

SUMMER COUNTS OF WADERS AT SOME LOCALITIES IN SOUTH AFRICA

by Gerlof Th. de Roos

Introduction

In recent years knowledge of the distribution of shorebirds and their migration through Europe and N. and S.Africa has increased greatly. During a stay in Cape Town on the occasion of the Symposium on Birds of the Sea and Shore in the University of Cape Town, I had the opportunity to count waders and seabirds at some coastal and inland localities. Regular counts were and are made there by the Western Cape Wader Study Group (Summers et al. 1976).

Study Area

From 17 November to 21 December waders were counted at 9 coastal localities, with different wetland types, and one inland locality in the Kruger National Park (see Fig.1 and Table 1). The habitats included salt marshes, sandy beaches, marshes, riverbanks, muds, salt pans and rocky beaches. The tidal areas were counted at high tide. Note that locality 10, which includes the Hilowenidam and the Orpendam, in the Kruger National Park, is not shown in Fig.1. The Kruger National Park is situated within the descending plains adjoining the Mozambique coast to the east and the Drakensberg Mountain escarpment to the west. The Rietvlei near Milnerton (location 4 in Fig.1) is a large seasonal vlei formed by the flooding of the Diep River (Summers et al. 1976). Dredging operations and the pumping of sea water into a large part of the vlei have drastically reduced the habitat suitable for waders and other waterbirds.

The Gouritz estuary (location 2) has a sandy mouth but mud banks, supporting *Zostera* beds, occur further up. The west bank is a salt marsh with *Arthrocnemum*. The Langebaan Lagoon is a large inlet of the sea with sand flats and *Arthrocnemum*/*Spartina* salt marshes and *Zostera* beds on the sand flats. The Berg estuary consists of an estuary and salt pans. On the south bank salt pans have developed. Small mud banks flank the river below the road bridge whilst above the bridge they are extensive and support large *Zostera* beds (Summers et al. 1976). In some areas tourism is an important factor, with associated activities including the flying of radio-controlled model aeroplanes at the borders of the Rietvlei; yachting, speed-boating, water-skiing, swimming and fishing in the Langebaan Lagoon; sport fishing and a marina in the Berg estuary; and boating in the Gouritz estuary.

Counts and discussion

A total of about 3000 waders, belonging to 27 species, were seen. Among them Ruff *Philomachus pugnax*, Curlew Sandpiper *Calidris ferruginae* and Whimbrel *Numenius phaeopus* were the most abundant species (Table 1). The largest number of Ruff (2000) was counted at the Rietvlei near Milnerton (location 4 in Fig.1).

Resident species in Table 1 are: Painted Snipe *Rostratula benghalensis*, Black Oystercatcher *Haematopus moquini*, Avocet *Recurvirostra avosetta*, Stilt *Himantopus meridionalis*, Dikkop *Burhinus capensis*, White-fronted Sandplover *Charadrius marginatus*, Chestnut-banded Sandplover *Charadrius pallidus*, Kittlitz's Sandplover *Charadrius pecuarius*, Crowned Plover *Stephanibyx coronatus* and Blacksmith Plover *Hoplopterus armatus*. Note that in the Gouritz River area 6 pairs of White-fronted Sandpipers with young were seen and also 1 pair of Kittlitz Plovers with young. In the dunes along the Gouritz River 10 pairs of Crowned Plovers with young were located. Two seabird observations are also worth mentioning. In the Kruger Park locality 5 Sooty Terns *Sterna fuscata* were seen on 2 December 1979 foraging in a lake between the Satara and Skukuza camps, while in the Gouritz River mouth on 15 December 1979 4 Damara Terns *Sterna balaenarum* were observed during their foraging and resting behaviour. This is very surprising because the Damara Tern has not been recorded previously east of Cape Agulhas (Mc Lachlan et al. 1978).

Acknowledgements

These counts would not have been possible without the help of Dr. J. Cooper and Mr. G.D. Underhill who transported me to interesting wader areas. In addition my family invited me to their summer cottage near the Gouritz River mouth, where waders also occur.

