

# Waders on the southern Mozambique coast

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Thirty-one species of wader were recorded from 1985-1989 on the Maputo coast and on Inhaca and Portuguese Island, Mozambique. The greatest diversity of waders, 16-21 species, was recorded in November-February; the lowest diversity, 10-11 species, in May-July. On the south-western coast of Inhaca Island and on Portuguese Island about 1,000 waders of 14 species were counted in December. The most abundant were Grey Plover *Pluvialis squatarola* (428 birds), Greater Sandplover *Charadrius leschenaultii* (200), Sanderling *Calidris alba* (129), Crab Plover *Dromas ardeola* (55), Curlew *Numenius arquata* (48), and Kittlitz's Plover *Charadrius pecuarius* (40).

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С 1985 по 1989 г. на побережье Мапуто и на островах Инхака и Португальский, Мозамбик, был зарегистрирован 31 вид куликов. Самое большое разнообразие куликов, от 16 до 21 вида, было отмечено в период с ноября по февраль; самое низкое разнообразие, от 10 до 11 видов, - в мае-июле. На юго-западном берегу острова Инхака и на о. Португальский в декабре было учтено около тысячи куликов 14 видов. Самыми многочисленными были тулес *Pluvialis squatarola* (428 особей), тольстоклювый зуек *Charadrius leschenaultii* (200), песчанка *Calidris alba* (129), рачья ржанка *Dromas ardeola* (55), большой кроншнеп *Numenius arquata* (48), и малый морской зуек *Charadrius pecuarius* (40).

## Introduction

Special ornithological studies have not yet been conducted in Mozambique due to the rather complicated political situation there. Thus, even fragmentary data could be of interest. While working in this country in the educational sphere (P. Nilsson in 1985-1989, A. Shubin in 1987-1989) we had an opportunity to carry out some observations on birds, particularly on waders, which are presented in this paper.

## Study area

Data were obtained mostly during week-end observations on the Maputo coast and in the area

immediately surrounding it (Figure 1), throughout the whole year. In addition, in May, June, August, November (P. Nilsson) and December (A. Shubin) short-term trips, usually not lasting longer than 10 days, were made to Inhaca and Portuguese Island. Here, observations were conducted mainly in the south-western part of Inhaca Island, in the area of the Marine Biological Research Station of Eduardo Mondlane University. In December 1989, several wader counts were carried out on the coasts in the vicinity of this station and along the whole coastline of Portuguese Island.

The main habitat used by waders in this area was uniform sandy beaches with sandflats and patches

