

## COASTAL WADERS ON THREE CANARY ISLANDS IN MARCH-APRIL 1986

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### INTRODUCTION

Estuaries and coastal lagoons harbour most of the populations of wintering coastal waders along the East Atlantic flyway (e.g. Evans et al. 1984). Since long distances of open shore with low densities of waders may nevertheless yield large total numbers, it is now becoming realized that the non-estuarine coastlines of Europe and Africa also deserve attention from waderologists. A recent winter count in Great Britain has shown that the non-estuarine parts of the coast hold 23% of the national population of wintering coastal waders (Moser and Summers 1987). However, little information is yet available on wader numbers along the non-estuarine coasts of western Africa. The Canary Islands, a Spanish archipelago of seven islands offshore from southernmost Morocco (c. 28°N 16°W), are not thought to hold large wader populations. Nevertheless, I felt it would be worthwhile to take the opportunity, during a long and sunny holiday, to sample some stretches of Canarian coast to get an impression of the species composition and densities of waders in late winter/early spring.

### METHODS

Three islands were visited: La Palma in the west (18 to 26 March), Hierro in the southwest (27 March to 1 April) and Fuerteventura in the east (3 to 11 April 1986). La Palma and Hierro are well vegetated mountainous islands with many volcanic rocks, which rise steeply from the sea. As a result the shores consist of cliffs and boulder beaches only, and were furthermore characterised by heavy surf. Fuerteventura is much lower, and is a heavily eroded, dry, island. Its western shores also consist mostly of cliffs and boulder beaches, but along the southern and eastern coasts there are large stretches of gently sloping rocky shores (with intertidal areas up to 80 m wide) interspaced by many small beaches, and there are also wide sandy beaches. The surf is much less strong than on La Palma and Hierro.

In the field, notes were made on the type of habitat of all parts of the coastline. The lengths of different types of coastline were measured with a curvimeter on 1:50 000 maps. The length of the shore covered during visits (which were made throughout the day, irrespective of tide), were estimated in the field, often with the help of a detailed map. On La Palma, 9 km (7%) out of a total of 132 km shoreline was covered, on Hierro 9 km (10%) of 90 km, and on Fuerteventura (including the small neighbouring island Lobos, which was not actually visited) 34.6 km (13%) of 266 km. It was relatively difficult to reach the cliff coasts, especially on Fuerteventura. However, the stretches of shoreline which we were able to visit were fairly regularly distributed along the remaining coast.

### RESULTS AND DISCUSSION

The results of the sample counts, and the extrapolations to the total numbers in each habitat, are given in Table 1. Only 1.6 km (1.3%) of the 120 km of cliff coast of Fuerteventura was visited, and no waders were observed there. Since there is no obvious reason why Turnstones *Arenaria interpres* would not occur at all along the cliff coasts of Fuerteventura, the average density on the comparable coastal habitat of La Palma and Hierro was used to get a more realistic estimate for this species on Fuerteventura.

Only 9 wader species were observed along the shores of La Palma, Hierro and Fuerteventura. No traces of the possibly extinct Canarian Black Oystercatcher *Haematopus meadewaldoi* were found. Along the cliffs and boulder beaches only Turnstones were encountered, occurring at a density of 1.3 birds/km. The habitat of sloping rocky shores with small sandy beaches on Fuerteventura yielded most species (8), with a density of 15 waders/km. The wide white beaches of south Fuerteventura were occupied by the densest wader populations: 24 birds/km. Over all habitats, Sanderlings *Calidris alba*, Turnstones and Grey Plovers *Pluvialis squatarola* were the three most abundant

Table 1. Results of the sample counts of waders in different shoreline habitats on La Palma, Hierro and Fuerteventura in March-April 1986, and extrapolations to island-totals for each habitat.

Island	La Palma and Hierro				Fuerteventura				Grand total
	cliff & boulder beach		cliff & boulder beach		sloping rocks & sandy beach		wide sandy beach		
	sample	extrapolation	sample	extrapolation	sample	extrapolation	sample	extrapolation	
Length of shoreline (km)	18	222	1.6	120	12	92	21	54	488
Ringed Plover <i>Charadrius hiaticula</i>	-	-	-	-	8	61	-	-	61
Kentish Plover <i>Charadrius alexandrinus</i>	-	-	-	-	22	169	-	15	184
Grey Plover <i>Pluvialis squatarola</i>	-	-	-	-	16	123	88	226	349
Sanderling <i>Calidris alpina</i>	-	-	-	-	46	353	260	669	1022
Dunlin <i>Calidris alpina</i>	-	-	-	-	5	38	30	77	115
Bar-tailed Godwit <i>Limosa lapponica</i>	-	-	-	-	-	-	110	283	283
Whimbrel <i>Numenius phaeopus</i>	-	-	-	-	12	92	8	21	113
Common Sandpiper <i>Actitis hypoleucos</i>	-	-	-	-	6	46	-	-	46
Turnstone <i>Arenaria interpres</i>	23	284	-	(c.154)*	65	498	-	-	782
Totals	23	284	-	(c.154)	180	1380	502	1291	2955

\*Estimated from average density on La Palma and Hierro.

species. Extrapolating from the sample counts, a total number of almost 3000 coastal waders is estimated to occur on the three Canary Islands visited. The overall density was 6 waders/km. This compares to an overall density of 27 waders/km on the non-estuarine coast of Great Britain (Moser and Summers 1987). A single count, on 13 March 1981, of 10 km of sloping rocky shore on the Atlantic coast near El Jadida, Morocco (1000 km NE of the Canary Islands), yielded 68 waders/km (Kersten *et al.* 1983: Appendix 2).

