

Wash Wader Ringing Group 2016/2017 Report



AIMS OF THE WASH WADER RINGING GROUP

The Group aims to monitor waders using the Wash, to provide a better understanding of their biology. This will allow decisions which may affect these waders to be taken in the light of factual information.

Work concentrates on eleven target species (Oystercatcher, Ringed Plover, Grey Plover, Knot, Sanderling, Dunlin, Black-tailed Godwit, Bar-tailed Godwit, Curlew, Redshank and Turnstone), studying:

- the patterns of migration and origin of each species and any known populations;
- the importance of the Wash as a whole;
- the importance of sub-areas of the Wash;
- the use of biometrics and other techniques to understand how birds use the Wash;
- long-term population dynamics.

HONORARY OFFICERS (AT DECEMBER 2017)

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Clive Minton

Group Leader Phil Ireland **Secretary** Jenny Wallace **Treasurer** Kevin Sayer

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Phil Ireland (Chair)
Nigel Clark
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Website: www.wwrg.org.uk
Email: enquiries@wwrg.org.uk
Sightings: sightings@wwrg.org.uk

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Compiled and edited by Lizzie Grayshon, Jenny Wallace, Jacquie Clark & Phil Ireland.

Design and layout by Lizzie Grayshon, Jenny Wallace & Jacquie Clark.

Proof reading by Graham Appleton, Lys Muirhead, Cathy Ryden & the authors.

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Wash map and recovery maps Ryan Burrell.

Dedicated to the memory of Steve Wakeham.

Group member and compiler of 'Notable Recoveries' since 1983.

25 Dec 1959– 20 Jan 2017.



Steve Wakeham (Jeff & Allison Kew)

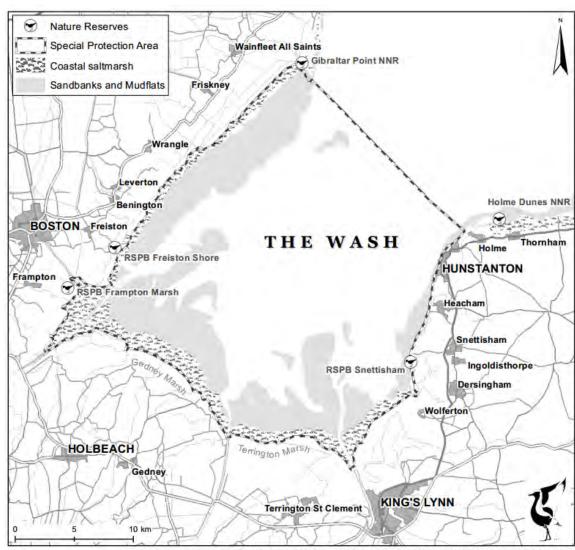
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- The many landowners, farmers and their staff around the Wash who allow us access to their land, foreshores and, through their co-operation, enable catches to be made.
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- John Bonell for his efforts in inputting large amounts biometric data.
- Members of the public who have come across us in the field and have co-operated to help with our catching operations.
- All of the Group members who help on field trips and behind the scenes.

MAP OF THE WASH



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INTRODUCTION

This report covers the Group's activities in the years 2016 and 2017. As usual, fieldwork was carried out largely on full weekend visits to the Wash over the winter months, with some one-night mist-netting catches and longer visits during the autumn passage period. The Group now seeks to maximise the value of the fieldwork using colour marks on certain species, so that both survival and movement data can be collected without the need to recapture individual birds. At least one tide in each fieldwork session is now often devoted to resighting colour marks rather than catching. As in recent years, mist-netting accounted for an increasing proportion of birds caught, at nearly 50% in 2016 and 2017. The species caught also followed the pattern of recent years, with a lack of Dunlin present to be caught being of particular concern. Support for the Group, both from existing members and new participants, has continued to be strong. Regrettably limitations on the accommodation available and the need to have an adequate mix between experienced and inexperienced participants has resulted in it being necessary to turn down some would-be participants.

Phil Ireland

FIELDWORK

2016 Fieldwork

The year started with an entirely mist-netting weekend in January which produced modest catches at both Terrington and Gedney. Some useful work was also done with parties going out to resight colour-marked birds and others checking data at base. February's fieldwork was more conventional in that cannon-netting was attempted on the Saturday morning but the Oystercatchers which were the target species did not play ball. Mist-netting in the evening was more productive, with 110 waders of nine different species being caught. Colour-mark resighting on Sunday morning was also productive.

The Oystercatchers on Snettisham beach were more co-operative in March when a total of 265 were caught. Terrington mist-netting in the evening produced 67 Dunlin, out of a total catch of 94, and the resighting fieldwork on Sunday morning was rewarded by two colour-marked Avocet as well as sightings of our own Godwit and Turnstone.

No further fieldwork was undertaken until July, the waders mainly being away from the Wash, breeding. A team assembled at the Old School House in late June for base and catching equipment maintenance. The AGM was also held during the weekend.

With birds beginning to return from breeding areas, the first of the autumn passage fieldwork was towards the end of July. This proved very productive with a catch of 400 Sanderling being made, the timing of firing mainly being determined by a paraglider approaching the catching area. The relatively small team was augmented by a member of the public who happened to be passing as the catch was made and became a rather competent ringer by the time we had finished.

The main autumn passage fieldwork was two sessions, in August and September, and on both occasions teams operated on both sides of the Wash, with team members moving side, in order to help when there was a good catching opportunity.

In August the highlight for the Terrington-based team was 183 Bar-tailed Godwit out of a total catch

of 251 on a field on the Royal Estate, enabling many more of this species, and Curlew, to have colour flags fitted. The team also had two good mist-netting sessions at Terrington and Gedney. Meanwhile the Lincolnshire-based team initially struggled to find suitable catching opportunities, but did end up with a couple of 100+ cannon-net catches, these being of Oystercatchers and, on the last morning, Dunlin. They also had a reasonable mist-netting session.

The September fieldwork was affected by poor weather initially and, apart from one substantial catch of Dunlin and Sanderling on Snettisham beach, the Terrington team did best with mistnetting. Meanwhile the Lincolnshire team made a number of small catches, plus a couple of three figure catches - 104 Oystercatchers and 112 Knot.

In October, tide times in relation to daylight gave an unusual opportunity for morning mist-netting and consequently the team had a very early start on both Saturday and Sunday. The action took place at Gedney on both days and the team was rewarded with moderate catches, mainly of Dunlin.

The final fieldwork for the year, in mid-December, followed the now more-normal format with cannon-netting being attempted on the Saturday morning, mist-netting on the Saturday evening and resighting on the Sunday morning. On this occasion the waders did not co-operate on the Saturday morning and no catch was made. Mist-netting in the evening was notable for the fog making a very different atmospheric feel. Nevertheless, exactly 100 birds were caught including a dozen Black-tailed Godwit and, unusually, a Teal.

2017 Fieldwork

Weather affected the first fieldwork of the year, in mid-January, with a combination of strong winds, rain and high predicted tides meaning the planned cannonnetting and mist-netting could not take place. In the end, there was a useful colour-mark resighting session on Saturday morning before an early departure for the team. Further fieldwork at the end of January concentrated on flag resighting, with weather once again preventing mist-netting on the Saturday evening.

The final spring cannon-net catching attempt followed in mid-March, and resulted in two modest catches of Oystercatchers. The first group were caught on the rising tide on Heacham beach, with a further catch being made the following morning on Snettisham beach. This was followed by a rare April mist-netting session (on April Fool's day) which produced not only a reasonable sample of both Dunlin and Redshank, but also a Shelduck and a Brent Goose.

The autumn passage campaign started rather unusually with a short 'weekend length' trip but not on a weekend! The team arrived Monday but, frustrated by poor weather, did not even make a catching attempt until Tuesday evening. This resulted in a catch of 55 Sanderling, but better things were to come on Wednesday morning when a further 430 Sanderling were caught. This satisfied one of the trip's aims (passage Sanderling) but it wasn't possible to catch Curlew and/or Bar-tailed Godwit so they could be flagged ready for observation later in the autumn passage period.

Although there were nominally two teams for the main autumn passage fieldwork, towards the end of August, both teams struggled to find good catching options. There were frequent movements of team members between the two sides of the Wash in order to make best use of what opportunities there were. In the end eight cannon-net catches were taken giving a total of just 549 birds. Apart from catches of 101 and 218, all the rest were just double-figure catches. Five mist-netting sessions had a rather better average catch size, with 448 birds being caught in total.

The next fieldwork was a month later and, rather unusually, started with a mist-netting session on Terrington Marsh. This turned out to be the best catch of the trip, consisting mainly of Redshank and Dunlin but also, surprisingly, no fewer than eight Ruff caught while it was still light. Further mist-netting sessions at both Terrington and Gedney continued the success at catching Redshank and Dunlin. The only cannon-netting was 31 Sanderling on Heacham.

No catching attempt was made during the October fieldwork, as the weather was unsuitable for mistnetting, but good use was made of the time with lots of colour ring and flag resighting. Curlew was the most rewarding, with 122 sightings allowing the identification of 69 individuals.

November was billed as an all mist-netting weekend, with the plan being to catch on the morning tides and do flag resighting on the evening tide. In the event, plans had to be modified due to weather conditions.

The Saturday evening catch produced a very creditable 95 birds, over half being Dunlin and the rest mainly Redshank, but also including a Spotted Redshank and seven Black-tailed Godwit. The weekend became especially memorable when the next morning's mist-netting produced, out of a total catch of 103, no fewer than 49 Black-tailed Godwit! There was also a Snipe to add variety.

Finally for the year, a small group took the opportunity of suitable tides to mist net at Gedney in early December. Just 22 birds of four species were caught, but it provided an opportunity for some training of new members of the team.



Setting a cannon net on Snettisham beach (Guy Anderson)

TOTALS

Totals of birds caught in 2016 and 2017 are given in Table 1, with details by catch in Tables 2 and 3 and totals of birds caught since 1959 in Table 4. In Tables 2 and 3 the top line records the catching site using a three character code. The first two characters identify the general area (see foot of Tables 2 and 3) and the third character identifies the exact location. The second line gives the day and month of the catch and the third line gives cannon nets fired or mist nets set (shown in brackets).

Table 1: Totals for 2016, 2017 and Grand Total since 1959.

		2016			2017		Grand Total
	Newly Ringed	Retrap	Total	Newly Ringed	Retrap	Total	1959-2017 (newly ringed)
Oystercatcher	491	96	587	359	31	390	39,636
Avocet	0	0	0	0	0	0	4
Stone Curlew	0	0	0	0	0	0	1
Little Ringed Plover	0	0	0	0	0	0	13
Ringed Plover	29	0	29	14	0	14	1,428
Golden Plover	0	0	0	0	0	0	380
Grey Plover	50	0	50	15	0	15	6,462
Lapwing	0	0	0	0	0	0	70
Knot	268	9	277	16	1	17	58,243
Sanderling	527	71	598	553	51	604	15,112
Little Stint	1	0	1	0	0	0	52
Pectoral Sandpiper	0	0	0	0	0	0	1
Curlew Sandpiper	5	0	5	1	0	1	322
Purple Sandpiper	0	0	0	0	0	0	43
Dunlin	1,183	25	1,208	416	5	421	139,864
Broad-billed Sandpiper	0	0	0	0	0	0	1
Ruff	1	0	1	9	1	10	123
Jack Snipe	0	0	0	0	0	0	2
Snipe	2	0	2	2	0	2	65
Black-Tailed Godwit	41	1	42	70	0	70	1,881
Bar-Tailed Godwit	245	20	265	73	12	85	8,951
Whimbrel	4	0	4	3	0	3	217
Curlew	106	19	125	111	30	141	6,048
Common Sandpiper	0	0	0	0	0	0	55
Green Sandpiper	0	0	0	1	0	1	7
Spotted Redshank	1	0	1	1	0	1	85
Greenshank	8	0	8	3	0	3	246
Wood Sandpiper	0	0	0	0	0	0	3
Redshank	809	22	831	463	17	480	17,602
Turnstone	40	0	40	8	0	8	7,437
TOTAL Waders	3,811	263	4,074	2,118	148	2,266	304,354
Teal	2	0	2	0	0	0	
Jackdaw	1	0	1	0	0	0	
Brent Goose	0	0	0	1	0	1	
Shelduck	0	0	0	1	0	1	
Starling	0	0	0	14	0	14	
TOTAL Non Waders	3	0	3	16	0	16	
GRAND TOTALS	3,814	263	4,077	2,134	148	2,282	

Site Code AFS GEX	AFS	S X	AFS	SNX	AFS	Ή	WWW	SNX	WWV	SNC	WTH	WTH	HND	Ι	AFS	FMG	FMG	VTW	GEX	AFS	GEX V	WWW	WWA
Date	15-1	16-1	13-2	12-3	12-3	23-7	19-8	19-8	19-8	20-8	21-8	21-8	22-8	22-8	22-8	23-8	23-8	23-8	23-8	04-9	15-9	17-9	18-9
Nets fired / (set)	(10)	(10)	(17)	2	(15)	1	1	1	1	_	1	1	1	(8)	(16)	1	1	(12)	(8)	(5)	(6)	1	2
Newly Ringed																							
Oystercatcher	_		4	201	_		7		108			63										100	
Ringed Plover														_			7						
Grey Plover	_	က	_												က			_	2				
Knot			7	7						43					~			13	7		9	15	
Sanderling						351		33														_	
Little Stint																							
Curlew Sandpiper															7	_			_				
Dunlin	54	33	61		2	13								15	8	135		17	4	_	88	က	
Ruff																					_		
Snipe		-																			_		
Black-Tailed Godwit		_	9		2										00						_		
Bar-Tailed Godwit			C.							164								4	-	-	4		
Whimbre										2				0				-	-	-	0		
Curlew			0		0					5			œ	10	-			-			ı		c
Callow Condition			1		1					2			0	1	-			-					0
Gleet Sandple																							
Redshank	က	2	ន		20		-				74			8	92			52	32	5	128		
Spotted Redshank																					_		
Greenshank															_								
Turnstone			1											2	2			2	1				
TOTAL RINGED	29	43	103	203	8	364	8	33	108	226	24	8	9	65	148	136	7	09	88	17	174	119	9
Site Code	AFS	œ Œ X	AFS	SNX	AFS	Ή	₩ W	SNX	WW MM	SNC	H M	MH		₹	AFS	FMG	FMG	× ×	ŒX	AFS	GEX V	MMW	MMA
Date	15-1	16-1	13-2	12-3	12-3	23-7	19-8	19-8	19-8	20-8	21-8	21-8	22-8	22-8	22-8	23-8	23-8	23-8	23-8	04-9	15-9	17-9	18-9
Nets fired / (set)	(10)	(10)	(17)	7	(15)	_	_	_	_	~	~	_	_	(8)	(16)	~	_	(12)	(8)	(2)	(6)	_	7
Retraps/Controls																							
Oystercatcher			_	2			_		4			တ										4	
Ringed Plover																							
Grey Plover																							
Knot										က													
Sanderling						23		7															
Dunlin	7		7		က													_	-				
Black-Tailed Godwit			_																				
Bar-Tailed Godwit										19				-									
Curlew			_							က													_
Redshank			2		2									-	-						_		
Turnstone TOTAL CONTROLS	c	c	_	2	ď	23	-	c	7	25	c	σ	c	c	-	c	c	-	-	c	-	V	-
	1	,	-	5	,	3	-	1	<u>t</u>	3	•	,	•	,	-	,	,	-	-	>		•	-
TOTAL WADERS	34	2	110	267	8	417	6	32	122	221	24	22	9	29	149	136	7	64	06	4	175	123	_