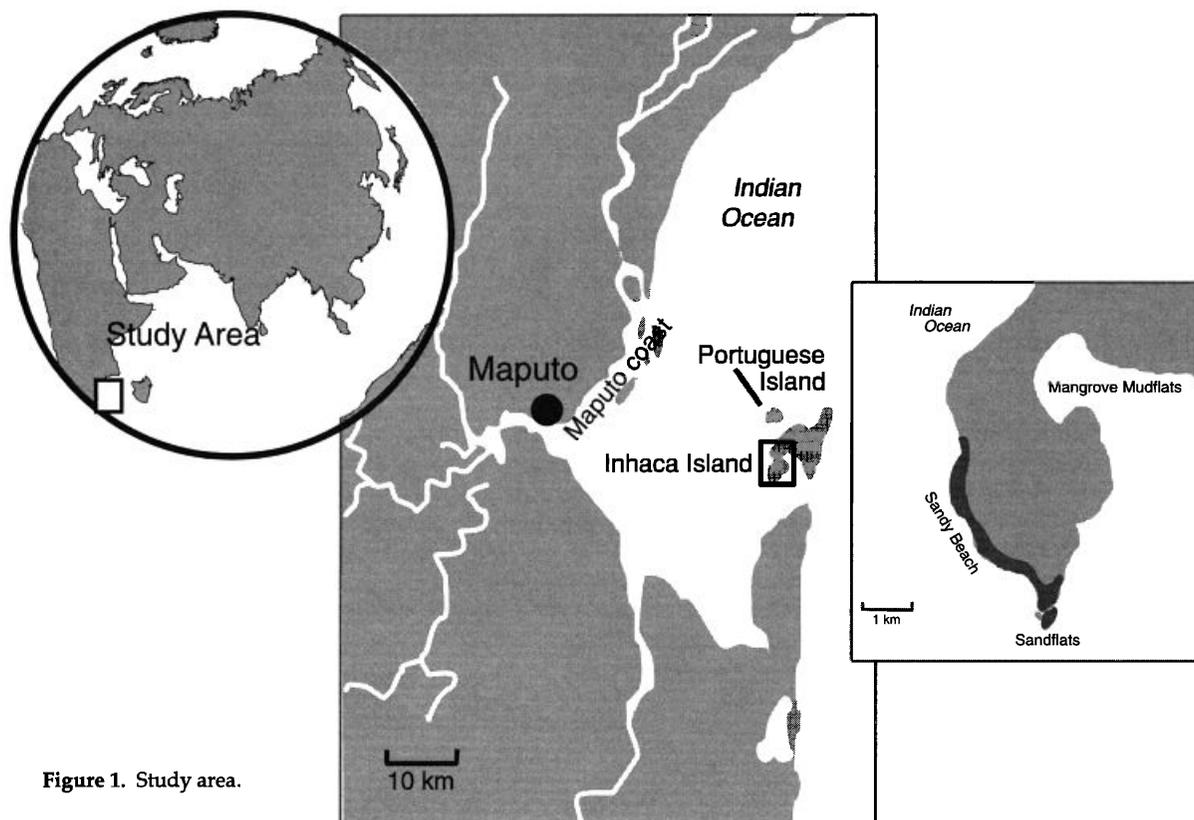


Figure 1. Study area.

of mudflats, with marine vegetation uncovered at low tide. On Inhaca and Portuguese Islands, coral remnants were also rather common on the intertidal area. Waders also fed on mudflats amongst the mangroves.

## Results and Discussion

### The list and status of waders

We recorded a total of 31 wader species (Tables 1 & 2). On the Maputo coast, the wader species list was approximately twice as large as on Inhaca and Portuguese Islands, although we should take into account the short-term nature of observations in the latter area. Among the waders recorded on the Islands, only three (Oystercatcher *Haematopus ostralegus*, Curlew *Numenius arquata* and Crab Plover *Dromas ardeola*) were not found near the Maputo coast. The most diverse wader fauna, with 16-21 species, was found in the period November to February; with the least diverse, 10-11 species, in the period May to July.

Eleven species were observed throughout the whole year: White-fronted Plover *Charadrius marginatus*, Kittlitz's Plover *Charadrius pecuarius*, Three-banded Plover *Charadrius tricollaris*, Grey Plover *Pluvialis squatarola*, Turnstone *Arenaria interpres*, Terek Sandpiper *Xenus cinereus*, Wood Sandpiper *Tringa glareola*, Greenshank *Tringa nebularia*, Curlew Sandpiper *Calidris ferruginea*, Sanderling *Calidris alba* and Whimbrel *Numenius phaeopus*.

Seven species were observed from Northern autumn to spring: African Jacana *Actophilornis africana*, Ringed Plover *Charadrius hiaticula*, Greater

Sandplover *Charadrius leschenaultii*, Common Sandpiper *Actitis hypoleucos*, Knot *Calidris canutus*, Black-winged Stilt *Himantopus himantopus* and Collared Pratincole *Glareola pratincola*.

Four species were observed from Northern winter to spring: Lesser Sandplover *Charadrius mongolus*, Marsh Sandpiper *Tringa stagnatilis*, Little Stint *Calidris minuta*, and Ruff *Philomachus pugnax*. Chestnut-banded Sandpipers *Charadrius pallidus* were recorded irregularly in June, July and December. Six of the eight uncommon species were found in winter: Lesser Jacana *Microparra capensis* (February), Pacific Golden Plover *Pluvialis fulva* (February), Oystercatcher (December), Curlew (December), Crab Plover (December) and Water Dikkop *Burhinus vermiculatus* (January). Only two uncommon species were recorded in summer: Blacksmith Plover *Vanellus armatus* (June) and Bar-tailed Godwit *Limosa lapponica* (August).

