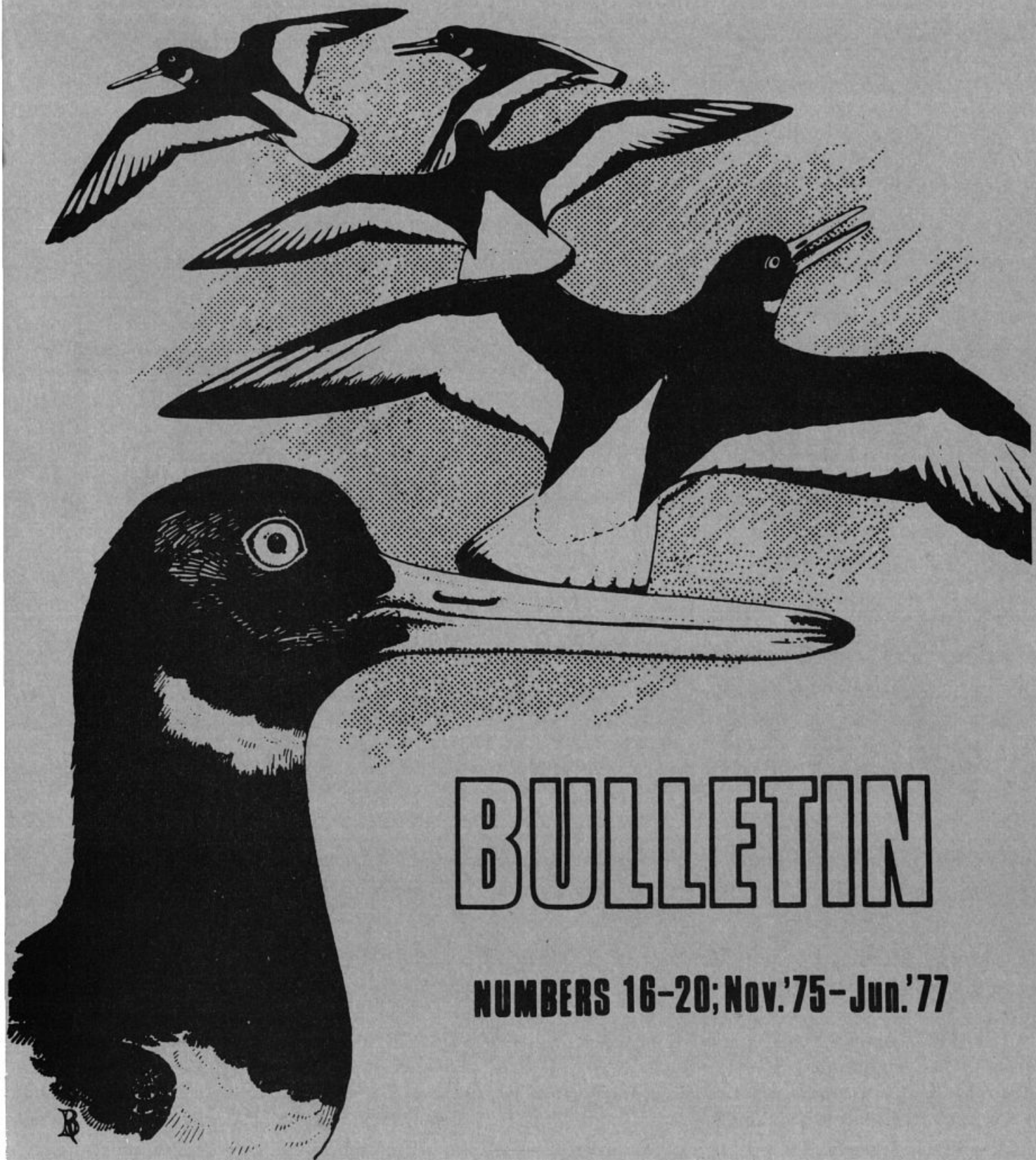
WADER STUDY GROUP



BULLETIN

NUMBERS 16–20; Nov.'75–Jun.'77

WADER STUDY GROUP

OFFICERS AND EXECUTIVE COMMITTEE

Chairman	G.H. Green, Windy Ridge, Little Comberton, Pershore, Worcs. WR10 3EW, U.K. (Tel home 038674-377, work 0905-25238)
Vice-chairman	Dr. M.W. Pienkowski, Department of Zoology, University of Durham, South Road, Durham DH1 3LE, U.K. (Tel work 0385-64971 ext 257, home 0385-733057)
General Secretary	Dr. S.R. Baillie, 44 The Pastures, Edlesborough, Dunstable, Beds. LU6 2HL, U.K. (Tel home 0495-220551, work 044-282-3461)
Membership Secretary	N.A. & J.A. Clark, Department of Zoology, University of Edinburgh, West Mains Road, Edinburgh EH9 3JT, U.K. (Tel home 0968-74441, work 031-667-1081 ext 3211)
Editor	Dr. N.C. Davidson, Department of Zoology, University of Durham, South Road, Durham DH1 3LE, U.K. (Tel home 0207-520702, work 0385-64971 ext 579)
Co-ordinator	Th. Piersma, Korte Nieuwstraat 4, 9724 LC Groningen, The Netherlands. (Tel home 050-143092, work 050-116502)
Treasurer	S.J. Sutcliffe, Eaton Cttage, Lydstep, Tenby, Dyfed, U.K. (Tel home 083482-508, work 0437-2686)
Committee members	W.J.A. Dick, 125 Leathwaite Road, London SW11 6RW, U.K. (Tel 01-223-6681)
	H. Galbraith, 96 Neilston Road, Paisley, Strathclyde PA2 6EL, U.K. (Tel 041-887-5499)
	H. Hotker, Biologische Station Rieselfelder, Coermuhle 181, D-4400 Munster, F.R.G. (Tel 02 51/24 81 72)

New World Section

General Secretary	Dr. M.A. Howe, Migratory Bird and Research Laboratory, Patuxent Wildlife Research Center, Laurel, Maryland 20811, U.S.A.
Membership Secretary	Dr. E.H. Miller, Vertebrate Zoology Division, B.C. Provincial Museum, 675 Belleville Street, Victoria, British Columbia V8V 1X4, Canada.
Editors	Dr. J.P. Myers, Vertebrate Biology, Academy of Natural Sciences, 19th and the Parkway, Philadelphia, Pennysylvania 19103, U.S.A.
	Dr. R.I.G. Morrison, Canadian Wildlife Service, Ontario Region, 1725 Woodward Drive, Ottawa, Ontario K1A 0E7, Canada.
New World Steering Committee	Officers listed above, and Dr. A.J. Baker and Dr. F.A. Pitelka.

CORRESPONDENCE

All general enquiries should be sent to the General Secretary (Dr. S.R. Baillie).

All applications for membership, initial subscriptions and renewals, changes of address, matters relating to the circulation of the *Bulletin* etc. should be sent to the Membership Secretaries (N.A. & J.A. Clark).

Matters and proposals concerning co-operative research projects and objectives should be sent to the Co-ordinator (Theunis Piersma).

All material for the *Bulletin*, and enquiries about this, should be sent to the Editor (Dr. N.C. Davidson).

In the New World, material for the *Bulletin* may be sent to Dr. J.P. Myers or Dr. R.I.G. Morrison.

Matters and proposals concerning colour-marking schemes should be sent to Dr. D.J. Townshend, Department of Zoology, University of Durham, South Road, Durham DH1 3LE, U.K. (tel. 0385-64971 ext 547), who will also try to forward to the appropriate person details of any colour-marked wader sent to him.

PAYMENTS AND SUBSCRIPTIONS

See details on inside back cover.

DEADLINES

For inclusion in the issue indicated	APRIL	AUGUST	DECEMBER
Material should be received before	1 February	1 June	1 October

If correspondence between editor and author(s) is likely to be needed, material must be received well before these dates if they are to be included in the next issue.

Cover designed by R.M. Bishop Printing by Minizen Ltd., Nottingham (0602-584942)

RE-ISSUE OF BACK NUMBERS OF WADER STUDY GROUP BULLETIN

We have reprinted WSG Bulletin numbers 1-22 in five volumes. They are facsimile reproductions and any errors in the first issue are still present.

Numbers 1-4 were originally produced on foolscap size paper and have been retyped on A4 to conform with later issues. The original pagination is indicated and should be used when citing references. Similarly bulletins should be referred to by number, not by re-issue volume.

WADER STUDY GROUP

Bulletin No 16 November 1975

CONTENTS

WSG Grants
WSG Winter meeting
Recent recoveries
Ringing totals
Curlew, cramp and keeping cages
Mud inside rings
Norway expedition
Colour dyed Waders : Dee/South Africa
Colour ringed Ringed Plover
Methods of catching and studying breeding waders
Report of Morocco 1972 expedition
Curlew Sandpipers in 1975
Foreign ringed waders in British Isles in 1974
Mist nets
Recent publications
Addresses

Articles and ringing data (October-February) should be sent by 15th February 1976 to either Tony Prater, B.T.O. Beech Grove, Tring, Herts or Mike Pienkowski, 5 Brockmill Cottages, Beal, Berwick upon Tweed, Northumberland.