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17-12

GEX 03-12

AFB 18-9 (15)

(12)

AFS

Site Code	AFB	HMB	FMF	WTH	VI	SNC	AFS	XNS	GFX	GFX	GFX	Ϋ́	Ϋ́	GFX	AFS	GFX	TOTAL	
))		:	:	2)	Š	í			i)	ì	í)	ì	j :	
Date	18-9	19-9	19-9	20-9	20-9	20-9	20-9	21-9	21-9	28-9	21-10	29-10	30-10	03-12	17-12	28-12		`
Nets fired / (set)	_	~	က	_	(8)	2	(15)	_	(6)	(4)	(10)	(6)	(5)	(12)	(15)	(;)		
Newly Ringed																		
Oystercatcher				_	2												491	Jackdaw
Ringed Plover								21									53	Teal
Grey Plover							_	_	16		10	2	_	_	4		20	
Knot				112	17		7		32		12	2			2		268	NON-WADERS
Sanderling								142									527	
Little Stint								-									_	
Curlew Sandpiper							_										2	
Dunlin				73	8		86	199	26	_	109	25	21	48	47	τ-	1183	
Ruff																	_	
Snipe																	7	
Black-Tailed Godwit							2				4			7	12		4	
Bar-Tailed Godwit				15	7	7	9		17		15				_		242	
Whimbrel																	4	
Curlew			4			47			-		-				4		106	
Green Sandpiper																	0	1
Redshank				4	42		163		20	=	4	7	7	9	8	7	808	V
Spotted Redshank																	_	200000
Greenshank		7															∞	
Tumstone				4	3		8		2	1	4	3			2		40	
TOTAL RINGED	0	7	14	219	92	54	289	364	194	13	196	99	29	22	94	3	3,811	
Site Code	AFB	HMB	FMF	MTH	∑ Z	SNC	AFS	SNX	GEX		GEX	GEX	GEX	GEX	AFS	GEX	T0T	
Date	18-9	19-9	19-9	20-9	20-9	20-9	20-9	21-9	21-9		21-10	29-10	30-10	03-12	17-12	28-12		
Nets fired / (set)	_	~	က	_	(8)	7	(15)	_	(6)		(10)	6)	(5)	(12)	(12)	(3)		T
Retraps/Controls																		
Oystercatcher				_	2												96	
Ringed Plover																	0	
Grey Plover																	0	
Knot					က				7			_					6	1
Sanderling								16									7	
Dunlin				_				7			9			7	2		25	
Black-Tailed Godwit																	_	
Bar-Tailed Godwit																	20	
Curlew						13					_						19	
Redshank				က			2		2		_			_			22	
Turnstone																	0	
TOTAL CONTROLS	0	0	0	2	2	13	2	18	7	0	8	1	0	3	2	0	263	Ringing
TOTAL WADERS	0	7	14	224	26	29	294	382	201	13	204	29	29	90	66	က	4,074	;

Site codes used: AF = Terrington; FM = Friskney; GE = Gedney; HE = Heacham; HM = Holbeach; LV = Leverton; SN = Snettisham; WM = Wainfleet; WT = Wrangle. The third letter defines a sub-division of a site. See Wash Map p. 2.

Ringing team at White Barn (Guy Anderson)

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Table 3: Catch totals for 2017	als for 2	017																		
Site Code	HET	SNX	AFS	SNX	HET	GEX													AFT	AFT
Date Note fired / (cot)	11-3	12-3	01-4	25-7	26-7	20-8	21-8	21-8	22-8 2	23-8 2	23-8 2	25-8 2	25-8	25-8	26-8	26-8	26-8	26-8	22-9	23-9
Month and / (set)	7	7	(10)	-	-	(11)													(61)	(50)
Newly ringed	70	70							700					0	c	00				
Oystel catchel	0/	40							404					2	ာ (20				
Ringed Plover					ဂ			-					- 0		2		-			,
Grey Plover													بر در.	ļ			_ ,	<u> </u>	,	_
Knot												7	-	_			-	-	-	
Sanderling				20	390		20		_						61					
Curlew Sandpiper																				
Dunlin			89		14	12		2	2				52	15			32	4	36	24
Ruff																			∞	_
Snine																			_	
Black-Tailed Godwit													ĸ				0		-	-
Bor-Toiled Godwit										_		50		c			1	c		
Whimprol						,						70		5			-) -	-	۲
			(-											- ,	-		
Curlew			2							4	31	33					_			
Green Sandpiper													_							
Redshank			16			17							26	31			20	26	69	39
Spotted Redshank																				
Greenshank														_					2	
					_									2					_	
TOTAL RINGED	28	34	98	20	410	30	20	က	207	45	31	. 48	142	63	29	30	29	144	120	20
Site Code	HET	SNX	AFS	SNX	HET	GEX	SNX	\ \MM	WTH H	HEK W	WTV S	SNB /	AFT V	WTH I	HET V	WTH	AFT	LVU	AFT	AFT
Date	11-3	12-3	01-4	25-7	26-7	20-8												26-8	22-9	23-9
Nets fired / (set)	7	2	(16)	_	_	(11)												(12)	(19)	(20)
Retraps/Controls																				İ
Oystercatcher	တ	7							1							4				
Ringed Plover																				
Grey Plover																				
Knot																				_
Sanderling				2	41		_								4					
Dunlin			_																	
Ruff																				_
Black-Tailed Godwit																				
Bar-Tailed Godwit												6						2	_	
Curlew										22	က	2								
Redshank			က			_							က	2				က	~	_
Turnstone																				
TOTAL CONTROLS	တ	7	4	2	41	-	-	0	7	22	3	14	က	2	4	4	0	2	2	က
TOTAL WADERS	87	41	90	22	451	31	21						145	65	71	34	29	149	122	73

Table 3: Catch totals for 2017 (continued)

18-11 (20) AFT

HEK 23-8 2

AFS 1-4 (16)

		В	တ	S	Z						A.	J				4	1			
TOTAL		329	4	15	17	553	_	416	6	2		73	3	111	_	463	-	က	80	2,119
GEX 02-12 (5)					-			7			2					ω				22
AFT 19-11 (m/n)								22		_	49	2				56				103
AFT 18-11 (20)				_	_			29			7					20	_		7	91
GEX 24-9 (9)				œ	∞		_	23			က	7				4			_	92
HET 24-9			က			31													_	35
Site Code Date Nets fired / (set)	Newly ringed	Oystercatcher	Ringed Plover	Grey Plover	Knot	Sanderling	Curlew Sandpiper	Dunlin	Ruff	Snipe	Black-Tailed Godwit	Bar-Tailed Godwit	Whimbrel	Curlew	Green Sandpiper	Redshank	Spotted Redshank	Greenshank	Turnstone Turnstone	TOTAL RINGED
																			9	

Site Code	HET	GEX	AFT	AFT	GEX	
Date	24-9	24-9	18-11	19-11	02-12	
Nets fired / (set)	_	(6)	(20)	(m/n)	(2)	
Retraps/Controls						
Oystercatcher						31
Ringed Plover						0
Grey Plover						0
Knot						_
Sanderling						51
Dunlin			7	7		2
Ruff						_
Black-Tailed Godwit						0
Bar-Tailed Godwit						12
Curlew						30
Redshank			7	-		17
Turnstone						0

Site codes used: AF = Terrington; FM = Friskney; GE = Gedney; HE = Heacham; HM = Holbeach; LV = Leverton; SN = Snettisham; WT = Wrangle. The third letter defines a sub-division of a site. See Wash Map p. 2.

22

3 106

95

92

35

TOTAL CONTROLS
TOTAL WADERS

							J					©photo by Jean F
		2	2		1		1					
		12	12	177			a sund	muniti The second				
.	_		2		N							
Brent Goose	Shelduck	Starling	NON-WADERS		1					1		
359	4	15	17 553 1 416 9	70 73 3	463	2,119	31	0 0 ←	τ ₀ τ	30 7 0	17	148 2,267

Releasing a Red Knot after ringing and processing (Jean Hall)

Table 4. Totals of birds caught since 1959, totals split between cannon-netting and mist-netting. Catch sizes of catches over 2,000 are listed.

	Cannon-	netting		М	ist-netting			Tota				
								Cum	Percent mist-	5-year	Cato	hes
Year	Total	Catches	Av	Total MN	Catches	Av	Total	Total	netting	av	over	
1959	1,132	1	1,132				1,132	1,132	0			
1960	2,893	7	413				2,893	4,025	0			
1961 1962	1,940 1,426	3 6	647 238				1,940 1,426	5,965 7,391	0			
1962	6,017	8	752				6,017	13,408	0	2.682	2,198	
1964	0,017	0	0				0,017	13,408	0	2,002	2,190	
1965	0	0	0				0	13,408	0			
1966	746	2	373				746	14,154	0			
1967	10,859	22	494				10,859	25,013	0		2,405	2,340
1968	14,654	41	357				14,654	39,667	0	5,252	2,973	
1969	8,938	35	255				8,938	48,605	0			
1970	8,524	25	341				8,524	57,129	0		3,210	
1971	13,151	28	470				13,151	70,280	0		2,393	2,297
1972	10,000	42	238	1,555	14	111	11,555	81,835	13		2,939	
1973	7,971	39	204	2,160	22	98	10,131	91,966	21	10,460		
1974	10,313	49	210	1,695	22	77	12,008	103,974	14			
1975	13,321	48	278	1,509	16	94	14,830	118,804	10		2,544	2,190
1976	10,904	52	210	1,896	31	61	12,800	131,604	15			
1977	10,380	52	200	1,379	18	77	11,759	143,363	12			
1978	9,008	56	161	1,455	20	73	10,463	153,826	14	12,372		
1979	6,549	28	234	633	8	79	7,182	161,008	9		2,262	
1980	7,021	34	207	734	11	67	7,755	168,763	9			
1981	7,092	34	209	86	4	22	7,178	175,941	1			
1982	5,811	25	232	466	7	67	6,277	182,218	7	7.064		
1983	7,489	21	357	440	14	31	7,929	190,147	6	7,264		
1984 1985	2,267 4,287	13 36	174 119	329 657	3 9	110 73	2,596 4,944	192,743 197,687	13 13			
1986	4,207	30	137	67	6	11	4,179	201,866	2			
1987	6,630	32	207	40	1	40	6,670	201,800	1			
1988	11,602	36	322	175	4	44	11,777	220,313	1	6,033		
1989	6,160	35	176	95	1	95	6,255	226,568	2	0,000		
1990	9,580	44	218	91	2	46	9,671	236,239	1			
1991	7,451	53	141	880	8	110	8,331	244,570	11			
1992	6,024	36	167	295	5	59	6,319	250,889	5			
1993	8,267	37	223	354	10	35	8,621	259,510	4	7,839	2,412	
1994	3,750	25	150	354	6	59	4,104	263,614	9			
1995	3,552	37	96	158	2	79	3,710	267,324	4			
1996	5,468	41	133	228	4	57	5,696	273,020	4			
1997	2,667	35	76	634	8	79	3,301	276,321	19			
1998	2,034	33	62	343	3	114	2,377	278,698	14	3,838		
1999	1,696	24	71	689	6	115	2,385	281,083	29			
2000	1,747	30	58	301	3	100	2,048	283,131	15			
2001	2,129	27	79	1,518		127	3,647	286,778	42			
2002	2,052	18	114	1,278		160	3,330	290,108	38	2.047		
2003	3,644	21	174	1,029		94	4,673	294,781	22	3,217		
2004 2005	4,369 5,380	33 30	132 179	1,074 539	10	107 60	5,443 5,919	300,224 306,,143	20 9			
2005	2,316	26	89	741	13	57	3,057	309,200	24			
2007	3,225	40	81	572	11	52	3,797	312,997	15			
2008	2,384	27	88	405	5	81	2,789	315,786	15	4,201		
2009	2,831	19	149	813		90	3,644	319,430	22	1,201		
2010	3,383	18	188	733		92	4,116	323,546	18			
2011	2,326	26	89	471	7	67	2,797	326,343	17			
2012	6,088	16	381	573	7	82	6,661	333,004	9		2,926	
2013	2,690	16	168	653	13	50	3,343	336,347	20	4,112		
2014	2,274	17	134	1,210	17	71	3,484	339,831	35			
2015	2,523	19	133	1,039		148	3,562	343,393	29			
2016	2,170	19	114	1,904		95	4,074	347,467	47			
2017	1,218	13	94	1,048	12	87	2,266	349,733	46			

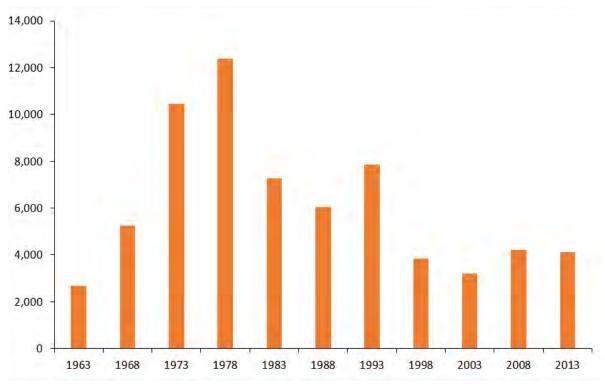


Figure 1. The five-year average of catches at the Wash from 1959 until 2017. Dates given are middle of 5 year period.

The peak number of birds caught in the 1970's was initially driven by the Wash Water Storage Scheme Feasibility Study, which took place in the period 1972-4. The Group was actively involved in research new sea wall built and the land claimed. This in into the possible impact on birds, conducting fieldwork at fortnightly intervals, culminating in a report published in 1975 entitled 'The Waders of the Wash – Ringing and Biometric Studies'.

The continued peak after the Feasibility study finished in 1975 is largely due to success in catching Dunlin in large numbers. The lowest annual catch total for Dunlin in the period 1975-1980 was 4,170 and the highest just under 7,000, with single catches often being over 1,000.

That the total number of waders caught did not stay at these levels is probably due to a number of factors.

- There was a deliberate attempt to catch other, and harder-to-catch, species.
- Dunlin numbers started to decline, a trend that unfortunately continues to this day.
- The cessation of land claim.

The last land claim on the Wash was in 1978; prior to this the tendency had been that as soon as the saltmarsh had accreted enough there would be a turn meant that on high tides, and particularly 'spring tides', waders had nowhere to roost and resorted to using fields just over the sea wall, where it was much more feasible for the Group to catch them. Once the practice of making land claims stopped the saltmarsh outside the sea walls continued to accrete and, as a result, waders can stay on the saltmarsh longer, only the very highest of high 'spring tides' forcing them to look elsewhere to roost.

The Group now makes some catches on the saltmarsh, but this is logistically more difficult, leading to fewer and smaller catches, with numbers being fairly stable over the last 20 years. Recces rarely find large flocks on fields and the composition of species that will cross the sea wall has changed. Hence the Group's relative success with Curlew and godwit in recent years, whilst the smaller species cling to the tide edge, only coming inland if the saltmarsh completely covers.

