



Wash Wader Research Group

2022–2023 Report



AIMS OF THE WASH WADER RESEARCH GROUP

We monitor the waders using the Wash, to provide a better understanding of their biology. This allows decisions which may affect these waders to be taken in the light of factual information. Work concentrates on eleven target species (Oystercatcher, Grey Plover, Ringed Plover, Curlew, Bar-tailed Godwit, Black-tailed Godwit, Turnstone, Knot, Sanderling, Dunlin and Redshank), primarily 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.

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Front Cover: Curlew with flag 3J (Cathy Ryden)

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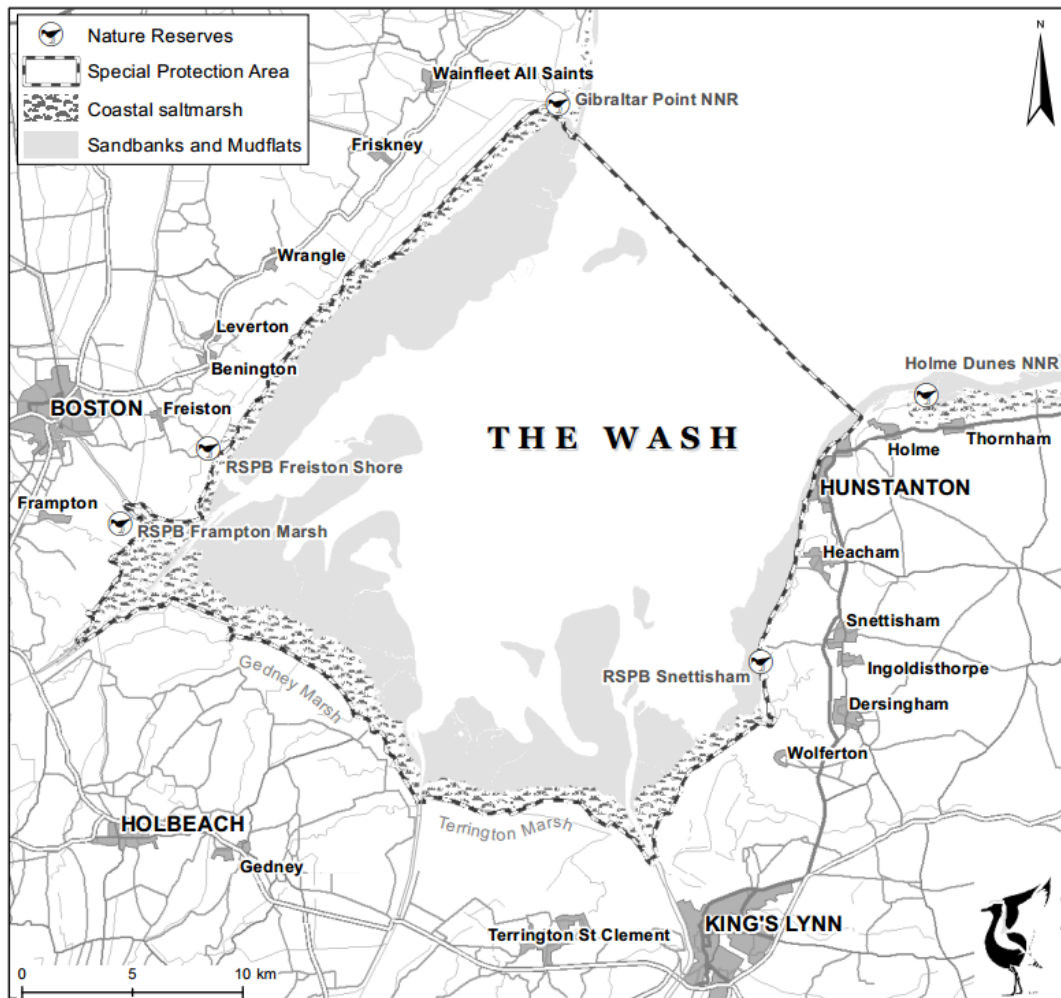
Releasing Sanderling (Sam Franks)

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MAP OF THE WASH



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INTRODUCTION

The Wash Wader Research Group is now back on its feet following the reduced catching opportunities that the Covid-19 crisis prompted and are running all the usual weekend trips and the two passage weeks at the end of the summer. The Group's new status as a registered charity has been in place for two years, and there are more people regularly involved in helping accomplish the smooth running of the group on all fronts!

Catching and resighting weekends occur throughout the year with increasing proportions of flagged birds allowing for greater chances of spotting individuals – thanks to all who work on both types of weekends. These all contribute to our increased abilities to monitor the survival and movements of waders on the Wash and further afield, in addition to the satellite tagging activities and skills that WWRG provides to NE, BTO and RSPB. The discovery of some newer pools further out from the White Barn than the traditional catching pools has led to some great mist-netting, increasing total numbers and opportunities for successful catches.

Our long-term data management and historic data entry and tidying also continues well and we are getting closer to having fully computerised biometrics back to the early days of the Group, which will potentially open even more opportunities for research. Many thanks to those involved here as well.

Finally, but not least – the team leading on keeping the Old School House (OSH) in great shape are consistently delighting us with new improvements across the buildings and garden. In addition to new hedge lines and planting, the fantastic donations we received from members have allowed for the old wooden porch to be replaced with a more spacious and durable extension with lots of space for wet and muddy field kit for all trip members.

I know you'll read more about all these activities throughout the rest of this report, so I'll stop there and just reiterate my thanks to all who help make WWRG a great group to be part of. Both regulars and more recent joiners, all members add their own time and help to improve the understanding of waders and spread the knowledge of their life cycles on the Wash and beyond.

Katharine Bowgen (Chair of Trustees 2022–2024)

FIELDWORK

2022 Fieldwork

Whilst 2022 started off in a normal fashion, Highly Pathogenic Avian Influenza (HPAI) became a growing concern throughout the year and protocols were put in place to disinfect the equipment in compliance with the BTO requirements. Huge thanks to everyone involved in the apparently never-ending job of disinfecting the kit during and after each catch.

The February trip coincided with 'Storm Eunice' and reccies on Friday revealed a potential option, with the birds not even bothered by the Environment Agency beach recharge nearby. Power cuts from the storm did affect the OSH for several hours, but by evening everything was back to normal. We set three narrow-full large-mesh cannon nets on Heacham South. However, the firing position had to be moved in the morning, as some birds had roosted in that spot; in addition, net three didn't test. Fortunately, the birds were in net one and we made a catch not long after getting into position. The first catch of the year yielded 346 Oystercatchers and a Bar-tailed Godwit. With the storm, mist-netting was impossible, so we spent the remainder of the weekend resighting resulting in 23 individuals recorded: Curlew (9), Turnstone (13) and Oystercatcher (1).



Keeping cages full of Oystercatchers (Ian Buxton)

On the March trip we set a cannon net on Saturday morning at Heacham North North. We set one full small mesh net, but the dropper cable had to be replaced. With the tide coming in quickly, we lifted the net and waited for the falling tide. After high tide, we made a small catch of seven birds: Turnstone (2), Sanderling (4) and a Dunlin. With a favourable catching option for Sunday, three small-mesh nets were set on Heacham South and, after some twinkling, we caught 56 Oystercatchers, the highlight being a Stavanger bird (below). There were no resightings during this trip.



Oystercatcher that was ringed and flagged while breeding in Norway (Chantal MacLeod-Nolan)

In July, we had a small team come together for a saltmarsh cannon-netting attempt. However, reccies revealed limited catching opportunities with marshes flooded before high tide. As a result, we did more reccies on Saturday morning as well as resighting. In the afternoon, two small-mesh, half-nets were set on the cannon-netting pool on Terrington Marsh. It was an optimistic set as the evening tide was going to be much lower than the morning recce and unfortunately nothing showed interest, so we gave up just before high tide. We tried again on Sunday morning and not

long after everyone settled, three Redshank came and landed on the pool. Unfortunately, they were the only waders that paid a visit and we eventually called the catch off. There were no resightings from the catching team, but Carole and Bernard made a total of 133 resightings of 117 individuals over the weekend. Of these, 87 were WWRG-marked birds while 28 were from other schemes.

With our priority being to put out GPS/GSM tags on Curlew roosting on the Lincolnshire side during the August trip, a team went to set on a saltmarsh near the Horseshoe Lagoon on Saturday morning and caught seven Curlew and a Bar-tailed Godwit. All seven were flagged and tagged. Faecal samples were collected during the whole trip to contribute to a genetics study on pathogens carried by waders. HPAI protocols were also in place to disinfect the kit, and this was applied in future trips as well. We then split into our two teams with the Lincs side setting the 7-cannon net on the Horseshoe Lagoon for Sunday, while the rest set a full, small-mesh net on Gedney with the aim to catch later in the evening. After dinner, we regrouped and, although it looked promising at Gedney, a Peregrine flushed the waders, and the catch was called off.

On Sunday morning we 'manned' the Horseshoe Lagoon set and caught 302 waders comprising Oystercatcher (245), Dunlin (56) and a Turnstone. Two 'recycled' GPS/GSM tags were deployed on re-trapped Oystercatchers to give more insight into the habits of the birds on the Lincolnshire side of the Wash.

We then split into three teams with one staying at the Horseshoe Lagoon to prepare to set a half net in the hope of catching some Knot for ringing and flagging and Dunlin for ringing. Team two set on a stubble field hoping to catch Curlew and the others shopped and and cooked breakfast. We set a single net on the stubble field with the greatest problem being the



Setting the net on the Horseshoe Lagoon (Cathy Ryden)

digging of holes for the cannons as the ground was rock hard.

On the next morning, we split up again with the majority deployed to the Horseshoe Lagoon and the rest to the Bennington field. Despite the Lagoon team having turned the net around in hopes for birds to come back after a Peregrine had caused them to disperse, we eventually called the catch off as the team members under the non-breathable tarp were melting! Although a Peregrine caused similar difficulties, the other team had more success and took a small catch which included a juvenile Curlew and two Whimbrel.

With the plan to mist net on both the Lincolnshire and Norfolk sides, the teams split up again and prepared for the evening. In Lincolnshire, this involved an afternoon of catching a Little Grebe with the twinklers getting very wet in the process. We set 13 mist nets at Friskney and caught 45 waders comprising Bar-tailed Godwit (18), Redshank (16), Dunlin (10) and a Knot. On the Norfolk side, at Terrington, due to the light only fading close to high tide, we caught 25 birds: Redshank (23), a Knot and a Dunlin.

Tuesday began with resightings across both sides of the Wash and the plan to mist net in the evening as the weather forecast implied that the heavy cloud would clear in time. Although we got as far as setting the nets at Gedney, the catching attempt was called off due to the heavy rain. The Lincolnshire team were also thwarted by the rain and everyone reunited at the OSH. The resighting total for the trip was 215 individuals of which 132 were WWRG birds. This was the first full trip since the pandemic where we were fortunate to meet as a large team without any restrictions!

With more GPS/GSM tags to deploy, the September trip started with the Norfolk team setting a net on a new pool that had been reccied the day before. We were hoping to catch juvenile Curlew to compare their movements to headstarted birds (p. 24). We caught two Curlew, a Dunlin and a Grey Plover. Meanwhile the Lincolnshire team set a new three-cannon net at Horseshoe Lagoon. Sunday morning had the Lincs team in situ (with the Norfolk team joining later) to try for a catch and, in a brief respite from the fog, we caught 304 individuals, of which the majority were Dunlin (222). We also caught Knot (42), Grey Plover (27), Oystercatcher (10) and Bar-tailed Godwit (3).

With the plan to have the next catch at Gedney we all relocated there and set a net in preparation for the evening tide. After some disturbance from low-flying paramotorists, we made a small catch of 43 waders: Redshank (30), Dunlin (6), Grey Plover (4), Knot (2) and a Black-tailed Godwit. The faecal sampling for the pathogen study also continued during this trip. With the two teams continuing to act as one, Monday



'Lifting' AKA 'tenting' the small mesh net at Horseshoe Lagoon (Brett Sandercock)

morning focused on a cannon net catch at Snettisham. After some twinkling and jiggling, we caught 247 birds: mostly Sanderling (213) but also Oystercatcher (19), Dunlin (13), Knot (1) and a Ringed Plover. In the afternoon, the Norfolk team set a net in a field near Wolferton, while the Lincs team went to Bennington, set two cannon nets and enjoyed a free evening due to the rain. Tuesday morning had both teams at their respective fields, with the Wolferton team seeing 600–800 Curlew in the vicinity, but unfortunately these were very flighty due to the presence of two paramotorists. We made a small catch which resulted in enough Curlew to deploy the remainder of the tags. The totals were 12 birds: Curlew (9) and Bar-tailed Godwit (3). On the Lincs side, there were fewer birds observed in the area coupled with some disturbance from a dog walker which resulted in the team searching for birds in adjacent fields. These efforts resulted in a small catch of Curlew (2).

There were two mist-netting sessions on Tuesday evening with the Norfolk team using the 'White' Barn Pool and the new Outer Pool. The catch was 142 birds: Redshank (116), Dunlin (13), Black-tailed Godwit (4), Bar-tailed Godwit (3), Curlew (2), Turnstone (2), a Knot and a Grey Plover. The Lincolnshire team was at Friskney, and their efforts yielded 84 waders: Redshank (30), Dunlin (29), Bar-tailed Godwit (17), Knot (6), a Curlew and a Grey Plover.

Wednesday morning saw the team back at Horseshoe Lagoon where we set the three-cannon net on the small spit near the inflow pipe. Unfortunately, the birds lifted, and no catch was taken.

In the evening we set nets on the Terrington Outer Pool and 184 birds were caught. The majority were Redshank (124), with Dunlin (23), Turnstone (12), Knot (7), Grey Plover (5), Curlew (4), Black-tailed Godwit (4), Bar-tailed Godwit (3) and an Oystercatcher. The Lincs team also had a productive mist-netting



Sunset at the White Barn (Nicholas Shaw)

session at Leverton with 169 birds consisting of Dunlin (74), Redshank (73), Bar-tailed Godwit (8), Curlew (5), Knot (3), Grey Plover (2), a Curlew Sandpiper, a Black-tailed Godwit, a Whimbrel and a Turnstone. The total resightings from the week were 72 individuals, comprising Curlew (42), Redshank (17), Turnstone (6) and Bar-tailed Godwit (6).

In October, some of the team arrived early to work on house and garden maintenance, while the rest assembled on Friday evening and packed the trailer ready to set two small mesh nets on Saturday morning on Heacham North North. We were targeting the Sanderling seen on the morning recce and, after some twinkling, we caught Sanderling (41) and Ringed Plover (2). As there were still birds on the beach, we reset a net for the falling tide and caught a further 55 Sanderling as well as some Ringed Plover (4) and Turnstone (2).

An evening of mist-netting was planned with two sets

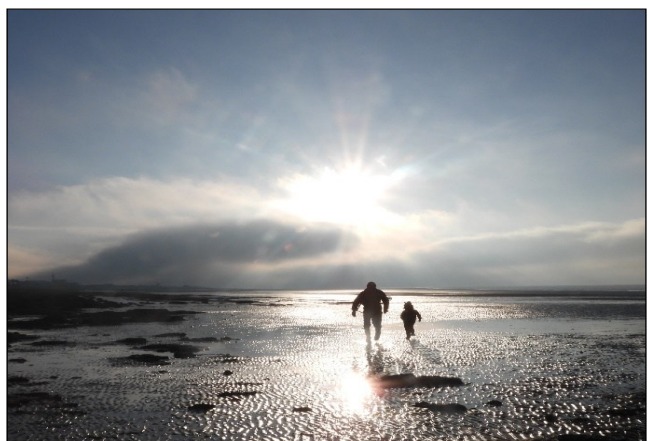


The October team extracting the morning's catch at Heacham (Ryan Burrell)

of nets on the 'White' Barn Pools and the newer Outer Pools. As the nets were catching extremely well, we switched off the lures and turned on headtorches to reduce the number of birds coming into the Outer Pool nets. The combined total at Terrington was 319 birds caught comprising Dunlin (123), Black-tailed Godwit (61), Knot (41), Oystercatcher (40), Redshank (36), Grey Plover (8), Turnstone (6) and Bar-tailed Godwit (4)! Sunday morning saw some of us heading off to resight while the others disinfected kit and sorted out data. In all 43 individual birds were resighted over the weekend: Curlew (29), Bar-tailed Godwit (8) and Turnstone (6).

After reccies on Friday morning, the November trip team packed the trailer and, in the evening, we set two lines (staggered) of two full-sized, small-mesh nets on Heacham South to maximise our chances of making a catch the next day. Although there were no birds on the beach initially and the tide had reached the lower nets, which we moved; a flock of Oystercatchers arrived which provided a new opportunity. One net was quickly reset. After deploying decoys and twinkling, we caught 202 waders with the vast majority being Oystercatchers (199), with Knot (2) and a Bar-tailed Godwit. Due to poor weather, we didn't mist-net in the evening and sorted out kit and data. Sunday focused on resighting, with 66 individuals recorded including the newly flagged Bar-tailed Godwit and Knot.

December's trip focused on resighting through the cold and foggy weather – we saw some nice wader flocks and resightings included a Bar-tailed Godwit flagged in 2018. Back at the OSH, we worked on making bird bags and preparations for the new porch.



Sunset at Hunstanton (Cathy Ryden)

2023 Fieldwork

With the plan to cannon-net on Saturday afternoon, the January trip started off with the team resighting in the morning. We recorded 34 individuals comprising Curlew (21), Bar-tailed Godwit (11), a Grey Plover and an Oystercatcher. We then set two large-mesh cannon nets on Heacham South and put a line of 'grot' either side of the nets to give the impression of a lower tide line which the nets were part of. A total of 98 birds were caught: Oystercatcher (97) and a Bar-tailed Godwit. With the plan to mist net in the morning, we awoke at 03:00 and went to set four nets on the Outer Pool. It was challenging though with cold and foggy weather and the pool had a hard frozen surface. A total of 20 waders were caught: Dunlin (8), Redshank (5), Knot (3), Bar-tailed Godwit (3) and a Black-tailed Godwit.



