

RINGING RECOVERIES RESULTING FROM THE MOROCCAN WADER EXPEDITIONS

by Michael W. Pienkowski

This list contains all the ringing recoveries resulting from the Moroccan Wader expeditions thus updating lists published in 1974 (WSG Bull. 11: 25-26) and 1975 (Pienkowski 1975). Brief notes indicate the contribution made by the recoveries to the clarification of migration patterns.

The following expeditions were involved. The University of East Anglia Expedition to Morocco 1971 worked along most of the Atlantic coast in August and September, catching mainly at the salt pans and lagoons between Oualidia and Sidi Moussa (33°00'N, 8°45'W), south of El Jadida and the estuary of Oued Chebeika (28°35'N, 11°35'W) in Tarfaya Province. The UEA Expedition to Tarfaya Province, Morocco 1972 worked at Sidi Moussa in late July and early August and at Puerto Cansado (28°00'N, 12°15'W) in Tarfaya Province in August and September. The Cambridge Sidi Moussa Expedition 1972 in August and the Oaklands Sidi Moussa Expedition 1973 in September both caught birds at Sidi Moussa.

This list was compiled with the help of Derek Stanyard and Francis Argyle, leaders of the Cambridge and Oaklands Expeditions, respectively. We would like to thank Michel Thévenot, in charge of the Moroccan ringing centre at the Institut Scientifique Chérifien in Rabat and the staff of the ringing office of the British Trust for Ornithology at Tring for their help. Rings with the Paris address are normally used in Morocco but because of supply problems special arrangements were made by the Cambridge Expedition to use some British-addressed rings; these are indicated by an asterix in the list below. The manner of recovery is indicated by conventional symbols: V - caught and released again with ring ("controlled"), + shot or killed by humans, X found dead or dying. Where the date of recovery was not given, the date of the reporting letter is given in parenthesis. Birds retrapped by the expeditions near the ringing site are noted only briefly; fuller summaries of these retraps are given by Pienkowski and Knight (1977) and Pienkowski (1976).

Black-winged Stilt *Himantopus himantopus*

FE 5683 Juv 12.9.72 Sidi Moussa + 18.12.72 Sidi Moussa  
Plus one within-year retrap at Sidi Moussa.

Ringed Plover *Charadrius hiaticula*

Reykjavik 834679 Pull 22.6.70 Skipalon, Eyjafjardarsysla, Iceland 65°47'N, 18°12'W  
V 20.8.71 Sidi Moussa  
Stockholm 3013206 Pull 31.5.62 Sodviken, Oland, Sweden 57°02'N, 16°54'E  
V 10.9.72 Sidi Moussa  
SA 837618 Ad. 20.9.71 Sidi Moussa + 9.11.73 baie de Salmengelles, Calvados, France  
49°16'N, 0°14'W  
SA 3629(7)2 Ad. 20.8.71 Sidi Moussa + 29.8.76 Brouage, Charente-Maritime, France  
45°52'N, 1°04'W  
SA 387478 Ad. 18.9.71 Sidi Moussa X 4.1.76 Sidi Bennour, El Jadida, Morocco  
32°39'N, 8°26'W

Plus 4 within-year and 3 subsequent-year retraps in Autumn at Sidi Moussa.  
A more varied pattern from five recoveries would be difficult to arrange: there is evidence of the presence in autumn of birds from the breeding populations of both Iceland and continental Scandinavia; a bird presumably on passage through France; another wintering near Sidi Moussa but one apparently changing wintering areas from NW Africa to France.

Kentish Plover *Charadrius alexandrinus*

SA 505107 Ad. 16.8.73 Sidi Moussa + 11.1.74 el Khemis des Zemara, El Jadida, Morocco  
32°38'N, 8°42'W

Plus 35 within-year and 9 subsequent-year retraps in autumn at Sidi Moussa.  
Some Kentish Plovers are resident in the Sidi Moussa area, breeding, moulting and wintering in the vicinity; the relative proportions to these and others present only at particular seasons is unknown.

Knot *Calidris canutus*

8 within-year retraps only. The migration of this species has been analysed by Dick et al (1976).

Little Stint *Calidris minuta*

7 within-year and 3 subsequent-year retraps in autumn at Sidi Moussa.

Curlew Sandpiper *Calidris ferruginea*

SA 240700 26.8.69 Radès-La Goulette, Tunis, Tunisia 36°52'N, 10°18'E V 25.8.72 Puerto Cansado  
Arnhem B-127484 Juv 1.10.70 Vlieland, Holland 53°16'N, 4°59'E V 25.8.72 Puerto Cansado  
Stockholm 3208554 Juv 26.8.72 Ottenby, Oland, Sweden 56°12'N, 16°24'E V 8.9.72 Sidi Moussa  
Stockholm 3456598 Juv 10.9.65 Ottenby, Oland, Sweden 56°12'N, 16°24'E V 11.9.72 Sidi Moussa  
Radolfzell G272655 ? 30.8.70 Roxheim (details not yet received) V 11.9.72 Sidi Moussa