WSG GRANTS

The WSG will make available a sum of up to £50 for research grants in 1976. It is unlikely that more than £25 will be given for any one project, (which should, preferably, be designed to study breeding populations in Britain and Ireland). For full details see Bulletin 14.

WSG : Winter Meeting

The annual winter meeting of the WSG will take place during the Ringing and Migration Conference at Swanwick 9-11th January 1976. There will be the reports by the officers followed by talks by William Dick on the full results of the Mauritanian 1973 expedition, by Chris Reynolds on Little Ringed Plover data and by Keith Grant on the Greenshank data.

Recent recoveries

Oystercatcher

FS 52166	Pull	14. 6. 75	Orkney	x	Morayshire	1.10.7
ED 00693	Ad	13. 8. 67	Wash	x	Sor Trondelag, Norway	15. 7.7
SS 75089	Ad	19. 8. 67	"	x	Troms, "	29. 7.7
SS 75675	Ad	18.11. 67	"	x	Hordaland, "	14. 6.7
SS 76997	Ad	25. 8. 68	"	(x)	Rogaland, "	11. 6.7
SS 77199	Juv	30. 8. 68	"	x	Sor Trondelag, "	(20. 7.7
SS 88006	2Y	29. 8. 69	"	x	Hordaland, "	30. 7.7
SS 88842	Juv	14.11. 70	"	x	Finnmark, "	1. 5.7
FS 15502	Ad	30. 1. 71	"	x	Nordland, "	end 5.7
FS 15544	Ad	27. 3. 71	"	x	Rogaland, "	1. 6.7
FS 29777	3Y	28. 5. 72	"	x	" , "	2. 6.7
FS 98284	Ad	18. 8. 74	"	x	Hordaland, "	27. 7.7
FS 98221	Ad	21. 8. 74	"	x	" , "	26. 8.7
FS 99544	Ad	21. 8. 74	"	x	More & Romsdal, "	16. 6.7
FS 98679	Ad	3.11. 74	"	x	Rogaland, "	6. 6.7
SS 60338	Ad	17. 8. 66	Bury Inlet	x	Sor Trondelag, "	13. 7.7
SS 95588	Ad	18. 1. 69	Morecambe Bay	+	Rogaland, "	23. 4.7
FS 75273	Ad	10. 3. 74	Solway	x	" , "	16. 5.7
AT 96106	FG	2.12. 62	Morecambe Bay	x	Faeroe Islands	30. 3.7
SS 89294	Ad	3.11. 68	"	x	"	6. 8.7
SS 47320	Ad	18. 1. 69	"	x	"	0. 7.7
FS 29410	Juv	22.12. 72	"	+	Jutland, Denmark	16. 8.7
SS 76656	Ad	28. 7. 68	Wash	+	" "	17. 8.7
FS 98475	Ad	21. 8. 74	"	v	Friesland, Netherlands	12. 6.7
FS 54765	2Y	22. 7. 74	"	+	Calvados, France	27. 7.7
SS 62293	Imm	21. 9. 66	Conway	x	Zetland	7. 6.7
ED 00762	Ad	13. 8. 67	Wash	x	"	24. 7.7
SS 88216	PJ	18. 7. 70	"	x	"	24. 9.7
SS 99371	Ad	30. 1. 72	Solway	x	"	27. 5.7
FS 66009	2Y	15.12. 74	Dee	x	"	3. 6.7
FS 08563	Ad	23.11. 69	Morecambe Bay	v	Orkney	28. 5 & 1. 7.7
SS 62991	1Y	19. 3. 69	Bury Inlet	x	"	12. 8.7
FS 12557	Juv	15.11. 70	Morecambe Bay	v	Wash	8. 9 & 5.10.7

There were also 8 recoveries on Scottish breeding grounds from Morecambe Bay (4), Bury Inlet (3) and the Solway.

Ringed Plover

BV 53170	Pull.	8. 6. 75	Southport	v	Morecambe Bay	7. 9.7
BX 18673	Juv	27. 9. 73	Wash	v	Varangerfjord, Norway	23. 8.7
BB 80255	Juv	3. 9. 71	Morecambe Bay	v	Rugen, DDR	11. 6.7
BB 86331	Ad	29. 1. 72	"	v	Jutland, Denmark	20. 6.7
BX 07590	Juv	10. 9. 72	"	v	" "	1. 7.7
BX 25801	Ad	14.10. 73	Solway	x	S. Humber	22. 6.

It is of particular interest to know that two birds in Denmark and the one in DD.R were controlled on the nest, the Humber bird was almost certainly breeding as well, to provide an excellent indication of the breeding range of birds reaching the west coast

Little Ringed Plover

BV 07658	Pull	11. 6. 74	Cheshire	+	Landes, France	29. 3.7
BV 49277	Pull	12. 6. 75	Norfolk	v	Majorca, Spain	26. 8.7
BV 46574	Pull	6. 7. 75	Lincoln	v	Wisbech, Cambs.	20. 8.7

These include our first Balearic and fifth French recovery.

Grey Plover

[illegible] 74359	Ad	20.11. 68	Wash	x	Schiermonnikog, Netherlands	22. 5. [illegible]

Dotterel

CE 20613	Pull	30. 6. 75	Invernesshire	+	Constantine, Algeria	5. 9. 75

This is our first recovery of this species.

Turnstone

CC 50579	AD	4.10. 70	Morecambe Bay	x	Thule, N.W. Greenland	0. 6. 74
CC 88696	Ad	28. 8. 72	Wash	v	Ellesmere Isl., Canada	3. 6. 75
CE 05101	1Y	18. 8. 73	"	x	Schleswig/Holstein, FRG	6. 6. 75
CK 81198	FG	17.10. 73	Dee	x	Morecambe Bay	(4. 7. 75)
CE 01524	1Y	24. 3. 74	Humber	v	Wash	5. 9. 75

Snipe

CH 85973	PJ	20. 2. 75	Dorset	+	Nordland, Norway	28. 9. 75
CH 85926	FG	8.12. 74	"	+	Pas de Calais, France	6. 9. 75
CE 03662	Ad	5. 9. 73	Essex	+	" , "	24. 8. 75

Curlew

FS 29899	FG	22.10. 72	Portsmouth	x	Oulu, Finland	2. 6. 75
SS 50534	FG	31. 8. 67	Zetland	x	Kopparberg, Sweden	1. 6. 75
SS 70808	FG	29. 9. 67	Butley, Suffolk	+	Jutland, Denmark	2. 8. 75
SS 48595	FG	9. 8. 68	Shropshire	+	" "	1. 8. 75
FS 64818	FG	29. 9. 73	"	x	S. Humber	14. 9. 75

Bar-tailed Godwit

DS 49798	Ad	30.11. 70	Dee	v	Morecambe Bay	3. 9. 75

Common Sandpiper

BA 60353	FG	20. 8. 67	Dungeness	x	Hordaland, Norway	31. 5. 75

Redshank

2064198	Pull	11. 6. 72	Nottinghamshire	v	Wash	11. 8. 75
DR 15560	Pull	27. 6. 74	Angus	v	"	13. 8. 75
DS 57570	Ad	22. 8. 70	R. Swale	x	Friesland, Netherlands	5. 6. 75
DS 25060	FG	11.12. 66	Dee	+	Manche, France	3. 8. 75
DR 25032	Ad	3. 6. 75	Ribble	+	Finistere, "	27. 7. 75
DR 13892	Ad	8. 5. 75	"	v	Aylburton, Glos.	13. 8. 75
DS 73777	FG	23.12. 72	Aylburton, Glos.	v	Ribble	16. 5. 75
DS 76100	FG	16.11. 74	" "	v	Wash	9. 9. 75
DS 89012	Ad	15. 9. 73	Morecambe Bay	x	Selset Res., Durham	5. 7. 75

The three birds caught on the Ribble Marshes were breeding there.

Greenshank

DS 95077	AD	8. 5. 71	Farlington, Hants.	+	Charante Maritime, France	11. 8. 74

Knot

CR 91733	Ad	9. 3. 69 & 9. 2. 74	Wash	x	Etah, N W Greenland	17.
CP 99850	AD	31. 1. 71	"	x	" "	21.
CC 57732	AD	8. 3. 70	"	x	Thule "	0.
CC 83714	Ad	19. 2. 72	"	?	" "	summe
CC 84145	Ad	19. 3. 72	"	+	Godhavn "	2.
CE 05572	Ad	9. 2. 74	"	+	Dundas "	end
CV 23442	FG	23. 2. 66	Dee	?	Thule "	summe
CC 87227	Ad	12. 8. 72	"	?	Siorapaluk "	
CC 66273	Ad	12. 8. 72	"	?	Thule "	
CP 17760	Ad	9. 4. 70	Ribble	+	Godhavn "	2.
CC 86001	Ad	13. 4. 72	"	+	" "	
CC 55462	Ad	21.12.72	Morecambe Bay	?	Siorapaluk "	summe
CV 48765	Juv	20. 9. 66	Dee	+	Jutland, Denmark	autun
CC 73954	Ad	19. 2. 72	Wash	x	Jutland, Denmark	0.
CC 87873	Juv	27. 1. 74	Dee	+	Charante Maritime, France	27.