The frozen saltmarsh after dawn (Jade Gunnell)

After reccies on the February trip we were up early to set two large-mesh nets at Heacham North North. After some expert twinkling, we caught 133 birds: Oystercatcher (130), Bar-tailed Godwit (2) and a Knot. Many of the Oystercatchers were adults which we were targeting to monitor the likelihood of a starvation event in this species. Due to high winds, we didn't attempt to mist net on Saturday evening. We made another cannon-netting attempt on Sunday morning with two small-mesh nets set at different heights on the beach to allow for more catching options. Unfortunately, although there were birds present, the numbers remained low, and they were reluctant to move into the catching area, so we eventually called the catch off. The team packed up with some heading off to resight while others returned to the OSH. The resighters saw 16 individuals: Curlew (10), Turnstone (5) and a Bar-tailed Godwit.

Sunday afternoon focused on the maintenance part of the weekend with an amazing job being done to tidy up the garden. Efforts continued on Monday with the team sorting out cabling, replacing old carpet, planting the hedge and even recovering two misplaced projectiles from the beach using a metal detector!

The first trip in March had Arctic winds during the reccies but this was expected to normalise on Saturday. With that in mind, we set three large-mesh nets at Heacham South on Friday night. Returning the following morning, we got into position and tried to stay warm while the tide slowly pushed birds up into the catching area. We made a catch of 153 waders comprising Bar-tailed Godwit (119) and Oystercatcher (34). This built on the Oystercatcher diet and weight study as our previous catches had indicated that they had been underweight this winter and an unusually high number of dead birds had been found. All the Godwit were flagged, and this was the biggest winter beach catch of this species since 2012! In the evening, we set 11 nets on the Outer Pool on Terrington Marsh which yielded a good catch of 147 birds. This consisted of Knot (47), Dunlin (43), Redshank (28), Oystercatcher (18), Bar-tailed Godwit (6), Black-tailed Godwit (2), Grey Plover (2) and a Curlew. On Sunday a small team went resighting at Snettisham Pits and during the whole trip, a total of 24 individuals were observed comprising Curlew (19), Bar-tailed Godwit (4) and Turnstone (1). Three of the marked Bar-tailed Godwits had been flagged the previous day while the other had been flagged over ten years ago in February 2012.

Due to the windy weather during the second March trip, we decided to set one large-mesh, narrow net high on Heacham North North beach to limit the possibility of a wet catch. We caught 253 birds comprising Sanderling (243), Turnstone (5), Ringed Plover (2), Dunlin (2) and a Knot. One of the retrapped Sanderling had been colour-marked on 18 April 2007 and which although not a record breaker, it's still much better than the average life expectancy of seven. In the evening the team set 18 nets across the White Barn Pool and the Cannon-net Pool. In all 65 birds were caught comprising Dunlin (43), Redshank (16), Oystercatcher (2),



Setting nets at Terrington Pools (Molly Brown)

Bar-tailed Godwit (2), a Grey Plover and an unexpected Shelduck. On Sunday morning we focused on sorting out kit and data, while others went resighting with 79 individuals seen consisting of Curlew (54), Bar-tailed Godwit (10), Turnstone (6), Knot (4), Avocet (2), Grey Plover (2) and a Sanderling.

The trip in early April was the maintenance and Annual General Meeting weekend which was the first since WWRG had become a charity. We completed a multitude of equipment and house maintenance tasks including finishing the fence, sorting out droppers, washing keeping cages and sealing the new vinyl flooring. These maintenance weekends are important to make sure that the OSH can continue to work efficiently as our main base in the future.

During June we had another successful maintenance weekend including a net-mending workshop, deburring the mist-net poles, fixing the annex electrics and repairing fieldwork chairs. We also recied to check for potential catch options of any summering flocks. Although there were about 300 Black-tailed Godwits at the Pits, there were no viable options.



Mark is shown how to mortar by James and Skye, while Max supervises (Tim Turner)

Before the first August Wash Week began, we had a decoy making weekend with Nigel being an excellent teacher and attendees learning a lot about the construction of decoys including the anatomy of birds.

Several members did reccies prior to the rest of the team assembling on Wednesday and the team leaders decided that setting at Horseshoe Lagoon would be the best option for Thursday morning. Both teams went round to Lincolnshire and set two parallel small mesh nets with one behind the other (a three-cannon net and full-sized net). The birds came in, but Knot (our target species for this catch) were too far away from the nets. We therefore changed focus and fired the three-cannon net successful catching 222 Oystercatchers. One had peculiar plumage with white spots among its black plumage (p. 22).

Regrouping at Friskney Village Hall and after consulting the recciers, we all relocated to the OSH (bar two who stayed to recce on the Lincs side) with the plan to set a full, small-mesh net on Heacham South on Friday



Decoy making (Florence Turner)

morning. Thursday afternoon was spent undertaking more reccies and resightings. Despite the twinklers' efforts, there were few catchable birds on Heacham South on Friday, and we lifted the net, with the kit getting taken to Heacham North North to try to catch on the falling tide. With the net reset in its new position, the team got in place and the longstops did a great job of communicating what was happening to members of the public. We made a catch of 145 birds consisting of Sanderling (128), Turnstone (13), Ringed Plover (3) and, unusually, a Little Grebe.

To maximise our efforts, we split the teams again with the Norfolk side sorting out equipment at the OSH while the Lincolnshire side set four full nets in two lines in a cabbage field near the old RAF control tower. Steve and Tim, who had stayed behind to recce that morning, had already reset the three-cannon net at the Horseshoe Lagoon. Saturday morning saw both teams in position back at the Horseshoe Lagoon. We made a catch and, with the damp conditions, the old RAF tower made an excellent processing base with the ringing team working below the building while the processing team were upstairs in relative comfort. We caught 115 waders the vast majority of which were Dunlin (113) with just two Oystercatcher, this allowed the team to see the differences between the two races of Dunlin.

In the evening, the Lincs side mist-netted at Friskney Pools, while the Norfolk team went back to resight on their side of the Wash. Friskney Pools yielded a small catch of 27 birds, comprising Dunlin (13), Bar-tailed Godwit (7), Redshank (5) and Knot (2).

Sunday morning saw us all regrouping at the cabbage field and, despite some disturbance from a Peregrine, 28 Curlew were successfully caught. We fitted four of the Curlew with GPS/GSM tags to help better understand how the birds use the Wash.

Two mist-netting sessions were planned for the evening, and we split once again, with the Lincs team heading to Leverton and the Norfolk side to Terrington.

As the wind had increased making the nets more visible, we only caught 41 waders in Lincolnshire: Dunlin (33), Redshank (7) and a Turnstone. However, on Terrington marsh we caught 185 birds consisting of Dunlin (99), Redshank (52), Grey Plover (9), Turnstone (7), Black-tailed Godwit (6), Whimbrel (5), Ruff (3), Bar-tailed Godwit (2), a Curlew and a Shelduck. Throughout the trip, and with the efforts of Carole and Bernard, a total of 205 individuals were resighted: Knot (47), Bar-tailed Godwit (44), Curlew (43), Black-tailed Godwit (43), Redshank (16), Oystercatcher (7) and Turnstone (5).

Reccies for the second August Wash Week kicked off on Wednesday, with most of the team arriving later in the afternoon to catch Curlew on Terrington Marsh. Unfortunately, after a harrier caused disturbance, we failed. We decided to try again on Thursday morning and successfully caught Curlew (10) and a Whimbrel and fitted five of the Curlew with GPS/GSM tags. Taking the kit off the marsh proved to be a bit of challenge with two 'guardians' having to stand on our plank 'bridge' to make sure it didn't float off!



Guardians of the plank (Rob Robinson)

After a promising recce, we then set on Gedney and had two marsh basecamps since this was going to be a wet catch. We made a good catch of 182 waders - the first really successful cannon-net catch at Gedney! The breakdown consisted of Dunlin (66), Grey Plover (55), Knot (41), Bar-tailed Godwit (15), Redshank (3) and Black-tailed Godwit (2). Continuing to work as one team, we set a net at Heacham North North on Friday morning. However, as the birds were uncooperative, the net had to be moved down onto a ridge on the beach. Further twinkling was required before we caught 93 birds comprising Turnstone (61), Sanderling (29) and Ringed Plover (3). We later found that we haven't caught over 50 Turnstone since 2003!

We set two clap-net pairs and one clap-net pair on fields near Wolferton and manned them on Saturday. Despite a promising start, after a decoy fell over, the birds moved out of the catching area and we decided to postpone the catch and focus on resighting and

maintenance. The following morning, we were back on the fields and, after deploying cars to twinkle, we eventually took a catch of Curlew (39) and flagged all of them. We then split into three groups with one team setting the mist nets at Terrington, while the other two went to set cannon nets for Monday morning. It was a quiet mist-netting session with 19 birds caught: Redshank (9), Dunlin (7), a Ringed Plover, a Turnstone and a Whimbrel.



Newly flagged Curlew NC (Sam Franks)

On Monday morning we split between the two cannon-netting sites on separate fields at Holbeach, with Nigel acting as a 'Roving Twinkler'. Unfortunately, both sites were quiet with no birds landing in the fields and the teams regrouped at OSH. Splitting again into two groups, one went to mist net the Outer Pools at Terrington while the other went to Gedney.

The Outer Pools once again yielded a fantastic catch, making it potentially our second biggest mist-netting session on Terrington Marsh! We caught 351 waders consisting of Redshank (237), Dunlin (36), Turnstone (20), Curlew (14), Black-tailed Godwit (10), Grey Plover (9), Bar-tailed Godwit (8), Whimbrel (5), Knot (5), Ruff (4), Oystercatcher (2) and a Greenshank. The Gedney team had a productive training session with a smaller catch of 37 birds (caused by the moonrise making the nets visible). The species caught were Redshank (20), Dunlin (6), Bar-tailed Godwit (4), Black-tailed Godwit (3), Grey Plover (3) and a Whimbrel. During the week, we resighted 79 individuals: Curlew (36), Black-tailed Godwit (15), Bar-tailed Godwit (12), Redshank (7), Turnstone (4), Oystercatcher (2), a Greenshank, an Avocet and a Knot.

The October trip started with reccies and resightings for both high tides on the Saturday, although the strong wind hampered our efforts in the morning. We set cannon nets on Snettisham, but when we got into position on Sunday morning, we realised that the Hunstanton streetlights were blinding the hide party so they couldn't see the catching area clearly. As the strong onshore wind meant that the tide was going to



Setting mist nets at Gedney (Ryan Burrell)

make again, we decided to take up the nets before they got wet. Some of the team returned to put the kit away while others resighted at Snettisham Pits and mudflats. These efforts yielded 79 individuals with Curlew (54), Bar-tailed Godwit (15), Turnstone (9) and even one head-started Curlew.

Reccies from Friday concluded that there was no realistic cannon-netting opportunity for November's trip unless one was found during Saturday morning's resighting session. No viable option was found but we saw 58 colour-marked birds during the weekend, comprising Curlew (40), Bar-tailed Godwit (11), Turnstone (6) and a Grey Plover. We all headed to bed at 18:00 on Saturday aiming to arrive at Gedney Marsh at 01:00 and mist net on the morning tide. We set two straight lines of five nets in parallel (adjusted afterwards to form slight zigzags) and caught 78 birds consisting of Dunlin (49), Redshank (15), Starling (9) and singles of Oystercatcher, Grey Plover, Black-tailed Godwit, Bar-tailed Godwit and Avocet. This was only the fifth Avocet we have ever ringed.

Those that hadn't mist-netted went resighting as well as continuing with the redecoration of the OSH.



Starting to ring before dawn at Gedney(Nick Shaw)

The December trip began on the Friday evening setting nets on Heacham Beach with the aim to catch Oystercatchers. However, when we returned in the morning, there were no birds on the beach. Two groups stayed out resighting while the rest returned to the OSH to sort out the kit for the mist-netting session on the Outer Pool at Terrington. The plan was to set two separate lines of mist nets in series and while the final nets were going up, Knots started to fly into them. After informing basecamp, everyone got good experience with nocturnal extractions. We took the nets down after an hour when we had caught 241 waders with Knot (191), Dunlin (22), Redshank (15), Turnstone (6), Black-tailed Godwit (5), a Bar-tailed Godwit and a Grey Plover. We later found that this was our largest mist-net catch of Knot on the Wash.

Sunday morning focused on resighting with 44 individuals seen: Curlew (27), Turnstone (13) and Bar-tailed Godwit (4).

Chantal MacLeod-Nolan



The team head for base camp (Sam Franks)

TOTALS

Totals of birds caught in 2022 and 2023 are given in Table 1, along with the grand total of newly ringed birds since the Group started. Details by catch are given in Tables 2 and 3, where 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).

Jacquie Clark

Table 1. Totals for 2022, 2023 and Grand Totals since 1959.

Species	2022			2023			Grand Total
	Newly ringed	Retrap	Total	Newly ringed	Retrap	Total	1959–2023 (newly ringed)
Stone-curlew	0	0	0	0	0	0	1
Oystercatcher	688	210	898	384	124	508	42,204
Avocet	0	0	0	1	0	1	5
Lapwing	0	0	0	0	0	0	71
Golden Plover	0	0	0	0	0	0	380
Grey Plover	47	2	49	78	3	81	6,681
Ringed Plover	22	4	26	7	2	9	1,485
Little Ringed Plover	0	0	0	0	0	0	13
Whimbrel	3	0	3	13	0	13	245
Curlew	30	3	33	80	13	93	6,341
Bar-tailed Godwit	57	5	62	140	33	173	10,085
Black-tailed Godwit	68	2	70	26	0	26	2,369
Turnstone	24	2	26	104	9	113	7,722
Knot	103	3	106	288	3	291	59,159
Ruff	0	0	0	7	0	7	132
Broad-billed Sandpiper	0	0	0	0	0	0	1
Curlew Sandpiper	1	0	1	0	0	0	323
Sanderling	271	42	313	297	103	400	16,918
Dunlin	563	9	572	530	11	541	142,418
Purple Sandpiper	0	0	0	0	0	0	43
Little Stint	0	0	0	0	0	0	52
Pectoral Sandpiper	0	0	0	0	0	0	1
Jack Snipe	0	0	0	0	0	0	2
Snipe	0	0	0	0	0	0	66
Terek Sandpiper	0	0	0	0	0	0	1
Common Sandpiper	0	0	0	0	0	0	59
Green Sandpiper	0	0	0	0	0	0	8
Redshank	434	14	448	393	21	414	20,007
Wood Sandpiper	0	0	0	0	0	0	3
Spotted Redshank	0	0	0	0	0	0	86
Greenshank	0	0	0	1	0	1	261
TOTAL: Waders	2,311	296	2,607	2,349	322	2,671	317,142
TOTAL: Other species	2	0	2	2	0	2	
GRAND TOTALS	2,313	296	2,609	2,351	322	2,673	

Table 2. Catch totals for 2022

Site Code	HET	HEW	HET	WTV	WTH	WTH	BTB	AFS	FMT	AFS	WTH	GEX	SNX	WLE	BNA	AFS	FMT	AFS	LUV	HEW	HEW	AFS	HET	Total		
Date	19-02	05-03	06-03	13-08	14-08	14-08	15-08	15-08	15-08	10-09	11-09	11-09	12-09	13-09	13-09	13-09	13-09	14-09	14-09	29-10	29-10	29-10	26-11			
Nets fired/(mist nets)	1	1	1	1	1	1	1	(17)	(13)	1	1	1	1	2	2	(15)	(11)	(15)	(9)	1	1	1	(18)	1		
RINGED																										
Oystercatcher	255		45		225		8											2					40	113	688	
Grey Plover							1	26	4				19			1	1	5	2				7		47	
Ringed Plover																				1	2				22	
Whimbrel							2												1						3	
Curlew		5	1				2			2		8	2	2	2	1	4	5							30	
Bar-tailed Godwit	1		1				15			3	16	3	8	3	4	4	1	8				3	1	57		
Black-tailed Godwit								1															58		68	
Turnstone		1			1										2	11	1	2	6		2		6		24	
Knot							1	1	1	6	7	3	3		1							39	2	103		
Curlew Sandpiper																			1						1	
Sanderling		4										179							35	53					271	
Dunlin		1			56		1	219	6	13					13	27	23	72				122			563	
Redshank							23	16	26						114	29	117	73				36			434	
TOTAL RINGED	256	6	45	6	282	3	25	41	4	296	39	212	11	2	140	80	176	167	36	57	311	116	2,311			
10																										
RECAPTURED																										
Oystercatcher	91		11		20		2																86	210		
Grey Plover							1															1			2	
Ringed Plover												1							1	2					4	
Curlew					2								1												3	
Bar-tailed Godwit								3								1						1			5	
Black-tailed Godwit																						2			2	
Turnstone			1													1									2	
Knot										2												1			3	
Sanderling													34							6	2				42	
Dunlin																							1		9	
Redshank												4			2	1	7								14	
TOTAL RECAPTURED	91	1	11	2	20	0	0	4	0	8	4	35	1	0	2	4	8	2	7	4	6	86	296			
TOTAL WADERS	347	7	56	8	302	3	25	45	4	304	43	247	12	2	142	84	104	169	43	61	317	202	2,607			

Site codes used: AF = Terrington, BN = Bennington, BT = Butterwick, FM = Friskney, GE = Gedney, HE = Heacham, LV = Leverton, SN = Snettisham, WL = Wolferton, WT = Wrangle. The third letter defines a sub-division of a site. See Wash Map page 1.