Curlew Sandpiper (cont)

JA 300100	Juv 5.9.73	Sidi Moussa	V 7.11.73	Serenni, Banc d'Arguin, Mauritania	19°40'N, 16°21'W
* BX 14525	Ad 10.9.72	Sidi Moussa	V 13.8.73	Sidi Moussa	
			V 19.11.73	Cap Timiris, Banc d'Arguin, Mauritania	19°22'N, 16°30'W
* BX 14348	Ad 8.9.72	Sidi Moussa	+ 24.8.75	near Genichesk, Khersen, Ukraine SSR	46°15'N, 34°47'E
* BX 14330	Ad 8.9.72	Sidi Moussa	+ 23.8.75	near Zolochov, Kharkov, Ukraine SSR	50°17'N, 36°00'E

Plus 1 control with illegible ring at Sidi Moussa on 10.9.72; and 8 within-year and 2 subsequent-year retraps.

An analysis of Curlew Sandpiper migration is advanced in preparation (Wilson *et al.* in prep).

Dunlin *Calidris alpina*

Copenhagen	8120206		21.7.71	Amager, Kobenhavn, Sjælland, Denmark	55°38'N, 12°34'E
					V Juv 21.9.71 Sidi Moussa
Reykjavik	919388	Juv	31.8.71	Gerdar, Gullbringusysla, Iceland	64°05'N, 22°40'W
					V 21.9.71 Sidi Moussa
London	BJ71204	Juv	9.10.71	Harty, Sheppey, Kent, England	51°21'N, 0°54'E
					V 25.8.72 Puerto Cansado
Stavanger	8105156	Juv	17.8.70	Makkevika, Giske, Møre & Romsdal, Norway	62°31'N, 6°02'E
					V 9.9.72 Puerto Cansado
London	BB72754	Juv	18.9.71	West Kirby, Wirral, Cheshire, England	53°23'N, 3°19'W
					V 9.9.72 Puerto Cansado
London	BB53240	Ad	24.7.72	Garmouth, Moray, Scotland	57°40'N, 3°06'W
					V 7.9.72 Sidi Moussa
London	BB90860	Ad	15.7.72	Wolferton, King's Lynn, Norfolk, England	52°50'N, 0°26'E
					V 8.9.72 Sidi Moussa
London	BR70617	Ad	17.8.73	Rock, Padstow, Cornwall, England	50°32'N, 4°56'W
					V 30.8.73 Sidi Moussa
London	BB65656	Juv	21.8.73	Radipole, Weymouth, Dorset, England	50°36'N, 2°28'W
					V 3.9.73 Sidi Moussa
SA 387671	Ad	21.9.71	Sidi Moussa	+13.8.72	Etang de Thau, Hérault, France
					43°23'N, 3°36'E
SA 387562	Juv	20.9.71	Sidi Moussa	+12.8.72	Baie des Veys, Manche, France
					49°19'N, 1°09'W
SA 505378	Juv	1.9.73	Sidi Moussa	V19.5.74	Ulverston, Morecambe Bay, England
SA 324375	Ad	8.9.71	Oued Chebeika	+13.8.74	Le Crotoy, baie de Somme, France
					50°13'N, 1°37'E
JA 270900	Ad	8.9.72	Puerto Cansado	V10.7.74	Amager, Sjaælland, Denmark
					55°38'N, 12°34'E
JA 270681	Juv	7.9.72	Puerto Cansado	+30.7.74	Cap Hornu, St. Valéry-sur-Somme, France
					50°11'N, 1°38'E
JA 270655	Ad	25.8.72	Puerto Cansado	+17.3.76	Moëze, Charente-Maritime, France
					45°54'N, 1°02'E
JA 270638	Ad	25.8.72	Puerto Cansado	V 1.5.76	Magor, Newport, Monmouth, Wales
					51°34'N, 2°48'W
JA 387325	Ad	16.9.71	Sidi Moussa	?(12.4.77)	St. Valéry-sur-Somme, France
					50°11'N, 1°38'E
* BX 14009	Juv	6.9.72	Sidi Moussa	V 7.5.77	Point of Air, Flintshire, Wales
					53°21'N, 3°19'W
* BX 14562	Ad	10.9.72	Sidi Moussa	V 1.5.76	Magor, Newport, Monmouth, Wales
					51°34'N, 2°48'W
SA 503212	Ad	27.8.73	Sidi Moussa	V 6.5.78	Peterstone, Wentlooge, Newport, Monmouth
					Wales 51°30'N, 5°03'W

Plus 67 within-year and 11 subsequent-year and one two-year retraps in autumn in Morocco. The new reports support the conclusions of Pienkowski and Dick (1975) that Dunlins in Morocco are mainly C.a.schinzii including birds from both Iceland and Europe together with a much smaller proportion of birds of the nominate race (C.a.alpina). The contribution of the Greenland race C.a.arctica remains unclear.