SCIENCE ON THE WASH

Benjamin Franklin once declared that only two things were constant in this world: death, and taxes. To that we might justifiably add a third. Change. As the pace of our lives quickens, ever more changes seem to be heaped upon us; the world of nature around us changes too. Superimposed on the daily cycle of the tides, and the annual procession of seasons, are slowerpaced changes, as the environment continues to evolve and responds to the pressures put on it by the people living in it. Often these changes are subtle, taking years to become apparent. While we might see them, it is only by recording what we observe, year after year, that we begin to appreciate them, grasp their import and know how to respond.

The Wash Wader Ringing Group has been documenting the changing nature of the Wash now for six decades. Some might ask, hasn't enough data been collected by now? Surely, we know enough? But the Wash, its landscape, and the birds which live in it, or alight, briefly, on their way to far-flung places, continue to evolve anew. A child running along the seawall today would view the Wash as a very different place to one doing so when the Group started in 1959.

And the Group was very different. Although still run by volunteers, long gone are the days of camping in a chitting shed. Although we still catch birds in much the same way, our knowledge of how do so safely and efficiently has improved enormously, and while we still meticulously record the condition of the birds we ring, the way we store and use the data has also changed. A major activity for certain group members has been marshalling the irreplaceable archive of data gathered by the group into a tidy form on the computer, where it will be safe and available to use for the next six decades, and beyond. This gargantuan task involves much deciphering of squiggles of varying legibility in old notebooks, but also causes one to reflect on the nature of the group's catching.

Going through records of the catches of the 1970s, reminds us of the astonishing dedication and effort that were expended. The autumn "Wash weeks" were indeed exhausting affairs. Catches of over 1,000 birds were not uncommon, and frequently two, three or more catches would be made in a day. Tiring it may have been, but the data are now an invaluable part of our archive, helping us to understand more about the lives of the birds using this special landscape. Catches now are smaller, and, while the species remain the same, their importance has altered. Dunlin, in particular, now feature in much smaller numbers than previously. In part this is because birds have less need to roost on fields; the saltmarsh is accreting so

patches remain available on all but the highest tides (see p. 11). Winters are also becoming warmer, so more individuals are deciding that the shores of the Wadden Sea are clement enough and have no need to fly on to the mudflats of Norfolk and Lincolnshire.

These changes are also changing the way we do our work. Increasingly, we are using plastic leg-flags to identify birds (in addition to the metal ring, some birds on the Wash are over 40 years old!) and you can read about these elsewhere in the report (p.24). Consequently, part of our time now is taken up by walking on to the marsh and mud with telescopes, trying to identify these individuals, without the need to catch them and, it has to be said, with much success! The frequency with which we re-encounter these birds is much higher than our chance of recatching them, giving us more data that we can use to benefit the Wash. However, we still need to catch birds to mark them and, of course, to record body condition.

Another change has been the increasing ease with which we can communicate our work. The ubiquity of the internet and, now, social media, means we can present our results to a much wider range of people than before. There is not much point in collecting data if you don't make use of it! Our website (wwrg.org.uk) has an increasing amount of material and information on our activities and the birds we catch – where they go and what they do. As we continue to sort and analyse the data we continue to collect, we aim to understand more about the birds that use the Wash, show more people how special this place is and contribute to safeguarding its future.

Rob Robinson



Weighing a Dunlin (Guy Anderson)

COLOUR-MARK RESIGHTING

Marking waders with coloured rings and engraved flags is a useful method of increasing the numbers of re-encounters of ringed birds. Indeed, a number of studies that the Group has participated in could not have otherwise been carried out. Individual colour-ringed Black-tailed Godwit marked by the Group in the 1990s have been seen over 200 times. The sighting locations of these birds outline the entire migratory pathway of the *islandica* subspecies from Portugal to Iceland, and there have been numerous publications offering new insights into wader biology using the thousands of sightings recorded.

We currently participate in colour-marking projects on six wader species: four (Grey Plover, Turnstone, Bar-tailed Godwit and Curlew) are administered directly by the Group and two (Black-tailed Godwit and Greenshank) are administered by Group members as part of wider projects. By reencountering birds in large numbers, precise survival estimates for wader populations on the Wash can be determined. To undertake survival modelling analysis at least 50 individual birds must be re-encountered in successive years, with 70-100 individuals providing more robust data. Therefore, the Group devotes considerable resources to resighting marked birds during our fieldwork sessions. This has resulted in over 1,000 reencounters of birds marked by the Group over the past two years, which will enable us to carry out detailed survival analyses for Curlew and Bar-tailed Godwit. Over 100 birds marked by other groups have also been encountered, often with interesting histories.

So, what makes a wader ringer swap her or his pliers for a scope and a notebook and spend time in the field patiently scanning hundreds of birds to identify marked individuals, aside from the data that can be obtained? We seem to agree amongst ourselves that re-sighting has a contemplative, and almost meditative quality to it, with all other concerns emptying from the mind as we focus solely on the leg of a wandering Bar-tailed Godwit. Zen mediation however takes less time than some wader re-sighting sessions: WWRG members visiting Delaware Bay to help on a research project there have been known to re-sight for up to five hours at a time with several hundred encounters documented. On the Wash, a three-hour session moving around to take advantage of the changes in the landscape over a tidal cycle is more typical, with a couple of dozen encounters recorded in a good session. By taking the time to carefully observe common waders for marks, an awareness of the subtleties of wader behaviour become apparent that are just not appreciated during standard birding or field surveys. Curlew assume an ethereal and magical quality as they appear seemingly out of nowhere on an uncovering mudflat, accompanied by that wonderful haunting "curlee" call – and then shatter the graceful mystique by landing like drunken chickens and almost crashing into each other. Bar-tailed Godwit

wait quietly on the mudflats at high tide like London commuters (not talking to each other of course) and then frantically follow the receding tide in a feeding rush hour. Turnstone industriously bulldoze their way through the tideline in the most individualistic and haphazard way possible, and like nothing more than to squabble over a discarded chip on the promenade. Black-tailed Godwit loaf about at high tide roosts with a certain air of entitlement, and must seem like foppish dandies to their Bar-tailed cousins as many move elsewhere when winter approaches.

In addition to being both an opportunity for shameless anthropomorphism and zen mediation with purpose, re-sighting provides a familiar level of excitement to the birder and ringer when control waders are encountered.

Seeing a flagged Oystercatcher from Norway, a Curlew from Finland, a Knot from Iceland, or a Bartailed Godwit that "belongs" to our Dutch counterparts and should be on the Waddensee, always adds colour to a session. These observations often merely confirm what we already know from metal ring-recovery data, but occasional surprises such as the first identification of an Oystercatcher on the Wash from a Scottish wintering population, or WWRG's oldest encountered Avocet do occur. Re-encountering the same bird in successive years is always encouraging, as we have a direct sense of survival of birds, despite increasing pressures exerted by human activity.



Bar-tailed Godwit (Chantal Macleod-Nolan)

Several Curlew have been encountered over a dozen times, but the bird that literally stands out the most is a wader marked by another team. Avocet M8 has been seen on the Wash for several years, typically among several thousand Oystercatchers. This bird has a well-known life history, having been 'adopted' by Oystercatchers at the Dunkirk colony in Cambridge as a chick and then re-encountered by WWRG at Snettisham. M8 has been observed mating at Welney with Avocets (we now know M8 is female) but returns in autumn to associate with her pied adopted family. For those who travel from around the UK to the Wash, it is possible to see the same birds in separate parts of the country, which re-enforces the migratory nature of waders. Although I have seen several wintering Black-tailed Godwit on the Solent that I have also seen on passage on the Wash, several group members can boast seeing individuals in completely different countries!

For the pragmatist, a good team re-sighting effort on a Wash weekend can result in around a hundred sightings that make up for failures to make cannon net catches or abandoned mist-netting sessions due to inclement weather. We have a growing pool of local knowledge regarding where and when to look for certain species (watching Snettisham beach two and a half hours after high tide when the mudflats start to uncover, or the same area around three hours before high tide is particularly productive).

Re-sighting marked waders does require an element of skill and experience, and it is satisfying to introduce new wader ringers to the technique and the data that can be obtained in addition to the ringing opportunities provided by the Group. Hopefully we will continue to help to increase the number of observers of marked waders around the Re-sighting marked waders allows valuable data to be gathered by individuals and small groups with minimal organisation, and we would particularly like to encourage participation by Group members that have commitments that preclude regular involvement with the Group for whatever reason. Meeting at Snettisham with friends to spend a couple of hours looking for flagged Curlew is understandably more civilised than wandering around a saltmarsh in the dark or hiding in dunes in February at 6am with a hard ground frost. So, if you feel as though you want to be more involved in the Group in a more flexible manner, we would welcome the opportunity to get your re-sighting off to a flying start!

Rob Pell



Wash Group members using their expertise to cannon-net birds in Delaware (Jean Hall)

A SUMMARY OF COLOUR-MARKED BIRDS ENCOUNTERED BY THE GROUP IN 2016 & 2017

Colour-marking waders is an established method to greatly increase the number of re-encounters of individual birds. Using metal ringing alone for even our most regularly caught and long-lived wader (Oystercatcher) does not generate sufficient numbers of recoveries to generate annual survival data. As a Group, we have invested a considerable amount of effort into improving our performance at reencountering marked birds on the east coast of the Wash (p.13). We have now raised the annual numbers of Curlew and Bar-tailed Godwit re-encounters to over 100 individuals (the minimum number of re-encountered birds possible to generate survival estimates is around 50). This is obviously an excellent team effort by the Group and justifies the decision to dedicate time during catching weekends to search for marked birds. Below is a summary of each scheme the Group participates in and the resightings made by WWRG members.

Bar-Tailed Godwit

The Group marks Bar-tailed Godwit with white flags bearing two alphanumeric characters on the left tibia and a plain scheme marker on the right tibia. Birds caught prior to 2016 have a white scheme marker, birds marked from 2016 onwards have an orange scheme marker. This project started in 2010 and the group has marked over 380 birds. We have recorded over 500 sightings, which will allow survival estimates to be made, and it is the only project in the UK to provide such information. The project also provides information on movements of Bar-tailed Godwit: regular sightings from the Netherlands and the Baltic countries on the migration routes confirm previous metal ring recovery data. Many Bar-tailed Godwits pass through the Wash as they migrate between summer breeding and wintering areas. Observations of WWRG colour-flagged Godwits in northern Norway and the Canary Islands highlight the wide range of locations occupied by 'our' birds.



(Ruth Walker)

	Bar-Taile	ed Godwit
Year	2016	2017
Sightings	188	212
Individuals	94	125

Curlew

The Group marks Curlew with white flags bearing two alphanumeric characters on the left tibia and a plain scheme marker on the right tibia. Birds caught prior to 2016 have a white scheme marker, birds marked 2016 and onwards have an orange scheme marker. This project started in 2012 and the group has marked over 350 birds. We have recorded over 800 sightings, allowing estimation of survival in both the passage and wintering populations; a key data resource for ongoing work by the RSPB and BTO in diagnosing the reasons for population declines in Curlew. The project also provides information on movements of Curlew, with regular sightings from the breeding grounds in Fennoscandia. Curlew are also known to roost in fields, sometimes several miles inland, and the Group is increasing sightings of wintering Curlew in fields to gain more information on the conservation requirements of these birds.

	Cur	lew
Year	2016	2017
Sightings	177	384
Individuals	78	141



(Ruth Walker)

Grey Plover

The Group marks Grey Plover with white flags bearing two alphanumeric characters on the left tibia and a plain scheme marker on the right tibia. Birds caught prior to 2016 have a white scheme marker, birds marked 2016 and onwards have an orange scheme marker. This project started in 2010 and the Group has marked over 100 birds, recording over 50 sightings, which has increased the number of annual reencounters of this under-studied plover. The information from birds already marked will provide greater understanding of the average lifespan of Grey Plover and further recruits into this project will provide sufficient numbers of sightings to provide survival estimates.

	Grey I	Plover
Year	2016	2017
Sightings	0	5
Individuals	0	2



(Ruth Walker)

Greenshank

The Group marks Greenshank with two colour rings on each tibia as part of Pete Potts' long term study based in the Solent. The study aims to expand our knowledge of the distribution of Greenshank and to help understand the migratory patterns of these elegant birds, which are still poorly understood. This project has already provided interesting data: a bird marked by the group in August 2015 has been encountered in 2016 and 2017 on its breeding grounds at Tromsø in Norway, the most northerly encounter of British-ringed Greenshank to date (see notable recoveries p. 24).

	nshank	
Year	2016	2017
Sightings	1	2
Individuals	1	1



(Ruth Walker)

Turnstone

The Group marks Turnstone with a black scheme marker ring on the left tibia, two colour rings on the left tarsus and two colour rings on the right tarsus. The confiding nature of Turnstone means that these birds can be encountered with binoculars or even the naked eye on sea fronts all around the Norfolk coast (including Hunstanton promenade and Cromer pier). This project has been running for over ten years and continues to provide data enhancing our understanding of the average lifespan of Turnstone and further recruits into this project will provide sufficient numbers of sightings to provide survival estimates (Smart & Gill 2003).

	Turnstone					
Year	2016	2017				
Sightings	24	42				
Individuals	13	17				



(Ruth Walker)

Black-Tailed Godwit

The Group participates in an established, long-standing project that studies the Black-tailed Godwits breeding in Iceland. This project involves researchers from Iceland, Ireland, Britain, France and Portugal and has greatly improved our understanding of how *islandica* Black-tailed Godwit migrate, how they use farmland habitat in the Icelandic breeding grounds and estuaries in winter, and how bird populations respond to environmental change. The project uses up to four colour rings of a range of colours to identify individuals (see WWRG website for list of publications).

	Black-Tailed Godwit					
Year	2016	2017				
Sightings	24	56				
Individuals	22	45				



(Ruth Walker)

Notable sightings by WWRG of birds marked by other groups

Sightings on the Wash of birds marked by other groups are often interesting and add to our overall understanding on how birds move between breeding, passage and wintering locations. These observations are often reciprocated: researchers from Netherlands Institute for Sea Research (NIOZ) see a comparable number of WWRG Bar-Tailed Godwit on the Waddensee to those marked by NIOZ and seen on the Wash.

		2016	2017
Avocet	Sightings	3	5
7.0000	Individuals	2	2
Bar-Tailed Godwit	Sightings	5	4
Bai Tailoa Goawii	Individuals	2	4
Oystercatcher	Sightings	1	3
- Cyclereaterier	Individuals	1	3
Curlew	Sightings	1	0
Garion	Individuals	1	0
Knot	Sightings	8	2
	Individuals	7	2

Avocet (EL93874) ringed as a pullus at the Dunkirk colony in 2013 and "adopted" by a pair of Oystercatchers! This bird is becoming a Wash favourite and has been seen by WWRG 11 times since it was first seen among roosting Oystercatchers in 2013. It associates with Avocets during the breeding season (it has been sexed as female due to observed mating) and then spends the autumn and winter roosting among thousands of Oystercatchers, last seen on Christmas eve 2017 at Snettisham looking rather cold!

