## WADERS AND WATERBIRDS ON DUBAI CREEK by I. Smart, G. A. Miles and M. West

Readers may recall a report by Harry Green of a conversation with George Miles about Palearctic waders in Dubai (<u>WSG Bull.</u> 33:1) In this note we give a more detailed account of the numbers of waders and other birds on mudflats in Dubai throughout the year. These suggest that Dubai is an important migration stopover and wintering site for several species of waders.

Dubai is situated at the southern end of the Arabian Gulf (Figure 1). It has a naturally-formed tidal creek extending some 8 km inland. This terminates in a large, round, area approximately 7 km in diameter, which has extensive tidal mudflats. On most days the mudflats are about 0.5 km wide at low water. Occasionally, on extreme tides, the whole creek empties at low water. Ragworms, probably <u>Nereis</u>, were abundant in the mudflats. These mudflats, the surrounding sandy shores, and the shallow warm water, provide suitable habitat for a large number and variety of wintering birds.



Figure 1. The location of Dubai in the Arabian Gulf.

We made observations of the whole creek at weekly intervals between May 1981 and May 1982, using binoculars and telescopes. Table 1 summarises these observations. The numbers of birds seen between 1979 and 1981 were similar to those in Table 1. Where actual numbers of birds are given in Table 1, the peak number in that month is shown. Both Black-tailed Godwits Limosa limosa and Bar-tailed Godwits Limosa lapponica occurred at Dubai, but during winter we often had difficulty in distinguishing between them at long range. Numbers of these species have therefore been combined in Table 1. Similarly, adult Herring Gulls and Lesser Black-backed Gulls could not always be distinguished, so their numbers have been combined.

Table 1. The abundance of birds on the Dubai Creek mudflats between May 1981 and April 1982.

		May	June	July	Aug	Sept	Oct	Nov .	Dec	Jan	Feb	March	April
Cormorant	Phalacrocorax carbo								a	a		a	
Grey Heron	Ardea cinerea			ь		b	b	с	c	с	с	с	
Reef Heron	Earetta gularis	a		b		b	b	с	с	Ċ	с	с	
Spoonbill	Platalea leucorodia								11	19	21	21	4
Greater Flamingo	Phoenicopterus ruber	ь	2			,	а	а	a	а	a	b	а
Mallard	Anas platyrhynchos								а	а	a	a	
Teal	Anas <sup>c</sup> rečca <sup>č</sup>								с	с	с	с	
Pintail	Anas acuta						a	a	а	b	a	a	
Shoveler	Anas clupeata								7	3			•
Oystercatcher	Haematopus ostralegus		3	6		17	16	a	a	a	a	a	а
Black-winged Stilt	Himantopus himantopus						16			9		• • •	
Avocet	Recurvirostra avosetta							5	6	6			
Ringed Plover	Charadrius hiaticula	а	1	a		a	а	а	а	b	b	c _	a _
Little Ringed Plover	Charadrius dubius	6*	6*	6								6*	6*'
Kentish Plover	Charadrius alexandrinus	a*	1*	с		c	с	с	с	с	đ	с	a*
Grey Plover	Pluvialis squatarola	а	1	a		a	a	b	b	с	с	с	đ
Dunlin	Calidris alpina					а	с	с	đ	d d	9000	d	с
Little Stint	Calidris minutus						с	а	a	а	а	с	a
Knot	Calidris canutus	a											
Sanderling	Calidris alba							c	:1000		c1000		
Redshank	Tringa totanus			с		с	đ	d	đ	đ	đ	d	с
Spotted Redshank	Tringa erythropus						6			3			
Greenshank	Tringa nebularia					a	a	a	a	а			
Common Sandpiper	Actitis hypoleucos					а	а						
Curlew	Numenius arguata	а	1	с		с	с	с	d	с	с	с	с
Whimbrel	Numenius phaeopus						а						a
Godwits	Limosa spp.	a	1			с	đ	c	с	a	с	с	С
Great Black-headed Gull	Larus ichthyaetus			с								5	6
Herring/Lesser Black-ba	/fusc	นธ						ь	b	a	а	а	
Slender-billed Gull	Larus genei	a	1	с		с	с	d	đ	d	d	đ	С
Little Gull	Larus minutus			a		a	а						a

Numbers give actual numbers of birds counted. Letters give abundance: a = 10-30 birds, b = 31-100 birds, c = 101-500 birds, d = 501-1000 birds, \* = suspected breeding. \* = confirmed breeding. \* = suspected breeding. No counts were made during August. Most waders use the mudflats during both spring and autumn passage, and as a wintering site. The most abundant waders were Dunlins <u>Calidris alpina</u> (up to 9000 birds) and Sanderlings <u>Calidris alba</u> (about 1000 birds). We saw Sanderlings only in December and February. Other numerous wintering waders, occurring at least in some hundreds, were Ringed Plovers <u>Charadrius hiaticula</u>, Kentish Plovers <u>Charadrius alexandrinus</u>, Grey Plovers <u>Pluvialis</u> <u>squatarola</u>, Little Stints <u>Calidris minutus</u>, Redshanks <u>Tringa totanus</u>, Curlews <u>Numenius arquata</u> and godwits. However, the pattern of occurrence differed between species. Grey Plovers and Ringed Plovers were particularly numerous on spring passage, and few occurred during autumn. Similarly, few Dunlins occurred on autumn passage. In contrast, numbers of Curlews, godwits and Kentish Plovers were similar in spring and autumn. Few Little Stints or Whimbrels Numenius phaeopus were present outside migration periods.

