. Inhaca Island is separated from the Machangulo Peninsula by a narrow (500 m) strait. The major habitats of the island are intertidal sand- and mud-flats, mangrove swamps, freshwater swamps, subtropical evergreen forests ranging from regenerating to mature, and a semi-natural mosaic of trees and bush clumps interspersed with small villages, subsistence agricultural fields and regenerating, no longer used, agricultural fields (Kalk 1995, de Boer & Bento 1999).

Several counts of waders and seabirds have been conducted on Inhaca Island over the last four decades, but these have been mainly in the austral summer when Palaearctic migrants are present (see Table 2). Jensen (1968) recorded large numbers of terns roosting at Ponta Raza, and large numbers of waders by the mangrove-lined lagoon in March–April 1968, but he did not publish individual counts. Brooke *et al.* (1981) counted seabirds in Maputo Bay, mainly around Inhaca. Ian Sinclair ringed 450 waders during October–December 1976 (SAFRING unpubl. data). Sinclair counted 3,200 Terek Sandpipers on Inhaca as part of a larger study of the species (Waltner & Sinclair 1981). Nilsson & Shubin (1998) counted waders from 1985 to 1989 on the Maputo coast and on Inhaca and Portuguese Islands, but count data for Inhaca are given for Dec. 1989 only. De Boer (2000,

p. 156) did an annual island count over three years, 1995–97. De Boer & Bento (1999) provide an annotated checklist for the island.

We visited the island in the austral winter to survey the birds in general, and to conduct wader, waterbird and seabird counts to compare with published summer counts. We surveyed the birds on the island, from 1 to 7 June 2003. This report details the wader, waterbird and seabird counts (Table 1).

A comparison of our winter data with published wader counts for Inhaca Island (Table 2) suggests marked seasonal differences. Here we highlight some of our most interesting findings.

The most common Palaearctic migrants at Inhaca Island on passage or during the austral summer are Grey Plover, Turnstone, Terek Sandpiper, Greenshank, Curlew Sandpiper, Sanderling, and Whimbrel (Table 2). We recorded small numbers of all of these species over-wintering, except Terek and Curlew Sandpipers (Table 1). We observed relatively large numbers of three Palaearctic species – Whimbrel, Greenshank and Sanderling – though even these were much fewer than in the austral summer. Sanderlings had not been recorded in the austral winter on Inhaca (de Boer & Bento 1999), but they were recorded in all months on the Maputo coast by Nilsson & Shubin (1998). Fewer than 10% of Sanderlings showed traces of breeding plumage, and none of the other species showed any, indicating that they were all one-year-old birds. Our counts were conducted in the middle of the austral winter, so it is unlikely that any of these birds were on passage. Summers *et al.* (1995) showed that most over-wintering waders at Langebaan Lagoon in South Africa are one-year-old and that more of the larger waders over-winter there than smaller species. Hence one-year-old Little Stints rarely over-winter while young Whimbrels and Greenshanks over-winter in South Africa in greater numbers. Our data are consistent with this pattern.

Not surprisingly, numbers of non-migratory species such as White-fronted Plovers were similar in our winter counts to previous summer counts. White-fronted Plover is consistently the most common resident wader there.

The small breeding colony of White-breasted Cormorants at Inhaca Lodge has increased. De Boer & Bento (1999) recorded six nests, while we counted 43, with most appearing to be active. Small flocks of Reed Cormorants were frequently seen over-flying and there was one larger flock of 37. This is similar to previous reports. We probably undercounted Green-backed Herons, while our counts for other herons and storks compare well with previous counts. Greater Flamingo numbers seem to vary widely over different years.

We recorded Caspian and Lesser Crested Terns in small numbers on the island. Notable was the complete absence of Little Terns, although we did see one in the Bay of Maputo. Birds seen during our two ferry journeys across the Bay of

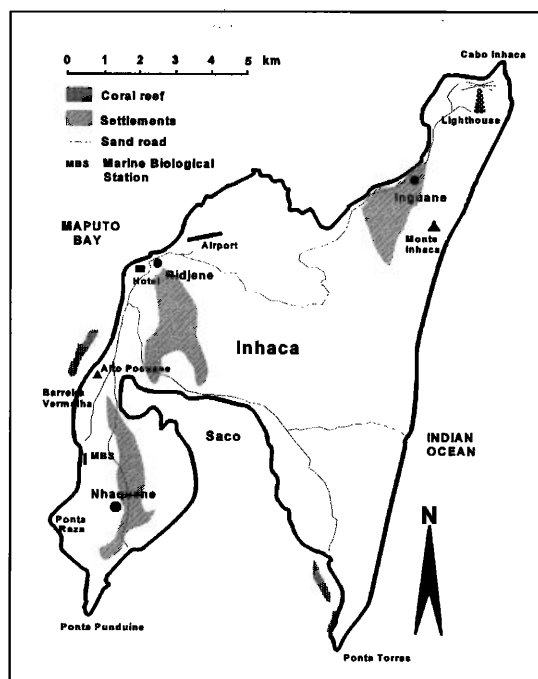


Fig. 1. Map of Inhaca Island, Mozambique, south-east Africa (26° S, 33° E).