Bar-Tailed Godwit (colour code R3RYWY) ringed on 24/05/2007 at Terschelling, polder Midsland-Oosterend, Netherlands and re-sighted by WWRG on 8/10/2017. Despite many re-sightings of this individual over a period of ten years since the ringing date, this was the first sighting away from the Waddensea. The bird had been sighted at Terschelling a month prior to the record on the Wash.

Bar-Tailed Godwit (K04742) ringed as a first-year bird on 29/09/2017 in Klepp, Rogaland, Norway and re-sighted on Hunstanton cliffs on 18/11/2017. This bird was subsequently re-sighted at Holme Dunes Nature Reserve on 01/12/2017.

Bar-Tailed Godwit (NflagYY/RP) ringed as an adult female on the island of Terschelling in August 2015. This bird has been seen on the Wash for the past three winters on five separate occasions in 2016/2017 and is also regularly encountered on passage in the Netherlands in spring and autumn.

Black-Tailed Godwit (568675) ringed as a pullus on 14/07/2008 in northern Iceland and re-sighted by WWRG on 07/10/2017. This Godwit had been re-sighted on many occasions both in eastern England and in Friesland, Netherlands, appearing to alternate between the two countries. The first sightings on the Wash were in 2015.

Black-Tailed Godwit (629331) ringed as a pullus on 05/07/2005 in northern Iceland and re-sighted by WWRG at Snettisham on 07/10/2017. This bird had also been re-sighted on many other occasions; between 2005 and 2007, in Scotland, Ireland, NW England, Yorkshire, Lincolnshire and NW France, although more recent sightings have been mainly restricted to Cambridgeshire (Ouse Washes) and the Wash

Curlew (CT180441) ringed as adult breeding female (caught on nest) on 27/05/2016 in Siikalatva, Karsama, Finland. It was seen on the Wash on 21/08/16 on farmland adjacent to Snettisham RSPB reserve. The bird appears to also winter on the Wash as it was seen in a field at Dersingham in January 2018.

Knot (7502651) ringed and colour marked as a second-year bird on 26/05/2009 in Marnes, Porsanger, Norway which was recaught in a cannon net on the Wash on 11/02/2012. Two further sightings of this bird have now been made on Snettisham beach (21/08/2016 and 18/11/2017). At least 1:200 of the *islandica* race of Knot have been colour marked in Norway, with many sightings made in The Netherlands and on the west coast of the UK. This has enabled the Norwegian ringing group to track movements between the west coast estuaries of the UK and of birds moving into the UK from the Waddensea.

Knot (N7PPRY) ringed at Griend in the western Waddensea, The Netherlands on 26/08/2017 as part of a long-running project by the NIOZ involving the colour ringing of 8,270 Knot in the Dutch Waddensea and 3,300 in Banc d'Arguin in Mauritania, West Africa, as well as smaller numbers in Germany, France and southern Portugal. This bird was re-sighted by WWRG on Snettisham beach on 18/11/2017.

Oystercatcher (5155505) ringed on 06/07/2014 in Norway as a pullus and re-sighted by WWRG feeding on the mussel beds at Snettisham on 22/09/2017. This bird was previously sighted at Heacham Beach South on 07/03/2015.

Oystercatcher (T43) ringed as an adult in Ballater, Scotland in spring 2014 by Grampian Ringing Group and seen at Frieston on 16/09/2016. This is the first time one of the Group's marked Oystercatcher has been seen on the east coast.

Rob Pell

References

Smart, J. & Gill, J.A. (2003) Non-intertidal habitat use by shorebirds: a reflection of inadequate intertidal resources? *Biological Conservation*, **111**, 359-369.



The team in Delaware Bay 2017 (Jean Hall)

A SOCIAL DIMENSION

Colour rings have changed the emphasis of the WWRG's operations over the last few years. If we want to measure survival rates, we no longer have to wait to recapture enough metal-ringed birds. Instead we can generate a lot more data simply by going out and looking for colour-marked birds. Importantly, colour rings also allow us to involve lots of other birdwatchers and social media can provide the tools we need to engage with them. Birdwatchers can 'find us' on Twitter and become increasingly keen waderwatchers when they receive feedback about marked birds. Some of these observers are out on the coast or at RSPB reserves on an almost daily basis, and can provide excellent coverage of key sites.

The blog series WaderTales (wadertales. wordpress.com/about) is designed to showcase wader research. It includes a lot of work in which WWRG has been involved.

Unsurprisingly, after 25 years of colour-ringing and many published papers, there is plenty about Icelandic Black-tailed Godwits, but one of the key blogs is about how the use of flags has hugely increased the amount of data that can be obtained from one catch of Bar-tailed Godwits. Instead of a 1% reporting rate from metal rings, colour-ringing gives a return of more than 30%. Adding a link to the story (wadertales.wordpress.com/2016/08/22/bar-tailed-godwits-migration-survival), when replying to colour-ring readers, is a great way to encourage them to spend time on the potentially addictive hobby of ring reading.

The Bar-tailed Godwit blog explains a little about why it is important to measure survival rates but here are two more examples, one relying on metal rings and the other on colour rings. Older Group members will remember the very cold winters of 1978/79, 84/85 and 85/86. There is an interesting report, produced by the BTO, that looks at how severely Oystercatchers and Knot were affected in these years, and also in years when there were low cockle numbers. The fact that Oystercatchers (and to a lesser extent Knot) can be caught regularly, enabled Phil Atkinson and the other authors to use retrap data, generated from metal rings, to relate survival probability to both cold weather and shellfish stocks. You can read more here: https:// www.bto.org/sites/default/files/shared documents/ publications/research-reports/2000/rr238.pdf

Waders are generally not particularly productive species but they live a long time. For a stable Lapwing population, for instance, a pair only needs to produce an average of 0.6 chicks per year although even this can be tough to achieve these days (wadertales.wordpress.com/2015/10/14/ahelping-hand-for-lapwings). The probability of an adult wader surviving for a year is typically between 70% and 90%. If this suddenly declines, as happened to several wader species one winter in Australia and New Zealand, then this can have a catastrophic effect on numbers. There's a WaderTales blog about this system, illustrating how colour-ring sightings pinpointed a problem in the Yellow Sea (wadertales.wordpress.com/2017/ 05/01/wader-declines-in-the-shrinking-yellow-sea). Now that so many of our Bar-tailed Godwits and Curlew are wearing flags, we will be able to monitor survival rates of Wash-wintering birds.

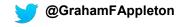
This is not just a way of keeping an eye on the condition of the Wash itself (as was shown with Oystercatchers and shellfish supplies) but also contributes to a national understanding of the pressures upon species, such as our near-threatened Curlew population (wadertales.wordpress.com/2015/11/03/is-the-curlew-really-near-threatened).

There are plenty of articles about the work of the WWRG but how do we make this information available to birdwatchers, who we would love to recruit as colour-ring readers? This is where social media can come in. In the UK, the most effective platforms to use at present are Twitter and Facebook, and WWRG has an increasing presence on both. Here's where we can tell people about recent catches, interesting recoveries, papers to which our data have contributed etc., thereby creating a buzz about Wash waders. When Jenny Gill gave a talk about tracking Black-tailed Godwits in Essex she was approached by a birdwatcher at the end who said that he had assumed that someone else was reporting colour-rings. He is now one of the most dedicated and enthusiastic of recorders. Twitter and Facebook are doing the same thing but on a bigger scale.

Across ornithology, social media are providing important ways in which to promote scientific research. The published paper is no longer the end-point of the scientific process. You can engage with a much broader audience by writing a blog (online article) and tweeting about the paper and the blog. Active involvement in social media can greatly boost a paper's Altmetric score, and these are increasingly being used to measure the societal impact of research, with every blog about a paper adding 5 points to the score. You can read more here: https://www.bou.org.uk/social-media/.

One of the additional bonuses of Twitter is that it provides a forum in which one can engage with people who don't understand why we ring birds. About a year ago, I happened to spot a tweet by a keen photographer who was complaining about colour rings. I chatted to her one-to-one (not in public) about the reasons that we use colour rings and pointed her to some of the WaderTales blogs and she is now providing excellent images of colour ringed birds that visit her estuary. She's hooked!

Graham Appleton



SUMMARY OF RECOVERIES RECEIVED

The following tables summarise the total number of recoveries generated by the Group. The tables include all recoveries from 1909 to 2017 that had been reported to the BTO by the end of April 2018. In each case the number before the '/' is birds that were ringed on the Wash and found in the county or country and the number after the '/' is birds ringed elsewhere and found on the Wash. Movements between the Wash and counties in the UK exclude movements within Norfolk and Lincolnshire.

The summaries of movements are produced from data supplied by the BTO Ringing Scheme. The Scheme is funded by a partnership of the British Trust for Ornithology, the Joint Nature Conservation Committee (on behalf of: Department of Agriculture, Environment and Rural Affairs, Northern Ireland, Natural England, Natural Resources Wales and Scottish Natural Heritage), The National Parks and Wildlife Service (Ireland) and the ringers themselves.

Rob Robinson

Table 1: Movements of wader species between the Wash and other countries.

Country	Oyster catcher	L-Ringed Plover	Ringed Plover	Golden Plover	Grey Plover	Lapwing	Knot	Sander- ling	Little Stint	Curlew S'piper	Purple S'piper
Algeria	-/-	-/-	-/-	-/-	-/-	-/-	-/-	1/-	-/-	-/-	-/-
Arctic Ocean	- / -	- / -	-/-	-/-	-/-	- / -	1 / -	-/-	-/-	-/-	-/-
Austria	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Baltic Sea	- / -	-/-	-/-	-/-	-/-	-/-	1 / -	-/-	-/-	-/-	-/-
Belgium	6/2	-/1	-/-	-/-	-/-	-/-	2/-	-/-	-/-	-/-	-/-
Benin	- / -	-/-	1 / -	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Canada	-/-	-/-	-/-	-/-	-/-	-/-	9/3	-/-	-/-	-/-	-/-
Channel Isles	2/-	- / -	2/-	- / -	- / -	-/-	-/-	2/1	-/-	-/-	-/-
Denmark	25 / 1	-/-	1/-	1/-	12 / -	1 / 10	29 / -	1/1	-/-	-/-	-/-
Eng Channel	-/2	- / -	- / -	- / -	-/-	-/-	6 / 16	7/3	-/-	-/-	-/-
Estonia	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	- / -	-/-
aroe Islands	35 / -	- / -	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Finland	2/-	-/-	-/1	-/-	1/-	-/2	-/-	1/-	-/-	1/-	-/-
rance	166 / -	- / -	33 / -	1/-	16 / 2	9/-	47 / 9	18 / -	-/-	-/-	-/-
Gabon	-/-	-/-	-/-	-/-	-/-	-/-	1/-	-/-	-/-	-/-	-/-
Sambia	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Germany	21 / 3	-/-	1/4	-/-	3/2	-/3	66 / 51	2/-	-/-	-/-	-/-
Shana	-/-	-/-	1/-	-/-	-/-	-/-	-/-	2/-	-/-	-/-	-/-
Greece	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Greenland	1/-	-/-	-/1	-/-	-/-	-/-	73 / -	-/2	-/-	-/-	-/-
Guinea	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Guinea Bissau	-/-	- / -	-/-	- / -	-/-	- / -	-/-	1/-	-/-	-/-	-/-
Hungary	-/-	-/-	-/-	-/-	-/-	-/-	-/1	-/-	-/-	-/-	-/-
celand	9/-	-/-	-/-	-/1	-/-	-/-	113 / 44	7/5	-/-	-/-	-/-
taly	-/-	-/-	-/-	-/-	-/-	-/1	-/-	1/1	-/-	1/-	-/-
Russia	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Lesser Antilles	-/-	-/-	-/-	-/-	-/-	-/-	1/-	-/-	-/-	-/-	-/-
_iberia	-/-	-/-	-/-	- / -	-/-	-/-	1/-	-/-	-/-	-/-	-/-
ithuania	-/-	-/-	-/-	-/-	-/-	-/1	-/-	-/-	-/-	-/-	-/-
Mali	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
	-/-	-/-	-/-	-/-	-/-	-/-	3/-	2/7	-/-	-/-	-/-
Mauritania	2/-		1/-	-/-	3/-	1/-	1/-	12 / -			
Morocco		- / -	-/-	-/-	-/-		2/-		-/-	-/-	-/-
North Atlantic	-/-			- / -	-/-	-/-		-/- -/1		-/-	-/-
North Sea	14 / 1	-/-	-/-	•	•	-/-	3/-		-/-	-/-	-/-
Norway	839 / 142	-/-	3 / 11	1/-	-/-	-/1	43 / 112	1 / 12	-/6	-/9	-/-
Poland	- / -	- / -	-/-	- / -	1/1	-/1	2/7	1/1	-/-	2 / -	-/-
Portugal	-/-	- / -	-/1	- / -	1 / -	-/-	1/1	7 / -	-/-	- / -	-/-
Rep of Ireland	2/-	- / -	14 / -	- / -	-/-	-/-	4 / -	-/-	-/-	- / -	-/-
Russia Fed	8 / -	-/-	1/-	-/-	3 / -	3 / -	1/-	2 / -	-/-	1/-	-/-
Senegal	- / -	- / -	1/-	- / -	-/-	- / -	4 / -	3 / 1	-/-	1/-	-/-
Slovakia	-/-	-/-	- / -	- / -	-/-	-/-	-/-	-/-	-/-	- / -	-/-
Spain	1 / -	1/-	3 / -	-/-	2/-	3 / -	2/-	5 / 1	-/-	-/-	-/-
Svalbard	- / -	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Sweden	9 / 1	- / -	- / 1	-/-	-/-	-/2	1/6	-/-	-/-	1 / 1	- / 1
Switzerland	- / -	- / -	-/-	-/-	-/-	- / -	-/-	-/1	-/-	-/-	-/-
Γhe Netherlands	214 / 24	- / -	2/3	2/3	1/1	1 / 7	89 / 28	3 / 2	-/-	-/-	-/-
Γunisia	- / -	-/-	-/-	-/-	-/-	-/-	-/-	1/-	-/-	1/-	-/-
Jkraine	- / -	- / -	- / -	- / -	-/-	- / -	- / -	- / -	-/-	3 / -	-/-
Nestern Cape	-/-	-/-	-/-	-/-	-/-	-/-	1/1	2/1	-/-	-/-	-/-
N Sahara	-/-	-/-	- / -	- / -	-/-	-/-	- / -	1 / -	-/-	-/-	-/-
Total	1,356 / 176	1/1	64 / 22	5 / 4	43 / 6	18 / 28	507 / 279	83 / 40	-/6	11 / 10	-/1



Cannon-net firing on large wader flock in Delaware (Jean Hall)

 Table 1 : Movements of wader species between the Wash and other countries (continued).