During the autumn 12 Knot were controlled on the Wash, being ringed at
Morecambe Bay on 22.12.68, 22.12.68, 21.2.70 (juv), 24.2.71, 25.3.71, 14.3.72, 21,12,72, 3.3.73 and 22.3.74
Dee on 16.9.66 and 12.8.72
Swale on 4.12.71

The number of recoveries of Knot in Greenland in 1974 has now reached 51, over half of the total of 98!

Dunlin

BB 55501	Ad	14. 1. 70	Morecambe Bay	v	Gt. Ainov Isl. USSR	11.
BB 56069	Ad	25.10. 70	"	v	" "	5.
BB 55598	Ad	6. 2. 70	"	+	Yoroslavl, "	7.
BB 77019	Ad	1. 5. 73	"	v	Turku & Pori, Finland	26.
BC 98314	Juv	13.11. 66	Swale	v	Telemark, Norway	4.
BB 55869	Ad	6. 2. 70	Morecambe Bay	v	" "	4.
BX 55576	Juv	6.10. 74	Teeside	v	Varangerfjord, "	15.
BX 88092	Ad	13. 1. 74	Dartford	v	" "	8.
BH 99301	Ad	14. 2. 69	Morecambe Bay	v	Lolland, Denmark	20.
BX 20052	Ad	25.11.72	Humber	v	" "	3.
BX 01574	1Y	12. 5. 75	Gwent	v	" "	29.
BX 28360	Ad	10. 4. 74	Humber	x	Romo "	9.
BB 83487	Ad	5.12. 71	Wash	+	Jutland "	10.
BB 67189	Ad	2. 1. 72	"	v	" "	11.
BX 49134	Ad	22. 8. 74	"	v	" "	23.
BB 51476	Ad	13.12. 69	Morecambe Bay	x	Schleswig/Holstein, FRG	28.
BX 50869	Ad	29. 9. 74	Eden Est.	x	" "	7.
BA 59262	FG	20.10. 74	Thames	x	" "	14.
BJ 74645	Ad	11. 1. 70	Wash	v	Vlieland, Netherlands	17.
BB 68810	Ad	13. 2. 71	Dee	v	" "	
BX 12194	1Y	17. 5. 73	Gwent	v	" "	11.
BR 48838	Ad	28. 1. 74	Plym	v	" "	11.
BB 77018	PJ	1. 5. 73	Morecambe Bay	+	Gironde, France	early
BB 38594	Juv	23.10. 73	Butley, Suffolk	+	Manche, "	10.1
BP 18216	Juv	23. 8. 75	Swale	+	" "	7.
BP 39666	Juv	30. 8. 75	Rye, Sussex	+	Calvados, "	14.
BB 78191	Ad	9. 8. 71	Wash	+	Vendee "	15.1
BX 49795	Ad	23. 8. 74	"	+	Cotes du Nord, France	29.
BX 58544	1Y	5.10. 74	"	+	Baie de Somme, "	27.
BB 32758	Juv	12. 8. 68	"	v	Evie, Orkney	24.

The 56 Dunlin controlled in Sweden during the period mid July - early August were ringed as follows:- on the

Wash	13.4.68, 16.3.68, 30.8.69, (4.8.73), 29.9.73, 18.8.73, 27.2.71, 15.11.70, 28.8.72, 7.10.72, 26.5.75.
Humber	28.9.72, 11.9.71, 20.9.74
Butley	12.9.74
Morecambe Bay	8.7.72, 3.1.70, 4.5.74, 29.1.72
Dee	10.12.69, 31.3.68, 30.11.67, 29.1.72
Portsmouth	27.3.75, 24.2.74, 3.3.73, 22.10.72, 18.12.72
Solway	25.5.75, 13.4.75
Clyde	13.1.73 : Glamorgan 19.5.73 : Milford Haven 22.1.72
Conway	2.1.72 : Plym 24.1.74 : Belfast 28.2.75

(Juv/1W are underlined, 1S are bracketed)

There were also 20 autumn controls on the Wash of birds ringed in previous winters on the west and south coasts, 11 ringed during passage periods on the west and south coasts and 10 ringed on the east coast during passage periods.

The Dunlin recovered in Orkney was of note as it was breeding there.

Sanderling

BX 17367	Ad	29. 7. 73	Wash	+	Reggio, Calabria, Italy	31. 3. 7
BX 00284	PJ	16. 5. 72	Dee	v	Gt. Ainov Isl. USSR	16. 7. 7
BB 61093	PJ	7. 8. 71	Wash	+	Manche, France	21. 9. 7
BX 42839	Ad	20. 7. 74	"	v	Dee	23. 5. 7

The Italian recovery is our first there and the Russian is the third.

RINGING TOTALS : JULY - SEPTEMBER 1975

	WVRG	FRG	SVRG	Spurn B.O.
Oystercatcher	2217			
Lapwing	1	22	2	
Ringed Plover	23	66	17	13
Grey Plover	164			3
Golden Plover	4			
Turnstone	329			
Common Snipe			1	
Curlew	278		22	
Whimbrel	4		2	
Bar-tailed Godwit	45		7	
Common Sandpiper	9			
Redshank	1051	9	34	
Spotted Redshank	62			
Greenshank	2			
Knot	1303			4
Dunlin	5945	55	106	114
Sanderling	308			5
Ruff	2			
Little Stint				3
Curlew Sandpiper	10	1	7	

CURLEW, CRAMP, AND KEEPING CAGES by Ian Bainbridge

The increased success in recent years of catching such waders as Curlew and Godwits, both in mist nets, and in larger numbers in cannon nets, has focused attention on the problem of leg cramp which can occur in these birds.

The reason for cramp is unknown, although it seems likely to be caused by the confinement of the birds in a space too small or too low to allow them to stand upright - such as a large bird bag, sack, or even a standard sized cannon net keeping cage. Obviously if the birds are caught by mist netting on saltings, a sack has to be used to transport the birds back to the base, but the use of high keeping cages can solve the problems of keeping them for longer periods, as is necessary with larger catches.

This newly designed keeping cage, which has been in operation on the Wash this autumn, appears to eliminate or at least greatly lessen the problems of cramp in long-legged waders. It is made from a standard hopsack (72" x 56"), slit lengthways to give a piece of material 144" x 36". The ends are sewn together to form a circle of material 36" high. This forms the rectangle of the keeping cage - sides 48", ends 24". A 12" cut is made down to the mid point of each end of the cage and the top 12" of each side is then folded over, as shown in Fig.1. This forms the roof, which is stitched down at the sides, and in the middle if necessary, to give either one or two slit entrances of the standard keeping cage type (Fig.2). The cage is held up by four 30" poles, one at each corner, which may need to be guyed.

.../

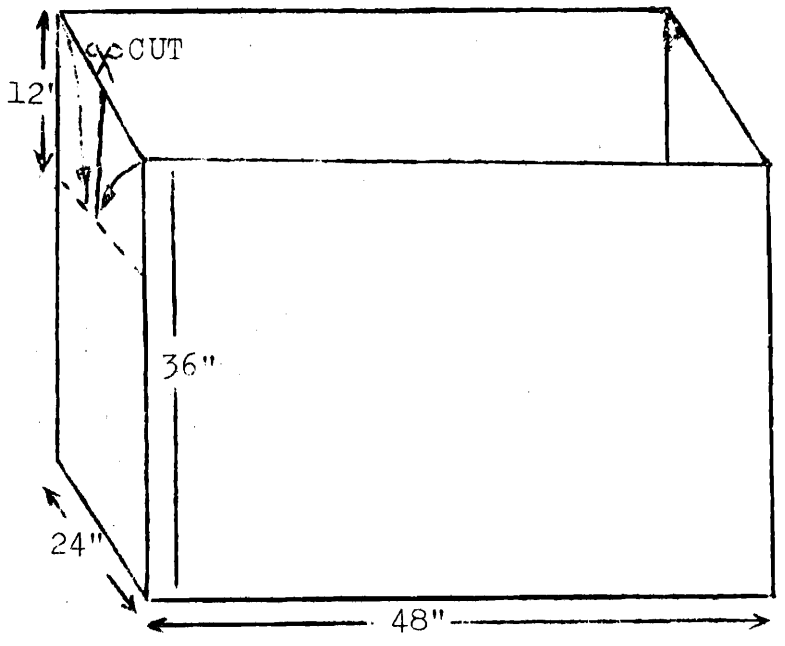


Fig.1.