Maputo between Maputo and the island included many Grey-headed Gulls, a number of Caspian Terns, one Sandwich Tern, a few Common Terns, one Lesser Crested Tern, one Little Tern, and one Kelp/Cape Gull.

Our data provide some of the first insights into the winter status of waders, waterbirds and seabirds on Inhaca Island. It also suggests changes in status of a few species over the last few years that may have nothing to do with season, such as the apparently increasing White-breasted Cormorant breeding colony.

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Table 1. Waterbirds recorded on Inhaca Island, 1–7 June 2003.

Species	Count number						Maximum
	1	2	3	4	5	6	
Pink-backed Pelican <i>Pelecanus rufescens</i>		5	10				10
Cape Gannet <i>Morus capensis</i>				73			73
White-breasted Cormorant <i>Phalacrocorax carbo</i>		3	2		4	9	84
Reed Cormorant <i>Phalacrocorax africanus</i>	1	1			7	2	37
Grey Heron <i>Ardea cinerea</i>		5			11		11
Black-headed Heron <i>Ardea melanocephala</i>							2
Little Egret <i>Egretta garzetta</i>		42	76	9	82		82
Cattle Egret <i>Bubulcus ibis</i>							4
Green-backed Heron <i>Butorides striatus</i>		7	1		1		7
Hamerkop <i>Scopus umbretta</i>				2			2
Woolly-necked Stork <i>Ciconia episcopus</i>				1			2
Yellow-billed Stork <i>Mycteria ibis</i>							6
Sacred Ibis <i>Threskiornis aethiopicus</i>		32		15			32
Hadedda Ibis <i>Bostrychia hagedash</i>		1					7
Greater Flamingo <i>Phoenicopterus ruber</i>		67			70		70
Spur-winged Goose <i>Plectropterus gambensis</i>						1	1
White-fronted Plover <i>Charadrius marginatus</i>	97					29	97
Kittlitz's Plover <i>Charadrius pecuarius</i>	1						1
Three-banded Plover <i>Charadrius tricollaris</i>							1
Grey Plover <i>Pluvialis squatarola</i>		2			1	1	2
Turnstone <i>Arenaria interpres</i>					1	3	3
Greenshank <i>Tringa nebularia</i>	10						10
Sanderling <i>Calidris alba</i>	58					25	58
Whimbrel <i>Numenius phaeopus</i>	12	4	25	7	1		25
Avocet <i>Recurvirostra avosetta</i>						6	6
Water Dikkop <i>Burhinus vermiculatus</i>		4					4
Kelp Gull <i>Larus dominicanus</i>							1
Caspian Tern <i>Hydroprogne caspia</i>	21	1	4		6	22	22
Lesser Crested Tern <i>Sterna bengalensis</i>						9	9
Pied Kingfisher <i>Ceryle rudis</i>	1	1	1			1	1
Mangrove Kingfisher <i>Halcyon senegaloides</i>		1			1		1
Total	201	176	119	107	185	108	671

Notes:

Count 1: 01/06/2003, MBS to Punduine, 15h00–17h15, rising tide
 Count 2: 03/06/2003, Saco, 10h10–14h02, tide becoming low
 Count 3: 05/06/2003, Saco, 8h30, high tide
 Count 4: 05/06/2003, lighthouse beach, 13h58 and 15h30

Count 5: 06/06/2003, Saco, 9h00 and 13h38 and 16h00
 Count 6: 07/06/2003, MBS to Ponta Raza, 7h30–8h05, tide rising
 Maximum: the maximum count of all counts and incidental observations anywhere on the island is used, rather than totals which would include duplicates.



Table 2. Waterbirds recorded on Inhaca Island – maxima. Year of count and austral season.