Table 3. Catch totals for 2023

Site Code	HET	AFS	HEW	HET	AFS	HEW	AFS	AFS	WITH	HEW	WITH	HEW	AFS	AFS	FMK	LVU	AFS	TMH	GEX	HEW	SNC	AFS	GEX	AFS	GEX	AFS	Total	
Date	21-01	22-01	25-02	11-03	11-03	11-03	25-03	25-03	09-04	03-06	04-06	05-06	05-06	06-06	06-06	06-06	06-06	31-06	31-06	01-09	03-09	03-09	04-09	12-11	16-12	16-12		
Nets fired/(mist nets)	1	(4)	1	1	1	(11)	1	(18)	1	1	1	1	(10)	2	(9)	(15)	2	1	1	1	4	(15)	(8)	(19)	(10)	(8)		
RINGED																												
Oystercatcher	65		79	17	16		2		201		2	8									2			1	1	1	384	
Avocet														9				33				1	3	9	1	1	78	
Grey Plover											1		4							1		1		7			47	
Ringed Plover									3											2		1					7	
Whimbrel														5	1							1	1	5			13	
Curlew														26						14	16	29	5	14			80	
Bar-tailed Godwit	1	3	2	87	6	2	2					7										4	7	1	5	140		
Black-tailed Godwit														6				2				3	10	1	1	26		
Turnstone										11					1	7				33		1	20				104	
Knot	2	1	1	47	1													41		6		3	5			189		
Ruff															3								4				7	
Sanderling										101										27							237	
Dunlin	8			41	2	42	1				110	12		33	97			63				7	6	35	49	22	330	
Redshank	5			23	15							5		7	49			3				9	19	219	14	15	393	
Greenshank																							1				1	
TOTAL RINGED	66	19	82	104	138	177	61	1	201	115	112	26	26	41	178	10	178	10	178	84	29	19	36	340	68	238	2,349	

Site Code	HET	AFS	HEW	HET	AFS	HEW	AFS	AFS	WITH	HEW	WITH	HEW	AFS	AFS	FMK	LVU	AFS	TMH	GEX	HEW	SNC	AFS	GEX	AFS	GEX	AFS	Total	
Date	21-01	22-01	25-02	11-03	11-03	11-03	25-03	25-03	09-04	03-06	04-06	05-06	05-06	06-06	06-06	06-06	06-06	31-06	31-06	01-09	03-09	03-09	04-09	12-11	16-12	16-12		
Nets fired/(mist nets)	1	(4)	1	1	1	(11)	1	(18)	1	1	1	1	(10)	2	(9)	(15)	2	1	1	1	4	(15)	(8)	(19)	(10)	(8)		
RECAPTURED																												
Oystercatcher	32		51	17	2				21																		124	
Grey Plover														1					2								3	
Ringed Plover																				1							2	
Curlew																											13	
Bar-tailed Godwit																1					10						33	
Turnstone			1							2										3							9	
Knot																											3	
Sanderling																					2						103	
Dunlin																											11	
Redshank																											21	
TOTAL RECAPTURED	32	1	51	49	9	76	3	0	21	29	3	1	2	0	6	1	3	8	10	0	1	12	1	3	322			
TOTAL WADERS	98	20	133	153	147	253	64	1	222	144	115	27	28	41	184	11	181	92	39	37	352	69	332	69	241	2,671		

Site codes used: AF = Terrington, FM = Friskney, GE = Gedney, HE = Heschem, LV = Leverton, SN = Snettisham, TM = Terrington, WT = Wrangle. The third letter defines a sub-division of a site. See Wash Map page 1.

SCIENCE ON THE WASH

In August we celebrated our 65th anniversary. Sixty-five years of catching and gathering data might seem overkill but, as articles elsewhere in this report show, our data are proving even more relevant than ever. In the early years, very little was known about where many of the birds using the Wash came from, or went to. Catches in the early years helped establish our knowledge about migration routes and timing, which span the globe – from the High Arctic of the Americas and Russia all the way to southern Africa. This knowledge made a significant contribution to the case against a fresh-water reservoir being built in the Wash in the 1970s. Only the two trial banks (which we call the Bund and the Outer Bund) remain to remind us of this threat to the Wash ecosystem.

While we still regularly receive reports of Wash-ringed birds from far-flung places (pp. 33–41), much of the value of what we do these days is closer to home. Curlew are a species in decline and have been ‘Red listed’ as being endangered. Members of the Group continue to support efforts to help this species, by helping both to provide chicks a ‘headstart’ (p. 24) and with fieldwork on wild Curlew. We have also analysed our data from resightings of colour-marked birds to better understand how individual Curlew use all the different habitats available to them around the Wash (pp. 21–22).

This reflects a general shift in the Group’s catching priorities to better match its scientific aims. For any long-term monitoring programme it is important to always keep one eye on the objectives. Are they still useful and, to coin a phrase, fit for purpose? Having such objectives is important, it helps steer day-to-day

activities, but they will need to change over time, to reflect the changing world in which we operate. The value of simply ringing birds should also be apparent. Metal rings and coloured plastic flags are very much ‘lo-tech’ in comparison to some of the distinctly ‘hi-tech’ tracking tags that we have been deploying on some birds (pp. 19–20).

Both have their place, however, and efforts to find the colour-marked birds, both during organised trips, and at other times have been very successful (pp. 15–18). No mean feat, given how big flocks of birds feeding on the mudflats can be! However, with a good knowledge of how the tides come in and go out at different sites, and a bit of patience, it is possible to ‘load the dice’ in your favour. As can be seen in the pages of this report, we are starting to build up a very valuable picture of how individuals make use of the Wash while they are here. As we get more experience of what works we will focus our activities on the methods best able to yield useful data, in some cases this will still be using metal rings, in others colour-marking, and for particular questions tracking tags. By continually assessing the balance of these different activities we will hopefully ensure the Group’s data remain scientifically valuable for the next 65 years and beyond.

Indeed, 50 years on from the threat of a reservoir being built in the Wash, a tidal power barrage, road and port are being proposed (opposite). Our data will again be used to help understand the effect that ‘damming’ the Wash will have on this fragile ecosystem.

Rob Robinson

Data requests

2022

- Assessment of the migrations of UK wintering waders over the North Sea in relation to environmental conditions and the potential risks posed by offshore wind farms (Curlew) Sam Franks & Ros Green, BTO.
- Effects of spring conditions in the Arctic on variation in timing of post-breeding moult of Bar-tailed Godwit on the Wash. Jack Morris & Jenny Gill, UEA (student project)
- Survival of Oystercatchers on the Wash in relation to shellfisheries. Rob Robinson, BTO.
- Behavioural reactions to offshore windfarms by migrating Curlews. Phillipe Schwemmer, Keil University, Germany.

2023

- The consequences of encephalization: testing trade-offs in cranial evolution (Oystercatcher). Andrew Knapp, University College London.
- Comparison of habitat use by headstarted and wild Curlew using data from GPS/GSM tags. Sam Franks, BTO.
- Investigating how different marking methods can increase our understanding of wader movements and breeding areas (Curlew). Jacquie Clark, Sam Franks & Rob Pell, WWRG.
- Curlew site connectivity in the East Atlantic Flyway. Martin Beal, University of Lisbon, Portugal.
- Impact of recent shellfish declines on the Wash on Oystercatchers. Jacquie Clark & Phil Atkinson, WWRG/BTO.
- Investigating gastro-intestinal pathogen loads in waders (various species). Biometric data of birds that had been swabbed. Anna Protasio, University of Cambridge.

Scientific publications

Clark, J.A. & Dodd, S.G. (2022) A Eurasian Oystercatcher with aberrant plumage. *Wader Study* 129: 151–152.
doi:10.18194/ws.00281

Pell, R.J., Clark, J.A. & Robinson, R.A. (2023) Contrasting habitat use between and within Bar-tailed Godwit and Curlew wintering on the Wash. *Wader Study* 130: 225–233.

Schwemmer, P., Mercker, M., Haecker, K., Kruckenberg, H., Kämpfer, S., Bocher, P., Fort, J., Jiguet, F., Franks, S., Elts, J., Marja, R., Piha, M., Rousseau, P., Pederson, R., Düttmann, H., Faermann, T. & Garthe, S. (2023) Behavioral responses to offshore windfarms during migration of a declining shorebird species revealed by GPS-telemetry. *Journal of Environmental Management*: 118131.

For a full list of our scientific publications see: <https://wwrg.org.uk/what-we-do/scientific-papers-using-wwrg-data>

THE 'EAST ATLANTIC FLYWAY' ENGLAND EAST COAST WETLANDS - THE NEXT NATURAL WORLD HERITAGE SITE?



Map showing suggested site boundaries for the 'East Coast Flyway' From ABP mer report.

The 'East Coast Flyway' – from the Humber to the Thames comprises a group of wetlands of global importance supporting internationally significant populations of over 150 species of coastal birds. It also supports fish (and fisheries) and provides carbon capture, flood defences and tourism. The Wash is a very valuable part of the 'East Coast wetlands' forming an important part of the East Atlantic Flyway, along which there are several UNESCO World Heritage Sites. The government Department for Media, Culture and Sport recently reviewed the UK's Tentative list of World Heritage Sites (the first stage in becoming a UNESCO World Heritage Site) identifying five new sites including the 'East Coast Flyway' which was formally added to the tentative list in September 2024.

Now comes more hard work from a range of NGOs and governmental bodies working together to get to the next stage. Our (Wash Wader Research Group) data will be an important part of this, demonstrating the international value of the Wash to waders. We will also be collecting new data and have already added tags to some Bar-tailed Godwit (supported by the RSPB, Natural England and the Wildfowl & Wetlands Trust). From these birds, 'Clive' started to migrate and returned to the Wash (possibly due to adverse weather conditions –

see <https://www.bbc.co.uk/news/uk-england-norfolk-67008557>), while 'Mike' made a direct flight to Mauritania. These 'personal' stories help to highlight the value of the Wash, bringing their stories to a wider audience and complementing the long-term data sets that we hold, which will undoubtedly form an important part of the evidence of the value of the Wash for wading birds.

For more information: <https://www.rspb.org.uk/media-centre/ecw-announcement>
<https://whc.unesco.org/en/tentativelists/6689/>

COLOUR-MARK RESIGHTING

We have expanded our efforts in re-encountering colour-marked waders on the Wash in recent years. We have now recorded over 28,000 sightings of birds previously captured by the group and marked with colour rings or engraved leg flags. The most frequently re-encountered species are Black-tailed Godwit (over 15,000 sightings), Curlew (over 7,000 sightings), Turnstone (over 4,000 sightings) and Bar-tailed Godwit (over 2,500 sightings).

With the Turnstone and Black-tailed Godwit projects generating data for over 25 years, and the Bar-tailed Godwit, Curlew and Grey Plover schemes now running for over 10 years, we have mature datasets for assessing long-term survival changes in a range of wader species. These have been used to complement our even-longer-term (over 60 years) datasets generated by metal ring recoveries in recent publications (e.g. Cook *et al.* 2021). We have recently used data from both metal- and colour-ringed birds to confirm that there is a bias towards male Bar-tailed Godwit and Curlew using the Wash during winter, and to show the importance of functionally linked agricultural and grassland adjacent to the Wash for Curlew (particularly males) during winter (Pell *et al.* 2023).

The maturity of our colour-marked population data has resulted in the need to upgrade our capacity for handling resighting data; regular WWRG fieldworkers will by now be familiar with the Shiny application

developed by Stephen Vickers to record sightings. This provides immediate feedback on the ringing and re-encounter history of each bird to the observer putting their observations into context. Additionally, we have begun the process of transferring all our historic data to the BTO via 'Demon'.

Group members continue to dedicate hundreds of hours resighting waders, increasingly assisted by members of the local community who make visits to look for marked waders. Covid-19 restrictions have made fieldwork challenging, and we are extremely grateful for everyone putting in the effort to record field sightings.

Below is a summary of each scheme the Group participates in and the re-encounters made by WWRG members. Re-encounters of birds marked by the Group away from the Wash are addressed in the main recoveries section (pp. 33–41).

Group schemes

Grey Plover

We mark 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 180 birds. Re-encounters of these birds continue to be challenging and highly sought: however, it is worth bearing in mind that the small number of sightings remain more frequent than recaptures of metal-ringed birds. We have received further overseas sightings of flagged Grey Plover on the Danish Wadden Sea and the German Baltic coast, adding to our understanding of this region as a stop-over site on migration.

Grey Plover	2022	2023
Encounters	32	13
Individuals seen	12	5

Curlew

We mark 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 to 2020 have an orange scheme marker. Birds caught in 2020 onwards have a green scheme marker on the left tibia and a white flag with two alphanumeric characters with a green scheme marker under the flag on the right tibia.

We have marked over 500 individual birds since the project started in 2012. Birds encountered away from the Wash are typically recorded on their breeding grounds in Finland and Sweden, although we have a small number of records of breeding birds in the UK. We also have records of birds on passage to the Wash from the breeding grounds (including Helgoland in Germany and Denmark). We have records of individual birds wintering away from the Wash in Kent, Devon, North Wales and the Netherlands. We have recorded over 7,000 encounters of Wash-marked Curlew, the majority over the past four years. We have recently identified key subpopulations of birds using different feeding strategies during winter on the Wash and have identified the key role that grassland and arable fields play in providing winter feeding sites. This will hopefully feed into any conservation measures implemented locally in an Internationally important

population of this Near Threatened species. We have also made over 100 resightings of headstarted Curlew (p. 24).

Curlew	2022	2023
Encounters	950	841
Individuals seen	189	191

Bar-tailed Godwit

We mark Bar-tailed Godwit with white flags bearing two alphanumeric characters and a plain scheme marker. Birds caught prior to 2016 have a white scheme marker; birds marked from 2016 to 2021 have an orange scheme marker and birds marked from 2022 onwards have a green scheme marker. We have marked over 650 individual birds since the project commenced in 2010. Birds are regularly encountered throughout their range on the East Atlantic Flyway (Russia, Scandinavia, Western Europe and the west coast of Africa). The vast majority of over 2,500 encounters have been made by Wash Group observers on the eastern shore of the Wash. Bar-tailed Godwit are less site faithful in winter than Curlew, and consequently we have a greater number of birds which 're-appear' after not having been seen in the previous year. Year-on-year re-encounter rates are thus relatively low for Bar-tailed Godwit (around 60%), in contrast to re-encounter rates which closely resemble the annual survival rate for Turnstone and Curlew (over 90%).

Bar-tailed Godwit	2022	2023
Encounters	194	290
Individuals seen	113	158

Black-tailed Godwit

We continue to participate in long-term studies of the *islandica* subspecies of Black-tailed Godwit which breed in Iceland. We started colour-marking Black-tailed Godwit over thirty years ago and continue to mark birds caught during fieldwork. In August 2023, this collaboration with Jen Gill recorded the 15,000th resighting of a Wash-marked Godwit. The project uses up to four colour rings to identify individuals (see WWRG website for list of publications). Re-encounters of birds colour-marked by researchers in Iceland, Britain, Ireland, France, Spain and Portugal are frequently made by Group members.

Black tailed Godwit	2022	2023
Encounters	70	74
Individuals seen	49	54

Turnstone

We mark Turnstone with a black scheme marker ring on the left tibia, two colour rings on the left tarsus and two on the right tarsus. Since the start of the project over 25 years ago, we have marked over 400 Turnstone. During that time the main capture site for marked Turnstone has shifted from Port Sutton Bridge to Heacham 'North North' Beach. There has been a decline in the number of birds using the Heacham North Beach site in recent years. However, more birds were caught and marked in 2023, which will hopefully improve our understanding of this population. Increased disturbance of roosting birds has been linked with wintering population declines elsewhere in the UK, and we suspect this may also be the case on the Wash.

Turnstone	2022	2023
Encounters	34	280
Individuals seen	10	47

Knot

We started to colour-mark Knot in August 2020 as part of an international study of the movements of Knot within north-west Europe. Each scheme uses a specific combination of colour marks and/or engraved flags. We are colour-marking Knot on all three sides of the Wash and use a lime flag engraved with three letters on the left tarsus with a plain green ring below the flag. We have colour-marked 570 individual Knot including 97 in 2022 and 198 in 2023.

Most of the sightings of our colour-marked Knot in the UK away from the Wash are from north-west England (Merseyside and Lancashire) where there are intensive resighting efforts. Resightings from abroad are predominantly from Iceland, the Netherlands and Ireland, again areas where substantial resighting efforts are made.

We are also trying to understand how juvenile Knot disperse around the Wash and elsewhere for which we already have some interesting results. There were 45 sightings of 23 second-calendar-year Knot from the Dutch Wadden Sea in June and July 2022, part of a summering flock. Another second-calendar-year Knot was resighted in Faro, Portugal in October 2023, which is probably the southern limit for wintering *islandica* Knot and is only the second Wash-ringed Knot to be recovered in Portugal.

Knot	2022	2023
Encounters (the Wash)	11	12
Individuals seen (the Wash)	10	10
Encounters (elsewhere - UK)	38	30
Individuals seen (elsewhere - UK)	18	18
Encounters (abroad)	50	21
Individuals seen (abroad)	28	14

Redshank

We have been marking Redshank since the end of 2019 with a white flag with three alphanumeric characters and a white ring under the flag on the left tibia and an orange scheme marker on the right tibia. Over 180 birds have been incorporated into the study. We are aiming to determine survival rates in this declining and under-studied wader, and to gain insights into juvenile dispersal from the Wash.

Redshank	2022	2023
Encounters	112	51
Individuals seen	39	28

Greenshank

We mark Greenshank with two colour rings on each tibia as part of Pete Potts' long-term study based on 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. As with Grey Plover, re-encounters of these birds are challenging and a focus for future fieldwork.

Greenshank	2022	2023
Encounters	0	0
Individuals seen	0	0

Interesting sightings by WWRG of birds marked by other groups

Sightings on the Wash of birds colour-marked by other ringing groups, in the UK and abroad, are reported to the relevant group. The information received on the histories of these birds adds to our overall understanding of the use of the Wash as birds pass through on migration or stay for the winter. Reporting these sightings also encourages the sharing of knowledge of these charismatic birds away from the Wash. Below is a selection of a few of the more interesting resightings in 2022 and 2023 with their histories.

Oystercatcher

NOS 515559 ringed as a pullus at Fredvang, Nordland in northern Norway on 1 July 2017 and seen every year at or near its breeding grounds since 2020. This Oystercatcher was seen at Freiston on 24 August 2021, 16 August 2022 and 5 August 2023 evidencing site fidelity along its migration route.



*Oystercatcher NOS 515559 at Freiston
(Cathy Ryden)*

FH75235 ringed in Dublin Bay, Ireland on 25 January 2020 and seen at Snettisham on 4 September 2023. This bird was first seen at Snettisham on 24 July 2020 and was the first resighting of an Oystercatcher on the Wash since the Birdwatch Ireland project in Dublin Bay began in 2013. This second sighting in 2023 indicates that this bird visits the Wash regularly on autumn migration.

NOS 5193889 ringed as a breeding adult in Rogaland, southern Norway on 13 May 2018 and seen on the breeding grounds every year until at least 2021. This Oystercatcher was seen at RSPB Snettisham on 16 August 2021 and again on 10 October 2022. A total of eight Oystercatchers, ringed as chicks or breeding adults in Rogaland under this colour-marking scheme, were resighted on the Wash in the autumns of 2022 and 2023.