Country	Dunlin	Ruff	Snipe	Black-t Godwit	Bar-t Godwit	Whimb	rel Curlew		d Red- lk shank	Green- shank		Commor S'piper	Turn- stone
Algeria	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Arctic Ocean	2 / -	- / -	-/-	-/-	-/-	-/-	-/-	-/-	-/-	- / -	-/-	-/-	-/-
Austria	1 / -	- / -	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Baltic Sea	10 / 2	-/-	-/-	-/-	1 / -	- / -	- / -	-/-	-/-	- / -	-/-	- / -	- / 1
Belgium	3 / 6	-/-	-/-	-/-	- / -	- / -	-/6	-/-	2/-	- / -	-/-	- / -	1 / -
Benin	- / -	-/-	-/-	-/-	- / -	-/-	-/-	-/-	- / -	-/-	- / -	- / -	-/-
Canada	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	2/4
Channel Island	s 4/8	-/-	-/-	-/-	- / -	-/-	- / -	-/-	1 / -	-/-	-/-	- / -	- / -
Denmark	55 / 59	-/-	1/-	1/-	3 / -	-/-	8 / 1	-/-	2/-	1/-	-/-	-/-	2/-
Eng Channel	9 / 24	-/-	-/-	-/-	- / -	-/-	-/-	-/-	-/2	-/-	-/-	-/-	-/-
Estonia	1 / -	-/-	-/-	-/-	1/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Faroe Islands	- / -	-/-	-/-	-/-	-/-	-/-	-/-	-/-	1/-	-/-	-/-	-/-	-/-
Finland	88 / 116	-/-	-/-	-/-	2/-	-/-	49 / 44	-/-	1/-	-/-	-/-	-/-	5/8
France	107 / 45	3 / -	9/-	26 / 4	04 / 1	3 / -	8 / -	-/-	50 / -	2/-	2/-	4 / -	7 / 1
Gabon	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Gambia	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	1/-
Germany	63 / 93	1/-	-/1	1/-	15 / 12	-/-	9/4	-/-	-/2	-/-	-/-	-/-	2/1
Ghana	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	2/-
Greece	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	1/-
Greenland	-/2	-/-	-/-	-/-	-/-	-/-	-/-	-/-	- / -	-/-	-/-	- / -	4 / -
Guinea	-/-	-/-	-/-	-/-	1/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Guinea Bissau	1/2	-/-	-/-	-/-	1/-	-/-	-/-	-/-	- / -	-/-	-/-	-/-	3/-
	-/-	-/-	-/-	-/-	-/-	-/-	-/-		-/-	-/-	-/-	-/-	-/-
Hungary		-/-			-/-		-/-	-/-				-/-	
Iceland	7/5		-/-	39 / 20		-/-		-/-	38 / 10		-/-		6/1
Italy	1/-	5/-	1/-	-/-	-/-	-/-	-/-	1/-	-/-	-/-	-/-	-/-	-/-
Russia	-/-	-/-	-/-	-/-	1/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Lesser Antilles	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Liberia	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	1/-
Lithuania	1/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Mali	-/-	2/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Mauritania	12 / 16	-/-	-/-	-/-	3/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Morocco	22 / 15	1/-	1/-	1/-	-/-	-/-	-/-	2/-	2/-	1/-	-/-	-/-	3 / -
North Atlantic	- / -	-/-	-/-	-/-	-/-	-/-	- / -	-/-	2 / -	-/-	-/-	-/-	1 / -
North Sea	4 / -	-/-	-/-	-/-	-/-	-/-	1/-	-/-	2 / -	-/-	-/-	-/-	-/-
Norway	9 / 332	-/-	-/-	-/-	4 / 14	-/-	3/2	-/-	-/-	2 / -	-/-	1/-	2 / 14
Poland	46 / 75	1/-	-/-	-/-	-/2	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/1
Portugal	63 / 21	1 / -	4 / -	2/1	-/-	-/-	-/-	-/-	2/-	-/-	-/-	1/-	1 / -
Rep of Ireland	20 / 23	-/-	3 / -	6/3	2 / -	-/-	2 / -	-/-	1 / -	-/-	- / -	- / -	-/-
Russia Fed	8 / 38	1/-	-/-	-/-	13 / 1	- / -	7 / -	-/-	- / -	-/-	-/-	- / -	1 / -
Senegal	- / -	1 / -	-/-	-/-	- / -	- / -	-/-	-/-	-/-	- / -	-/-	- / -	1 / -
Slovakia	-/1	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Spain	44 / 17	2/-	5/-	2/1	1 / 1	-/-	-/-	-/-	3 / -	-/-	-/-	1 / -	1 / -
Svalbard	-/1	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Sweden	261 / 370	-/-	-/1	-/-	1 / -	-/-	12 / 13	-/-	-/-	-/-	-/-	-/-	-/2
Switzerland	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
The Netherland		1/7	-/2	13 / -	13 / 7	-/-	5/5	-/2	4 / 4	2/1	-/-	-/-	4 / 1
Tunisia	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Ukraine	- / -	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Western Cape	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
W Sahara	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	- / -	-/-	-/-	- / -	-/-
Total	873 / 1,289	19/7	24 / 4	91 / 29	66 / 38	3 / -	104 / 75	3/2	111 / 18	88 / 1	2/-	7 / -	51 / 34

Table 2 : Movements of wader species between the Wash and elsewhere in the UK.

County	Oyster- catcher	L- Ringed Plover	Ringed Plover	Grey Plover	Lapwing	Knot	Sanderling	Curlew S'piper	Dunlin	Ruff
Aberdeenshire	10/3	-/-	-/-	-/-	-/-	-/2	-/-	-/-	1 / 12	-/-
Anglesey	2/2	-/-	5/-	-/-	-/-	3/-	-/-	-/-	80 / 40	-/-
Angus Antrim	2/3	- / -	- / - - / -	1 / - - / -	- / - - / -	3 / 5 - / -	1 / - - / -	- / - - / -	-/2 1/2	-/-
Argyll	1/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	1/-	-/-
Ayrshire	- / -	-/-	-/-	-/-	-/-	1/-	- / -	-/-	- / -	-/-
Bedfordshire	-/-	-/-	-/1	-/-	-/-	-/-	-/-	-/-	- / -	-/-
Belfast	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	3/8	-/-
Buckingham	- / 1	- / -	- / -	-/-	-/-	- / -	- / -	-/-	- / -	-/-
Cambridge	5/3	1/2	1/2	- / 1	-/-	- / 7	- / -	2/-	16 / 22	01-/ 6
Carmarthen	-/7	-/-	-/-	-/-	-/-	-/-	- / -	-/-	- / -	-/-
Ceredigion	1/-	-/-	-/-	-/-	-/-	-/-	- / -	-/-	1/2	-/-
Cheshire	-/-	-/-	-/-	-/-	-/-	-/1	- / -	-/-	4/5	-/-
Conwy	5/2	-/-	2/2	-/-	-/-	-/1	-/-	-/-	18 / 24	-/-
Cornwall Cumbria	-/1 3/2	- / -	- / - 11 / -	- / - - / -	- / - - / -	1 / - 41 / 40	-/- 6/3	- / - - / -	5 / 6 50 / 70	- / - - / -
Derby	2/-	1/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Devon	23 / 7	-/-	5/-	-/-	-/-	-/2	- / -	-/-	10 / 10	-/-
Dorset	2/9	-/-	2/1	-/-	-/-	-/2	- / 7	-/-	11 / 15	-/-
Down	-/-	-/-	1/-	-/-	-/-	2/-	-/-	-/-	4/1	-/-
D'fries & G'way	3/2	-/-	-/-	-/-	-/-	4 / 11	7/1	-/-	11 / 26	-/-
Durham	9/2	- / -	2/-	2/-	-/-	46 / 17	11 / 2	-/-	27 / 39	-/-
East Sussex	2/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	1/1	-/-
Essex	8/5	-/-	2/-	3 / -	-/-	2/5	3 / -	-/-	5/9	-/-
Fife	4 / -	- / -	1/-	-/-	-/-	20 / 18	-/-	-/-	4/9	-/-
Flint	-/3	- / -	1/-	-/-	-/-	-/2	3 / -	-/-	1/7	1 / -
Glamorgan	7/9	- / - - / -	2/-	- / - - / -	- / - - / -	3/2	- / - - / -	-/-	18 / 4	- / - - / -
Gloucester G London	- / - - / -	1/-	1/-	-/-	-/-	-/-	-/-	-/-	3 / 11	-/-
G Manchester	- / -	-/-	- / -	-/-	-/-	-/-	-/-	-/-	-/-	- / -
Gwent	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	11 / 25	-/-
Gwynedd	5/ 5	-/-	-/-	-/-	-/-	2/2	- / -	-/-	26 / 13	-/-
Hampshire	3 / 1	-/-	1/-	2/1	-/-	2/1	3/3	-/-	18 / 22	-/-
Hereford	-/-	-/-	-/-	-/-	1/-	-/-	-/-	-/-	- / -	-/-
Hertford	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Highland	9 / 1	-/-	1 / 1	-/-	-/-	23 / 48	-/-	-/-	11 / 18	-/-
Isle of Man	1 / -	-/-	-/-	-/-	-/-	-/-	- / -	-/-	-/2	-/-
Kent	9/1	-/-	-/-	-/-	-/-	1/2	15 / 4	-/-	5 / 43	1/-
Lancashire	6/3	- / -	8 / -	-/-	- / -	44 / 40	9/2	-/-	18 / 16	-/-
Leicester	1/-	-/-	1/-	-/-	-/-	-/-	-/-	-/-	-/2	-/-
Lincoln	3 / -	-/1	4 / -	1/-	-/-	7 / - - / -	- / - - / -	-/-	3 / 9 - / 1	-/-
Londonderry Lothian	-/- 2/1	- / - - / -	1/-	-/-	- / - - / -	5/2	-/-	-/-	4/2	-/-
Merseyside	3/-	-/-	2/-	-/-	-/-	25 / 29	10-/ 6	-/-	42 / 26	-/-
Moray	4/1	-/-	-/-	-/-	-/-	4/7	-/-	-/-	1/11	-/-
Northampton	- / -	-/-	-/-	-/-	-/-	1/-	- / -	-/-	- / -	-/-
Northumberland	9/-	-/-	6/-	-/-	-/-	-/-	-/-	-/-	-/6	-/-
Nottingham	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	1/-	-/-
Orkney	8/1	-/-	-/-	-/-	-/-	-/2	2/-	-/-	5/-	-/-
Pembroke	1/1	-/-	-/-	2/-	-/-	-/-	-/-	-/-	6/6	-/-
Perth & Kinross	1/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Powys	1/-	- / -	-/-	-/-	-/-	- / -	- / -	-/-	1/-	-/-
Scot Borders	-/1	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Shetland	33 / 19	-/-	-/-	-/-	-/-	1 / 1	-/2	-/-	1/3	-/-
Shropshire	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Somerset	1/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	66 / 14	-/-
Stafford	- / -	-/-	-/1	-/-	-/-	- / -	-/-	-/-	-/-	-/-
Strathclyde	-/-	- / -	-/-	-/-	-/-	-/-	- / -	-/-	2/4	-/-
Suffolk	38 / 11	-/-	3 / 1	1/-	-/-	13 / 1	-/-	-/-	19 / 38	-/-
Surrey	-/-	-/1	-/- 1/	-/-	-/-	- / - - / -	-/1 2/-	-/-	-/- 1/1	-/-
Tyne and Wear Upper Forth	2 / - - / -	- / -	1 / - - / -	- / - - / -	- / - - / -	- / -	-/-	-/- -/-	1 / 1 - / 1	-/-
Warwick	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	2/-	-/-
W Midlands	1/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
	1/-	-/-	-/-	-/-	-/-	3/-	-/-	-/-	-/1	-/-
West Sussex Western Isles	1/-	- / -	1/-	- / -	-/-	1/1	1/-	-/-	4 / 12	- / -
Worcester	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	4 / 12 - / -	-/-
Yorkshire	36 / 9	-/-	12 / 3	1/3	- / - - / 1	25 / 16	17-/ 1	-/-	21 / 62	-/-
			, 0	., 0			, ,	,	, 52	
Total	268 / 116	03-/ 4	77 / 12	13 / 5	1/1	283 / 268	90 / 32	2/-	544 / 664	3/6

Table 2: Movements of wader species between the Wash and elsewhere in the UK (continued).