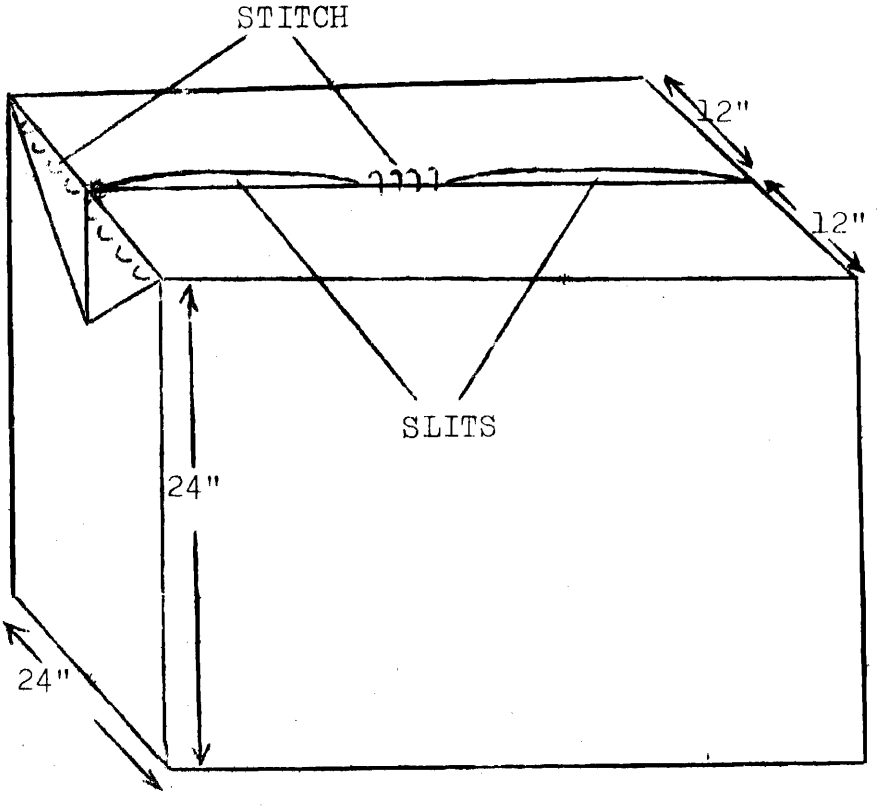


Fig.2.

If preferred one or two partitions may be sewn into the cage, although for Curlew this is thought to be unnecessary as they do not fight. Up to 25 can be held safely in a keeping cage.

At the Wader Study Group A.G.M. it was recommended that anyone likely to catch Curlew in any numbers should be properly equipped with these higher cages, in order to avoid the cramp problems that have caused concern to Curlew ringers for so long.

MUD INSIDE RINGS

Recently a German ringer submitted to the Ringing Office a photograph of a British ringed Turnstone in which the ring, although of the correct size and correctly fitted, had caused a significant narrowing of the bird's tarsus. He suggested that this had come about as a result of mud caking hard on the inside of the ring, thereby reducing its diameter. Not long afterwards members of the WWRG caught a German ringed Dunlin and reported "inside the ring was packed with what appeared to be hard dried mud and the ring would not move at all. When the ring was removed the leg was found to be deeply indented."

Presumably this is a problem which is of rare occurrence, but it would be much appreciated if all such cases could be reported to Bob Spencer at the Ringing Office.

ARLY EXPEDITION

There are still places available for wader ringers who wish to go on the expedition to the Lyngen Peninsula, just north of Tromso in northwest Norway, as announced in the last bulletin. The expedition is due to leave on 6 July 1976 and will return in two groups in early and mid August. If anyone is interested would they please contact Chris Loynes, 1 Recreation Road, Colchester, Essex.

COLOUR DYED WADERS

Two schemes will be operating during this winter and spring. They have been designed so as not to clash.

DEE: A study of roosting and feeding grounds is being made as part of the Dee Barrage Feasibility Study. Dyeing of the principal species of waders will be carried out during the winter.

SOUTH AFRICA: Numbers of Sanderling, Knot and Curlew Sandpipers will be colour dyed in the late winter/early spring, before they leave for breeding grounds, by the Western Cape Wader Study Group.

Could all sightings of birds away from ringing areas be reported to Tony Prater at the B.T.O. including details on where and when seen, species and which colour (s) were involved. He will pass on the records to the appropriate persons. For local sightings please send details to Dee:- N. Buxton, Dee & Clwyd River Authority, 2 Vicars Lane, Chester and for South Africa:- Dr. R. Summers, Percy Fitzpatrick Institute, University of Cape Town, Rondebosch 7700, South Africa.

.../

Colour-ringed RINGED PLOVERS

The colour-ringing of Ringed Plovers in NE England, described in WSG Bulletin No.9 (September 73), is continuing. While this is mainly concerned with a behavioural and ecological study, sightings of these birds in other areas are extremely valuable and we are very grateful for those already reported. The number of birds ringed in the past year was greater than in preceding years and we are hopeful of more sightings. Details of date, locality, positions and colours of rings and any other relevant information should be sent to Mike Pienkowski,(address on Page 1). Observers will be informed of ringing details.

METHODS OF CATCHING AND STUDYING BREEDING WADERS

Peter Ferns and Harry Green.

With few exceptions, we know relatively little about British and Irish breeding waders. What is the exact distribution, habitat preference and population size of each species? What are their bill, wing and tarsus measurements? Where do they winter? In a country that has made major international contributions to the study of waders, many of these questions remain embarassingly unanswered. Few people have studied our breeding waders. Exceptions are Nethersole-Thompson's (1951-1973) work on Greenshanks and Dotterel in Scotland, Oystercatcher studies by Harris (1967) and others, Jim Wilson's unpublished preliminary study of Hebridean Ringed Plover, Lapwing, Dunlin and Oystercatcher, and current work on Redshanks by Bill Hale and his colleagues, and on Ringed Plover by Mike Pienkowski. In spite of these good beginnings a concerted effort is needed to ring, weigh and measure breeding adults to provide basic information for comparison with the excellent data already collected from migrant, wintering and some overseas populations. It is not an easy task since breeding adults can only be caught one at a time, and even this requires patience. The fact that every breeding adult measured is worth perhaps a hundred measured on migration or in winter, provides some consolation. We set out below some basic catching techniques for use in breeding areas. Our experience has been gained, ironically enough, in north-east Greenland, but we hope it will prove of value nearer home.

Locating nests and young

Random searching for either nests or young in suitable areas is seldom of any real value. A few may be found in this way. An adult bird which is aware of the observers' presence will rarely stand anywhere near the nest, so a search in an area where a bird has been standing is an even greater waste of time. The most useful standard method is to walk systematically across suitable habitat until a bird is flushed (a bird flushed from a nest usually rises much later than one, for example, feeding), and then to retire to cover, as far away as possible, and await its return. With shy species which flush easily the problem is retreating far enough to allow the bird to return but to still be within binocular range. With species which sit tight, the problem is getting them to rise at all, and in this case a length of rope held stretched between two people and dragged systematically across the ground often proves useful. In some parts of Britain a car is an excellent hide for

.../

'watching back' waders to the nest.

Once a bird has been traced back to the nest through binoculars, two people are required to locate the exact spot. One should train his binoculars on the bird and fix its position in relation to surrounding vegetation and other landmarcks. The bird will usually rise from the nest as soon as the second person begins to make a move towards the spot (which he has fixed with his naked eye). The person walking towards the nest must keep out of the line of sight of the static observer and, by the use of pre-arranged hand signals, he can be directed to within one or two metres of the nest, from where it should be visible.

Adults do not usually perform distraction displays until either near th end of incubation or after the chicks have hatched, therefore this behaviour usually means chicks are present. Exactly the same technique should be used for locating these, but greater skill is needed since the static observer has to fix several 'targets' at the same time. The chicks may be well spread out. They scatter when first disturbed, and then crouch in response to the adult alarm calls, and so long as the appropriate calls continue they remain crouched and 'frozen'.

Trapping methods at the nest

Adults may be trapped at the nest either when they return to incubate or in the short period when the chicks are brooded in the nest cup. Special care must be taken to avoid chilling of eggs or chicks. In some cases it may be advantageous to use a dummy clutch (filled with Plaster of Paris or similar) to catch the parents while the genuine clutch is kept warm artificially. The most widely used trap for smaller waders is about 40 cm high and 45 cm diameter (but heart shaped in ground plan) with a walk-in funnel entrance. The entrance should point in the direction of the adult's normal return path to the nest and this should be carefully recorded when first 'watching back'. After the bird has entered always approach the trap from the funnel side. An alternative is a manually operated drop-door trap (we used one made from Twillweld, mesh 2.5 x 1.5 cm, and about 40 x 40 60 cm in size). The door, heavily weighted to ensure rapid closure, is propped up with a stick attatched to a long release cord. The side walls should be slightly angled so the door does not have to fall to a vertical position to shut, and the cord should not be pulled until the bird is well settled on the nest. Other workers have used automatic treddle operated drop door traps. In all cases the trap must be watched continuously during the short period of use.