Avocet

EW87052 ringed as a pullus on 18 June 2021 at Condor Green, Lancashire and seen in its second calendar year on 17 July 2022 on Wolferton mudflats, in a flock of 180 Avocets, and again on 18 August at RSPB Frampton in a flock of 25. This bird may have remained on the Wash during its first summer along with other non-breeding birds.

NLA 3747257 ringed as a pullus on 8 July 2022 in Blije, the Netherlands, this bird was seen at RSPB Frampton just less than six weeks later, on 18 August. This is the first resighting of an Avocet from the Netherlands, and we can only speculate on its migration route and wintering destination.

Grey Plover

FRP FS102599 ringed as a chick on 1 November 2016 in Les Portes-en-Re, Charente-Maritime in western France and seen at Wolferton mudflats on 13 October 2022, the first sighting of this bird since ringing. It is also the first non-WWRG colour-marked Grey Plover to be resighted on the Wash.

Bar-tailed Godwit

NOS KA03253 ringed in Porsanger, northern Norway on 14 May 2010, probably on spring migration. The first resighting on the Wash was at Holme-next-the-Sea on 29 September 2010. It was also seen at Wolferton on 18 July 2022, almost twelve years later.

NOS DA49336 ringed at Klepp, Rogaland in southern Norway on 26 August 2021 as a juvenile on its first autumn migration, this is one of five Bar-tailed Godwits from this scheme seen on the Wash in 2022 or 2023. This bird was seen at Snettisham on 9 May 2022 and again on 18 July 2022 and was probably over-summering on the Wash.

NLA 1598332 ringed on 24 April 2023 in Castricum, this bird was resighted on 15 August 2023 at Snettisham, at Heacham on 11 November and Snettisham on 17 November. According to the ringer this was unusual as most of the birds caught on the Dutch coast in late spring fly directly to Africa. However, this bird was one of the 5% heaviest females ever caught at Castricum, indicating that it may not have travelled far and could possibly winter on the Wash.

Knot

NLA Z111571 ringed on Griend on 17 September 2023 in the western Dutch Wadden Sea and seen on 2 October 2023 in a high tide roost at RSPB Snettisham. This bird was fitted with a 'WATLAS' tracking device at the time of ringing as part of a study by NIOZ to follow the movements of Knot within the western Wadden Sea.



Knot NLA Z111571 at Snettisham (Cathy Ryden)

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- Pell, R.J., Clark, J.A. & Robinson, R.A. (2023) Contrasting habitat use between and within Bar-tailed Godwit and Curlew wintering on the Wash. *Wader Study* 130: 225–233.

ISR 787329 ringed in Dyrafjordur, north-west Iceland on 20 May 2014 and seen there again in subsequent years, this bird has been resighted at RSPB Snettisham on four occasions, twice in spring (March 2016 and 2022) and twice in autumn (August 2016 and September 2021). These sightings suggest that this Knot moults on the Wash in both spring and autumn but, although many birds which moult on the Wash then travel to north-west England or even to Ireland for the winter, this bird has never been re-sighted in winter, so its wintering site is unknown.

Dunlin

PLG JT71631 ringed at Gdansk, Poland on 19 August 2018 and seen on Snettisham mudflats on 22 March 2022. There are two previous resightings of Dunlin ringed in Gdansk, both seen on Snettisham mudflats in March 2020. All three are likely to be of the race *alpina* on migration, possibly to northern Russia.

BT88183 ringed at Ynyslas, Ceredigion, Wales on 16 July 2018 and seen on 16 July 2022 at RSPB Snettisham, exactly four years later. Three more Dunlin were resighted over two days in mid-August 2022 at RSPB Snettisham, all of which were ringed at Ynyslas over a period of three consecutive days in early September 2021.

Redshank

DD51642 ringed in Chichester harbour on 19 November 2017 and seen at RSPB Snettisham on 1 September 2023 amongst a flock of 250 Redshank. This was the first sighting away from the Solent of this bird and the first sighting since March 2018 when it was seen in Chichester harbour. Most colour-marked Redshank seen on the Wash are regular overwintering birds, so it was interesting to find a bird on passage.

DD49382 ringed on 25 October 2018 at Welwick saltmarsh on the Humber estuary as a juvenile and first seen on the Wash at Snettisham on 29 September 2019. This bird has been resighted at Snettisham regularly since this date, having been seen in almost every month between August and March and almost certainly winters on the Wash. This is one of four Redshank ringed by Humber Ringing Group and resighted on the Wash in 2022 or 2023, three at Snettisham and one at Freiston.

Rob Pell & Carole Davis

TAGGING AND TRACKING

Our tagging work has grown in the last few years as we have used them to help us to understand movements of birds around and beyond the Wash. As well as our own work, some of these projects are collaborations with other organisations such as Natural England, the RSPB or BTO making use of our expert skills in catching and tagging waders.

Oystercatcher

Our tagging work kicked off in late 2020 when we tagged 10 Oystercatchers with GPS/GSM tags using temporary harnesses as part of a BTO project funded by Natural England. The GPS system calculates the position and height of the bird and transmits that information via the GSM – mobile phone – network. The main aim was to track their movements within the Wash in relation to the location of shellfisheries (Clewley *et al.* 2021). We found that some birds were very faithful to foraging sites on the side of the Wash they were caught, whilst others moved around more - including one that ventured up the coast and spent some time on the Humber! As well as gathering information on local movements we received data on where the birds went to breed. A couple of birds were sadly predated in Norway, but we were lucky that some colleagues of Brett Sandercock (who joined us on the Wash himself) were able to recover the tags for us. The last data from any of these tags came through in summer 2023 following several Norwegian breeding trips.

Curlew

Following on from our work on Curlew habitat use based on colour marks (pp. 21–22), that showed the importance of inland habitat for the species, we decided to investigate further using tags. We started with 10 tags, funded by a donation from group members, but this was quickly followed by other funding allowing us to tag 31 Curlew between 2021 and 2023. Their amazing tracks have shown how widely spread Curlew wintering on the Wash are in the breeding season. Fig. 1a shows their tracks across the North Sea to Sweden, Finland and Russia, but also highlights a few birds that made some unexpected movements to the west to Anglesey and Ireland before continuing eastwards again. Fig. 1b shows the easternmost locations for each bird based on their year of tagging highlighting how far they can move.

The majority of Curlew that we tagged went to Finland to breed (18 birds) whilst six spent the breeding season in western Russia and four were in Sweden. One of the Swedish birds stayed on the southern island of Gotland whilst the other three went further north to similar latitudes to those breeding in Finland.

Base maps courtesy of Google Earth (tracks) and ESRI World Imagery (points).



Oystercatcher fitted with a GPS/GSM tag in November 2020 (Cathy Ryden)

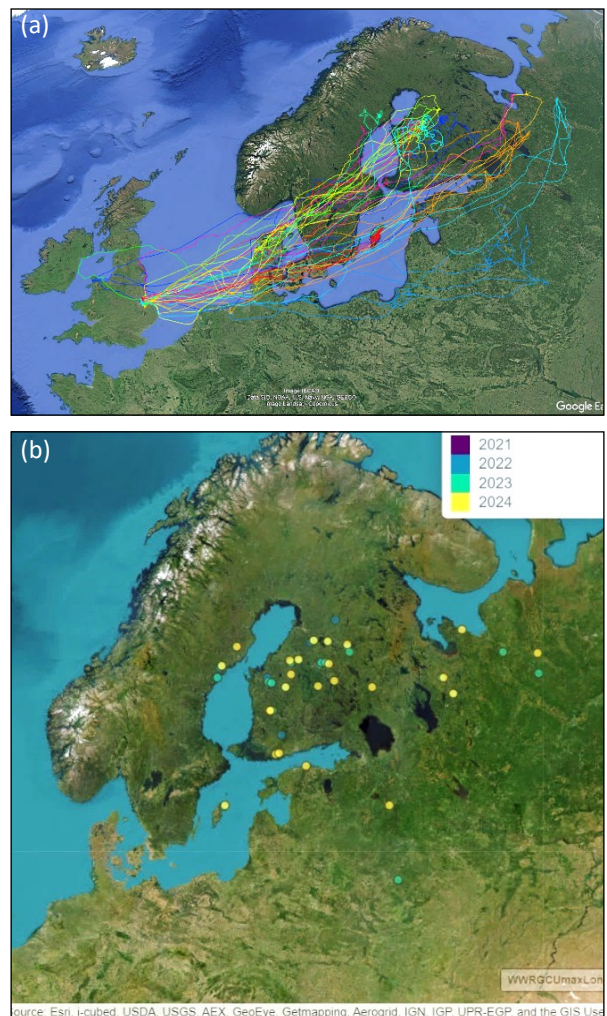


Fig. 1 (a): Tracks of tagged Curlew in 2022 and 2023 showing their individual routes across to breeding grounds in northern Europe and western Russia **(b)** Map of maximum longitude locations of every WWRG Curlew over the four years tags were active (2021–2024)

Bar-tailed Godwit

In August and September 2023, in collaboration with the RSPB and NE we tagged eight Bar-tailed Godwit to follow their movements around the Wash and to illustrate the international links they form along the East Atlantic Flyway. These data will support work to have a large swathe of the east coast of England inscribed as a World Heritage Site (p. 14).

The initial results from the tags were great! Some birds stayed close to where they were caught, but others moved around and made use of other areas of the Wash (Fig. 2).

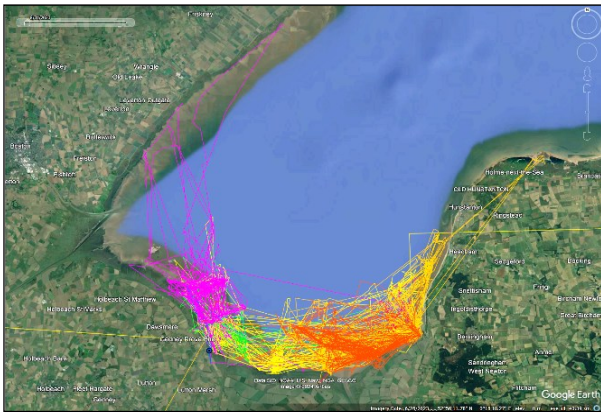


Fig. 2: Map of Bar-tailed Godwit tagging movements around the Wash showing faithfulness of many to the locations near where they were caught

One bird ('Clive') which initially stayed very local on the mudflats, made an amazing four-day journey across the UK to Ireland then headed all the way down to the Bay of Biscay before meeting unfavourable winds and coming back to the Wash again (Fig. 3)! This is exactly the sort of data that is only available from tagging to show us how mobile these birds can be and where they travel to.

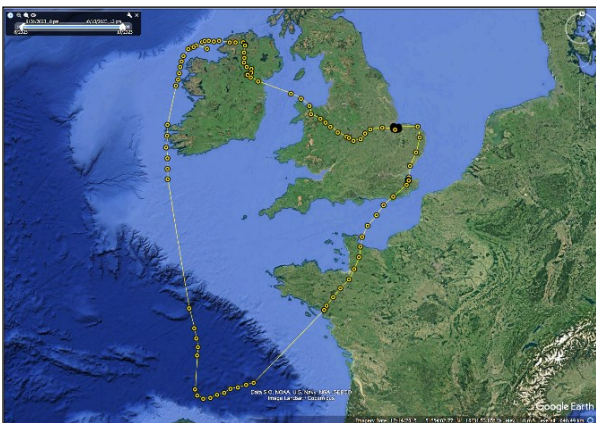


Fig. 3: The amazing track of one Bar-tailed Godwit 'Clive' that travelled around Ireland and down to the Bay of Biscay before returning to the Wash over four days (16–20 September 2023)

Unfortunately, a fault in the GPS tags' GSM networking (how they download the data) meant that all the tags stopped checking in in October 2023 and, although

there have been many discussions with the manufacturers and the mobile network providers, the issues haven't been resolved, and we have only had useful data for one tag since then. That tagged bird ('Mike') checked in in May 2024 and provided an amazing track down to Mauritania going via Morocco in October 2023 and then travelling back in April and May via the same region of Morocco with a short stop in Brittany to arrive in the Netherlands in May (Fig. 4). The last points we had from this bird's tag were on 25 May on Schiermonnikoog – an island in the Wadden Sea.



Fig. 4: Bar-tailed Godwit 'Mike' track to Mauritania in autumn 2023 and back the following spring to the Netherlands before contact was lost in May 2024

We are still keeping an eye out for these tags, but it is likely they won't start again so they will be removed if we catch any of the birds carrying them.

Most of our tags will report for many more years, so further updates will come in on their travels in future reports! The data that we get in on both local and international movements of our birds shows how well connected the Wash is and how important our work can be for populations not only in the UK but around the western hemisphere. More tagging projects are already in the pipeline with our regular collaborators so look out for additional work going on when you join some of our winter trips!

Katharine Bowgen

CURLEW AND BAR-TAILED GODWIT FEEDING LOCATIONS ON THE WASH: DO YOU LIKE YOUR WORMS WITH OR WITHOUT SALT?

If you have taken part in WWRG winter fieldwork over the past twelve years, you know that we are colour-marking several species to improve our understanding of their movements and survival. In addition, one tide of each fieldwork weekend is dedicated to resighting colour-marked birds. We have been applying leg flags to Bar-tailed Godwit since 2010, and Curlew since 2012, with over 200 people reporting one or more flag sightings.

We use individual leg flags to both add to the survival data generated from metal rings (see Cook *et al.* 2021) and to look at how individual birds use the Wash and the surrounding area. Our first paper analysing how birds move around within the Wash was published in the journal *Wader Study* in 2023 (Pell *et al.* 2023).

The paper used data from over 250 Curlew and 250 Bar-tailed Godwit caught and flagged between August 2014 and October 2018 – the catches involved over 60 different people over at least 12 separate cannon-net catches. We also used resighting data - total Bar-tailed Godwit sightings now exceed 2,000 and Curlew over 6,000.

We looked at data from all Curlew caught by cannon-netting on the Wash between 1987 and 2018 (over 3,500 birds) to determine whether there was a bias in the frequency of males to females caught on different shores of the Wash (West / South / East). We also used over 1,000 Curlew sightings and over 250 Godwit sightings between 2018 and 2020.

Writing up the study started during the first phase of the Covid -19 pandemic in 2020, with numerous subsequent revisions and data corrections undertaken before submission for peer review by independent experts. Once a paper is published, it joins similar studies to form a body of scientific evidence about the ecology of waders. This is important for conservation bodies when making management decisions regarding a site or region.



Bar-tailed Godwit EJ (Cathy Ryden)

Our study has demonstrated how Curlew and Bar-tailed Godwit have a bias towards males spending winter on the Wash. We already knew this for Bar-tailed Godwit but repeating the observation strengthens the finding of the previous study (Atkinson 1996). We have described how Wash Curlew use surrounding fields in winter in addition to intertidal mudflats and shown that there is a male bias in the birds that feed inland. Conservation measures currently exist for the estuary, but not the surrounding land. This has prompted additional work using tags which report location information to us via the mobile phone network to explore the use of this 'functionally linked land' in more detail. Male-predominant functionally linked land use could result in a greater impact on wintering Curlew populations due to more conservation pressures than previously anticipated.

Observers with over 500 sightings are a distinct rarity in our group, but these half-dozen members have provided over two-thirds of our data. Hence, we are always keen to develop resighting observers. We are very grateful to Stephen Vickers of the Waterbird Colour-Marking Group who has written an App to our specifications, which allows everyone to record resighting data and provides instant feedback to observers. This has reduced the amount of time expended on handling sighting data and improved data accuracy. Submission of resighting data to the BTO has required many hours of data checking and correction, however given this dataset almost doubled the all-time total Curlew recoveries to or from Britain & Ireland, it has been well worth the effort.

Hopefully, we have demonstrated how years of fieldwork distils into evidence for wader conservation. Continuing the legacy of nearly 65 years of wader study on the Wash is no mean feat: we must continue to evolve to meet conservation threats to our best habitats for wild birds.

None of this would have been possible without you! The landowners who give us permission to catch on their land, the many ringers who have been involved in our catches and everyone who records resightings of colour-marked birds. This sort of extensive work is only possible with the contribution of 'citizen scientists' giving up their time (and getting cold and wet) to collect such big datasets to help us understand more about 'our' birds.

Rob Pell

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WHY IS THAT WADER WHITE?

We all occasionally see birds with some white feathers and, unless the bird has no colouring at all (albino), we generally put the lack of colouring down to leucism – an absence of pigment in some feathers. However, it's not that simple – there are several different types of lack of pigment (van Grouw 2021).

In an article in the journal *Wader Study*, WWRG members Jacquie Clark and Steve Dodd (Clark & Dodd 2022) discuss an Oystercatcher with some white feathers which was recaptured at Friskney in 2021, having previously been caught on the same site in 2015. The bird had 'white spotting' (i.e. some fully white feathers) so the options were leucism or 'progressive greying' – and the two are difficult to distinguish. Leucistic birds hatch without melanin in the cells that provide colour to the feathers and the same feathers will be white each time they moult. In 'progressive greying' birds develop new white feathers through their life as the pigment-producing cells progressively become inactive.

What makes this Oystercatcher more interesting is that we had caught it before, when it had no white feathers. So, for this individual, we know it has 'progressive greying' rather than leucism – something that is very hard to distinguish unless you have a ringed bird. It will be fascinating to see how the greying has progressed should we catch this bird again.

Jacquie Clark



The Oystercatcher with 'progressive greying' caught at Friskney in 2015 and 2021. (Sam Franks)

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CURLEW AND WINDFARMS: ANOTHER MIGRATION HAZARD?

Curlew, a Near Threatened species, are a major feature of the Wash where they occur in nationally important numbers. They are declining throughout their range and, in the UK the 25-year (to winter 2022–2023) population trend for Curlew is -32% and the 10 year -20% (Woodward *et al.* 2024). We see them feeding on both the tidal mudflats and on the inland fields, where they eat earthworms (pp. 21–22).

Over the last few years, we have begun to add more to our knowledge of the movements of Curlew by using coloured and engraved leg flags so that we can identify an individual without re-catching it. More recently, we have gone a step further and equipped a few birds with GPS/GSM tags which allow us to track their movements both on the Wash and when they head off to breed. For Wash Curlew this means crossing the North Sea (and for some the Baltic) heading east on their way to Sweden, Finland, or Russia.