County	Snipe	Black-t Godwit	Bar-t Godwit	Whimbre	el Curlew	Redshank	Green shank	Green S'piper	Wood S'piper	Commo S'piper	n Turnstone
Aberdeenshire	-/-	-/-	-/-	-/-	-/-	2 / 10	-/2	-/-	-/-	-/-	-/-
Anglesey	1 / -	- / -	- / -	- / -	- / -	1 / -	-/-	- / -	- / -	- / -	- / -
Angus	-/-	4/3	-/-	- / -	-/-	4/7	-/-	-/-	-/-	-/-	-/-
Antrim	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Argyll	-/-	1 / - - / -	- / - - / -	- / - - / -	- / - - / -	- / - - / -	-/- -/-	- / - - / -	- / - - / -	- / - - / -	- / - - / -
Ayrshire Bedfordshire	-/-	-/-	-/-	-/-	-/-	2/-	-/-	-/-	-/-	-/-	-/-
Belfast	-/-	4 / -	-/-	- / -	-/-	1/-	-/-	-/-	-/-	-/-	- / -
Buckingham	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Cambridge	1/4	17 / -	-/-	-/-	2/1	10 / 6	- / 1	-/-	1/-	1/1	- / -
Carmarthen	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Ceredigion	-/-	-/-	-/-	-/-	-/-	- / -	-/-	-/-	-/-	-/-	-/-
Cheshire	-/-	1/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Conwy	-/-	- / -	- / -	-/-	2/-	2/4	-/-	-/-	-/-	- / -	- / 1
Cornwall	1/-	-/-	-/-	1/-	-/-	1 / -	-/-	-/1	-/-	-/-	-/-
Cumbria	-/-	- / -	- / 1	- / -	-/-	-/-	-/-	- / -	- / -	- / -	2/-
Derby	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Devon	1 / -	3 / 10	-/1	- / -	1/-	-/-	-/-	-/-	-/-	- / -	- / -
Dorset	-/-	- / -	-/2	- / -	-/1	2/-	-/-	-/-	-/-	- / -	- / -
Down	-/-	1/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
D'fries & G'way	-/-	-/-	-/-	-/-	-/-	1/1	-/-	-/-	-/-	- / -	-/-
Durham Fact Succes	-/-	- / -	-/-	-/-	-/- 1/	3/3	-/-	-/-	-/-	-/-	- / -
East Sussex Essex	-/-	- / - 11 / -	- / - - / -	- / - - / -	1/-	-/- 8/-	- / - - / -	- / - - / -	- / - - / -	- / - - / 1	- / - 1 / -
Fife	-/-	1/5	-/-	-/-	-/-	1/4	-/-	-/-	-/-	-/-	-/-
Flint	-/-	2/-	-/-	- / -	-/-	1/4	-/-	-/-	-/-	-/-	- / -
Glamorgan	-/-	-/-	-/-	-/-	-/-	4/5	-/-	-/-	-/-	-/-	-/-
Gloucester	-/-	-/-	-/-	-/-	-/1	1/1	-/-	-/-	-/-	-/-	- / 1
G London	-/-	-/-	-/-	-/-	-/-	- / -	-/-	-/-	- / -	-/-	1/-
G Manchester	-/-	- / -	-/-	-/-	-/-	1 / -	-/-	-/-	-/-	-/-	- / -
Gwent	-/-	-/-	-/-	-/-	2/-	1/-	-/-	-/-	-/-	-/-	-/-
Gwynedd	-/-	-/-	- / 1	- / -	-/1	8/2	-/-	- / -	-/-	-/-	-/-
Hampshire	-/-	6/3	-/-	-/-	-/-	8/2	-/1	-/-	-/-	-/-	-/-
Hereford	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Hertford	-/-	-/-	-/-	-/-	-/-	- / 1	-/-	-/-	-/-	- / -	- / -
Highland	-/-	-/-	-/6	-/-	-/-	7 / 17	-/-	-/-	-/-	-/-	- / -
Isle of Man	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Kent	-/-	8 / 11	1/2	- / -	3 / 1	3/2	-/-	-/-	- / -	-/-	1 / -
Lancashire	-/-	7/-	2/-	-/-	1/-	2/1	-/-	-/-	- / -	- / -	- / -
Leicester	-/-	2 / - 25 / -	-/- 1/-	- / - - / -	- / - - / -	1 / - 5 / -	-/- -/-	- / - - / -	-/-	- / - - / -	- / - - / -
Lincoln Londonderry	-/-	-/-	-/1	- / -	-/-	-/-	-/-	-/-	-/-	-/-	- / -
Lothian	-/-	-/-	-/-	-/-	-/-	1/1	-/-	-/-	-/-	-/-	-/-
Merseyside	-/-	3 / -	2/-	-/-	-/-	3 / 1	-/-	- / -	-/-	-/-	- / 1
Moray	-/-	-/-	-/-	- / -	-/-	4/2	-/-	-/-	-/-	-/-	- / -
Northampton	-/-	-/-	- / -	- / -	-/-	-/-	-/-	- / -	-/-	-/-	-/-
Northumberland	-/-	-/-	-/-	-/-	-/-	3 / 1	-/-	-/-	-/-	-/-	-/-
Nottingham	-/-	-/-	-/-	-/-	-/-	1/1	-/-	-/-	-/-	-/-	- / -
Orkney	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	2/-
Pembroke	-/-	- / -	-/-	-/-	-/1	-/-	-/-	-/-	-/-	-/-	-/-
Perth & Kinross	-/-	-/-	-/-	-/-	-/-	4/-	-/-	-/-	-/-	-/-	-/-
Powys	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	- / -
Scot Borders	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Shetland	-/-	-/-	-/-	-/2	-/1	-/-	-/-	-/-	-/-	-/-	1/-
Shropshire	-/-	-/-	-/-	-/-	-/1	-/-	-/-	-/-	-/-	-/-	-/-
Somerset	-/-	-/-	- / -	- / -	-/-	2/-	-/-	-/-	-/-	-/-	-/-
Stafford	1/-	1/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	- / -
Strathclyde	-/-	- / -	-/-	-/-	-/-	-/1	-/-	- / -	-/-	-/-	- / -
Suffolk	-/-	31/5	3/-	-/-	-/-	14 / 8	-/-	-/-	-/-	-/-	1/-
Surrey	-/-	-/-	-/-	-/-	-/-	2/-	-/-	-/-	-/-	-/-	-/-
Tyne and Wear	-/-	-/-	-/-	-/-	-/-	3 / -	-/-	-/-	-/-	-/-	-/-
Upper Forth	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Warwick	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
West Midlands	-/-	-/-	-/-	-/-	-/-	-/1	-/-	-/-	-/-	-/-	-/-
West Sussex	-/-	3 / -	-/-	-/-	-/-	1/-	-/-	-/-	-/-	-/-	-/-
Western Isles	-/-	-/-	-/-	-/-	-/-	2/3	-/-	-/-	-/-	-/-	- / 1
Worcester	-/-	-/-	-/-	-/-	-/-	1/-	-/-	-/-	-/-	-/-	-/-
Yorkshire	1/-	1/2	1 / 4	-/-	-/-		-/-	-/-	-/-	- / -	2/2
						8 / 13					
Total	6 / 4	132 / 39	10 / 18	1/2	12 / 14	129 / 98	-/4	-/1	1/-	1 / 2	11 / 06

NOTABLE RECOVERIES

The Wash Wader Ringing Group focuses its activities on eleven target species: Oystercatcher, Grey Plover, Ringed Plover, Curlew, Bar-tailed Godwit, Black-tailed Godwit, Turnstone, Knot, Sanderling, Dunlin and Redshank. Other wader species are also ringed when the opportunity arises. This report provides a selection of the more notable recoveries of birds ringed by WWRG and found elsewhere, either in the UK or further afield, and of birds ringed elsewhere and recovered by WWRG which have been reported to the BTO in 2016 and 2017. There are also a few interesting recoveries of Lesser Black -backed Gulls which were ringed at the colony on the 'Outer Bund' until 2015. Recoveries may be the result of intentional capture by another ringer, field observations or from the reporting of a dead bird. Also included are recovery maps showing recoveries outside of Britain and Northern Ireland during 1909 -2017 for selected species. The maps show ringing locations of birds ringed abroad and recovered on the Wash (red triangles) and recovery locations of birds recovered abroad and ringed on the Wash (blue dots). The base maps used are courtesy of Natural Earth (www.naturalearthdata.com). Similar maps for birds ringed or found throughout Britain and Ireland are available on the BTO website (www.bto.org/ringing-report) in the Recovery Summaries by Species Section.

The following abbreviations are used for foreign ringing schemes:

DEH Germany, Hiddensee ISR Iceland, Reykjavik NLA Netherlands, Arnhem NOS Norway, Stavanger SFH Finland, Helsinki SVS Sweden, Stockholm

Reports from outside the UK provide the location, including county and country with co-ordinates. Birds ringed or recovered in the UK, away from the Wash, provide the location including county and co-ordinates. Locations for Wash sites can be found on the map of the Wash on page 2.

The notable recoveries report has been expertly produced for many years by Steve Wakeham who sadly died in January 2017. Steve had continued to compile a list of interesting recoveries in 2016 and his contribution is recognised in the authorship of this report.

OYSTERCATCHER

Oystercatcher is, by a substantial margin, the most frequently recovered species for WWRG. Of the 76 Oystercatcher recoveries notified in 2016 and 2017 half were from the UK and half from other countries. Of the UK recoveries, 14 were from Norfolk and Lincolnshire (all but two of these were birds that had been found dead). There were also five recoveries from elsewhere in England, one in Wales, one each in Orkney and Shetland and an amazing 17 sightings of five individual birds read by one birdwatcher at Dawlish Warren NNR.

An example of one of these birds is given below. Similar sightings were made of a second bird from the same catch at Friskney.

FH52527

Adult 02/08/2015 Friskney, Lincolnshire

Ring read in field 19/12/2015 Dawlish Warren NNR, Devon
Ring read in field 01/01/2016 Dawlish Warren NNR, Devon
Ring read in field 24/12/2016 Dawlish Warren NNR, Devon
Ring read in field 27/07/2017 Dawlish Warren NNR, Devon
Ring read in field 06/08/2017 Dawlish Warren NNR, Devon
Ring read in field 16/10/2017 Dawlish Warren NNR, Devon
Ring read in field 16/10/2017 Dawlish Warren NNR, Devon

Recoveries from Orkney and Shetland are interesting since, whilst still in the UK, these are often breeding birds and the distances involved are considerably further from the Wash than parts of Europe including The Netherlands, Germany and France.

This bird, ringed as a nestling in Orkney, is the first Oystercatcher ringed on Orkney to have been caught on the Wash.

FH82113 Nestling 14/06/2015 Bosqoy, Dounby, Orkney 59 02N 03 13W Caught by ringer 19/08/2016 Wainfleet Marsh, Lincolnshire 698 km SSE

This is the thirteenth report of an Oystercatcher ringed on the Wash and recovered in Shetland, where it may have been breeding.

FH52638 Adult 04/08/2015 Holbeach St Matthew, Lincolnshire

Dead 10/06/2017 Nibon, Shetland 60 26N 01 27W 847 km N

Most foreign recoveries of Oystercatcher are from Norway, a major breeding area for the species; 30 such reports have been received during the two-year period of this report. Most of the Oystercatchers wintering on the Wash breed throughout the coastal and arable habitats of western Norway; their population density diminishing in the far north (Wernham *et al* 2002). This is reflected in the numbers of birds recovered from southern and western Norway, specifically from the Rogaland and Hordaland areas. Many of these recoveries were of dead birds, or from birdwatchers reading metal rings in the field. There have been several exchanges between the Wash and breeding grounds in the far north of Norway during 2016 and 2017, all covering distances of over 2,000 km.

_	•			
NOS 5157988		Eidkjosen, Tromso, Troms, Norway Heacham, Norfolk	69 40N 18 45E	2,093 km SSW
FP61097		Snettisham, Norfolk Myreng, Katjord, Troms, Norway	69 42N 20 31E	2,139 km NNE
FH18165		Wainfleet, Lincolnshire Sorreisa, Troms, Norway	69 09N 18 10E	2,015 km NNE
FH18433		Wainfleet, Lincolnshire Sommarøya, Troms, Norway	69 37N 00 18E	2,055 km NNE

Three birds were recovered in The Netherlands; all the rings were read in the field by non-ringers. One of these was found just four weeks after being ringed in Norfolk.

FH52454 Adult 07/03/2015 Heacham, Norfolk

Ring read in field 06/04/2015 Suwald, Friesland, **The Netherlands** 53 10N 05 57E 369 km E

Two recoveries were from the Faroe Islands, a not uncommon finding, with 33 previous recoveries of Oystercatchers ringed on the Wash.

FH31024 Second-year 16/09/2012 Wainfleet, Lincolnshire

Freshly Dead 20/05/2016 Skálafjørður, Eysturoya, Faroe Islands 62 07N 06 46W 1,090 km NNW

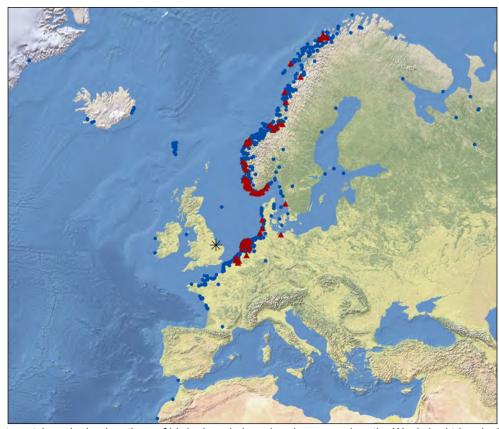
FP99942 Adult 11/08/2010 Heacham, Norfolk

Ring read in field 24/07/2016 Torshavn, Streymoy, Faroe Islands 62 01N 06 45W 1,102 km NNW

One recovery from northern France was shot just five days after being ringed in Lincolnshire.

FH52845 Adult 04/08/2015 Holbeach St Matthew

Freshly dead (hunted) 09/08/2015 Mont-Saint-Michel, Manche, France 48 37N 01 30E 486 km SSW



Oystercatcher, ringing locations of birds ringed abroad and recovered on the Wash (red triangles) and recovery locations of birds ringed on the Wash and recovered abroad (blue dots).

The oldest recovery of a Wash-ringed Oystercatcher, which is also the record for Britain and Ireland, stands at 40 years 1 month 2 days, a bird that was ringed as a nestling on 14 June 1970 at Friskney and subsequently recaught on 16 July 2010 at Wrangle, less than a kilometre away. Whilst the recoveries below are far from the record, it is none-the-less interesting that there were four recoveries of birds older than 30 years.

FA07229 Age unknown 12/08/1983 Friskney, Lincolnshire

Caught by ringer 21/08/2016 Wainfleet, Lincolnshire LOCAL

FV70199 Adult 21/08/1985 Friskney, Lincolnshire

=FH94283 Caught by ringer 20/09/2016 Wrangle, Lincolnshire LOCAL

FA07743 First-year 08/09/1983 Wrangle, Lincolnshire

Leg and ring found 18/12/2016 Long Bank Marsh, near Kilnsea, Yorkshire 53 37N 00 06E 67 km N

FV44917 First-year 05/12/1982 Snettisham, Norfolk

=FP32158 Freshly dead 25/06/2016 Nordland, **Norway** 66 13N 13 07E 1,641km NNE

GREY PLOVER

There were no reported recoveries of Grey Plover involving Wash birds in 2016 or 2017. The most recently reported recovery of this species was in December 2012, with only two in the last decade.

RINGED PLOVER

There were no reported recoveries of Ringed Plover involving Wash birds in 2016 or 2017. The most recently reported recovery of a Ringed Plover was in September 2014 when a bird was recovered in The Netherlands 5 days after being ringed on the Wash.

CURLEW

Thirteen recoveries of Curlew were reported to WWRG in 2016 and 2017, all of which were either birds found dead or from rings that had been read in the field.

Most overseas Curlew recoveries involve birds from the species' main breeding grounds in Finland. This bird was seen with a chick.

FP32856 Adult 23/08/2005 Holbeach St Matthew, Lincolnshire

Ring read in field 24/06/2016 Kajaani, Oulu, **Finland** 64 19N 27 52E 2,036 km NE

Four other recoveries in Finland were birds that had all been found dead including two road casualties and one taken by a predatory bird.

FH52164 Adult 13/09/2014 Terrington, Norfolk

Freshly dead (predated) 15/08/2015 Levijoki, Vaasa, **Finland** 62 58N 23 55E 1,787 km NE

FH31705 Adult 14/08/2014 Wrangle Tofts, Lincolnshire

Dead (not fresh) 23/04/2016 Keski-Pohjanmaa, Vaasa, Finland 63 45N 23 10E 1,783 km NE

FH04278 Adult 01/10/2011 Heacham, Norfolk

Freshly dead (hit by car) 11/05/2017 Torppi, Lappi, **Finland** 65 49N 24 10E 1,955 km NE

FH30764 Adult 27/07/2013 Leverton Outgate, Lincolnshire

Freshly dead (hit by car) 14/06/2017 Joroinen, Mikkeli, **Finland** 62 10N 27 49E 1,930 km ENE

Sweden is the country with the second highest number of recoveries of WWRG Curlew. This bird is the 12th in Sweden and reflects the increasing number of recoveries from colour-ring re-sightings.

FH81461 Adult 20/08/2016 Snettisham. Norfolk

Colour-mark sighting 24/04/2017 Skelleftea, Vasterbotten, **Sweden** 64 43N 21 01E 1,763 km NE

This is the third WWRG-ringed Curlew to be reported in Germany.

FH52040 Adult 14/08/2014 Terrington, Lincolnshire

Dead 15/06/2016 Löningen, Weser-Ems, **Germany** 52 45N 07 43E 505 km E

There have only been two previous reports of WWRG-ringed Curlew in Norway.