One of the major disadvantages of cage traps is that some birds are reluctant to enter and a few will not return when such a conspicuous object is in the region of the nest. Clap nets, which are less conspicuous, have a considerable advantage in this respect. We used to basic types. The first, which was elastic powered, consisted of two poles between which the net (150 x 150 cm, 3.5 cm mesh) was suspended. Strong U-shaped wire, threated through holes at the end of each pole, provided simple, effective and easily anchored hinges. Tension strings were attached to the other ends and the leading cage of the net strung between them. The rear of the net was pegged to the ground. Power was provided by a short length of powerful elastic attached to one pole (a lifter, such as a stone, was necessary to give initial upward as well as forward pull). A bent metal pin,

.../

attached to a long release cord and thrust into the ground, held the elasticated pole in the set position. We also used single pole clap nets 1 x 2.5 m and 2 x 2.5 m size manually operated by pulling hard on the release cord. The elastic operated net had the advantage of speed; the hand pulled one of larger size. Even when operating over a relaxed incubating bird clap nets have to move quickly to catch the bird. Damage to eggs is avoided because the bird always has time to move several inches away from the nest before being caught in the net. Properly set and camouflaged clap nets cause little delay in the return of adults to the nest provided that net, poles and cord do not lie across the bird's line of approach. There was no apparent difference between cage trap and clap net in the adult's speed of return to the nest after its release and withdrawal of the observers. There was no evidence of desertions amongst the birds we caught in Greenland (Ringed Plover, Sanderling, Dunlin, Knot and Turnstone).

Catching juveniles

Just before fledging young waders can be difficult to catch since they no longer crouch when alarmed but instead rely on speed to escape. In such cases, and also when newly fledged, young run some distance rather than flying and they can be caught by means of a mist net, held on two poles between two people, which is laid quickly on top of them. Even those which fly can sometimes be caught by judiciously flicking the net up in front of them, since their ability to manoeuvre in flight is poorly developed.

Safety of the bird and its offspring

The usual common sense considerations apply when dealing with eggs that may be chilled, predated or deserted and chicks that may chill if they are not brooded regularly. Catching must not be attempted in wet weather. Speed when trap setting and when handling the adults is essential. A useful tip is to delay capturing a bird which has returned to incubate in a trap until the eggs have been warmed. In cold weather a hat, glove or handkerchief placed carefully over the eggs while the caught adult is examined, will reduce their rate of cooling. It must be noted that in Britain several species of wader are on the first schedule of the Protection of Birds Act and special permits are required for studies at the nest. The use of snares, and restrained chicks to attract adults, both of which we used in Greenland, are prohibited in Britain (Section 5 - (1) (a) and (c) of the above Act) and although in theory a special licence could be obtained it is extremely unlikely to be granted except in very special circumstances.

Recording

A great deal of information can be collected by studies at the nest and none should be wasted through inadequate record keeping. Nest records should always be made (date and time of visits, clutch size, details of nest etc) and if future visits are possible attempts should be made to determine the exact time of laying of successive eggs and the length of incubation period. For some species it may be of value to weigh and measure the eggs and if repeat visits are likely each egg can be identified by a pencilled number. Eggslose weight during incubation and direct records of the rate and amount of loss are few. This is essential information for studies of relationships between female weight and egg weight, shape and volume. These may well show interesting differences between species, races and

.../

in different parts of the world. There are few accurate data on wader chick growth rates and running chicks should be weighed and measured - especially retraps of known age. Some fledging periods are not accurately known. Besides collecting the usual measurements adults should be checked for brood patches, both wing and body moult, perhaps photographed and of course ringed.

To avoid prolonged disturbance, chilling or other damage it is obvious that quick careful work is required. So much information becomes available at short notice that anyone undertaking detailed study of breeding waders should plan their recording system with care, and have all the necessary tools (pliers, calipers, balances etc) ready for instant use. In the rush at the nest it is very easy to forget to record some items. In Greenland we used pre-printed record cards (150 x 100 mm) which were very satisfactory as they collected all the data relating to one nest into one place and also provided memory cues in the field. Full details of the system will be given in the report of The Joint Biological Expedition to north-east Greenland 1974, which will be available in 1976.

References

Green, G.H. and Greenwood, J.J.D. eds (1976 - in prep). Report of the Joint Biological Expedition to north-east Greenland 1974.

Harris, M.P. (1967). The Biology of Oystercatchers Haematopus ostralegus on Skokholm Island, S. Wales. Ibis 109 : 180-193

Nethersole-Thompson, D. (1951). The Greenshank. Collins, London.

Nethersole-Thompson, D. (1973). The Dotterel. Collins, London.

REPORT OF WADER STUDIES IN MOROCCO 1972

The long-awaited joint report of the University of East Anglia Expedition to Tarfaya Province, Morocco 1972 and the Cambridge Sidi Moussa Expedition 1972 is now at the printers. Entitled "Studies on coastal birds and wetlands in Morocco 1972", it should be available by the time this bulletin is circulated.

The report of 100 pages falls into four main sections, the first briefly describing the Atlantic coast and activities of the expedition with descriptions of the main sites for waders, those in the remote south - Oued Chebeika and Puerto Cansado - being discussed in some detail. These are followed, in the second part, by a systematic list of birds observed, particular attention being given to Tarfaya Province, a previously neglected area, and to the autumn migration of Palaearctic species. Also included in this section are notes on the identification of some fairly common species, not fully treated by field guides. This, as other sections, is illustrated by figures and photographs.

The third and largest section is devoted initially to reports and discussion of counts of waders along the Atlantic coast of Morocco and subsequently to an analysis of results from catching. Moulting patterns and weight changes are discussed for each species as well as geographical origins and migrations. The final, short section is devoted mainly to organisational information and includes a list of publications, and detailed analyses in progress, resulting from these expeditions and the earlier UEA Expedition in Morocco 1971.

Copies of the report are available, price £1.00, from Mike Pienkowski (address on page 1).

.../

Foreign ringed waders reported in British Isles in 1974

Oystercatcher

Rk 412365	Juv	29. 8. 72	Skogarnes, Iceland	x Wexford	20. 8. 74
As 52580	Pull	23. 6. 66	Nordland, Norway	v Wash	3.11. 74
St 542797	"	19. 6. 69	Rogaland, "	v "	21. 8. 74
St 546093	"	17. 7. 70	More & Romsdal, Norway	v "	18. 8. 74

Lapwing

Bd F32192	Pull	27. 5. 75	Niederbayern, FRG	x Stansted, Essex	15. 8. 74
Hg 5134127	"	29. 5. 69	Niedersachsen, "	x Wetherby, Yorks	23.12. 74
Ar 1076678	"	28. 5. 72	Friesland, Netherlands	x Belfast	5. 1. 74
Ar 1098753	"	3. 6. 72	Noord Brabant, "	x Ipswich, Suffolk	7.11. 74

Ringed Plover

Hg 80538354	Ad	11. 5. 72	Schleswig Holstein, FRG	v Morecambe Bay	15. 9. 74
Co 8062679	Pull	7. 6. 72	Jutland, Denmark	x Dawlish, Devon	early 9. 74

Turnstone

Rk 722566	Ad	25. 5. 71	Gardskagi, Iceland	v Fife Ness	24. 3. 74
Rk 723832	Ad	21. 5. 72	Midnes, "	v Torpoint, Cornwall	14.2. 74
Hk A363459	Pull	29. 6. 74	Vaasa, Finland	v Humber	21. 8. 74
Po F555048	1Y	20. 8. 71	Gdansk, Poland	v Bradwell, Essex	18. 8. 74

Snipe

Hd 7097785	FG	10. 8. 73	Thuringen, DDR	+ Galway	20.12. 74
Hd 7093556	FG	16. 8. 73	Berlin-Buch, DDR	+ Warrington,Lancs	1974
Hg 7505960	Juv	1. 9. 73	Braunschweig, FRG	+ Antrim	26.12. 74
Sk 5059952	FG	27. 8. 71	Halland, Sweden	+ Bodmin, Cornwall	21. 1. 74
Sk 5072726	FG	24. 8. 74	Orebro, "	x Fermanagh	8.11. 74
Sk 5083831	FG	30. 9. 72	Sodermanland, Sweden	+ Kent	29.12. 73
Sk 5085971	FG	6. 9. 73	Skanor, "	x Blakeney, Norfolk	7. 1. 74
Sk 5087303	FG	16. 8. 73	Halland, "	+ Chorley, Lancs	24. 9. 74
Ar 2036831	FG	13.10. 70	Texel, Netherlands	+ Glamorgan	0. 1. 74