Flagged Curlew 9P (Cathy Ryden)

There are many potential dangers for a bird crossing the North Sea, and the risks have increased as more and more offshore windfarms (OWFs) are being installed as we try to move towards renewable energy sources. However, we know relatively little about the chance of birds colliding with, or being displaced as they avoid, windfarms. There are many potential dangers for a bird crossing the North Sea, and the risks have increased as more and more OWFs are being installed as we try to move towards renewable energy

sources. However, we know relatively little about the chance of birds colliding with, or being displaced as they avoid, windfarms. To address this, Philip Schwemmer and colleagues brought together data from Curlew tagged in seven countries across Europe which included 259 migration tracks for 143 GPS-tagged birds recorded over six years (including data from the Wash birds – 10 tracks in autumn and 10 in spring). The data were used to look at how individuals respond when approaching OWFs in the North and Baltic Seas at two different spatial scales (i.e. within 3.5 km and up to 30 km distance). They found small but significant increases in flight height (particularly within 500 m of an OWF) and changes in horizontal movements as birds tried to avoid turbines. Overall, they estimated that about 16% of Curlew were at increased risk during autumn migration and about 6% at increased risk in the spring (when wind conditions mean their flight heights overlapped with rotor levels far less).

This work has shown how Curlew make small-scale movements to avoid OWFs, which is good as it is likely to reduce collision risk. However, it also shows the substantial barrier effects of OWFs and, given the massive ongoing construction of new OWFs, emphasizes the urgent need to quantify the energy costs to birds of avoiding rotors during what must be an arduous flight.

While we will be looking at habitat use from data collected from the Curlew we have tagged on the Wash, we will continue to look for opportunities to work with others to further increase the value of our data and contribute to the conservation of this iconic species.

Samantha Franks

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WHERE ARE THEY NOW? CURLEW FROM THE NORFOLK HEADSTARTING PROJECT

Following the first successful release year in 2021, young Curlews originating from eggs collected from English airfields and reared at Pensthorpe have continued to be released near the east shore of the Wash in 2022 and 2023. With fewer eggs collected in 2022, only 37 birds were released at Wild Ken Hill and on a Sandringham field near Great Bircham; another 43 birds were released in 2023, but this was a year marked by various challenges with chick feather development across all six English headstarting projects.

After the initial trial year in 2021, we have continued to deploy GPS/GSM tags on a cohort of released birds, revealing fascinating information on movements during their first months, and now years, post-release. The tags are temporary as they are deployed with elastic backpack harnesses that fail after 6–24 months.

One bird from 2021 continued to provide GPS tag data up until June 2023. Following overwinter and oversummer movements around the south and west shores of the Wash during her first 18 months, this female showed exploratory behaviour within the Brecks in May 2023, before heading south to Kent and, we presume, finally losing her tag on the Medway estuary in June 2023.

With a further 12 birds tagged in 2022, we were able to gather more information on both overwinter survival during their first year, as well as their movements. This year saw the first migrations of headstarted Curlew, with one tagged bird (6Y) moving to southern Ireland, and another (9L) to the north coast of Brittany in France (Fig. 1). Half of the tagged birds were still transmitting by spring 2023, which is a far higher proportion known to be alive than gleaned from resighting encounters (mainly by WWRG members). With GPS-tagged birds sprinkled around the west, south and east shores of the Wash (Fig. 2), it seems likely that headstarts winter right around the Wash, which might explain the comparatively low resighting rate of headstarts on the east shore relative to the GPS tag data (Fig. 3).

We are looking forward to seeing whether released birds return to breed around the Wash, or whether they recruit into existing breeding populations in East Anglia or elsewhere.

Samantha Franks



Fig. 1: Migrations away from the Wash of 6Y (Ireland, orange) and 9L (France, dark green)

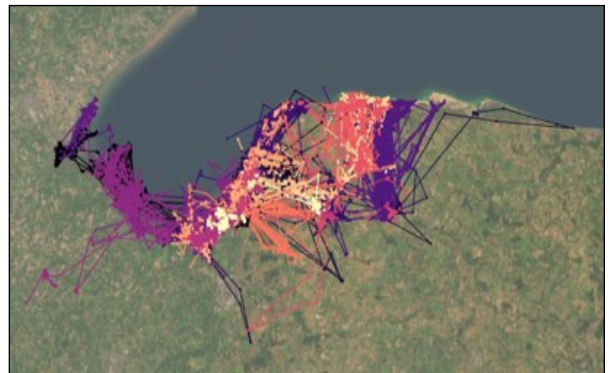
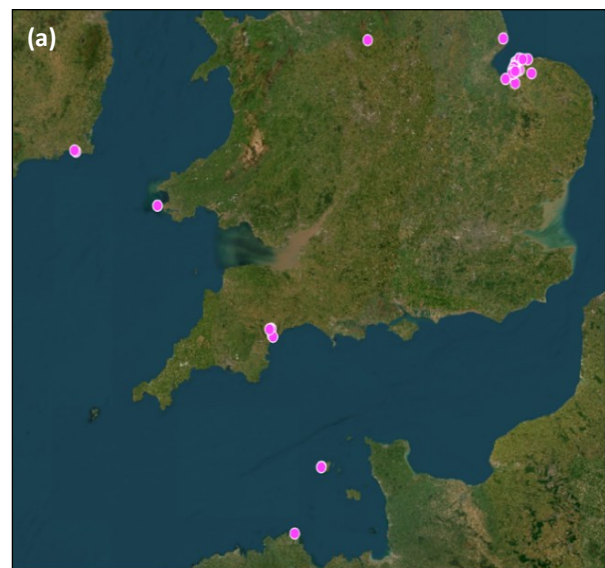
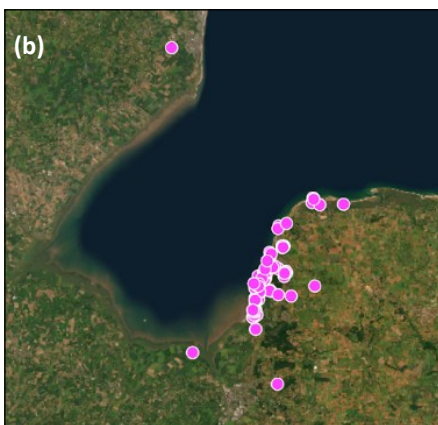


Fig. 2: All movements of GPS-tagged headstarted Curlew 2021–2023 which remained local to the Wash



*Fig. 3 (a): above
All sightings of headstarted birds 2021–2023*



*Fig. 3 (b): left
All sightings of headstarted birds 2021–2023 from
the area around the Wash*

MARK SMART

1 SEPTEMBER 1967–3 FEBRUARY 2024

On 8 March 2024, over 150 people gathered to celebrate the life of Mark Smart. Mark was a giant of wetland conservation, developing and delivering land management to help breeding waders. He was a long-standing, active WWRG member, Vice-Chair and Membership Secretary, a cannon-net endorsement-holder, a dog lover and a cyclist, fun, strong, reliable – but, most of all he was our friend. In this article we remember him and some of the many fun times we had together on the Wash. More formal obituaries can be found in *Wader Study* and *The Guardian*.

I first came to the Wash in August 1997, and this is the story of my first memory of Mark.

Hedging our bets, we had set cannon nets in two fields and had split the team so that if one field was successful the whole team could quickly come together. I ended up in a little blue Suzuki jeep with this guy called Mark, who seemed to know what he was doing, and very soon we were deployed to twinkle some birds that had landed on our field but in the wrong place. Soon after we started twinkling, we were instructed to STOP because the other team had birds catchable, so Mark did as instructed and turned the engine off. Over the radio came "3,2,1, fire" as the other team made a catch. Two things then happened. Firstly, the little blue jeep wouldn't start – so Mark jumped out and started running in the direction of the catch – which was three ditches and two fields away. Secondly, I tried to follow him but couldn't get out of the jeep because the lock snib had disappeared inside the door, so I had to clamber out the driver side by which time Mark was nowhere to be seen. To this day, I've never quite understood how we went from meeting in this way to being engaged four months later and then spending the best part of 25 years together.

Jen Smart

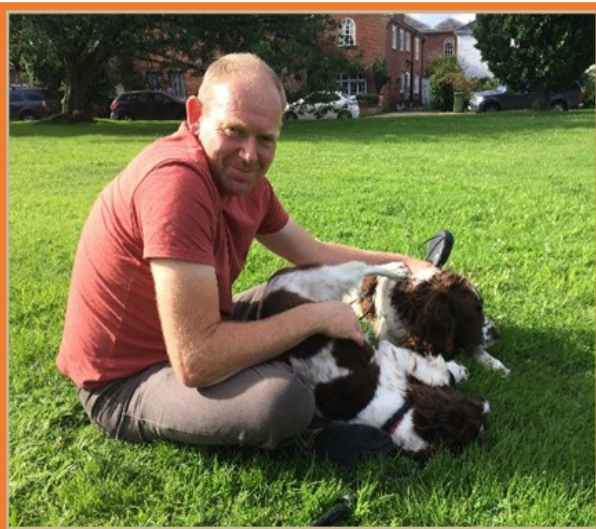


I had the pleasure of a visit from Mark a few days before he died. I had some equipment belonging to WWRG in my house in the West Midlands which needed to get back to the Group's base on the Wash. Mark had volunteered to stop off at my house to collect the equipment on one of his journeys past on the nearby motorway.

The opportunity arose on 29 January when Mark had an RSPB meeting and called in at my house. The car was duly packed with mist-netting and cannon-netting equipment. Whilst this was being done, Mark enthusiastically updated me with his plans. This included greater involvement with WWRG, including becoming the Group's chair, increased responsibilities with his work for the RSPB and a new relationship following his move back south.

Mark left my house to continue his journey obviously very happy with life. So, it was such a shock to be told just a few days later that he had died. It is so tragic his life has been cut so short.

Phil Ireland, Group Leader & Honorary President





I first met Mark on a WWRG field trip sometime in the 1980s and have been on many happy ringing sessions with him there. His enthusiasm for conservation and love of the outdoors made him a great guy to work alongside. His sense of humour made us laugh a lot. Many years later I was pleased to find that he was to be our instructor on an RSPB/ Lantra 4WD training course. His calm patience was reassuring as we navigated our way over some 'interesting' terrain at slightly scary angles. He even offered to teach me how to drive a tractor. We will miss you, Mark.

Lys Muirhead

I must have first met Mark on the Wash, so long ago I can't remember exactly. He was always a huge reliable, practical presence, and I am so glad he came to stay with me or at least stayed in his camper van on my drive for a couple of days in summer 2023. As always, I relished his company. Reminiscences were many. Ever helpful, I know he put in a good word for ringing on our local reserve. Stories of his enthusiasm and power with machinery are legion. He will be greatly missed by all who knew him, in so many different fields.

Daphne Watson Honorary President

Mark – what a giant of a man. I still can't believe you are gone. We met on the Wash as teenagers – I think I was 15 and you were 19. Warm, kind-hearted, humble and generous, and able to pretty much carry a cannon-net set single handedly. I remember once you came up to Ormskirk to help me look after my much younger siblings when my parents were away, typically a lovely thing to do. You were driving some old banger, I think. We re-connected just last year and bonded over our shared experiences of a long marriage ending. I hope I offered you some support through some dark days. You had emerged into a lighter world though and had a lot of love and life to look forward to. I'm so grateful that you had had those good times too. It was great to see you again last year in person when you embraced the challenge of a freezing cold November swim in the Thames, fighting the current and emerging lobster pink with a huge grin on your face. My dog Tippy loved you immediately, a very good judge of character, and she steadfastly stuck by your side when you were ill at Christmas, while dog-sitting. Your warmth, humour, kindness, determination and above all else loving friendship, will always be remembered. Rest in peace, Mark.

Laura Watson

I first met Mark on a WWRG trip in the late 1980s and, since then, Mark's friendship has been an ever-present part of my life. Over the last 20 years, Mark, Jen and I spent many happy hours developing and running wader projects at Buckenham and Berney. We were guided by Mark's extraordinary knowledge of wetlands, and working with many wonderful MSc and PhD students, we learnt so much about waders and how to provide the conditions that they need. Thank you, Mark, for being such a wonderful friend; always so generous with your time and knowledge, and in sharing your passion for waders. I will be forever grateful that our paths were intertwined for so many years.

Jenny Gill



I first met Mark at Terrington in 2002. I was a trainee on about my third wader mist-netting evening and hadn't got my marsh legs yet (to be honest I still haven't, but that's another story). I tripped and fell flat on my face in the mud on the edge of the 'E Pool', where Mark almost always led the net setting. I was absolutely covered! Mark pulled me out (while doing a very good job of not laughing!) and made sure I was OK. He then spent the rest of the evening gently winding me up about it, but in such a friendly way that it made me feel like I was already an established part of the team, not a newbie outsider. We became firm friends and over the next few years he and Jen taught me loads about birds, ringing and conservation both at the Wash and on weekend mornings when they generously invited me and others to help ring Reed Buntings and other farmland birds at their house next to Buckenham Marshes, usually followed up with bacon and egg butties for breakfast. They had a big hand in getting me from trainee to C permit and forming my addiction to waders.

However, that first evening was a pattern that followed us throughout our friendship - me getting into some minor scrape or other, Mark helping to fix it, and then gently laughing at me! Recently, we ran several catching weekends together. I really loved working with Mark; he was good at things I find difficult and thought differently from me. We'd talk, taking on board each other's ideas and those of others in the team, and come up with a plan - I think we were a good trip-leading team. He could guide me without a word, by giving me that quizzical look of his, making me think a bit harder. His first trip back at the Wash we were the only ones with a cannon-net endorsement. Mark had said he wanted to ease back in gently, but he was happy to watch safety from the opposite end of the beach to me. Of course, the birds had other ideas - they ended up behind me, so the only way we could twinkle them to the catching area was if I got off the beach to let the birds go past. We agreed I would get back on the beach to take charge as soon as I could, but if Mark got an option, he would take it - which he did, brilliantly, it was a lovely catch. I last saw Mark on the Wash a few weeks before he died. The tide came in more than expected while we were mist-netting, and Mark's camper van came to the rescue - allowing wet team members to change and warm up (minor scrape, Mark to the rescue, spend the rest of the evening laughing about it!). Later that weekend, we had a lovely chat when he told me how happy and excited he was about his new relationship. It was brilliant to see him so happy and hopeful. I shall miss him greatly, as we all will.

Lucy Yates



I think it was in the late 1980's Wash Week and we were on the Lincs side. Mark had decided to help at the early morning tide and stayed overnight leaving for work in the morning. We got a call on the CB radio asking for help as he had driven his car into a ditch! Thankfully he was able to climb out and only his pride was injured. The car needed more to extract as seen in the photos.

Rest in Peace Mark.

Tim Chinn



Mark was so helpful, especially to young newbies like me - sharing his knowledge and experience. One memory that I will never forget was when Mark and Tim taught me how to mix mortar and repoint the patio at the Old School House. I so appreciated the time Mark took to teach me this skill, not doubting for a minute that I could do it despite being one of the youngest there.

In Delaware, I remember how much Mark enjoyed being out on the water. He would be out on the boat in Mispillion Harbour three times a day if he could. We did several shore surveys together, counting the shorebirds and reading colour rings.

Florence Turner

The Wash is usually a predictable place to enjoy and catch birds for ringing. But not always. Mark and I have spent many happy evenings squelching about the marshes and one evening stands out for me. On this occasion at the 'E pool', we had set as usual, light breeze, nice afternoon and definitely a "wellie depth only night" said NAC. Plenty of bird noise about and Mark predicted a good catch. The evening continued as usual, tapes put out and teams dispatched.

On going over the top there was a lot of water in the creek and the causeway was already bordered by water. Worse still, there seemed to be trickles of water in the vegetation on the marsh. Mark was leading and seemed supremely confident as usual. Shorter folk in the party with wellies on were not! Mark strode on and we found a rather larger pool than the one we had left. And there were some birds, not masses - after all it was the first round.

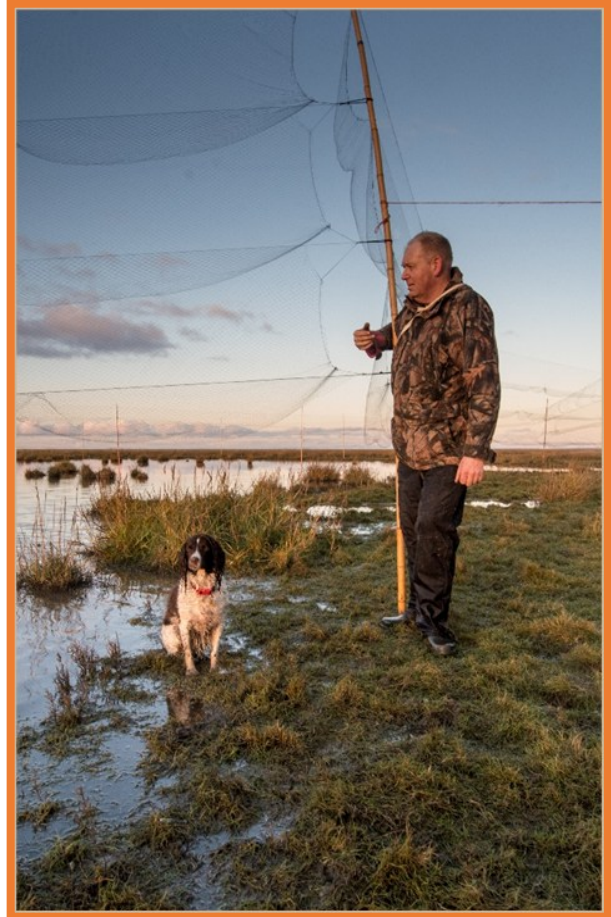
It was about an hour before the tide, which was coming in fast, and the team was rapidly mobilized to extract what was in the nets. I remember accumulating a big necklace of bags round my neck. Withdrawing from the nets we waited, but the tide just kept coming. We decided to take the birds back and two people set off.

About 30 minutes before tide the first wellie wearers started getting wet as we extracted the second round. With most of the vegetation submerged the Wash took on a completely different feel. Mark was reassuringly confident, but we did know it was deeper near the crossing. So, while some of the team stayed near the nets on a slightly higher bit of marsh, Mark and I set off to take more birds back to base. It was just a lake between us and the shore, with a few wisps of grass poking out. Loaded up, away we went, Mark strode on with water up to his knees or deeper. It was his confidence and determination that encouraged me, as we prodded and splashed along. I had little idea where we were with no reference points, Mark somehow knew, we didn't find any creeks and emerged after a thigh deep last bit.