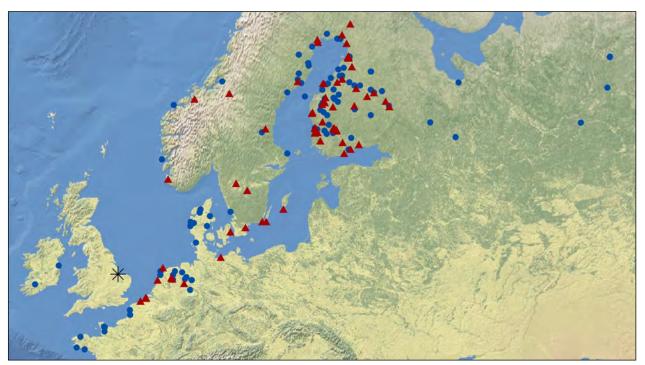
FP74039 Adult 14/08/2006 Heacham, Norfolk

Dead 15/09/2015 Haram, More og Romsdal, Norway 62 42N 06 22E 1,145 km NNE

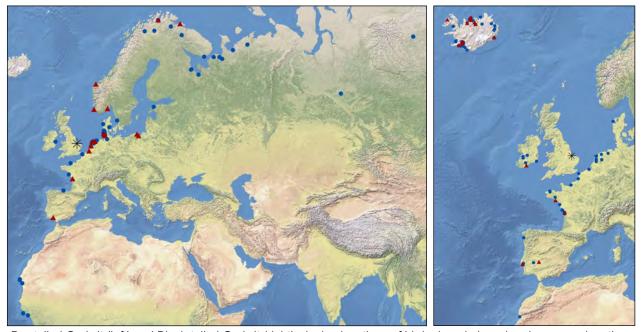
There are very few records of Curlew movements between the Wash and other parts of Britain & Ireland, and this bird is the first to be reported from Devon. It is possible that this bird could have been using the Wash as a stop-over to moult prior to moving southwest for the winter.

FP61233 Adult 27/08/2003 Terrington, Norfolk

Ring read in field 13/11/2016 Yealm Estuary, Devon 50 19N 04 01W 405 km SW



Curlew, ringing locations of birds ringed abroad and recovered on the Wash (red triangles) and recovery locations of birds recovered abroad and ringed on the Wash (blue dots).



Bar-tailed Godwit (left) and Black-tailed Godwit (right), ringing locations of birds ringed abroad and recovered on the Wash (red triangles) and recovery locations of birds ringed on the Wash and recovered abroad (blue dots).

BAR-TAILED GODWIT

The Wash is an important migration and wintering site for Bar-tailed Godwit, mainly of the nominate race *lapponica* which breed from northern Scandinavia eastwards across western Siberia to the Taimyr Peninsula (Wernham *et al* 2002).

Whilst some way off the age record for a Bar-tailed Godwit (33 years), this bird was the oldest in 2016/17 having been ringed as an adult almost 22 years prior to being shot. This is the 14th record of a WWRG-ringed Bar-tailed Godwit recovered in Russia, the majority in the Murmansk area.

DK32416 Adult 09/09/1994 Wrangle Tofts, Lincolnshire Freshly dead (hunted) 14/05/2016 Murmansk, **Russian Federation** 66 05N 38 51E 2,590 km ENE

Bar-tailed Godwits wintering on the Wash move to the Wadden Sea in late winter where they undergo pre-migratory fattening before returning to their breeding grounds (Wernham *et al* 2002). The two individuals caught in The Netherlands in April are likely to be part of this movement.

DE42176 Adult 05/08/2015 Snettisham, Norfolk

Caught by ringer 28/04/2017 Noord-Holland, The Netherlands 52 25N 04 32F 281 km F

NI A Adult 27/04/2006 Castricum, The Netherlands 52 32N 04 36F

Caught by ringer 05/08/2015 Snettisham, Norfolk 282 km W 1423448

With only one previous interchange between Kent and the Wash these two birds show movement in each direction. Interestingly, both birds were caught together in August 2015.

Adult 07/09/2014 Spitend, Sheppey, Kent DE56105 51 22N 00 48E

Caught by ringer 05/08/2015 Snettisham, Norfolk 167 km N

Adult 05/08/2015 Snettisham, Norfolk DE42218

> Caught by ringer 17/09/2017 Harty, Kent 51 20N 00 53E 170 km S

A catch of Bar-tailed Godwit on the Wash on 5 August 2015 contributed to the recovery of four birds including the following.

Adult 05/08/2015 Snettisham, Norfolk DE42151

> Colour-mark sighting 13/02/2016 Knott End on Sea, Lancashire 53 55N 03 00W 258 km WNW

The following two individuals were also ringed together, at Heacham in 1998 and subsequently recaptured together at Snettisham 17 years later!

DK73113 Adult 06/12/1998 Heacham, Norfolk

Caught by ringer 28/11/2015 Snettisham, Norfolk LOCAL

Adult 06/12/1998 Heacham, Norfolk DK73119

Caught by ringer 28/11/2015 Snettisham, Norfolk LOCAL

BLACK-TAILED GODWIT

Only six recoveries of Black-tailed Godwit ringed by WWRG were reported to the Group in 2016/17. Three of the six recoveries were ringed during a single catch at Holbeach St Matthew, Lincolnshire on 13 August 2010, one of which was recovered in Iceland, one in Fife and one in Essex.

The first of two Icelandic recoveries was in the northwest of the country and the second was from the southeast. The second recovery is one from several years ago, only recently reported to WWRG. The Icelandic Black-tailed Godwit Limosa limosa islandica has undergone an extensive population increase during recent decades. In the early 20th century, the population was limited to southern Iceland, expanding into western Iceland by about 1930. The population has since expanded substantially and Black-tailed Godwits now breed across most lowland areas of Iceland (Gunnarsson et al 2005).

Adult 22/08/1993 Holbeach St Matthew, Lincolnshire ES28043

> Caught by ringer 03/05/2003 Alftafjordur, Sudur-Mula, Iceland 64 34N 14 30W 1.544 km NNW

EL09171 Adult 13/08/2010 Holbeach St Matthew, Lincolnshire

Freshly dead 16/06/2017 Midjanes, Reyholasveit, Iceland 65 28N 22 18W 1.883 km NW

The following is one of only six recoveries of Black-tailed Godwit from Fife and was sighted by a nonringer reported via the local ringing group.

Adult 13/08/2010 Holbeach St Matthew, Lincolnshire EL09148

> Colour-mark sighting 14/03/2016 Guardbridge, Fife 56 21N 02 53W 432 km NNW

KNOT

A number of foreign recoveries of Wash-ringed Knot are in Iceland and Norway, reflecting the annual migration route of the islandica race of these birds which stage in Iceland and Norway on their way to their High-Arctic breeding grounds in Greenland and north east Canada, 70% of the total population of islandica Knot spend the winter in Britain and Ireland (Wernham et al 2002).

The following recoveries involving Iceland and Norway reflect these movements through the ringing/ recovery dates, all in the second half of May. This also demonstrates the lateness of the movements of these birds and the short time they have to breed in the High-Arctic before returning to the UK.

Adult 28/02/2009 Snettisham, Norfolk

Caught by ringer

(Colour-marks added) 25/05/2016 Finnmark, Norway 70 24N 25.31E 2.331 km NE

SX70935

Adult 11/02/2012 Snettisham, Norfolk Caught by ringer 22/05/2017 Straumfjordur, Mýrasýsla, **Iceland** 64 28N 22 13W 1,828 km NW

SV59602 Adult 11/02/2012 Snettisham, Norfolk

Caught by ringer 24/05/2017 Skogarnes, Hnappadalssýsla, Iceland 64 46 N 22 34W 1,859 km NW

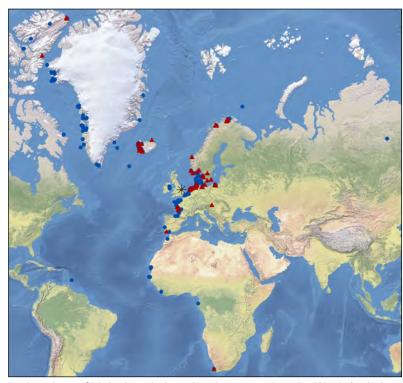
NOS 7502651	Adult 26/05/2009 Porsanger, Finnmark, Norway Caught by ringer 11/02/2012 Snettisham, Norfolk	70 24N 25 31E	2,331 km
NOS 7503185	Adult 26/05/2013 Porsanger, Finnmark, Norway Caught by ringer 28/11/2015 Snettisham, Norfolk	70 32N 25 43E	2,346 km SW
ISR 787048	Adult 16/05/2014 Kollafjordyr, Strandasýsla, Iceland Caught by ringer 13/09/2014 Terrington Marsh, Norfolk	65 34N 21 26W	1,874 km SE

Following a refuelling stop in Iceland or Norway, the *islandica* subspecies of Knot make a non-stop migration to moulting areas in Britain and The Netherlands (particularly the Wadden Sea area). Several of these birds have been caught both on the Wash and in The Netherlands in early autumn, suggesting that individual birds may use both areas.

SX71386		Terrington Marsh, Norfolk Schiermonnikoog, The Netherlands	53 28N 06 13E	402 km E
SX71357		Snettisham, Norfolk Harlingen, Griend, The Netherlands	53 15N 05 15E	331 km E
SV59468		Wainfleet Marsh, Lincolnshire Harlingen, Griend, The Netherlands	53 15N 05 15E	331 km E

Morecambe Bay and the Ribble Estuary are known areas for wintering Knot in the UK, with an average of 20,000 and 13,500 Knot wintering respectively (Frost *et al* 2018). Two individuals ringed in September 2016 on the Wash were found in the same catch on Merseyside in September 2017. WWRG do not currently colour mark Knot. However, two of these birds were subsequently observed and identified from colour marks added by the ringing group in Merseyside. The catch in Merseyside in 2017 was led by a member of WWRG and involved a number of other ringers from the Group.

ST32200	First-year	15/09/2016	Gedney Drove End, Lincolnshire		
	Caught by ringer				
			Altcar, Hightown, Merseyside	53 31N 03 05W	233 km WNW
			Crosby Beach, Merseyside		
	Colour-mark sighting	31/10/2017	Caldy, Merseyside		
ST32171	First-year	17/09/2016	Wainfleet Marsh, Lincolnshire		
	Caught by ringer				
			Altcar, Hightown, Merseyside	53 31N 03 05W	233 km WNW
	Colour-mark sighting	23/10/2017	Altcar, Hightown, Merseyside	53 31N 03 05W	233 km WNW



Knot, ringing locations of birds ringed abroad and recovered on the Wash (red triangles) and recovery locations of birds ringed on the Wash and recovered abroad (blue dots).

SANDERLING

Sanderling breed in the High-Arctic and travel long distances on migration to their wintering grounds. The Wash is of importance to the Sanderling population both as a stopover site and as a wintering site (Wernham et al 2002). The population of Sanderling breeding in East Greenland migrates through western Europe and winters mainly in West Africa. There has been a small number of recoveries from birds ringed in the Banc d'Arguin in Mauritania (a UNESCO World Heritage Site and one of the key areas in the world for migratory waders) with three recoveries in Norfolk in late July/early August, where they were fattening for migration, reported in the last two years.

NLA	Adult	09/01/2013	Banc d'Arguin, Mauritania 19 53N 16 16W	
7502651			Heacham, Norfolk	3,946 km NNE
	Caught by ringer	26/07/2017	Heacham, Norfolk	

NLA First-year 29/11/2013 lwik, Banc d'Arguin, Mauritania 19 53N 16 16W

H364178 Caught by ringer 26/07/2017 Heacham, Norfolk 3,946 km NNE

Adult 20/11/2014 lwik, Banc d'Arguin, Mauritania NLA 19 53N 16 16W

H366494 Caught by ringer 01/08/2015 Snettisham, Norfolk 3,946 km NNE

There have only been two previous recoveries of Wash-ringed Sanderling in The Netherlands. This individual was caught on one of the West Friesian Islands in the Wadden Sea, probably taking a slightly different route on migration to West Africa.

BT20799 Adult 03/08/2012 Snettisham, Norfolk Caught by ringer 05/08/2016 Griend, The Netherlands 53 15N 05 15E 324 km E

A small number of Wash-ringed Sanderling have been recovered in Portugal in winter (November through to February), possibly birds that are wintering in Portugal rather than continuing on to West Africa. NT88726 has been caught twice on the Wash and was in moult on both occasions. Colour marks were added to this bird in Portugal which enabled several subsequent recoveries and which has provided an insight into the travel of this bird across three countries.

NT88726 Adult 10/09/2010 Heacham, Norfolk

Caught by ringer

(Colour-marks added) 08/11/2012 Setúbal, Portugal 38 43N 09 01W 1.739 km SSW

Colour-mark sighting 15/02/2013 Salinas do Samouco, Setúbal, **Portugal** Colour-mark sighting 23/02/2013 Alcochete, Santarém, **Portugal**

Caught by ringer 21/08/2013 Snettisham, Norfolk

Colour-mark sighting 30/05/2014 Hestamol, Iceland 66 31N 16 03W 1,764 km NNW

Adult 30/08/2015 Heacham, Norfolk NR54991

Caught by ringer 16/12/2017 Praia da Rocha, Faro, Portugal 37 07N 08 31W 1,886 km SSW

Northward spring migration of birds probably destined for northeast Greenland follows a broad front, with Iceland as a useful staging post.

Adult 31/05/2013 Sandgerdi, Gullbringu, Iceland ISR 64 01N 22 41W

Caught by ringer 25/07/2017 Snettisham, Norfolk 8108173 1.819 km SE

This bird, ringed in Poland is only the second recovery of a Sanderling on the Wash wearing a Poland ring. A first-year bird, this individual may have come from Siberia.

JT61953 First-year 24/08/2016 Swibno, Pomorskie, Poland 54 21N 18 55E

Caught by ringer 26/07/2017 Heacham, Norfolk 1.229 km W

This recovery of a Sanderling in Orkney was presumably on its northerly migration route back to its breeding grounds in Greenland. There is an interesting difference in weight of this bird between the two captures, with an (almost) 50% increase in Orkney in May on pre-migration (86.7g) from the initial capture during the previous August (60.2g).

NR54909 Adult 01/08/2015 Snettisham, Norfolk

Caught by ringer

(Colour-marks added) 21/05/2016 Ebb of The River, Orkney 59 17N 02 33W 737 km NNW

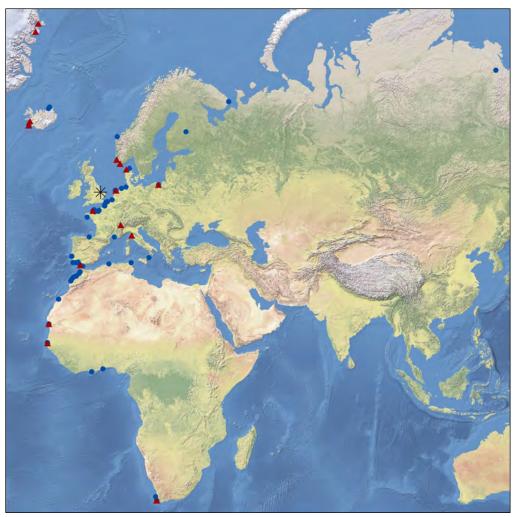
The first WWRG recovery of a Sanderling carrying a Channel Islands ring was in 2005. These two recoveries represent the first two recoveries of Wash-ringed Sanderling in the Channel Islands, almost a year apart. These are probably wintering birds given the dates of capture.

BT51413 First-year 05/10/2013 Snettisham, Norfolk

> Caught by ringer 19/12/2016 La Haule Slip, Jersey 49 10N 02 08W 450 km SSW

NT88688 Adult 09/09/2010 Snettisham, Norfolk

> Caught by ringer 14/01/2016 La Haule Slip, Jersey 49 10N 02 08W 450 km SSW



Sanderling, ringing locations of birds ringed abroad and recovered on the Wash (red triangles) and recovery locations of birds ringed on the Wash and recovered abroad (blue dots).

TURNSTONE

There were no reported recoveries of Turnstone involving Wash birds in 2016 or 2017.