Woodcock

Go C54485	FG	8. 8. 58	Malmohus, Sweden	x Sussex	9. 3. 65
Ka 602763	1Y	31. 3. 73	Jutland, Denmark	+ Dongeal	2.12. 73
Ar 1067849	FG	15.11. 72	Friesland, Netherlands	+ Essex	1. 1. 74
Ar 1110157	FG	18.11. 72	" "	+ Galway	1. 1. 74
Ar 1110202	FG	19.11. 73	" "	+ Cheshire	9.11. 74
Ar 1110227	FG	5.11. 74	" "	+ Yorkshire	7.11. 74

Curlew

Hl C152081	Pull	1. 7. 70	Kymi, Finland	v Aylburton, Glos.	16.11. 74
Hl C164204	"	5. 6. 65	Oulu, "	+ Orkney	17. 9. 74
Hl C182025	"	11. 6. 66	" "	+ Hunstanton,Norfolk	22.11. 74
Hl C85662	"	29. 6. 60	Vaasa, "	x Wexford	20. 1. 74
Sk 8021795	"	17. 6. 72	Gavleborg, Sweden	+ Wash	2.11. 74
Ar 5057724	"	17. 6. 72	Noord Brabant, Netherlands	x Cornwall	(13. 4. 74)
Ar 4046827	"	12. 6. 74	Overijssel, "	+ Chichester Hbr.	1. 9. 74
Bx L15756	"	13. 6. 71	Antwerpen, Belgium	+ North Kent Marshes	15.12. 74

Black-tailed Godwit

[illegible] FT65101	PJ	26.10. 73	Vendee, France	+ Pagham Harbour	1. 9. 74

Bar-tailed Godwit

St 612990	FG	1. 9. 65	Revtangen, Norway	v Wash	22. 8. 71

Redshank

RK 617530	Pull	8. 7. 69	Thingeyjar, Iceland	v Isle of May, Fife	7.10.74

Knot

USA 76230120	PJ	7. 6. 74	Alert, Ellesmere, Canada	v Wash	18. 8. 74
Rk 721031	Ad	15. 5. 70	Eyri, Iceland	v "	"
Rk 721876	Ad	"	" "	v "	"
Rk 724497	Ad	25. 5. 72	Stokkseyri, Iceland	(v) Dennington,Wash	10. 2. 74
Rk 724843	Ad	21. 7. 72	Skogarnes, "	v Wash	5.10. 74
Rk 725333	Ad	28. 7. 72	" "	v "	18. 8. 74
Rk 725729	Ad	9. 8. 72	" "	v "	"
Rk 725188	Ad	28. 7. 72	Akrar, "	x Aberlady, Forth	9. 2. 74
St 7120133	FG	30. 8. 71	Revtangen, Norway	v Wash (1Y)	30. 7. 72
				v Ellesmere, Canada	8. 6. 74
St 7115904	FG	13. 9. 69	" "	x Wash	27. 1. 7[illegible]
Ar K472456	PJ	2. 9. 73	Vlieland, Netherlands	v Wash	24. 2. 74
Ar K476976	PJ	2. 9. 73	" "	v "	27. 1. 74
Ar K484090	PJ	7.10. 73	Schiermonnikoog, "	v "	24. 2. 74

Little Stint

St 9288306	Juv	20. 8. 74	More & Romsdal, Norway	v Tentsmuir, Fife	11. 9. 74

Dunlin Too many Dunlin were controlled in Britain and Ireland to detail fully. The countries with few recoveries are detailed, the rest are summarised in the table below.

Mo S152432	Ad	24. 7. 70	Gt. Ainov Isl. USSR	v	
				v Skanor, Sweden	27. 7. 74
Po G310849	PJ	1. 8. 73	Mikoszewo, Poland	v Humber	24. 3. 74
Po G333391	PJ	6. 8. 72	" "	v Plym	24. 1. 74
Po JA03079	Ad	29. 7. 74	" "	v "	22.11. 74
Hd 30231979	FG	11. 9. 73	Rostock, DDR	v Humber	24. 3. 74
Hd 30232084	FG	14. 9. 73	" "	v Clyde	13. 1. 74
Hd 30291502	FG	16. 9. 73	" "	v Monmouth	25. 5. 74
Rk 920190	Ad	25. 5. 72	Stokkseyri, Iceland	v Glamorgan	5. 5. 74
Jg X2987	Ad	14.12. 69	Jersey	v Wash	18. 8. 74
Pa SA257249	FG	18. 9. 71	Finistere, France	v "	23. 8. 74
Pa SA505378	1Y	1. 9. 73	Sidi Moussa, Morocco	v Morecambe Bay	19. 5. 74
Pa SA526225	Ad	22.10. 73	Banc d'Arguin, Mauritania	v Glamorgan	5. 5. 74
Pa SA542853	PJ	12.11. 73	" "	v Morecambe Bay	19. 5. 74
Pa SA542966	Ad	17.11. 73	" "	v Wash	21. 7. 74

Recovered in British Isles

Ringed	July-October	Nov-March	April-June	Total
Finland	2	4	-	6
Sweden	5	27	3	35
Norway	22	17	5	44
Denmark	3	2	-	5
FRG	1	3	-	4
Netherlands	-	3	1	4
Belgium	-	-	2	2
	33	56	11	100

Ruff

Ar 1092318	Pull	25. 5. 71	Polder Arkemheem, Neth.	(v) Wigston, Leics. 13. 5. 74

Avocet

Ar 3047555	Pull	6. 5. 63	Vlieland, Netherlands	v Havergate, Suffolk 9. 6. 7?

THE ROAD FROM THE TAIMYR

Michael Smart

The first indication I had of the 1975 Curlew Sandpiper invasion was on 24 July when I saw 400 adults at the Monastir salt-pans in Tunisia on 26 July I saw 600 more, all adults, on the Lake of Tunis at a spot where there had been four on 9 July, nil on 19 July and 120 on 21 Jul

At this point I should explain that I lived in Tunis between 1962 and 1971, and got quite used to seeing flocks of several hundred Curlew Sandpiper (up to 1,100 in fact) in full breeding plumage durin the month of May when they were on their way north-east; numbers on autumn passage on the other hand were invariably much lower - the fir few would appear in late July, there would be up to a hundred in August (though I saw 400 plus on 4 August 1971) and by late September most would have moved on. Except, that is, in autumn 1969, when Tunisia, like most of western Europe was deluged with Curlew Sandpipe And so, naturally enough, having seen flocks of 400 and 600 at two sites a hundred miles or so apart, I began to wonder if we were in for an invasion on the lines of 1969. Stanley and Minton (1972, "The unprecedented westward migration of Curlew Sandpipers in autumn 1969" British Birds, 65 : 365-380), however showed that the 1969 invasion happened in September and was concerned almost exclusively with birds of the year.

So on returning to home territory on the Upper Severn, I was disappoi to learn that local observers had spent several days by the river (including the whole morning of 4 August, before, during and after high tide) without seeing a single Curlew Sandpiper, or much else either. The night of 4 August was dark and thundery, the first broa in the heat-wave for some weeks ("a thundery trough of low pressure moved northwards over western districts"). I should therefore have been prepared, on taking a quick look at the river on 5 August, to have found some new arrivals, even though the tide was way out. But I had not really expected to find 138 plus Curlew Sandpipers, every one in adult plumage, together with 28 Whimbrel, all settled but calling anxiously and obviously in a hurry to be off; and a Gloucest ershire rarity, a Wood Sandpiper. On closer examination at high tide early on 6 August there were those Curlew Sandpipers, plus 40 Turnstone, 40 Sanderling, 20 adult Knot (good totals for Gloucester-shire, none of which had been observed on 4 August, a Little Ringed Plover and as a bonus a Pectoral Sandpiper (apparently the first recorded in the county). The obvious conclusion was that the trough of low pressure had grounded all these waders of Siberian origin as they passed over the area; the Pectoral Sandpiper could hardly have come across the Atlantic in prevailing weather conditions - it seems much more plausible to regard it as a bird from Siberia which had ju mixed up with the Curlew Sandpipers and others when they moved off south-westwards.

And, as if to confirm this hypothesis, they all disappeared as quic as they had come - the Whimbrel, Turnstone, Sanderling and Knot were not seen again, while the numbers of Curlew Sandpiper dwindled to 83 on 7 August, 13 on 8 August, with only a single left by 12 and 13 August. The Pectoral Sandpiper hung about until 14 August. A visit to the next high tide roost down on the west bank was made on 7 Augu - there was however absolutely no sign of unusual numbers of Siberi waders: Ringed Plovers, Turnstone and Dunlin, all in about average quantities, one Knot, one Whimbrel - but Curlew Sandpipers? Sanderli unusual numbers of anything? Nary a one!