References

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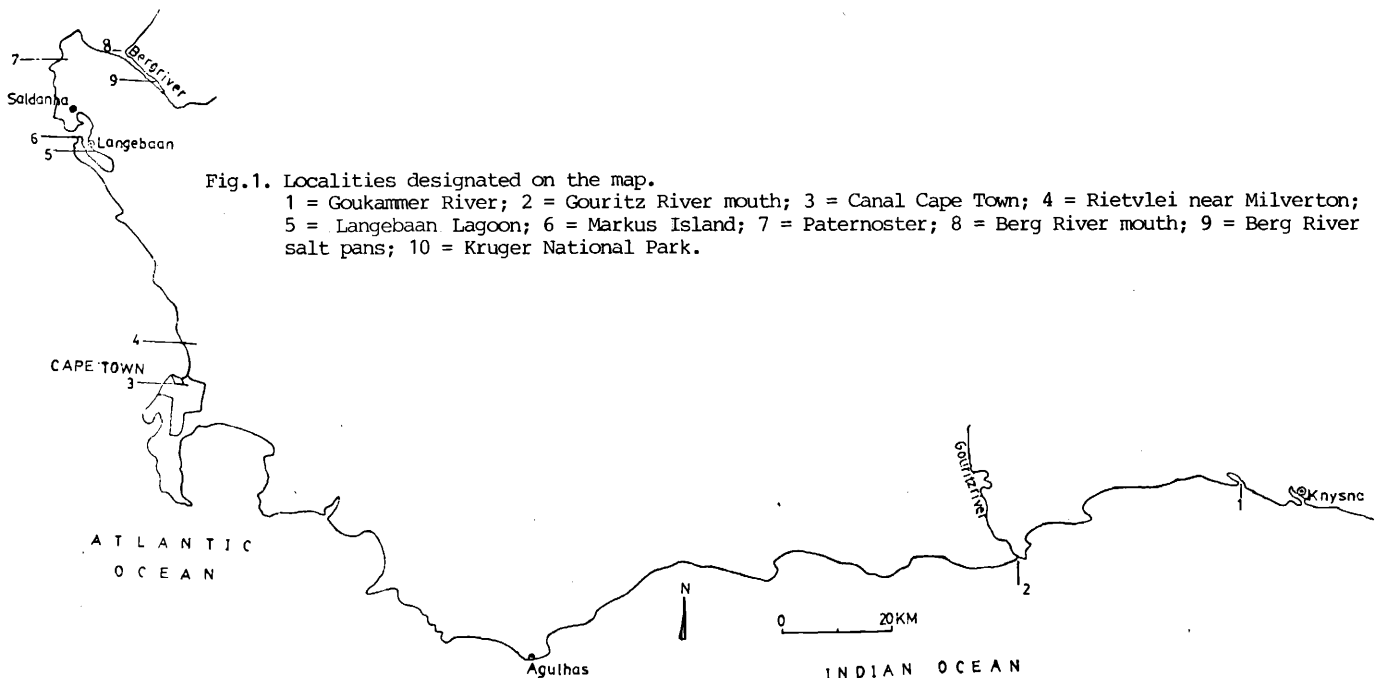


Fig.1. Localities designated on the map.
1 = Goukammer River; 2 = Gouritz River mouth; 3 = Canal Cape Town; 4 = Rietvlei near Milnerton; 5 = Langebaan Lagoon; 6 = Markus Island; 7 = Paternoster; 8 = Berg River mouth; 9 = Berg River salt pans; 10 = Kruger National Park.

Table 1. Numbers of birds seen in each locality in 1979

Locality	1	2	3	4	5	6	7	8	9	10	Total
Habitats present	A M	I B	M	C	B I	R	A	I	S	D	
Date	21-12	15-12	23-11	17-11	23-11	8-12	8-12	9-12	9-12	2-12	
Painted Snipe <i>Rostratula benghalensis</i>									1		1
Black Oystercatcher <i>Haematopus moquini</i>				10		40					50
Curlew <i>Numenius arquata</i>		2									2
Wimbrel <i>Numenius phaeopus</i>		18		200							218
Avocet <i>Recurvirostra avosetta</i>							4	10	4		18
Stilt <i>Himantopus meridionalis</i>	1		8	5			1	12	1		28
Dinkop <i>Burhinus capensis</i>	3										3
Turnstone <i>Arenaria interpres</i>		10			2	25					37
Ringed Plover <i>Charadrius hiaticula</i>		26			2						28
White-fronted Sandplover <i>Charadrius marginatus</i>		20	1		4	2					27
Chestnut-banded Sandplover <i>Charadrius pallidus</i>									1		1
Kittlitz's Sandplover <i>Charadrius pecuarius</i>		4				2			2		8
Grey Plover <i>Plover squatarola</i>		30			1	1		8			40
Crowned Plover <i>Stephanibyx coronatus</i>		12				1					13
Blacksmith Plover <i>Hoplopterus armatus</i>			2			2	10		10	6	30
Long-toed Plover <i>Hemiparra crassirostris</i>										1	1
Curlew Sandpiper <i>Calidris ferruginae</i>		2	25		90		15	110	22		264
Dunlin <i>Calidris alpina</i>		3									3
Little Stint <i>Calidris minuta</i>						3	3				6
Knot <i>Calidris canutus</i>		40			10	6					56
Sanderling <i>Calidris alba</i>		20			5	50					75
Ruff <i>Philomachus pugnax</i>				2000			95			2	2097
Terek Sandpiper <i>Xenus cinereus</i>		5			1						6
Common Sandpiper <i>Tringa hypoleucos</i>		4								4	8
Marsh Sandpiper <i>Tringa stagnatilis</i>							3		30		34
Greenshank <i>Tringa nebularia</i>	1	2						1			4
Wood Sandpiper <i>Tringa glareola</i>									1		1
											3059