DUNI IN

The Wash is important for Dunlin as both a moulting and wintering site (Wernham *et al* 2002). There are several exchanges between birds on the Wash and Sweden, with smaller numbers of exchanges with other parts of Fennoscandia. Most recoveries are from retraps by ringers. The recoveries from Fennoscandia are all from July and early August, with the exception of a juvenile bird from Norway. This timing reflects the return passage of *Calidris alpina alpina*, many of which will remain on the Wash for the winter.

SVS 3594453		Ottenby, Öland, Sweden Gedney Drove End, Lincolnshire	56 12N 16 23E	1,109 km WSW
SVS 3592652		Nidingen, Halland, Sweden Terrington Marsh, Norfolk	57 17N 11 54E	890 km WSW
SVS 3579368		Ottenby, Öland, Sweden Terrington Marsh, Norfolk	56 12N 16 23E	1,104 km WSW
BT19023		Leverton Outage, Lincolnshire Ottenby, Öland, Sweden	56 12N 16 23E	1,105 km ENE
NT89307		Gedney Drove End, Lincolnshire Ottenby, Öland, Sweden	56 12N 16 23E	1,109 km ENE
NT89362		Friskney, Lincolnshire Nidingen, Halland, Sweden	53 01N 00 11E	882 km ENE

 SVS
 First-year
 01/09/2016
 Kragero, Telemark, **Norway** 58 52N 09 35E

 8N51354
 Caught by ringer
 20/09/2016
 Friskney, Lincolnshire
 873 km SW

BT52583 Adult 13/02/2016 Terrington Marsh, Norfolk

Caught by ringer 30/07/2016 Paraine, Turku-Pori, Finland 59 49N 21 36E 1,522 km ENE

The following bird, also recovered in Sweden, was caught twice at the same place on consecutive days!

BT59382 First-year 21/09/2016 Snettisham, Norfolk, UK

Caught by ringer 25/07/2017 Ottenby, Öland, **Sweden** 56 12N 16 23E 1,092 km ENE

Caught by ringer 26/07/2017 Ottenby, Öland, Sweden

This Iceland recovery could be of the race schinzii which breed in Iceland and southeast Greenland (Wernham et al 2002). The initial capture on the Wash was probably during the bird's migration to West Africa.

BT20574 Adult 03/08/2012 Snettisham, Norfolk

Dead (road casualty) 15/07/2016 Miðhálendi, **Iceland** 64 57N 19 01W 1,737 km NW

These birds, recaptured in Portugal, are also likely to be of the *schinzii* race, on migration down to West Africa. The first of these birds was identified as *schinzii* on plumage characteristics on the Wash.

NT28612 Adult 01/08/2003 Terrington Marsh, Norfolk

Caught by ringer 27/04/2014 Vasa Sacos, Santarém, Portugal 38 49N 08 56W 1,708 km SSW

BT03995 Adult 03/08/2007 Snettisham, Norfolk

Caught by ringer 12/08/2015 Aldeia do Marim, Faro, Portugal 37 01N 07 46W 1,876 km SSW

Two more juvenile birds, these ringed in France.

SB44111 First-year 12/08/2003 Charente-Maritime, France 45 53N 01 05W

Caught by ringer 24/07/2009 Butterwick, Lincolnshire 792 km N

SB41667 First-year 07/09/2002 Charente-Maritime, France 45 53N 01 05W

Caught by ringer 23/07/2009 Wainfleet Marsh, Lincolnshire 807 km N

The following bird was caught twice by WWRG during consecutive field trips in August and September 2017 which may indicate that this bird would be staying to winter on the Wash.

BT19114 First-year 26/08/2017 Leverton Outage, Lincolnshire

Caught by ringer 24/09/2017 Wrangle Marsh, Lincolnshire LOCAL

This is the first recovery on the Wash of a Dunlin ringed on the Isle of Man.

BT75115 First-year 05/08/2016 Point of Ayre, Isle of Man 54 23N 04 26W

Caught by ringer 23/08/2016 Gedney Drove End, Lincolnshire 353 km ESE

REDSHANK

The British and Irish breeding populations of Redshank remain in winter and are joined by large numbers of birds from the Icelandic breeding population (Wernham *et al* 2002).

This following bird was probably breeding when seen over several days in late June/early July in Iceland.

DB61092 Adult 11/09/2002 Terrington, Norfolk

Ring read in field 25/06/2010 Hofn, Hornafjordur, **Iceland** 64 13N 15 11W 1,552 km NW

Ring read in field 30/06/2010 Hofn, Hornafjordur, **Iceland** Ring read in field 03/07/2010 Hofn, Hornafjordur, **Iceland**

Sadly, some species of waders continue to be shot in France. The first of these two was shot as a juvenile whilst the second had reached the age of 8 or more.

DR66318 First-year 13/09/2014 Terrington, Norfolk

Freshly dead (hunted) 20/11/2014 Marck, Pas-de-Calais, France 50 55N 01 55E 236 km SSE

DD15965 Adult 03/08/2008 Terrington, Norfolk

Freshly dead (hunted) 05/12/2016 Baie des Veys, Manche, France 49 21N 01 07W 397 km SSW

This newly-fledged Redshank, ringed in the Fens, provides a recovery of a local bird with a known date and place of hatching.

DR04044 Newly fledged 16/05/2012 Little Downham, Cambridgeshire 52 26N 00 14E

Caught by ringer 20/09/2016 Friskney, Lincolnshire 65 km N

These birds were ringed by WWRG and recaptured by SCAN ringing group in North Wales, where they may have stayed for the winter. Many members of SCAN also ring on the Wash and vice versa.

DE41178 Adult 24/08/2013 Terrington, Norfolk

Caught by ringer 12/12/2015 Ogwen Estuary, Gwynedd 53 13N 04 05W 299 km W

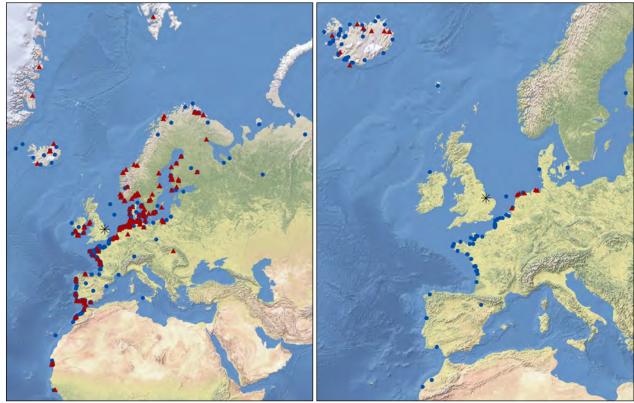
DE41654 Adult 02/09/2015 Terrington, Norfolk

Caught by ringer 03/10/2016 Llanfairfechan, Conwy 53 14N 04 00W 293 km W

This first-year bird was caught three times in less than a month, ringed as a juvenile in the Highlands at the beginning of August and then re-captured twice during the WWRG main summer fieldwork week. On 20 August, the bird was one of 14 Redshank during the first mist-net catch of the week and on 26 August, one of 97 Redshank in the final mist-net catch.

DD70206 First-year 07/08/2017 Tain, Highland 57 48N 04 03W

Caught by ringer 20/08/2017 Gedney Drove End, Lincolnshire 614 km SSE Caught by ringer 26/08/2017 Leverton Outage, Lincolnshire 596 km SSE



Dunlin (left) and Redshank (right), ringing locations of birds ringed abroad and recovered on the Wash (red triangles) and recovery locations of birds ringed on the Wash and recovered abroad (blue dots).

GREENSHANK

This Greenshank was ringed (and colour-marked) on the Wash in August 2015, having just begun its autumn moult. A photograph of the bird was published in the WWRG Report 2014-2015, following the first Norwegian re-sighting in Tromso nine months later. This was the most northerly record of a BTO-ringed Greenshank. There have now been four further re-sightings of this bird, one from Welney, Norfolk and three more from Norway. This is a fascinating record of an individual bird which presumably breeds in the far north of Norway. The Welney sighting demonstrates that the bird was still in Norfolk on 5 May and that, five days later, it had travelled over 1,000 km to southern Norway on its way back to the breeding grounds.

DE41539	Adult	31/08/2015	Holbeach St Matthew, Lincolnshire		
	Colour-mark sighting	21/05/2016	Troms, Norway	69 39N 18 29E	2,095 km NNE
	Colour-mark sighting	04/05/2017	Welney, Norfolk		40 km SSE
	Colour-mark sighting	09/05/2017	More og Romsdal, Norway	62 34N 07 46E	1,169 km NNE
	Colour-mark sighting	22/05/2017	Tisnes, Tromso, Norway	69 36N 18 49E	2,133 km NNE
	Colour-mark sighting	28/05/2017	Tisnes, Tromso, Norway	69 36N 18 49E	2,133 km NNE

LESSER BLACK-BACKED GULL

Many Lesser Black-backed Gulls migrate to southern Europe in their first winter, remaining in these areas until ready to breed (typically in their fourth year). Some of these birds return to the Mediterranean for the winter (Wernham *et al* 2002).

GC33293	Nestling	25/06/2006	Inner Westmark Knock, Terrington, No	rfolk	
	Ring read in field	09/01/2016	Chipiona, Cadiz, Spain	36 43N 06 25W 1,8	63 km SSW
GC33426	•		Inner Westmark Knock, Terrington, No		
	Sick	08/01/2016	Armona Island, Faro, Portugal	37 01N 07 46E 1,8	65 km SSW
GC79001	J		Inner Westmark Knock, Terrington, No		
	Sick	31/08/2017	Porto, Portugal	41 07N 08 37W 1,4	63 km SSW
0070404	N 1 (1)	0.4.10.0.10.0.0.0		6.11	
GC79464	•		Inner Westmark Knock, Terrington, No		
	Dead (not fresh)	15/07/2017	Praia da Deserta Island, Faro,	36 58N 07 55W 1,8	74 km SSW
			Portugal		
GN89640	Nootling	27/06/2004	Inner Westmark Knock Torrington No	rfolk	
GN09040	J		Inner Westmark Knock, Terrington, No		4 000 1 0
	King read in field	02/01/2016	Tarragona, Spain	41 06N 01 13E	1,306 km S

The following two recoveries, from Ireland and Germany respectively, are more unusual with no such recoveries identified in the Migration Atlas (2008). It is possible that these birds have changed their breeding area.

GC79547 Nestling	21/06/2009	1/06/2009 Inner Westmark Knock, Terrington, Norfolk						
Dead (not fresh)	31/07/2017	Kerry, Ireland	52 14N 10 01W	696 km W				
GC16560 Nestling	26/06/2005	Inner Westmark Knock, Terrington,	Norfolk					
= DEH								
EA202021 Caught by ringer								
(Colour marks added)	02/05/2016	Brandenburg, Germany	51 42N 14 07E	953 km E				
Colour-mark sighting	06/06/2016	Brandenburg, Germany	51 42N 14.07E	953 km E				
Ring read in field	12/07/2016	Dresden, Germany	51 16N 13 13E	905 km ESE				
Colour-mark sighting	31/05/2017	Brandenburg, Germany	51 40N 14 05E	952 km E				

Carole Davis & The late Steve Wakeham, maps Ryan Burrell

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LONGEVITY RECORDS

Listed below are all known longevity records for all species of which the WWRG has ringed 25 or more individuals since 1959. The BTO-ringed records have been extracted from annual ringing reports in *Ringing & Migration* and also in the online ringing reports (https://app.bto.org/ring/countyrec/results2017longevity.htm). Some of the species ringed by WWRG have had few recoveries and so no significant longevity has been noted. Where a bird ringed on the Wash holds the BTO record, the details appear in *orange italics*.

Carole Davis

Table 1: Longevity records for BTO-ringed birds and those ringed by WWRG

Species BT		jed		Ringed by WWRG		
Oystercatcher	SS58540	40yr	1m	SS58540	40yr	1m
Ringed Plover	BV85945	21yr	11m	BV85945	19yr	8m
Golden Plover	2072773	12yr	0m	DN77939	6yr	5m
Grey Plover	DR33258	25yr	1m	DR33258	25yr	1m
Lapwing	DS30355	21yr	1m			
Knot	CE25745	27yr	3m	CK68568	24yr	0m
Sanderling	BB52147	17yr	7 <i>m</i>	BB52147	17yr	7m
Little Stint	KR8	3yr	11m			
Curlew Sandpiper	BV70618	14yr	10m			
Purple Sandpiper	NV03868	15yr	2m	BV89291	11yr	11m
Dunlin	NS64038	19yr	3m	NR32469	18yr	11m
Ruff	CC91720	9yr	0m	CE33211	6yr	7m
Snipe	XC34292	16yr	0m			
Black-tailed Godwit (previously recaptured by WWRG)	EF90838	23yr	3m			
Bar-tailed Godwit	DS66917	33 <i>yr</i>	11m	DS66917	33yr	11m
Whimbrel	EK92102	24yr	1m			
Curlew	FV67501	32yr	7m	FA10051	29yr	11m
Common Sandpiper	NV54164	15yr	1m			
Spotted Redshank	DR28508	7yr	5m	DR28508	7yr	5m
Greenshank	DR70162	16yr	0m	DR96000	5yr	11m
Redshank	DR74213	20yr	1m	P10010 DN20546	17yr 17yr	0m 0m
Turnstone	XS56243	20yr	0m	CC88754	19yr	2m

Table 2: Details of WWRG longevity records.

Species in *orange italics* are holders of the national record.

		Ringing information			Finding information		
Species	Ring no	Age	Place	Date	Circs	Place	Date
Oystercatcher	SS58540	Nestling	Friskney	14/06/70	Controlled	Wrangle	16/07/10
Ringed Plover	BV85945	Adult	Heacham	31/08/80	Controlled	Snettisham	20/05/00
Golden Plover	DN77939	Adult	Terrington	24/07/97	Shot	Sutton Bridge	14/12/03
Grey Plover	DR33258	2 nd Summer	Terrington	13/07/79	Controlled	Terrington	31/08/04
Knot	CK68568	Adult	N. Wootton	27/08/68	Controlled	Friskney	01/09/92
Sanderling	BB52147	Adult	Snettisham	18/07/70	Controlled	Heacham	21/02/88
Purple Sandpiper	BV89291	Adult	Heacham	16/04/88	Controlled	Hunstanton	08/04/00
Dunlin	NR32469	Adult	Benington	21/08/90	Controlled	Butterwick	24/07/09
Ruff	CE33211	1 st Winter	Wolferton	22/08/78	Controlled	Senegal	20/02/85
Bar-tailed Godwit	DS66917	Adult	Wolferton	22/08/78	Controlled	Terrington	04/08/08
Curlew	FA10051	Adult	Leverton	18/09/85	Controlled	Friskney	1/09/15
Spotted Redshank	DR28508	2 nd Summer	Terrington	27/07/75	Dead	Morocco	12/01/83
Greenshank	DR96000	Adult	Wolferton	22/08/82	Controlled	Denmark	10/08/88
Redshank	P10010 DN20546	Adult Adult	Terrington Terrington	18/08/59 11/08/87	Controlled Controlled	Terrington Terrington	27/08/76 29/08/04
Turnstone	CC88754	Adult	Terrington	28/08/72	Controlled	Heacham	22/11/91



Large wader flocks at Snettisham (Aleksi Lehikoinen)

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