I'm glad Mark got me off the marsh, tired, wet and a little bit shaken by the rapid change in the conditions out there. I'd hardly gathered myself together and unloaded when we were off back to the nets.

Experience, knowledge and confidence Mark had in abundance.

Tim Turner



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 2023 that had been reported to the BTO by the end of April 2024. 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 Nature Scot), 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	Species	Oyster-catcher	Lapwing	Golden Plover	Grey Plover	Ringed Plover	L-Ringed Plover	Whimbrel	Curlew	Bar-t Godwit	Black-t Godwit	Turnstone	Knot
Algeria		-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Arctic Ocean		-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	2/-
Austria		-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Baltic Sea		-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	1/-	-/-	-/1	1/-
Belgium		6/2	-/-	-/1	-/-	-/-	1/1	-/-	-/6	-/-	-/-	1/-	2/-
Benin		-/-	-/-	-/-	-/-	1/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Canada		-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	2/4	9/3
Channel Islands		2/-	-/-	-/-	-/-	2/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Denmark		25/1	1/10	1/-	12/-	1/-	-/-	-/-	9/1	3/-	1/-	2/-	31/-
English Channel		-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	1/-
Estonia		-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	1/-	-/-	-/-	-/-
Faroe Islands		36/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Finland		2/-	-/2	-/-	1/-	-/1	-/-	-/-	102/69	3/-	-/-	5/8	-/-
France		172/-	9/-	1/-	16/4	40/-	-/-	3/-	8/-	4/1	25/12	7/1	51/11
Gabon		-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	1/-
Germany		20/3	-/6	-/-	3/2	1/5	-/-	-/-	10/4	16/12	1/-	2/1	68/52
Ghana		-/-	-/-	-/-	-/-	1/-	-/-	-/-	-/-	-/-	-/-	2/-	-/-
Greece		-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	1/-	-/-
Greenland		1/-	-/-	-/-	-/-	-/1	-/-	-/-	-/-	-/-	-/-	4/-	72/-
Guinea		-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	1/-	-/-	-/-	-/-
Guinea Bissau		-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	2/-	-/-	3/-	1/-
Hungary		-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/1
Iceland		9/-	-/-	-/1	-/-	-/-	-/-	-/-	-/-	-/-	37/29	6/1	113/110
Italy		-/-	-/1	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Lesser Antilles		-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	1/-
Liberia		-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	1/-	1/-
Lithuania		-/-	-/1	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Mali		-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Mauritania		-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	3/-	-/-	-/-	3/1
Morocco		2/-	1/-	-/-	3/-	1/-	-/-	-/-	-/-	-/-	1/-	3/-	1/-
North Atlantic		-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	1/-	1/-
North Sea		2/-	-/-	-/-	-/-	-/-	-/-	-/-	1/-	-/-	-/-	-/-	-/-
Norway		884/198	-/1	1/-	-/-	3/15	-/-	-/-	4/3	5/49	-/1	2/14	48/158
Poland		-/-	-/1	-/-	1/1	-/1	-/-	-/-	-/-	-/8	-/-	-/1	3/10
Portugal		-/-	-/-	-/-	2/-	-/1	-/-	-/-	-/-	-/-	2/1	1/-	1/1
Rep. of Ireland		2/2	-/-	-/-	-/-	22/3-	-/-	-/-	2/-	2/1	7/3	-/-	4/-
Rep. South Africa		-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	1/1
Russian Fed.		8/-	3/-	-/-	3/-	1/-	-/-	-/-	7/-	16/1	-/-	1/-	1/-
Senegal		-/-	-/-	-/-	-/-	1/-	-/-	-/-	-/-	-/-	-/-	1/-	4/-
Slovakia		-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Spain		1/-	3/-	-/-	2/-	3/-	1/-	-/-	-/-	1/1	2/5	1/-	2/-
Svalbard		-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Sweden		9/1	-/2	-/-	-/-	-/1	-/-	-/-	31/13	1/-	-/-	-/2	1/6
Switzerland		-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
The Gambia		-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	1/-	-/-
The Netherlands		225/35	1/7	2/3	1/1	9/3	-/-	-/-	15/5	15/42	13/-	4/1	96/110
Tunisia		-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Ukraine		-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
W Sahara		-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Total		1,406/242	18/31	5/5	44/8	86/31	2/1	3/-	189/	74/	89/51	51/34	516/464



Sanderling and stormy seas (Cathy Ryden)

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

Country	Species	Ruff	Curlew S'piper	Sander-ling	Dunlin	Purple S'piper	Little Stint	Snipe	Common S'piper	Red-shank	Wood S'piper	Spotted R'shank	Green-shank
Algeria		-/-	-/-	1/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Arctic Ocean		-/-	-/-	-/-	2/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Austria		-/-	-/-	-/-	1/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Baltic Sea		-/-	-/-	-/-	10/2	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Belgium		-/-	-/-	-/-	3/6	-/-	-/-	-/-	-/-	2/-	-/-	-/-	-/-
Benin		-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Canada		-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Channel Islands		-/-	-/-	2/1	4/8	-/-	-/-	-/-	-/-	2/-	-/-	-/-	-/-
Denmark		-/-	-/-	1/1	55/59	-/-	-/-	1/-	-/-	2/1	-/-	-/-	1/-
English Channel		-/-	-/-	1/-	1/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Estonia		-/-	-/-	-/-	1/-	-/-	-/-	-/-	-/-	1/-	-/-	-/-	-/-
Faroe Islands		-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	1/-	-/-	-/-	-/-
Finland		-/-	1/-	1/-	88/116	-/-	-/-	-/-	-/-	1/-	-/-	-/-	-/-
France		3/-	-/-	19/-	108/45	-/-	-/-	10/-	4/-	54/-	-/-	-/-	2/-
Gabon		-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Germany		1/-	-/-	2/-	63/94	-/-	-/-	-/1	-/-	-/2	-/-	-/-	-/-
Ghana		-/-	-/-	2/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Greece		-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Greenland		-/-	-/-	-/3	-/2	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Guinea		-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Guinea Bissau		-/-	-/-	2/1	1/2	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Hungary		-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Iceland		-/-	-/-	7/6	7/5	-/-	-/-	-/-	-/-	48/13	-/-	-/-	-/-
Italy		5/-	1/-	1/1	1/-	-/-	-/-	1/-	-/-	-/-	-/-	1/-	-/-
Lesser Antilles		-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Liberia		-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Lithuania		-/-	-/-	-/-	1/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Mali		2/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Mauritania		-/-	-/-	5/7	15/16	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Morocco		1/-	-/-	12/-	22/15	-/-	-/-	1/-	-/-	2/-	-/-	2/-	-/-
North Atlantic		-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
North Sea		-/-	-/-	-/-	2/-	-/-	-/-	-/-	-/-	1/-	-/-	-/-	-/-
Norway		-/-1	-/11	1/14	9/341	-/-	-/10	-/-	1/-	-/-	-/1	-/6	4/-
Poland		1/-	2/1	1/1	46/87	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Portugal		1/-	-/-	7/-	65/22	-/-	-/-	4/-	1/-	2/-	-/-	-/-	-/-
Rep. of Ireland		-/-	-/-	-/-	20/23	-/-	-/-	3/-	-/-	1/-	-/-	-/-	-/-
Rep. South Africa		-/-	-/-	2/1	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Russian Fed.		1/-	1/-	2/-	8/38	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Senegal		1/-	1/-	3/1	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Slovakia		-/-	-/-	-/-	-/1	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Spain		2/-	-/-	5/1	44/17	-/-	-/-	5/-	1/-	3/-	-/-	-/-	-/-
Svalbard		-/-	-/-	-/-	-/1	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Sweden		-/-	1/1	-/-	269/376	-/1	-/-	-/1	-/-	-/-	-/-	-/-	-/-
Switzerland		-/-	-/-	-/1	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
The Gambia		-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
The Netherlands		1/3	-/-	5/2	33/18	-/-	-/-	-/2	-/-	8/4	-/-	-/2	2/1
Tunisia		-/-	1/-	1/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Ukraine		-/-	3/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
W Sahara		-/-	-/-	1/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Total		19/4	11/14	84/41	879/1,294	-/1	-/10	25/4	7/-	122/21	-/1	3/8	9/1

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

Species	County	Oyster -catcher	Lapwing	Golden Plover	Grey Plover	Ringed Plover	L-Ringed Plover	Whimbrel	Curlew	Bar-t Godwit	Black-t Godwit	Turnstone
Aberdeenshire		10 / 3	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Anglesey		3 / 2	- / -	- / -	- / -	4 / -	- / -	- / -	- / -	- / -	- / -	- / -
Angus		2 / 3	- / -	- / -	1 / -	- / -	- / -	- / -	- / -	- / -	4 / 3	- / -
Antrim		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Argyll		1 / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / -	- / -
Ayrshire		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Bedfordshire		- / -	- / -	- / -	- / -	- / 1	- / -	- / -	- / -	- / -	- / -	- / -
Belfast		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / -	- / -
Buckingham		- / 1	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Cambridge		9 / 3	1 / -	- / -	- / 1	3 / -	1 / -	- / -	3 / 1	- / -	17 / -	- / -
Carmarthen		- / 7	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Ceredigion		1 / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Cheshire		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / -	- / -
Conwy		6 / 3	- / -	- / -	- / -	2 / 5	- / -	- / -	3 / -	- / -	- / -	- / 1
Cornwall		- / 1	- / -	- / -	- / -	- / -	- / -	1 / -	9 / -	- / -	- / -	- / -
Cumbria		3 / 2	- / -	- / -	- / -	11 / -	- / -	- / -	- / -	- / 1	- / -	2 / -
Derby		2 / -	- / -	- / -	- / -	- / -	1 / -	- / -	- / -	- / -	- / -	- / -
Devon		28 / 15	- / -	- / -	- / -	5 / -	- / -	- / -	1 / -	- / 1	3 / 6	- / -
Dorset		3 / 9	- / -	- / -	- / -	2 / 2	- / -	- / -	- / 1	- / 2	- / -	- / -
Down		- / -	- / -	- / -	- / -	4 / -	- / -	- / -	- / -	- / -	2 / 1	- / -
D'fries & G'way		3 / 2	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Durham		9 / 4	- / -	- / -	2 / -	3 / -	- / -	- / -	- / -	- / -	- / -	- / -
East Sussex		2 / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / -	- / -	- / -	- / -
Essex		9 / 5	- / -	- / -	3 / -	5 / -	- / -	- / -	- / -	- / -	11 / -	1 / -
Fife		4 / -	- / -	- / -	- / -	5 / -	- / -	- / -	- / -	- / -	2 / 1	- / -
Flint		- / 5	- / -	- / -	- / -	1 / -	- / -	- / -	- / -	- / -	2 / -	- / -
Glamorgan		7 / 9	- / -	- / -	- / -	2 / -	- / -	- / -	- / -	- / -	- / -	- / -
Gloucester		- / -	- / -	- / -	- / -	1 / -	- / -	- / -	- / 1	- / -	- / -	- / 1
G London		- / -	1 / -	- / -	- / -	- / -	1 / -	- / -	- / -	- / -	- / -	1 / -
G Manchester		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Gwent		- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / -	- / -	- / -	- / -
Gwynedd		5 / 6	- / -	- / -	- / -	- / -	- / -	- / -	1 / 1	- / 2	- / -	- / -
Hampshire		3 / 1	- / -	- / -	2 / 1	1 / -	- / -	- / -	- / -	- / -	6 / 5	- / -
Hereford		- / -	1 / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Hertford		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Highland		12 / 1	- / -	- / -	- / -	2 / 1	- / -	- / -	- / -	- / 7	- / -	- / -
Isle of Man		1 / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Kent		10 / 1	- / 2	- / -	- / -	- / -	- / -	- / -	3 / 1	1 / 2	1 / 7	1 / -
Lancashire		6 / 3	- / -	- / -	- / -	8 / -	- / -	- / -	1 / -	2 / -	7 / -	- / -
Leicester		2 / -	- / -	- / -	- / -	1 / -	- / -	- / -	- / -	- / -	2 / -	- / -
Lincoln		3 / -	- / -	- / -	1 / -	4 / -	- / 1	- / -	- / -	1 / -	23 / -	- / -
Londonderry		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1	- / -	- / -
Lothian		2 / 1	- / -	- / -	- / -	1 / -	- / -	- / -	- / -	- / -	- / -	- / -
Merseyside		3 / -	- / -	- / -	- / -	2 / -	- / -	- / -	- / -	2 / -	3 / -	- / 1
Moray		4 / 1	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Northampton		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Northumberland		9 / -	- / -	- / -	- / -	6 / -	- / -	- / -	- / -	- / -	- / -	- / -
Nottingham		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Orkney		8 / 2	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 1
Pembroke		1 / 1	- / -	- / -	2 / -	- / -	- / -	- / -	- / 1	- / -	- / -	- / -
Perth & Kinross		1 / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Powys		2 / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Scottish Borders		- / 1	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Shetland		37 / 19	- / -	- / -	- / -	- / -	- / -	- / 2	- / 1	- / -	- / -	1 / -
Shropshire		- / -	- / -	- / 1	- / -	- / -	- / -	- / -	- / 2	- / -	- / -	- / -
Somerset		1 / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Stafford		- / -	- / -	- / -	- / -	- / 1	- / -	- / -	- / -	- / -	1 / -	- / -
Strathclyde		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Suffolk		42 / 12	- / -	- / -	1 / -	5 / 1	- / -	- / -	1 / 1	3 / -	29 / 6	1 / -
Surrey		- / -	- / -	- / -	- / -	- / -	- / 1	- / -	- / -	- / -	- / -	- / -
Tyne and Wear		2 / -	- / -	- / -	- / -	2 / -	- / -	- / -	- / -	- / -	- / -	- / -
Upper Forth		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Warwick		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / -	- / -
West Midlands		1 / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
West Sussex		1 / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 1	- / -
Western Isles		1 / -	- / -	- / -	- / -	1 / -	- / -	- / -	- / -	- / -	- / -	- / 1
Worcester		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Yorkshire		36 / 18	- / 1	- / -	1 / 3	12 / 4	- / -	- / -	1 / 5	2 / 5	1 / 1	2 / 2
Total		295 / 141	1 / 3	- / 1	13 / 5	93 / 16	3 / 2	1 / 2	26 / 15	11 / 21	130 / 159	11 / 7

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

County	Species	Knot	Ruff	Curlew S'piper	Sanderling	Dunlin	Snipe	Common S'piper	Redshank	Green-shank	Wood S'piper
Aberdeenshire		- / 5	- / -	- / -	- / -	1 / 13	- / -	- / -	1 / 2	- / 2	- / -
Anglesey		3 / -	- / -	- / -	- / -	80 / 41	1 / -	- / -	1 / -	- / -	- / -
Angus		3 / 5	- / -	- / -	1 / -	- / 2	- / -	- / -	4 / 7	- / -	- / -
Antrim		- / -	- / -	- / -	- / -	1 / 2	- / -	- / -	- / -	- / -	- / -
Argyll		- / -	- / -	- / -	- / -	1 / -	- / -	- / -	- / -	- / -	- / -
Ayrshire		1 / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Bedfordshire		- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / -	- / -	- / -
Belfast		- / -	- / -	- / -	- / -	3 / 8	- / -	- / -	1 / -	- / -	- / -
Buckingham		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Cambridge		- / 7	- / -	4 / -	- / -	24 / -	1 / -	1 / -	14 / -	- / -	1 / -
Carmarthen		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Ceredigion		- / 11	- / -	- / -	- / -	1 / 1	- / -	- / -	2 / 6	- / -	- / -
Cheshire		- / 1	- / -	- / -	- / -	4 / 5	- / -	- / -	1 / -	- / -	- / -
Conwy		- / 4	- / -	- / -	- / -	18 / 25	- / -	- / -	3 / 4	- / -	- / -
Cornwall		1 / -	- / -	- / -	- / -	5 / 6	1 / -	- / -	1 / -	- / -	- / -
Cumbria		41 / 42	- / -	- / -	6 / 3	50 / 70	- / -	- / -	- / -	- / -	- / -
Derby		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Devon		- / 2	- / -	- / -	- / -	10 / 10	1 / -	- / -	- / -	- / -	- / -
Dorset		- / 2	- / -	- / -	- / 7	1 / 11	- / -	- / -	3 / -	- / -	- / -
Down		2 / 4	- / -	- / -	- / -	4 / 1	- / -	- / -	- / -	- / -	- / -
D'fries & G'way		4 / 11	- / -	- / -	7 / 1	1 / 11	- / -	- / -	3 / 1	- / -	- / -
Durham		46 / 17	- / -	- / -	11 / 2	27 / 39	- / -	- / -	4 / 4	- / -	- / -
East Sussex		- / -	- / -	- / -	- / -	1 / 1	- / -	- / -	- / -	- / -	- / -
Essex		3 / 5	- / -	- / -	6 / -	5 / 9	- / -	- / 1	8 / -	- / -	- / -
Fife		20 / 18	- / -	- / -	- / -	4 / 9	- / -	- / -	1 / 4	- / -	- / -
Flint		5 / 8	1 / -	- / -	9 / 3	1 / 9	- / -	- / -	1 / 2	- / -	- / -
Glamorgan		3 / 2	- / -	- / -	- / -	18 / 5	- / -	- / -	4 / 5	- / -	- / -
Gloucester		- / -	- / -	- / -	- / -	3 / 11	- / -	- / -	1 / 1	- / -	- / -
Greater London		- / -	- / -	- / -	- / -	- / 1	- / -	- / -	- / -	- / -	- / -
Greater Manch'er		- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / -	- / -	- / -
Gwent		- / -	- / -	- / -	- / -	1 / 11	- / -	- / -	1 / -	- / -	- / -
Gwynedd		2 / 11	- / -	- / -	- / -	28 / 13	- / -	- / -	10 / 7	- / -	- / -
Hampshire		2 / 1	- / -	- / -	3 / 4	18 / 22	- / -	- / -	8 / 2	- / -	- / -
Hereford		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Hertford		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1	- / -	- / -
Highland		23 / 74	- / -	- / -	- / -	1 / 11	- / -	- / -	1 / 7	- / -	- / -
Isle of Man		- / -	- / -	- / -	- / -	- / 2	- / -	- / -	- / -	- / -	- / -
Kent		2 / 2	1 / -	- / -	15 / 4	1 / 5	- / -	- / -	3 / 2	- / -	- / -
Lancashire		46 / 50	- / -	- / -	9 / 3	18 / 18	- / -	- / -	2 / 1	- / -	- / -
Leicester		- / -	- / -	- / -	- / -	- / 2	- / -	- / -	1 / -	- / -	- / -
Lincoln		7 / -	- / -	- / -	- / -	3 / 9	- / -	- / -	5 / -	- / -	- / -
Londonderry		- / -	- / -	- / -	- / -	- / 1	- / -	- / -	- / -	- / -	- / -
Lothian		5 / 2	- / -	- / -	- / -	4 / 2	- / -	- / -	1 / 1	- / -	- / -
Merseyside		25 / 130	- / -	- / -	13 / 6	43 / 27	- / -	- / -	3 / 1	- / -	- / -
Moray		4 / 6	- / -	- / -	- / -	1 / 11	- / -	- / -	4 / 2	- / -	- / -
Northampton		1 / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Northumberland		- / -	- / -	- / -	- / -	- / 6	- / -	- / -	3 / 1	- / -	- / -
Nottingham		- / -	- / -	- / -	- / -	1 / -	- / -	- / -	1 / 1	- / -	- / -
Orkney		- / 6	- / -	- / -	3 / -	5 / -	- / -	- / -	- / -	- / -	- / -
Pembroke		- / -	- / -	- / -	- / -	6 / 6	- / -	- / -	5 / -	- / -	- / -
Perth & Kinross		- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / -	- / -	- / -
Powys		- / -	- / -	- / -	- / -	1 / -	- / -	- / -	- / -	- / -	- / -
Scottish Borders		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Shetland		1 / 1	- / -	- / -	2 / 2	1 / 3	- / -	- / -	- / -	- / -	- / -
Shropshire		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Somerset		- / -	- / -	- / -	- / -	66 / 14	- / -	- / -	2 / -	- / -	- / -
Stafford		- / -	- / -	- / -	- / -	- / -	1 / -	- / -	- / -	- / -	- / -
Strathclyde		- / -	- / -	- / -	- / 1	2 / 4	- / -	- / -	- / 1	- / -	- / -
Suffolk		13 / 1	- / -	- / -	- / -	19 / 39	- / -	- / -	14 / 9	- / -	- / -
Surrey		- / -	- / -	- / -	- / 1	- / -	- / -	- / -	2 / -	- / -	- / -
Tyne and Wear		- / -	- / -	- / -	2 / -	1 / 1	- / -	- / -	3 / -	- / -	- / -
Upper Forth		- / -	- / -	- / -	- / -	- / 1	- / -	- / -	- / -	- / -	- / -
Warwick		- / 1	- / -	- / -	- / -	2 / -	- / -	- / -	- / -	- / -	- / -
West Midlands		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1	- / -	- / -
West Sussex		3 / -	- / -	- / -	- / -	- / 1	- / -	- / -	1 / 5	- / -	- / -
Western Isles		1 / 1	- / -	- / -	1 / -	4 / 12	- / -	- / -	2 / 3	- / -	- / -
Worcester		- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / -	- / -	- / -
Yorkshire		25 / 27	- / -	- / -	19 / 1	21 / 66	1 / -	- / -	1 / 8	- / -	- / -
Total		292 / 457	2 / -	4 / -	107 / 38	564 / 705	6 / -	1 / 1	148 / 162	- / 2	1 / -