In addition to wintering and passage waders, we found small populations of breeding Little Ringed Plovers <u>Charadrius</u> <u>dubius</u> and Kentish Plovers.

Other birds that used the Dubai Creek mudflats in appreciable numbers during migration and for wintering were Grey Herons <u>Ardea cinerea</u>, Reef Herons <u>Egretta gularis</u>, Greater Flamingoes <u>Phoenicopterus ruber</u> (especially during spring and autumn), Teal <u>Anas creeca</u>, and Slender-billed Gulls <u>Larus genei</u>. In spring, there is a large passage (up to 500 - 600 birds each hour) of terns, particularly Gull-billed Terns <u>Gelochelidon nilotica</u>, Caspian Terns <u>Hydroprogne</u> <u>tschegrava</u> and Little Terns <u>Sterna albifrons</u>, westwards along the coast.

The only waders that we found elsewhere than the Dubai Creek mudflats were in Saffa Park. This park is grassland, with avenues of trees, and with a pond of semi-treated sewage at its centre. The sewage is sprayed as fertiliser over the park at dawn and dusk. Between September and April, the pool was used by between 1 and 5 Red-necked Phalaropes <u>Phalaropus lobatus</u>. About 40 Ruffs <u>Philomachus pugnax</u> (both males and females) and 10 - 15 Golden Plovers <u>Pluvialis apricaria</u> fed on the grassland throughout the winter. The park is also an important spring and autumn stopover site for passerine migrants.

We estimated that peak numbers of over 15000 birds used the Dubai Creek mudflats. Little is known of the importance of the Arabian Gulf for migrant and wintering wader populations. However, it seems probable that the Dubai Creek mudflats are an important wintering and migration stopover for several species of waders. We think that the numbers of waders using Dubai Creek may be increasing, possibly as a consequence of nutrient enrichment from increased sewage outflow in recent years. Presumably the passage birds belong to populations that spend the winter in eastern Africa. The importance of Dubai, and other parts of the Arabian Gulf, to waders warrants further investigation. Anyone interested in visiting Dubai should contact Mike West.

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# WADER STUDIES IN AUSTRALIA: A REVIEW OF WADER COUNTS

## by Brett A. Lane, John D. Martindale and Clive D.T. Minton

### Introduction

In the last ten years, interest in waders in Australia has expanded dramatically. Prior to then, little was known of their broad distribution patterns and population numbers. This paper reviews the expansion of knowledge in the last thirty years and presents the results of the most recent comprehensive counts conducted over the last three years.

### History

Australia is largely empty, with 80% of its population living within 100 kilometers of the coast. Its coastline displays great geographic variation, stretching for over 19,000 kilometers. In the North of the continent, much of it is remote and inaccessible. The same holds for much of the inland of the continent. In most years, the inland is desert, but occasionally, provided the rains are heavy enough, extensive temporary wetlands develop.

Information on waders around population centres has been published in a variety of journals. Wall (1953) wrote the first comprehensive review of the wader populations in an area (Hobart, Tasmania). Since then, numerous accounts have been published; for the Adelaide region (Glover 1954; Boehm 1960, 1964; Beruldsen 1972), Sydney area (Hindwood & Hoskin 1954) and Melbourne (Wheeler 1955; Smith 1962, 1964, 1966, 1967). Liddy (1955, 1960) was the first to publish information from an inland area (Mt Isa in North-west Queensland). The waders of inland South-west New South Wales were reviewed by Hobbs (1958a, 1958b).

Amiet (1957) was the first to conduct a regular, systematic survey of waders, at a site on Moreton Bay, Brisbane, Queensland. In addition, he presented results of a number of spot counts at sites near population centres on the Queensland coast between Brisbane and Cairns. The general account by Thomas (1968) was the last one covering a substantial period, and updated information in Wall's (1953) paper.

There were two characteristics of this period: 1) information was available and published only from the immediate vicinity of population centres, reflecting the mobility (or immobility) of people interested in waders, and 2) with the exception of Amiet's (1957) work in Brisbane, no studies involving regular counting of waders at a site, either throughout the year, or from year to year, were done.

The next systematic survey of waders at a site was not done until the 1960's, in the Hobart area (Thomas 1973), and the methods used formed the basis for much subsequent work. In the early 1970's, two surveys involving regular counting, at Westernport Bay, near Melbourne and Botany Bay in Sydney were started. Both surveys were stimulated by the potential threat of encroaching urban and industrial development. Westernport Bay has been counted ever since at intervals of two months. The results of the earlier counts were presented by Loyn (1978). These were the first surveys to cover all known high tide roosts in an estuary, and involved a team of co-ordinated volunteers.