.../

Nevertheless, having seen unusual numbers of adult Curlew Sandpipers as far apart as Tunis and Upper Severn in late July and early August, I modestly assumed that somebody somewhere must have been something similar; so far, however, I've drawn a complete blank; juvenile Curlew Sandpipers yes - thirties and forties in eastern England in late August; 60 plus on the Forth; several thousand in Vendee, France, with their arrival date clearly noted as the evening of 8 September; we've even seen (for the Upper Severn!) good numbers of juveniles in September - two on the east bank on 9 and 11 September, and on the west bank 8 on 6 September (seven of which departed with rings on their legs in the early hours of 7 September). But adults - no; the only remotely promising lead was a Marsh Sandpiper (which after all also comes from the eastern end of the wader spectrum) at Borough Fen on 5 August.

So, did anybody see unusual numbers of Siberian waders, especially adult Curlew Sandpipers, anywhere in the western Palearctic in late July or early August? And if so can they explain why such numbers were around - is this purely a case of weather conditions affecting the adults as they carried out their usual migration, or could there have been an unusually large and early exodus from the breeding grounds, and if so, why?.

Or is the 1975 Curlew Sandpiper invasion a figment of my imagination?

MIST-NETS

Chris Mead

It is now almost twenty years since mist-nets were introduced to the British ringing scene. During that time a wide variety of manufacturers, materials, meshes and net sizes and heights have been used and it seems appropriate, as we emerge from a very difficult period when supplies have been almost unobtainable, to run through the types for the benefit of wader netters. These are listed in a roughly chronological order, and if they are (or may be) available comments on prices and availability are added.

HIGH NETS

A) Japanese 1.5", 3-shelf, nylon nets. The first type. Flimsy, untethered -(it had not been invented) but used by the first wader netters.

B) Gundry 1.5", 3-shelf, terylene nets. Stronger than the Japanese material, tethered (at least since ca. 1965). The material is 125d/2-ply and such nets are still being made by Bridport-Gundry. Some 70 are outstanding to ringers and when (if) further nets become available ringers with SAE's at the ringing office will get to hear of them and their prices (likely to be rather more than those on order).

C) Gundry 1.25", 4-shelf, terylene nets. Made from the same material as B these proved ideal for small passerines but did not take waders at all well. Knox 1.25" nets are direct equivalent.

D) Gundry 1.25", 4-shelf, terylene SUPERFINE nets. These are made from 75d/2-ply material and their current equivalent is the Japanese nets now being imported. Some ringers have used these nets in daylight and caught waders.

.../

E) Gundry 3", 2-shelf, nylon nets. Only 60' available. Thes wader nets were produced for several years but proved nasty if small waders were caught. They have been out of production for some time . most sensitive ringers have probably relegated them lower even than strawberry protection.

F) French wader nets. The situation here is confusing. The better nets had 1.7" mesh with 55 meshes per shelf. They were 3-shel nets with braided shelf string (40.5 kg breaking strain) and 440 mesh (laterally) to the 12 m net. Tethered top and bottom. However our no recent request, to the same firm, has resulted in an inferior sample net with 1.5" mesh only (making less slack all round) and thinner she strings. The material feels different although the specification is probably the same 210d/2-ply. These nets are not currently being imported and it may be that the good type of French net is gone for ever. On the basis of the last quotation they would cost at least £15.50 for a 12 m net.

G) Knox, 1.5", 3-shelf, polyester nets. These are the new n which should start to be available in January. The material is 125d/ ply polyester - half as strong again as normal mist net material and about 90% of the strength of the French material. The mesh size has been set a 1.5" to allow for their use at thrush roosts etc but the lateral slack, at over 600 meshes per 18 m net, has been increased to make really capacious shelves. Shelf string will be 18-ply polyester with a breaking strain of 32 kg - probably stronger than the old Gund wader shelf-string. This shelf-string should soon be available in c ca. 100 m long at 35p. The nets will be tethered one edge only. Bot 12 m and 18 m nets will be available at £14.50 the former and £18.50 the latter. Rather more expensive than we had hoped but they should really good catching nets and very long-lasting.

SINGLE SHELF NETS

Wader catchers have had a lot of success with singles. At the moment we are in the process of importing Japanese superfine 42" singles and loose material. Wader catchers trying to operate in daylight may fin that these nets will work. Other sorts of single shelf netting may become available in the future when the Gundry material currently in Ireland is cleared. Since we do not know what they have, and any ord for single-shelf material from Knox would slow down their delivery on other nets, we do not feel justified in trying to get Knox singles yet

HOW TO GET HOLD OF NETS

For Knox nets send in the postal Q-form or a letter asking for whatev nets you want. Immediately the first of the nets you request becomes available the Ringing Office will invoice you for them and, as soon as you pay, they will start coming. For Jap nets money should be enclosed with your order. If you have Gundry nets on order they shou c me eventually at no extra cost to you - if you want to hear about further Gundry nets that might become available details (and prices - which will inevitably be increased) will be sent if you have lodged an SAE with the Ringing Office. French nets do not currently seem to be a good buy. Incidentally if you have wader shelf string on order Knox material will be sent as soon as it comes in.

.../

RECENT PUBLICATIONS ON WADERS

See also abstracts in Ibis, Auk and Bird-Banding and lists in IWRB Bulletin. Details of omissions in this list to Mike Pienkowski, please.

Batten, L.A. & Marchant, J.H. 1975. Bird population changes for the year 1972-73. Bird Study 22:99-104.

Becuwe, M. 1973. (An ecological interpretation of the seasonal fluctuation of the number of turnstones Arenaria interpres in Belgium.) Gerfaut 63:281-290. (Flemish w. Eng. summ.)

Bourne, W.R.P. 1975. Oystercatchers on the roof. Brit. Birds 68:302.

Dawson, R. 1975. Marsh Sandpipers associating with feeding Avocets and other species. Brit. Birds 68:294-5.

Evans, P.R. 1973. Avian resources of the North Sea. pp 400-412 in E.D. Goldberg (Ed.) North Sea Science M.I.T. Press, Cambridge, Massachusetts.

Evans, P.R. 1975. Notes on the feeding of waders on Heron Island. Sunbird 6:25-30.

Flegg, J.J.M. 1975. Bird population and distribution changes and the impact of man. Bird Study 22:191-202.

Hobson, W. 1972. The breeding biology of the Knot. (With an appendix by V.E. Flint on The Breeding of the Knot on Vrangelya (Wrangel) Island, Siberia : comparative remarks). Proc.W. Foundation Vert. Zool. 2(1):1-29.

Howe, M.A. 1975. Social interactions in flocks of courting Wilson's Phalaropes. (Phalaropus tricolor). Condor 77:24-33

Hulscher, J.B. 1974. An experimental study of the food intake of the Oystercatcher Haematopus ostralegus L. in captivity during the summer. Ardea 62:155-170.

Jones, R.E. Food of Turnstones in the Wash. Brit.Birds 68:339-341.

Kistchinski, A.A. Breeding biology and behaviour of the Grey Phalarope Phalaropus fulicarius in east Siberia. Ibis 117:285-301.

Lea, D. & Bourne, W.R.P. 1975. The birds of Orkney. Brit.Birds 68:261-266.

McClure, H.E. 1974. Migration and Survival of the Birds of Asia. U.S. Army Medical Component, SEATO Medical Research Laboratory, Bangkok, Thailand. 476 pp.

Nethersole-Thompson, D. 1975. Summer food and feeding habitats of the Greenshank. Brit. Birds 68: 243-5.

Ogilvie, M.A. 1975. Studies of less familiar birds. 177. Purple Sandpiper. Brit.Birds 68:284-8.

Page, G. & Whitacre, D.F. 1975. Raptor predation on wintering shorebirds. Condor 77:73-83.

Parrinder, E.R. & E.D. 1975. Little Ringed Plovers in Britain in 1968-73 Brit.Birds 68:359-368.

Pienkowski, M.W. (Ed.) 1975. Studies of coastal birds and wetlands in Morocco 1972 - The joint report of the University of East Anglia Expedition to Morocco 1972 and the Cambridge Sidi Moussa Expedition 1972. Norwich. 100 pp. (Copies £1.00, from the editor 5 Brockmill Cottages, Beal, Berwick).

Pienkowski, M.W. & Knight, P.J. 1974. Autumn counts of waders on the Atlantic coast of Morocco. Bull.Int.Waterfowl Res.Bur. 38: 89-92.

Prater, A.J. (Ed.) 1974. Proc. of the Wader Symposium, Warsaw, Poland, 13-14 September 1973. IWRB Warszawa. (Copies £1.00, from IWRB, Slimbridge, Glos.) Papers included are:-
Kalbe, L. Waders breeding in the G.D.R. pp. 9-14.
Prater, A.J. Breding Biology of the Ringed Plover Charadrius hiaticula. pp. 15-22.
Harrison, J. Creating inland wading bird habitat. pp. 25-31.

.../

Merne,O.J. Waders in Ireland. pp. 37-48.
Harrison,J. Racial characteristics as an aid to the understanding of wading bird migration. pp. 49-60.
Soikkeli, M. Population dynamics of Dunlin in Finland. pp.61-2
Johnson,A.R. Wader Research in the Camargue. pp. 63-82.
Boere, G.L. Wader Research in the Dutch part of the Waddensea. pp. 83-98.
Prater, A.J. The population and migration of Knot in Europe. pp. 99-113.