The recoveries of birds ringed in Morocco fall into three groups. One and probably a second March recovery in France are likely to represent the early northward migration of European schinzii (c.f. Redshank). The series from the West coast of Britain (1 May (twice), 6 May in S.Wales, 7 May in N.Wales, 19 May in Morecambe Bay) give a good indication of the timing of migration of probable Icelandic birds. The early July Danish bird and those in France from late July to mid-August could include birds from various breeding grounds.

Ruff *Philomachus pugnax*

One within-year retrap only.

Bar-tailed Godwit *Limosa lapponica*

FE 5674	Juv	9.9.72	Sidi Moussa	+ 22.10.72	Sidi Moussa
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Plus one within-year retrap Sidi Moussa.

Redshank *Tringa totanus*

GM 1414	17.12.69	Sidi Moussa	V 18.9.71	Sidi Moussa	
GB 98077	Juv 18. 9.71	Sidi Moussa	+ 28.1.72	Sidi Moussa	
GB 98091	Juv 18. 9.71	Sidi Moussa	+ 6.2.72	Sidi Moussa	
GB 98013	Juv 16. 9.71	Sidi Moussa	+ 5.3.72	Sidi Moussa	
GC 87093	Ad 17. 9.72	Sidi Moussa	+ 25.2.73	Sidi Moussa	
GB 98006	Juv 16. 9.71	Sidi Moussa	+ 15.3.73	Berrechid, Casablanca, Morocco	33°16'N, 7°35'W
GC 87041	Ad 9. 9.72	Sidi Moussa	+ 16.3.73	Marais de la Macta, Algeria	35°44'N, 0°07'W
GB 98083	Ad 17. 9.71	Sidi Moussa	V 16.9.72	Sidi Moussa	
			+ 21.3.73	St. Bonnet sur Gironde, France	45°21'N, 0°40'W
GB 98093	Ad 18. 9.71	Sidi Moussa	+ 25.11.73	Berrechid, Casablanca, Morocco	33°17'N, 7°35'W
GB 98066	Ad 17. 9.71	Sidi Moussa	+ 10.3.74	Oualidia, El Jadida, Morocco	32°44'N, 9°02'W
GB 98557	Ad 20. 9.71	Sidi Moussa	V 14.8.73	Sidi Moussa	
			+ 14.3.74	Labatud, Maubourquet, Hautes-Pyrénées, France	43°28'N, 0°02'E
GB 59261	Ad 2. 8.72	Sidi Moussa	+ 14.1.73	Sidi Moussa	
GB 98051	Ad 17. 9.71	Sidi Moussa	+ 4.1.76	El Jadida, Morocco	33°15'N, 8°30'W
GB 98123	Ad 20. 9.71	Sidi Moussa	X 30.5.77	Duivenvoorde, Voorschoten, Zuid Hollande, Holland	52°07'N, 4°25'E
GC 87135	Ad 30. 8.73	Sidi Moussa	+ 19.3.75	le Verdon, Gironde, France	45°33'N, 1°04'W
GB 63749	Ad 14. 8.73	Sidi Moussa	+ 14.3.76	Valeyrac, Gironde, France	45°24'N, 0°54'E

Plus 21 within-year, 11 subsequent-year and 6 two-year retraps in autumn at Sidi Moussa. For the Redshank there is a remarkable contrast between the lack of previously-ringed birds caught by the expeditions and the number of subsequent recoveries of expedition-ringed birds. This is presumably due to a lack of ringing (at least before the time of the expeditions) in the other areas frequented by this population and the occurrence of shooting along parts of the route.

Many Redshanks clearly remain to winter in the vicinity as demonstrated by six recoveries between November and February. There appears to be a rapid northward passage in March with recoveries on 5, 10, 15 March in Morocco, 16 March in Algeria and 14, 14, 19, 21 March in France. The bird recovered in late May in Holland had been dead for some time and was in a state of decomposition.

Earlier ringing results, wing and bill measurements and moulting pattern suggested that Moroccan Redshanks come from breeding areas on the Baltic and east North Sea coasts (Pienkowski 1975, Pienkowski *et al.* 1976). The distribution and timing of spring recoveries now available are compatible with this.

Greenshank *Tringa nebularia*

FE 5553	Ad 16.9.71	Sidi Moussa	X 13.5.72	Saravesi, Laukaa, Vaasa, Finland	62°25'N, 25°58'E
GB 63724	Ad 12.8.73	Sidi Moussa	+ 19.1.74	Sidi Moussa	32°44'N, 9°02'W

Plus 3 within-year retraps in autumn at Sidi Moussa.

Common Tern *Sterna hirundo*

Arnhem K 289261 23.7.71 Veluwemeer Noord, Holland V Juv 8.9.71 Oued Chebeika

Black Tern *Chlidonias niger*

\* BX 14083 Ad 6.9.72 Sidi Moussa + 10.12.72 M'Bour, Senegal 14°22'N, 16°54'W  
Plus 8 within-year retraps at Sidi Moussa.

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M.W. Pienkowski, 1 West Fenton Cottages, North Berwick, East Lothian, EH39 5AL, Scotland.