	1968 ^a autumn	1976 ^b summer	1976 ^c summer	1989 ^d summer	1995 ^e	1996 ^e	1997 ^e	2003 ^f winter
Shy Albatross <i>Thalassarche cauta</i>		2						
Yellow-nosed Albatross <i>Thalassarche chlororhynchos</i>		2						
White-chinned Petrel <i>Procellaria aequinoctialis</i>		6						
Pink-backed Pelican <i>Pelecanus rufescens</i>		6			6	2	1	10
Cape Gannet <i>Morus capensis</i>		40			1	3	0	73
White-breasted Cormorant <i>Phalacrocorax carbo</i>		35			12	10	9	84
Cape Cormorant <i>Phalacrocorax capensis</i>		14			1	4	0	
Reed Cormorant <i>Phalacrocorax africanus</i>		40			14	0	23	37
Grey Heron <i>Ardea cinerea</i>					22	13	35	11
Black-headed Heron <i>Ardea melanocephala</i>					0	2	0	2
Little Egret <i>Egretta garzetta</i>					122	6	55	82
Cattle Egret <i>Bubulcus ibis</i>								4
Green-backed Heron <i>Butorides striatus</i>					38	31	46	7
Hamerkop <i>Scopus umbretta</i>								2
Woolly-necked Stork <i>Ciconia episcopus</i>					2	0	1	2
Yellow-billed Stork <i>Mycteria ibis</i>					5	12	26	6
Sacred Ibis <i>Threskiornis aethiopicus</i>					30	6	1	32
Hadedda Ibis <i>Bostrychia hagedash</i>					0	5	2	7
Greater Flamingo <i>Phoenicopterus ruber</i>					1027	518	0	70
Spur-winged Goose <i>Plectropterus gambensis</i>								1
Great Ringed Plover <i>Charadrius hiaticula</i>	y		1		99	124	58	
White-fronted Plover <i>Charadrius marginatus</i>	y				118	32	144	97
Kittlitz's Plover <i>Charadrius pecuarius</i>				40	1	0	0	1
Three-banded Plover <i>Charadrius tricollaris</i>								1
Mongolian Plover <i>Charadrius mongolus</i>				4	0	1	0	
Greater Sandplover <i>Charadrius leschenaultii</i>			12	200	26	38	108	
Grey Plover <i>Pluvialis squatarola</i>	y		32	415	610	564	904	2
Ruddy Turnstone <i>Arenaria interpres</i>	y		12	16	296	343	494	3
Terek Sandpiper <i>Xenus cinereus</i>	y		78	12	345	200	529	
Common Sandpiper <i>Actitis hypoleucos</i>	y		4	2	3	1	8	
Greenshank <i>Tringa nebularia</i>			7	4	349	243	556	10
Red Knot <i>Calidris canutus</i>			25					
Curlew Sandpiper <i>Calidris ferruginea</i>	y		89	1	1473	795	2272	
Sanderling <i>Calidris alba</i>	y		127	124	195	297	635	58
Bar-tailed Godwit <i>Limosa lapponica</i>					47	133	61	
Eurasian Curlew <i>Numenius arquata</i>	y			48	3	5	3	
Whimbrel <i>Numenius phaeopus</i>	y		15	13	1554	1322	2168	25
Pied Avocet <i>Recurvirostra avosetta</i>								6
Black-winged Stilt <i>Himantopus himantopus</i>					1	0	0	
Crab Plover <i>Dromas ardeola</i>	y		2	55				
Water Dikkop <i>Burhinus vermiculatus</i>								4
Arctic Skua <i>Stercorarius parasiticus</i>		4						
Subantarctic Skua <i>Catharacta antarctica</i>	y							
Kelp Gull <i>Larus dominicanus</i>		1			0	3	0	1
Lesser Black-backed Gull <i>Larus fuscus</i>		1						
Grey-headed Gull <i>Larus cirrocephalus</i>		350			29	33	37	
Caspian Tern <i>Hydroprogne caspia</i>	y	250			3	25	9	22
Swift Tern <i>Sterna bergii</i>	y	300			9	39	22	
Lesser Crested Tern <i>Sterna bengalensis</i>	y	15			13	169	77	9
Sandwich Tern <i>Sterna sandwicensis</i>	y	450			29	31	11	
Common Tern <i>Sterna hirundo</i>	y	2000	46		4	0	52	
Black-naped Tern <i>Sterna sumatrana</i>		4						
Sooty Tern <i>Sterna fuscata</i>		4						
Little Tern <i>Sterna albifrons</i>	y	150			32	8	148	
White-winged Tern <i>Chlidonias leucopterus</i>		2						
Lesser Frigatebird <i>Fregata ariel</i>					0	0	1	
Pied Kingfisher <i>Ceryle rudis</i>					10	2	4	1
Malachite Kingfisher <i>Alcedo cristata</i>								
Mangrove Kingfisher <i>Halcyon senegaloides</i>								1
Cape Wagtail <i>Motacilla capensis</i>					4	0	4	
Total count		3,676	450	934	6,533	5,020	8,504	671

^a Jensen 1968, list of waders and terns in March–April, y = species recorded.^b Brooke *et al.* 1981, Table 1. Seabirds counted 26 Oct.–11 Nov.^c SAFRING unpubl. data. Waders ringed in Oct.–Dec.^d Nilsson & Shubin 1998, tables 3–5. Waders counted in Dec.^e de Boer 2000, p. 156. Waterbirds counted.^f This study, maximum column in Table 1. Waterbirds counted in June.