Prater, A.J. 1975. The wintering population of the Black-tailed Godwit. Bird Study 22: 169-176.

Prater, A.J. & Marchant, J.H. 1975. Primary moult of Tringa brevipies and T. incana. Bull. Br.Orn.Club 95: 120-122.

ADDRESSES

New

Bradstreet, M.	P.O. Box 117, Port Rowan, Ontaria, NOLlMO,Canada.
Lennon, P.	St. Monans Hotel, 54 Thornton Road, Morecambe, Lancs.
Marshall, W.	57 Craiglea Drive, Edinburgh 10.
Moon, S.	Zoology Dept., Durham University, South Road, Durham DH1 3HE.
Page, G.	Point Reyes Bird Observatory, Mesa Road, Bolinas, California 94924, U.S.A.
Ramsay, A.	Wardens House, Berstane Road, Kirkwall, Orkney.
Tate, P.	Half Acre, Rooks Hill, Rickmansworth, Herts WD3 4HZ.
Taylor, Dr.I.	Dept. of Zoology, University of Ghana, Legon, Accra, Ghana.
Wiersema, G.	c/o Veldstation V.U., Kooiweg, Schiermonnikoog, Netherlands.

Changes

Coates, T.	4 Tyndale Street, Leicester, LE3 0GP.
Etheridge, B.	1 Thornhill Cresc. Forres, Morayshire IV36 0HV.
Hardy, P.	MAFF, Hookrise South, Tolworth, Surbiton, Surrey.
Mason, Dr. C.	DOE, Water Data Unit, Reading Bridge House, Reading RG1 8PS. Berks.
McAlpine-Leny, I.	51 Gloucester Road, London SW7.
Old, A.	Kalinka, 2 Flimby Brow, Flimby, Maryport, Cumbria CA15 8TD.
Rusk, Dr.M.	18 Morven Road, Inverness, IV2 4BU.
Smith, P.	Dept. of Biology, Acadia University, Wolfville, Nova Scotia, Canada.
Swinfen, R.	72 Dunraven Drive, Derriford, Plymouth, Devon PL66AT.
Taylor, R.	Derwentcote House, Hamsterley Colliery, Newcastle-upon-Tyne, NE17 7RS.
Wilson, G.	114 Briza Road, Table View, 7436. South Africa.

The WADER STUDY GROUP (WSG) is an association of amateur and professional workers on the Charadrii (waders or shorebirds) from all parts of the world. By 1982, membership of the WSG was over 500 people, more than half of the members living in countries other than Britain (where the group was formed in 1970), and including people in the Americas, Asia, Africa and Australasia, as well as Europe. New World members have their own section within the WSG. Interests of the Group have diversified from the original concentration on migration-related studies to embrace all aspects of research on waders, e.g. counts, breeding biology, feeding ecology and behaviour.

The aims of the WSG are to maintain contact between both amateur and professional individuals and groups studying waders; to help organise co-operative studies; and to provide a vehicle for exchange of information. The main means of achieving these aims is by the publication of the *Wader Study Group Bulletin* (see below). WSG maintains contacts with many regional, national and international bodies interested in bird research and conservation, notably the International Waterfowl Research Bureau (IWRB), and often works alongside them in co-operative studies. The Group has been involved also in the organisation of expeditions to remote areas to fill gaps in the knowledge of waders. Projects co-ordinated by WSG have included studies of the spring migration of Siberian-breeding Knot through Europe and Africa, and of other species passing through western Europe. Current projects include a comprehensive assessment of the networks of coastal sites used by shorebirds in western Europe in the non-breeding season; a large-scale investigation of spring migration through the Americas; a long-term monitoring of the usage of inland sites in Europe; and an investigation into the effects of severe winter weather in Europe. Most of these studies have immediate relevance to conservation as well as increasing basic understanding of wader biology. These comments apply also to the current WSG co-operative projects concerning breeding waders, particularly an intensive study of wader distributions and densities in the Outer Hebrides of Scotland, where rapid changes are being made due to agricultural practices. WSG also co-ordinates (on behalf of several national authorities) the use on waders of colour-marks visible in the field, and attempts to forward sightings of these.

Membership of the WSG is open to all individuals or groups interested in waders, and application forms can be obtained from the Membership Secretaries, N. & J. Clark, Department of Zoology, University of Edinburgh, West Mains Road, Edinburgh EH9 3JT, U.K. The subscription is devoted mainly to the cost of production and circulation of the *Bulletin*. The annual subscription is £10 (or US $17 or Canadian $21). Outside Europe, *Bulletins* will be sent by airmail for a total subscription of £13 (or US $22 or Canadian $27). Rates for institutions and payment through subscription services are £25 (or US $42 or Canadian $52), or for airmail posting £28 (or US $47 or Canadian $58). All cheques should be payable to "Wader Study Group"and must be in British, US or Canadian currency. Alternatively, payments may be made by bank giro (in English pounds) to Lloyds Bank Ltd., 7 Victoria Place, Haverfordwest, Dyfed SA61 2JZ, U.K. (Bank sorting code no. 30-93-98), with reference to WSG account (no. 0095972); or by British Post Office Giro to account no. 471204404. Please ensure that your name and initials appear on the transfer form and that a membership application form is sent directly to WSG. Persons with bank accounts in Britain may use the bankers order form provided with the application form.

The *WADER STUDY GROUP BULLETIN* provides a forum for news, notices, recent ringing recoveries, recent publications, new methods of catching and study, articles and preliminary or interim publication of results from all parts of the world. The editors try to maintain a balance of material ranging from newsletter, informal descriptions of research activities, meetings and expeditions to formal presentation of results or preliminary analyses.

The *Bulletin* appears three times per year, in April, August and December; the deadlines for copy being the first of February, June and October respectively, for notices, but articles must be received well before these dates. Articles, notes, papers, notices, obituaries, requests for information, books for review, reprints of papers and other items should be sent to the Editor, Dr. N.C. Davidson, Department of Zoology, University of Durham, South Road, Durham DH1 3LE, U.K. Material relating to the New World may be sent to the editors of the New World Section (Dr. J.P. Myers, Vertebrate Biology, Academy of Natural Sciences, 19th and the Parkway, Philadelphia, Pennsylvania 19103, U.S.A.; and Dr. R.I.G. Morrison, Canadian Wildlife Service, 1725 Woodward Drive, Ottawa, Ontario, Canada K1A 0E7). Matters relating to the circulation of the Bulletin should be sent to the Membership Secretaries (address above).

The Editors are always pleased to discuss possible contributions with potential authors, and to advise on presentation. Manuscripts should be typed or written clearly, with all lines double-spaced, leaving wide margins, and following the style of *Bulletin* 40 (April 1984) or later issues. Pay particular attention to the style of headings and reference lists. Scientific names should appear at the first mention of each species or, if all species occur in a table, scientific names may be given there instead. Tables and figures should, wherever possible, be designed to fit a single column width of 12 cm. Full page width is 25 cm. A single column of text comprises 47 characters (including spaces).

The *Bulletin* is produced from camera-ready copy printed by an Canon PW-1156A dot-matrix printer driven by a British Broadcasting Corporation Microcomputer Model B (Acorn Computers), with a Computer Concepts "Wordwise" word-processing chip. Authors with such equipment may submit copy in machine-readable form. Advice on this was given in *Bulletin* 40, and is summarised here. Material should be on a 5.25 inch floppy disc, single-sided, at single density, and preferably on 80-track (but 40-track is acceptable). Authors with a Canon or Epson printer can include "embedded commands" in the text for italics, underlining, superscripts etc. Otherwise, mark these features clearly on a print-out of your article, using a coloured-pen. A print-out of the article should in any case be sent as well as the machine-readable form. It may be possible for authors with a BBC Microcomputer, but not "Wordwise", to submit machine-readable material, but please consult the editor first.

Line illustrations and figures should be produced neatly in black ink on good quality white or tracing paper, with linear dimensions about 1.5 times intended publication size. These can then be used directly in printing. Lettering should be stencilled or by dry transfer (e.g. Letraset), and be at least 1.5 mm high after final reduction. If stencil or dry transfer is not available, leave the original illustration unlabelled, and mark the required lettering on a separate copy. Please send original illustrations, and retain a copy in case of loss or damage in transit. It would be helpful if two copies of each manuscript could be submitted.

Publication of interim results in *WSG Bulletin* is not intended to pre-empt publication of final results as journal papers. Readers are requested to bear in mind that results and analyses published in *WSG Bulletin* may be of a preliminary nature, and to take account of this if making reference to these articles in publications of their own. If editors of other publications wish to reprint items from *WSG Bulletin* with suitable acknowledgement, this can usually be arranged; the persons concerned should contact the WSG Editor.