### Numbers of waders on Inhaca and Portuguese Island in December 1989

On Inhaca Island, both the most diverse wader fauna and the highest numbers were recorded on the sandflats during low tides (Table 3). On the sandy beaches and mangrove mudflats waders were not as numerous (Tables 4 & 5). A total of 13 wader species were observed in December 1989 on Inhaca Island, with a total of not less than 970 (on Table 3 total is 916) birds (the sum of the maximum estimate for each species). Only 22 birds of four wader species were recorded on Portuguese Island

**Table 1.** The list and status of wader species observed on the Maputo coast and surrounding area.

English name	Scientific Name	Month											
		J	F	M	A	M	J	J	A	S	O	N	D
African Jacana	<i>Actophilornis africanus</i>	+	-	+	+	-	-	-	-	+	+	+	+
Lesser Jacana	<i>Microparra capensis</i>	-	+	-	-	-	-	-	-	-	-	-	-
Ringed Plover	<i>Charadrius hiaticula</i>	+	+	+	+	-	-	-	-	+	-	+	
White-fronted Plover	<i>Charadrius marginatus</i>	+	+	+	+	+	+	+	+	+	+	+	+
Chestnut-banded Plover	<i>Charadrius pallidus</i>	-	-	-	-	-	+	+	-	-	-	-	+
Kittlitz's Plover	<i>Charadrius pecuarius</i>	+	-	-	+	+	+	+	-	-	+	-	+
Three-banded Plover	<i>Charadrius tricollaris</i>	-	+	+	-	+	+	-	-	+	+	+	+
Mongolian Plover	<i>Charadrius mongolus</i>	+	+	-	-	-	-	-	-	-	-	-	+
Sand Plover	<i>Charadrius leschenaultii</i>	-	+	-	+	-	-	-	-	-	-	+	+
Pacific Golden Plover	<i>Pluvialis fulva</i> #	-	+	-	-	-	-	-	-	-	-	-	-
Grey Plover	<i>Pluvialis squatarola</i>	+	+	+	+	+	+	-	+	+	+	+	+
Blacksmith Plover	<i>Vanellus armatus</i>	-	-	-	-	-	+	-	-	-	-	-	-
Turnstone	<i>Arenaria interpres</i>	+	+	+	+	+	+	+	+	+	+	+	+
Terek Sandpiper	<i>Xenus cinereus</i>	+	+	+	+	+	+	-	+	+	+	+	+
Common Sandpiper	<i>Actitis hypoleucos</i>	+	+	+	-	-	-	+	+	+	+	+	+
Wood Sandpiper	<i>Tringa glareola</i>	+	+	+	+	-	-	+	-	+	+	+	-
Marsh Sandpiper	<i>Tringa stagnatilis</i>	-	+	-	-	-	-	-	-	-	-	+	-
Greenshank	<i>Tringa nebularia</i>	+	+	+	+	+	+	-	+	+	+	+	+
Knot	<i>Calidris canutus</i>	+	+	-	-	-	-	-	+	-	+	+	+
Curlew Sandpiper	<i>Calidris ferruginea</i>	+	+	+	+	+	-	-	+	+	+	+	+
Little Stint	<i>Calidris minuta</i>	+	-	-	+	-	-	-	-	-	-	-	-
Sanderling	<i>Calidris alba</i>	+	+	+	+	+	+	+	+	+	+	+	+
Ruff	<i>Philomachus pugnax</i>	+	+	+	-	-	-	-	-	-	-	-	-
Bar-tailed Godwit	<i>Limosa lapponica</i>	-	-	-	-	-	-	-	+	-	-	-	-
Whimbrel	<i>Numenius phaeopus</i>	+	+	+	+	+	+	+	+	+	+	+	+
Black-winged Stilt	<i>Himantopus himantopus</i>	+	+	+	-	-	-	+	-	-	+	-	-
Water Dikkop	<i>Burhinus vermiculatus</i>	+	-	-	-	-	-	-	-	-	-	-	-
Collared Pratincole	<i>Glareola pratincola</i>	-	+	-	-	-	-	+	+	+	-	+	-