If densities of coastal waders on the other Canary Islands - Gomera (78 km coastline), Tenerife (240 km), Gran Canaria (165 km) and Lanzarote (180 km) - is on average comparable to those on La Palma, Hierro and Fuerteventura, then the Canary archipelago would hold about  $1151 \times 6$  waders/km = 7000 coastal waders in late winter. This would be about 0.1% of the total number of coastal waders estimated to winter along the East Atlantic flyway (Altenburg *et al.* 1983). However, it must be pointed out that the estimates given here probably incorporate quite considerable sampling error, the size of which we have no idea.

On 8 April a few detailed observations were made on the southern beach of the Jandia peninsula, Fuerteventura. Of 37 Bar-tailed Godwits *Limosa lapponica* examined at close range, 35 (95%) could be sexed as males. In another scan, 36 male Bar-tailed Godwits were examined for the extent of summer plumage on their breasts and bellies: 26 showed no traces, 3 one-quarter, 3 one-half, 4 three-quarters; no bird was in full summer plumage. The Bar-tailed Godwits were feeding in loose flocks on a wet

sandy flat partly covered by a layer of filamentous green algae. Many aggressive interactions occurred between individuals in the foraging flocks. Their prey probably consisted mainly of the oligochaete worm *Pontodrilus litoralis*, the only worm found at the site. On the same sandflat, the amphipod crustacean *Talorchestia brito* (Talitridae) was abundant, and was probably fed on by Kentish *Charadrius alexandrinus* and Grey Plovers.

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## RECENT RECOVERIES OF WADERS RINGED IN BRITAIN AND IRELAND

compiled by Nigel and Jacquie Clark

The following lists are compiled from data provided by the British Trust for Ornithology, from whom permission must be sought before using these data in publications. As usual, space does not allow us to detail all records in full. For the more rarely recorded species all records are given. For others, except Oystercatcher, all movements of over 100 km, and recoveries of more than 3 000 days after ringing, are detailed.

Symbols. Age is coded according to EURING code. v = caught and released (i.e. controlled), vv = ring number or colour marks (dye or rings) read in the field, + = shot or killed by man, x = found dead or dying, ? = manner of recovery unknown. Co-ordinates are generally given only when the locality is first mentioned.

Oystercatcher *Haematopus ostralegus*

The durations for all recoveries are as follows: <500 days 5, 500-999 days 6, 1000-1999 days 10, 2000-2999 days 5, 3000-3999 days 11, 4000-4999 days 1, 5000-5999 days 1, over 6000 days 1.

FV85010	10 27.02.82	Sandwich Bay, Kent 51 18'N 1 22'E	x Suduroy, Faeroes 61 32'N 6 50'W	01.07.84
FS66211	3 15.12.74	Wirral, Merseyside 53 21'N 3 8'W	v Ribble Estuary, Lancs. 53 41'N 2 55'W	12.10.85
FV48787	8 18.09.77	Dawlish Warren, Devon 50 37'N 3 26'W	x Exe Estuary, Devon 50 38'N 3 26'W	01.01.86
SS58860	8 05.10.74	Holme, Wash 52 58'N 0 32'E	v Snettisham, Wash 52 51'N 0 27'E	12.01.86
FV31632	5 04.06.77	Terrington Marsh, Wash 52 48'N 0 18'E	+ Baie des Veys, France 49 19'N 1 9'W	28.02.86
FV48743	8 18.09.77	Dawlish Warren, Devon	x Kelso, Border Region 55 31'N 2 29'W	15.03.86
SS17677	6 19.01.69	Walney Island, Cumbria 54 3'N 3 12'W	v At Sea, North Sea 58 8'N 3 5'W	16.03.86
FV31366	5 04.06.77	Terrington Marsh, Wash	v Fagbury, Suffolk 51 58'N 1 18'E	23.03.86
FV08356	3 23.09.79	Point of Air, Clwyd 53 21'N 3 19'W	v Loch Flemington, Highland 57 32'N 4 0'W	23.03.86
FR25130	8 12.09.81	Bangor, Gwynedd 53 14'N 4 3'W	v Loch Flemington, Highland Region	23.03.86
FR40888	1 10.06.84	Fiag Bridge, Highlands 58 8'N 4 37'W	x Cardross, Strathclyde 55 58'N 4 42'W	23.03.86
FS13359	6 25.03.71	Barrow-in-Furness, Cumbria 54 8'N 3 7'W	x Morecambe Bay, Lancs 54 2'N 2 54'W	26.03.86
FV04002	8 12.07.75	Friskney, Wash 53 3'N 0 15'E	x Gibraltar Point, Wash 53 6'N 0 20'E	04.04.86
FS87812	8 08.10.75	Poole Harbour, Dorset 50 42'N 1 58'W	v Forfar, Tayside 56 40'N 2 55'W	11.04.86
FR65658	6 10.08.83	Teesmouth, Cleveland 54 38'N 1 9'W	x Burra Isle, Shetland 60 6'N 1 20'W	17.05.86
FV48839	8 18.09.77	Exe Estuary, Devon	x Dunrossness, Shetland 59 57'N 1 16'W	21.04.86
FR11419	1 28.05.85	Litton, North Yorks. 54 10'N 2 8'W	v Bangor, Gwynedd	21.06.86
FA14791	7 27.01.85	Colwyn Bay, Clwyd 53 19'N 3 44'W	x Strey moy, Faeroes 62 15'N 7 10'W	24.06.86
FV31890	8 02.08.77	Benington, Wash 53 0'N 0 7'E	x Freiston, Lincs. 52 56'N 0 5'E	25.06.86
FR33626	5 15.12.85	Friskney, Wash	x Rogaland, Norway 58 27'N 5 58'E	26.06.86
FV43717	8 14.08.77	Terrington Marsh, Wash	x Sutton Bridge, Wash 52 46'N 0 12'E	15.07.86