NOTABLE RECOVERIES

The Wash Wader Research Group is notified by the BTO of recoveries of birds caught by WWRG which have also been caught or seen elsewhere, either in the UK or abroad. These recoveries include birds ringed by WWRG and recovered elsewhere, as well as those ringed elsewhere and recovered by WWRG. This article is based on recoveries notified to WWRG by the BTO in 2022 and 2023, some of which are historical, due to a delay in reporting.

This article highlights some of the more interesting recoveries of the eleven target species for the Group (Oystercatcher, Grey Plover, Ringed Plover, Curlew, Bar-tailed Godwit, Black-tailed Godwit, Turnstone, Knot, Sanderling, Dunlin and Redshank). Interesting recovery reports of Lesser Black-backed Gull and Herring Gull, ringed by WWRG on the Outer Trial Bank until 2015, are also included. Recoveries may be the result of capture by another ringer or ringing group, field observations, or from dead birds found by the public. Colour-mark sightings of birds ringed by WWRG, which may also be notified to us via recovery reports from the BTO, are covered elsewhere in this report and are therefore not included here unless they contribute to the history of a particular bird or provide an interesting link with a foreign recovery.

Recovery maps are included, showing recoveries outside Britain and Northern Ireland reported to the BTO between 1909 and 2023. The maps show 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). Base maps used are courtesy of Natural Earth (www.naturalearthdata.com). Similar maps showing foreign locations of birds ringed or recovered throughout Britain and Ireland are available in the 'Recovery Summaries - by Species' section of the BTO Ringing and Nest Recording Report (Robinson *et al.* 2024).

The following abbreviations are used for foreign ringing schemes referred to in this article:

ISR Iceland, Reykjavik
NLA the Netherlands, Arnhem
NOS Norway, Stavanger
SFH Finland, Helsinki

The location of birds ringed or recovered outside the UK are given with the country (in bold) and co-ordinates (as provided on the ringing recovery report). The location of birds ringed or recovered elsewhere in the UK (away from the Wash) are given with the county and co-ordinates. Locations for Wash sites can be found on the map of the Wash on page 1 of this report.

OYSTERCATCHER

Most of the recoveries for Oystercatchers caught on the Wash are from Norway and 2022–2023 was no exception. There were several recoveries of Wash-ringed Oystercatchers in Norway from metal rings read in the field and from dead birds. Two Oystercatchers ringed (and colour-marked) in Norway, one in the north and one in the south, were caught on the Wash a few years later. Colour-marked Oystercatchers from both these Norwegian schemes have been seen by WWRG (in Lincolnshire and Norfolk) but neither of these two individuals have been resighted.

NOS	Adult	08/05/17	Klepp, Rogaland, Norway	58 47N 05 32E		
5191608	Caught by ringer	09/09/21	Friskney, Lincolnshire		724km	SSW
NOS	Adult	29/05/20	Flakstad, Nordland, Norway	68 04N 13 13E		
5155575	Caught by ringer	06/03/22	Heacham, Norfolk		1,821km	SSW

There were several recoveries on the Wash of adult Oystercatchers which were ringed as chicks, two from the Netherlands, two from Norway and three from Norfolk.

Two birds ringed in the same year, but different areas in the Netherlands were caught at Friskney in consecutive years.

NLA	Chick	19/05/20	Baarn, Utrecht, the Netherlands	52 12N 05 17E		
4042140	Caught by ringer	09/09/21	Friskney, Lincolnshire		357km	WNW
NLA	Chick	17/06/20	Rotterdam, the Netherlands	51 58N 04 00E		
5515148	Caught by ringer	14/08/22	Friskney, Lincolnshire		284km	WNW

Two recoveries of birds ringed in southern Norway – one caught at Heacham and one at Friskney.

NOS	Chick	28/06/11	Pudderfjorden, Bergen, Norway	60 22N 05 19E		
5145999	Caught by ringer	19/02/22	Heacham, Norfolk		883km	SSW
NOS	Chick	16/06/20	Hå, Rogaland, Norway	58 37N 05 37E		
5200486	Caught by ringer	09/09/21	Friskney, Lincolnshire		709km	SSW

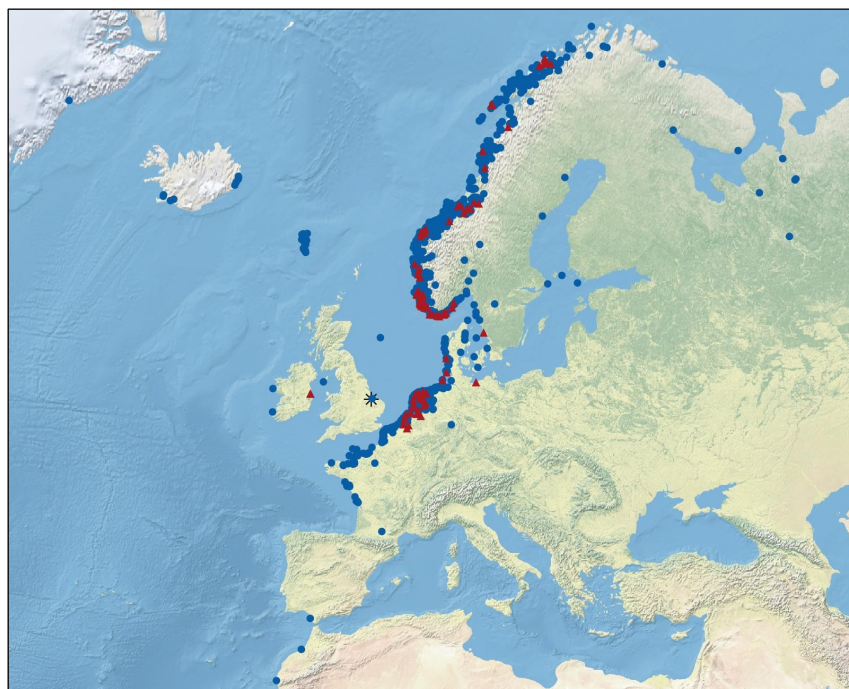
Three recoveries of chicks ringed at breeding sites in Norfolk, provide evidence of successful breeding in the county and their survival over several years. Two of these birds were from the same catch at Heacham in February 2022.

FH28818	Chick	22/07/14	Ling Farm near Thornham, Norfolk			
	Caught by ringer	19/02/22	Heacham, Norfolk			LOCAL
FH88616	Chick	17/06/15	Bircham, Norfolk			
	Caught by ringer	14/08/22	Friskney, Lincolnshire			LOCAL
FH88674	Chick	11/05/17	Bircham, Norfolk			
	Caught by ringer	19/02/22	Heacham, Norfolk			LOCAL

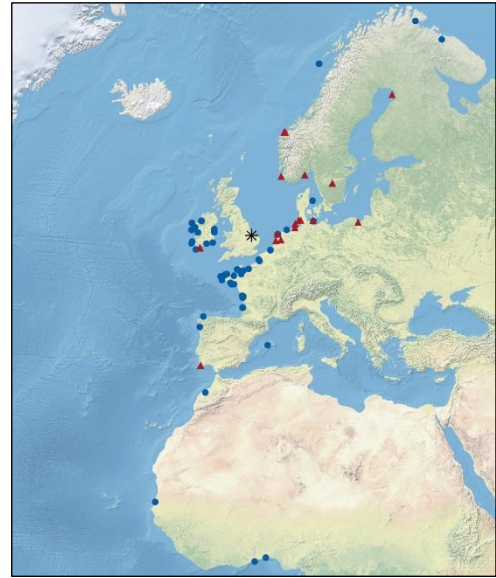
Three recoveries in Wales include the second record in Powys, the third on Anglesey and the sixth in Conwy. Two of these were caught by SCAN Ringing Group, many members of which are also members of WWRG, some of whom were present at both catches.

FP74903	Adult	03/08/07	Friskney, Lincolnshire			
	Caught by ringer	21/01/23	Beaumaris, Anglesey	53 14N 04 07W	289km	W
FH18263	Adult	11/08/10	Wainfleet Marsh, Lincolnshire			
	Metal ring read in field	05/03/23	Llangorse Lake, Powys	51 55N 03 16W	273km	WSW
FH94897	Adult	12/08/18	Wainfleet Marsh, Lincolnshire			
	Caught by ringer	27/11/22	Llanfairfechan, Conwy	53 14N 04 00W	286km	W

An unusually high number of dead Oystercatchers were reported to the BTO in January and February 2023 with 24 reported between 26 December and 27 February (14 of which were reported between 21 January and 1 February). Almost all these birds were found along the beaches between Snettisham and Hunstanton with one exception reported from Terrington Outer Bund; no dead birds were reported on the west shore. The dead birds were emaciated and probably died from starvation. Oystercatchers cannon-netted on the east shore beaches in early 2023 weighed substantially less than the mean for the time of year, especially in January. Weights of the mist-netted birds (on saltmarsh on the south shore) were more like the historical average, suggesting they were less affected by reductions in food supply.



Oystercatcher recoveries, 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).



Grey Plover (left) and Ringed Plover (right) recoveries, 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).

GREY PLOVER

There were no recovery reports from the BTO of Grey Plover in 2022–2023. The most recent recoveries of Grey Plover were in 2018 and 2019, when two dead birds were found locally following spells of cold weather.

RINGED PLOVER

Two recoveries of Ringed Plover ringed away from the Wash and caught by WWRG were the first for almost a decade. There was one recovery from each of two small catches - 20 were caught on 12 September 2022 and a further six on 29 October 2022.

NW41366	Second-year	14/01/17	Poole Harbour, Poole, Dorset	50 41N 01 56W		
	Caught by ringer	12/09/22	Snettisham, Norfolk		293km	NE
NW73997	Chick	21/07/20	North Dunes, Winterton, Norfolk	52 43N 01 40E		
	Caught by ringer	29/10/22	Snettisham, Norfolk		83km	WNW

CURLEW

Finland and Sweden are the main breeding areas for Curlew wintering on the Wash (Wernham *et al.* 2002). There were five recoveries of Curlew from Finland in 2022–2023 and one from Sweden.

This bird, ringed and colour-marked in Finland, was caught for the second time in four autumns on Snettisham beach on 3 September 2023. This bird has only been resighted on the Wash on one occasion, so may be using an area away from our usual sites or may now be wintering elsewhere.

SFH	Adult	28/05/15	Oulu, Finland	64 40N 25 34E		
CT179123	Colour-mark sighting	07/01/18	Dersingham, Norfolk			
	Caught by ringer	20/09/20	Snettisham, Norfolk			
	Caught by ringer	03/09/23	Snettisham, Norfolk		1,944km	SW

This bird, ringed as an adult in 1997 and seen with a chick on the breeding site in Finland, is five years short of the longevity record for a Wash-ringed Curlew. Ringed many years before WWRG began colour-marking Curlew, this is the second record from Finland of this bird, which was seen at the same place with a chick on both occasions.

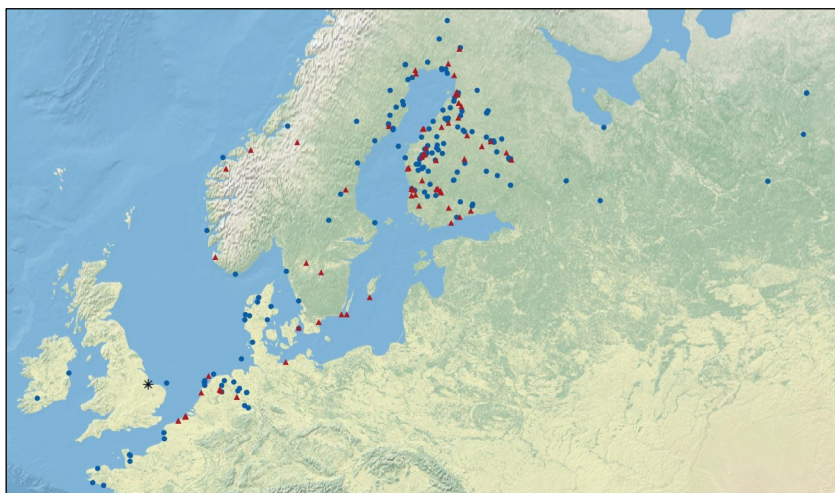
FA69784	Adult	21/07/97	Boston, Lincolnshire			
	Metal ring read in field	09/06/20	Parikkala, Ymi, Finland			
	Metal ring read in field	26/05/22	Parikkala, Ymi, Finland	61 38N 29 48E	2,022km	ENE

This Curlew, ringed at Wrangle Tofts in 2014, was caught by WWRG members as part of a BTO study of Curlew in North Yorkshire when colour marks and a GPS tag were fitted. The bird was incubating prior to it being caught in April and its chicks hatched on or around 22 May. The chicks were monitored until 26 June by which time they were about ready to fledge. The GPS tracking data showed that the Curlew guarded the chicks until 29 June and that it remained in the area until 3 July before returning to the Lincolnshire side of the Wash for the winter.

FH31734	Adult	14/08/14	Wrangle Tofts, Lincolnshire			
	Caught by ringer	13/04/23	North Yorkshire	54 18N 01 58E	201km	NW

Below is the first recovery in Gwynedd of a Curlew ringed on the Wash – again caught by SCAN RG.

FA97809	Adult	27/08/99	Admiral's Farm, Terrington, Norfolk			
	Caught by ringer	18/03/22	Wig, near Bangor, Gwynedd	53 13N 04 03W	296km	W



Curlew recoveries, 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

Two populations of Bar-tailed Godwit use the Wash. The nominate race *lapponica* breeds from northern Fennoscandia eastwards to western Russia and the Taymyr peninsula and moults on the Wash in autumn, with most birds remaining on the Wash for the winter. The race *taymyrensis* breeds further east, as far as central Siberia, passes through north-west Europe, mainly the Wadden Sea, on migration to its wintering sites in West Africa (Appleton 2016).

Two records of Bar-tailed Godwit in Russia were notable as there had only been 15 previously. Most of these recoveries were from western Russia as with this one from Murmansk.

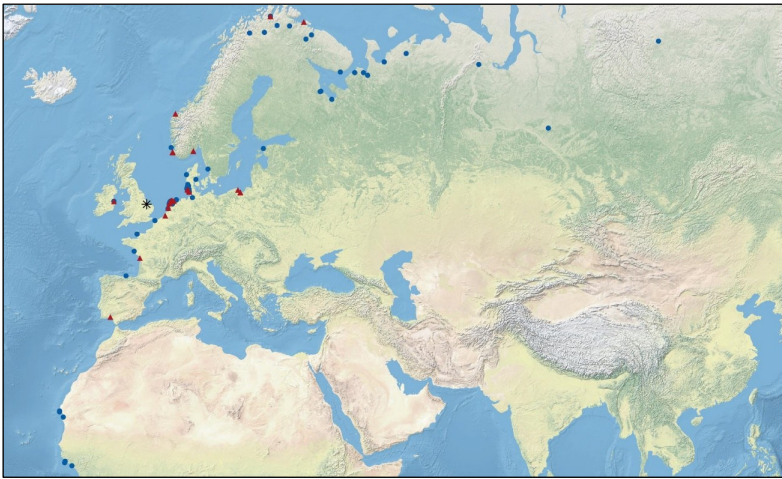
DT09557	Adult	14/08/18	Snettisham, Norfolk			
	Dead (predated)	15/09/21	Murmansk O., Russia	68 55N 33 07E	2,483km	NE

There are only two WWRG-ringed Bar-tailed Godwit have been reported further east than this recovery. The bird was shot just west of the Taymyr peninsula, and it is unclear whether it had arrived at its breeding grounds or whether it was on its way to a site further east.