# - at that time *P. dominica* included *P. fulva*; + - the species was recorded; - - the species was not recorded.

**Table 2.** The list and status of wader species observed on Inhaca and Portuguese Island.

English name	Scientific name	Month											
		J	F	M	A	M	J	J	A	S	O	N	D
Oystercatcher	<i>Haematopus ostralegus</i>	-	-	-	-	-	-	-	-	-	-	-	+
White-fronted Plover	<i>Charadrius marginatus</i>	-	-	-	-	+	+	-	+	-	-	+	-
Kittlitz's Plover	<i>Charadrius pecuarius</i>	-	-	-	-	+	-	-	-	-	-	-	+
Three-banded Plover	<i>Charadrius tricollaris</i>	-	-	-	-	+	-	-	-	-	-	-	-
Mongolian Plover	<i>Charadrius mongolus</i>	-	-	-	-	-	-	-	-	-	-	-	+
Sand Plover	<i>Charadrius leschenaultii</i>	-	-	-	-	-	-	-	-	-	-	-	+
Grey Plover	<i>Pluvialis squatarola</i>	-	-	-	-	-	+	-	+	-	-	+	+
Turnstone	<i>Arenaria interpres</i>	-	-	-	-	-	+	-	+	-	-	-	+
Terek Sandpiper	<i>Xenus cinereus</i>	-	-	-	-	-	-	-	-	-	-	-	+
Common Sandpiper	<i>Actitis hypoleucos</i>	-	-	-	-	-	-	-	-	-	-	-	+
Greenshank	<i>Tringa nebularia</i>	-	-	-	-	+	+	-	-	-	-	+	+
Curlew Sandpiper	<i>Calidris ferruginea</i>	-	-	-	-	-	-	-	-	-	-	-	+
Sanderling	<i>Calidris alba</i>	-	-	-	-	-	-	-	-	-	-	+	+
Curlew	<i>Numenius arquata</i>	-	-	-	-	-	-	-	-	-	-	-	+
Whimbrel	<i>Numenius phaeopus</i>	-	-	-	-	+	+	-	+	-	-	+	+
Crab Plover	<i>Dromas ardeola</i>	-	-	-	-	-	-	-	-	-	-	-	+

(Table 6); among them was Oystercatcher, which was not found anywhere else in the study areas. In total, not less than 992 birds of 14 wader species were present in the study area of both islands. We should mention, that according to personal

communication of Mr. Costa, the Director of Marine Biological Research Station, the numbers of waders that year were much lower than in the same seasons of other years.

**Table 3.** Numbers of waders during low tides on 1 ha of sandflats on Inhaca Island in December 1989.

Species	Dates of observation				Maximum number
	5 Dec.	7 Dec.	8 Dec.	9 Dec.	
Kittlitz Plover	28	40	>10	-	40
Mongolian Plover	-	-	4	-	4
Sand Plover	-	200	22	-	200
Grey Plover	300	255	415	33	415
Turnstone	1	16	13	14	16
Terek Sandpiper	-	-	2	-	2
Greenshank	-	-	2	-	2
Curlew Sandpiper	-	-	1	-	1
Sanderling	100	3	124	20	124
Curlew	-	-	48	-	48
Whimbrel	8	9	-	9	9
Crab Plover	-	5	55	-	55
Total no. birds	437	528	696	76	916
Number of species	5	7	11	4	12

**Table 4.** Numbers of waders during low tides on 2 km of sandy beach on Inhaca Island in December 1989.

Species	Dates of observations						Maximum number
	2 Dec.	3 Dec.	6 Dec.	8 Dec.	9 Dec.	10 Dec.	
Grey Plover	3	-	-	2	-	2	3
Common Sandpiper	2	1	-	-	-	-	2
Greenshank	4	3	-	1	2	1	4
Sanderling	-	-	-	5	-	2	5
Whimbrel	2	4	1	6	1	3	6
<i>Tringa</i> sp.	-	-	-	-	2	-	2
Total no. birds	11	8	1	14	5	8	22
Number of species	4	3	1	4	3	4	5

**Table 5.** Numbers of waders during low tide on 3 ha of mangrove mudflats at Inhaca Island on 3 December 1989.

Species	No. of birds
Grey Plover	7
Terek Sandpiper	12
Whimbrel	13
Total no. birds	32
No. of species	3

**Table 6.** Wader numbers during low tide on all the sandy beaches (6 km) of Portuguese Island on 4 December 1989.

Species	No. of birds
Oystercatcher	2
Grey Plover	3
Greenshank	8
Whimbrel	9
Total no. birds	22
No. of species	4

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