Localities: 1 = Goukammer River; 2 = Gouritz River mouth; 3 = Canal Cape Town; 4 = Rietvlei near Milnerton; 5 = Langebaan Lagoon; 6 = Markus Island; 7 = Paternoster; 8 = Berg River mouth; 9 = Berg River salt pans; 10 = Kruger National Park.
Habitats: A = Salt-marsh; B = Sandy Beach; C = Marsh; D = Riverbank; I = Intertidal mud; M = Mud; R = Rocky beach; S = Salt pans.

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PROBLEMS IN CENSUSING BREEDING WADERS IN S.W. ICELAND

by Ron Summers and Mike Nicoll

Recently, there has been much interest in estimating the populations of breeding waders, in an attempt to measure the effects of the continuing and increasing drainage of the few remaining wetlands in lowland Britain. Some of the problems in counting breeding waders have been identified by Dyrce and Tomiatocj (1974); for example, incubating birds may leave their nests and territory undetected, or neighbouring pairs may join territory holders to mob the observer. Waders vary in size, crypsis and breeding behaviour, so the methodology has to vary according to the species and the habitat in which they breed. Therefore, the problems we encountered in attempting to census waders during a visit to Iceland, 5-19 June 1981, may be of interest.

We attempted to estimate the density of breeding waders on a sedge marsh north of Selfoss, south-west Iceland. It was about eight hectares in size and composed of sedges, mosses, and prostrate willows and birches. The vegetation formed turf hummocks about half a metre across and about 20 cm high, surrounded by shallow water with emergent sedges. The hummocks made walking difficult, and the small waders were not easy to see.

Four pairs of Black-tailed Godwits *Limosa limosa* were present. They were easy to count, for the non-incubating bird stood on a prominent mound and defended the territory.

The smaller species were less easy. We attempted to flush incubating Dunlins *Calidris alpina* and Snipe *Gallinago gallinago* from their nests by dragging a 50 metre nylon cord (diameter 4 mm) between us. By pacing the distance walked, we knew the area that we were dragging. It became apparent that the Dunlins and Snipe that we flushed from nests were close to where we were walking, and no nests were located in areas where the cord had flushed birds. This suggested that the dragged cord was inefficient in flushing incubating birds, but did flush non-incubating birds which we would have otherwise not seen.

To test the effectiveness of the cord we dragged the centre portion of it over the Dunlin nests we had already found. Four nests and eight adults (trapped afterwards) were involved, and on seven occasions the cord passed over the sitting bird without flushing it. The nests were all on the tops of hummocks so the cord would have passed within a centimetre or two above the bird. This test shows the ineffectiveness of this technique. All clutches were in advanced stages of incubation, for the eggs floated to the surface when put in water. The dragged cord may be more effective at earlier stages of incubation. Also the technique may be more effective if a rope was used instead of a cord, or where waders nest among shorter vegetation. Wherever this technique is used however, it would first have to be tested over known nests to establish its efficiency.

The exercise also brought to light the problem of censusing non-incubating birds on the marsh (we were walking 50 m apart). Had we not dragged the cord we would have been unaware of the numbers of Dunlin, Snipe and Red-necked Phalaropes *Phalaropus lobatus* present, presumably feeding, among the hummocks.

Reference

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