DT09962	Adult	01/09/19	Snettisham, Norfolk			
	Dead (shot)	22/05/22	Yamal-Nenets A.O., Russia	66 42N 66 24E	3,939km	ENE

Ringed as a first-year bird on its autumn migration in southern Norway, this Bar-tailed Godwit has been seen every year on the Wash from 2017 until 2022 with the first sighting in Hunstanton just two months after it was ringed. It was one of 119 Bar-tailed Godwits caught on Heacham beach in March 2023. This bird was seen on Merseyside on several occasions between mid-May and mid-September 2019 suggesting that it remained there for the summer rather than returning to the breeding grounds as might have been expected for a bird in its third calendar year, although some Bar-tailed Godwit do not breed until their fourth calendar year (Wernham *et al.* 2002).

NOS	First-year	29/09/17	Klepp, Rogaland, Norway	58 45N 05 28E		
K04742	Colour-mark sighting	18/11/17	Old Hunstanton, Norfolk			
	Colour-mark sighting	22/12/18	Heacham North, Norfolk			
	Colour-mark sighting	21/07/19	Formby Point, Merseyside	53 32N 03 06W		
	Colour-mark sighting	20/01/20	Snettisham, Norfolk			
	Colour-mark sighting	27/12/21	Snettisham, Norfolk			
	Colour-mark sighting	28/07/22	Bliestorf, Schleswig Holstein, Germany	53 45N 10 35E		
	Colour-mark sighting	14/12/22	Heacham, Norfolk			
	Caught by ringer	11/03/23	Heacham, Norfolk		723km	SSW



Bar-tailed Godwit recoveries, 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).

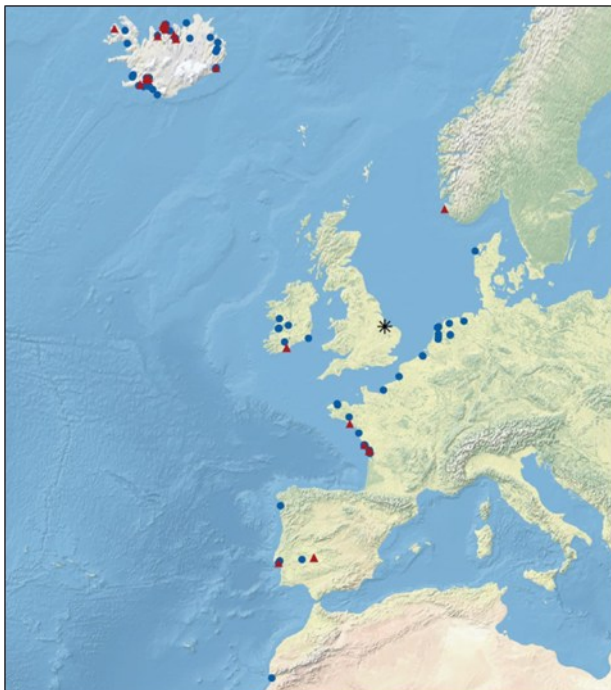
BLACK-TAILED GODWIT

There are generally very few recoveries of Black-tailed Godwit caught on the Wash, although this species is very well monitored through colour-mark sightings from the various schemes along the flyway. In 2022–2023, a report of a leg and ring from Iceland was the only foreign recovery and a leg and ring found in a Peregrine nest the only UK recovery.

EP85109	Adult	30/08/96	Holbeach St Matthew, Lincolnshire				
	Leg and ring only	15/07/21	Rangárvallasýsla, Iceland	63 55N 20 37W	1,713km	NW	
EL09397	Adult	10/09/06	Holbeach St Matthew, Lincolnshire				
	Leg and ring only (Peregrine)	24/05/22	Louth, Lincolnshire	53 21N 00 01W	55km	E	

TURNSTONE

There was one recovery of a WWRG-ringed Turnstone in 2022–2023, a bird found dead close to the ringing site in Heacham, a few weeks after being caught and ringed. The last foreign recovery of a Turnstone was in Iceland in 2009 and the last UK recovery away from the Wash in Orkney in 2019.



Black-tailed Godwit (left) and Turnstone (right) recoveries, 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).

KNOT

There were very few recovery reports of Knot in 2022–2023. This highlights the importance of colour-marking for this species as there were over a hundred colour-mark sightings of foreign-ringed Knot on the Wash over the same period. There were none of the usual recovery reports from Norway or Iceland, both known staging sites for Knot on their northern migration route to their high-Arctic breeding grounds, or from the Netherlands, a major moulting site for Knot in autumn and spring for birds which winter on the Wash.

Two recovery reports from France include a Knot caught on the Atlantic coast in western France and a bird killed by hunters just across the Channel in northern France.

SR19105	First-year	03/10/15	Gedney Drove End, Lincolnshire		
	Dead (hunted)	05/08/23	Marck, Pas-de-Calais, France	50 55N 01 57E	244km SSE
SX71085	First-year	26/08/17	Admiral's Farm, Terrington, Norfolk		
	Caught by ringer	11/05/21	Moeze, Charente-Maritime, France	45 52N 01 04W	777km S

Two Knot caught and ringed together on Ainsdale foreshore in late May 2021 were second-year birds which would probably have remained on Merseyside over the summer since Knot rarely return to the breeding grounds until their third year (J. Wilson pers. comm.).

One of these birds may have spent the winter on the Wash, as it was resighted on Snettisham pits in March 2023.

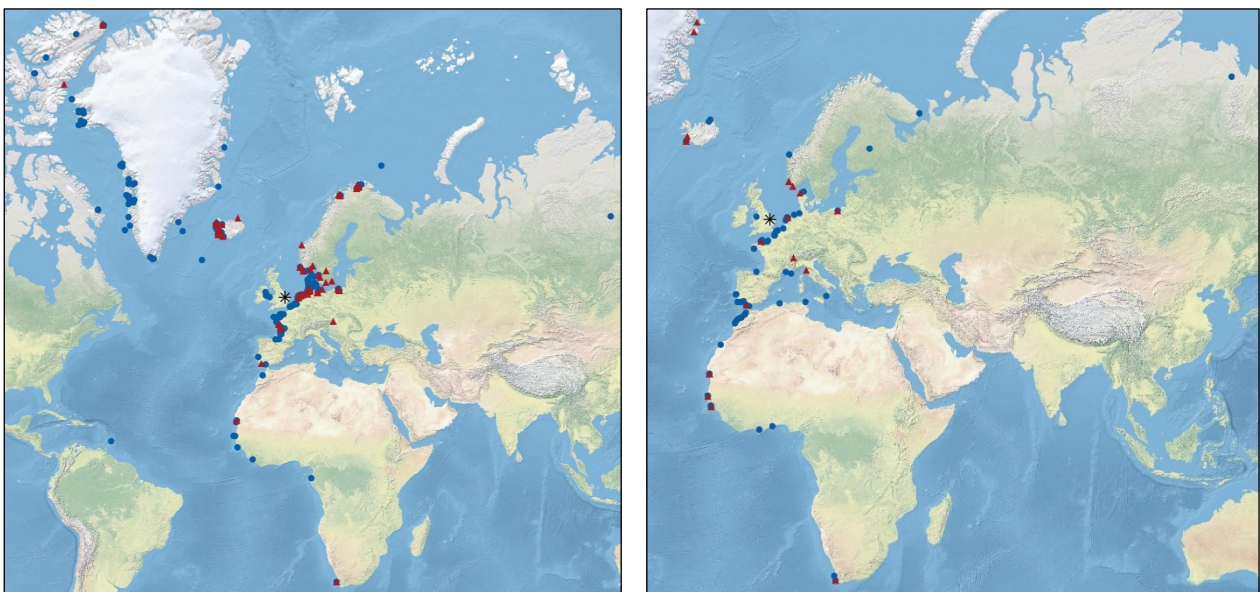
SK04331	Second-year	27/05/21	Ainsdale foreshore, Merseyside	53 36N 03 03W (Colour-marks added)	
	Colour-mark sighting	02/07/21	St Anne's beach, Merseyside	53 44N 03 02W	
	Caught by ringer	29/10/22	Admiral's Farm, Terrington, Norfolk		241km ESE
	Colour-mark sighting	24/03/23	RSPB Snettisham, Norfolk		

This bird, caught and colour-marked by WWRG in 2023, was subsequently resighted in Iceland in May 2023, staging on its spring migration to the high-Arctic breeding grounds.

Second-year	27/05/21	Ainsdale Foreshore, Merseyside	53 36N 03 03W		
	Caught by ringer	22/01/23	Admiral's Farm, Terrington, Norfolk	(Colour-marks added)	241km ESE
	Colour-mark sighting	15/05/23	Hiltarnes, Iceland	64 43N 22 21W	

This Knot caught by the Swale Wader Group in November 2023 was presumably wintering in Kent and is only the second recovery of a WWRG-ringed Knot in this county.

SV90447	Adult	26/07/13	Leverton Outgate, Lincolnshire		
	Caught by ringer	25/11/23	Harty, Kent	51 21N 00 54E	191km SSE



Knot (left) and Sanderling (right) recoveries, 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

Two historical recovery reports from Mauritania, a known wintering site for Sanderling using the Wash on autumn passage, increased the number of Wash-ringed birds recovered there to seven. These two birds were caught together on the Wash in August 2007 and caught in consecutive winters in Mauritania.

BT03098	Adult	03/08/07	Snettisham, Norfolk			
	Caught by ringer	21/11/08	Iwik, Banc d'Arguin, Mauritania	19 52N 16 16W	3,944km	SSW
BT03301	Adult	03/08/07	Snettisham, Norfolk			
	Caught by ringer	15/12/09	Iwik, Banc d'Arguin, Mauritania	19 52N 16 16W	3,944km	SSW

Only three Wash-ringed Sanderling have been reported in the Netherlands, so it was surprising to receive these two metal-ring readings from the north of the country both seen on the same day. The ability of birders with high quality optics and cameras to read metal rings in the field increases opportunities for recoveries of birds away from the more well-known sites.

BT18472	Adult	02/08/08	Snettisham, Norfolk			
	Metal ring read in field	25/04/23	Noord-Holland, the Netherlands	52 49N 04 40E	284km	E
BT60137	Adult	26/07/17	Heacham, Norfolk			
	Metal ring read in field	25/04/23	Noord-Holland, the Netherlands	52 49N 04 40E	284km	E

The second recovery from Fair Isle, Shetland was a metal ring read in the field. The first recovery from Fair Isle in 2020 is included here to compare the two sightings which were on similar dates, two years apart, on autumn migration.

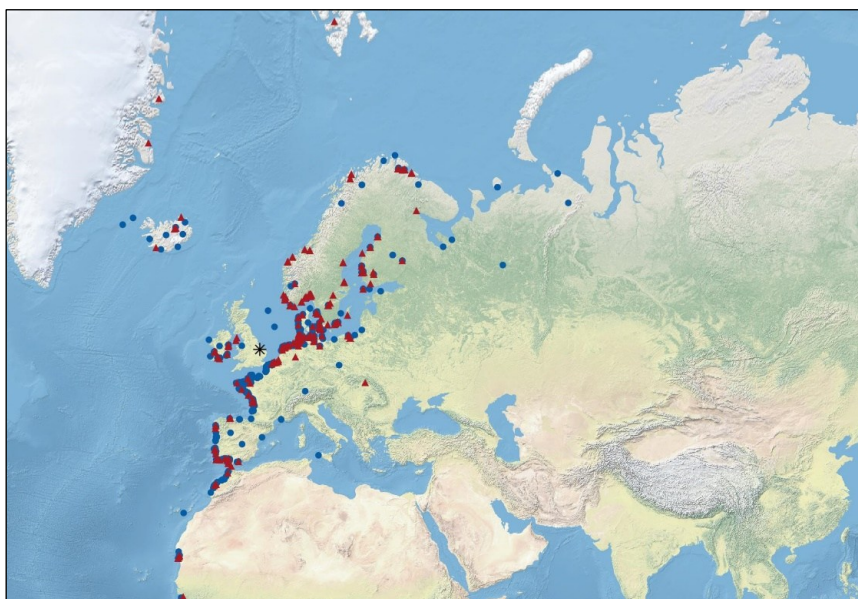
BT60381	Adult	21/08/17	Snettisham, Norfolk			
	Metal ring read in field	16/08/22	Fair Isle, Shetland	59 31N 01 37W	752km	N
BT33505	Adult	13/09/18	Heacham, Norfolk			
	Metal ring read in field	13/08/20	Fair Isle, Shetland	59 31N 01 37W	747km	N

DUNLIN

Most of our recoveries of Dunlin are from Norway and Sweden, both important breeding areas for the *alpina* race (Wernham *et al.* 2002). Five birds ringed on passage in southern Norway in mid- to late August could be either *alpina* or *schinzii* as small numbers of the latter breed there. Four birds ringed on the Wash and recaptured at Ottenby bird observatory in southern Sweden in mid- to late July and one ringed at Ottenby in mid-July, would be of the race *alpina*.

This bird, ringed near Gdansk on the northern coast of Poland, is also likely to be of the race *alpina*, an individual breeding further east than Fennoscandia, probably in northern Russia (Wernham *et al.* 2002). A colour-mark resighting on the Wash of a Dunlin from Poland is included here for interest as the two records were on similar dates in different years.

PLG	Second-year	19/07/14	Świbno, Pomorskie, Poland	54 21N 18 55E		
JT45012	Caught by ringer	11/03/23	Admiral's Farm, Terrington, Norfolk		1,240km	W
PLG	Second-year	19/08/18	Świbno, Pomorskie, Poland	54 21N 18 55E		
JT71631	Colour-mark sighting	22/03/22	Snettisham, Norfolk		1,233km	W



Dunlin recoveries, 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).

Two recoveries of *schinzii* Dunlin in Mauritania bring the total number of recoveries of Wash-ringed Dunlin in Mauritania to 16. The majority of *schinzii* breed in Iceland and south-east Greenland, although small numbers breed in the UK and southern Norway. Both birds were staging on the Wash when caught.

NT74986	Adult	22/07/05	Admiral's Farm, Terrington, Norfolk			
	Caught by ringer	19/12/06	Iwik, Banc d'Arguin, Mauritania	19 53N 16 16W	3,929km	SSW
	Caught by ringer	03/08/07	Snettisham, Norfolk			
BT91523	Adult	14/08/22	Friskney, Lincolnshire			
	Caught by ringer	20/11/22	Iwik, Banc d'Arguin, Mauritania	19 52N 16 16W	3,950km	SSW

Two Dunlin caught while staging on the Wash in early autumn and recaptured in Portugal later in the autumn were probably both *schinzii*.

BT07199	Adult	24/07/09	Butterwick, Lincolnshire			
	Caught by ringer	07/09/10	Setúbal, Portugal	38 43N 08 58W	1,728km	SSW
BT19566	Adult	03/08/19	Snettisham, Norfolk			
	Caught by ringer	03/11/21	Santarém, Portugal	38 46N 08 55W	1,724km	SSW

REDSHANK

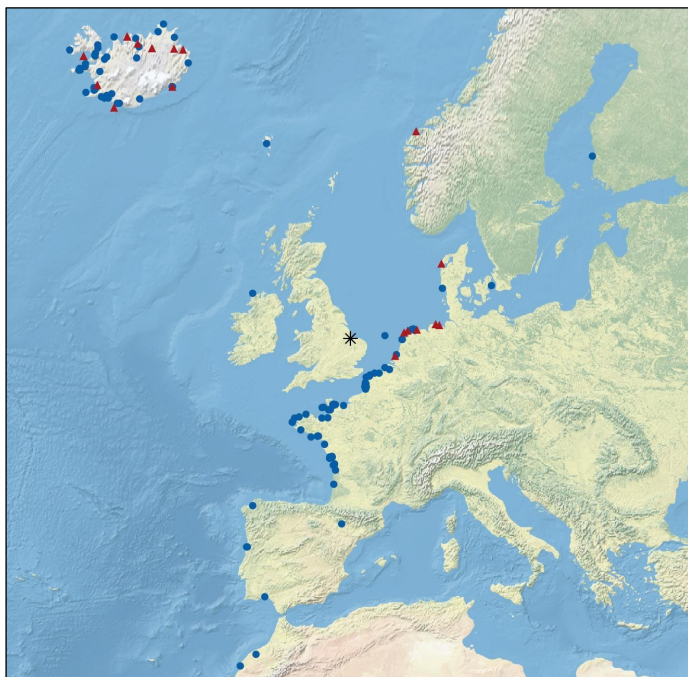
The British and Irish breeding population of Redshank (nominate *totanus*) remain here in winter and are joined by large numbers of Redshank (race *robusta*) from the Icelandic breeding population (Wernham *et al.* 2002).

There were two recovery reports in Iceland of Redshank ringed on the Wash, one caught in the north-west and one in the south-west, probably both breeding birds of the race *robusta*. DT35804

			Admiral's Farm, Terrington, Norfolk	First-year	16/08/18	
	Leg and ring only	09/06/22	Árnessýsla, Iceland	63 51N 21 22W	1,754km	NW
DT35985	First-year	12/09/18	Admiral's Farm, Terrington, Norfolk			
	Metal ring read in field	13/07/22	Dalassýsla, Iceland	65 23N 21 56W	1,877km	NW

Two recovery reports from the Wash of Redshank from Iceland included one ringed as a chick (both in the same catch at Friskney) both will also be *robusta*.

ISR	Chick	08/06/13	Áustur-Skaftafellssýsla, Iceland	64 13N 15 11W		
634347	Caught by ringer	13/09/22	Friskney New Marsh, Lincolnshire		1,525km	SE
ISR	Adult	14/06/22	Skagafjarðarsýsla, Iceland	66 04N 19 07W		
792964	Caught by ringer	13/09/22	Friskney New Marsh, Lincolnshire		1,828km	SE



Redshank recoveries, 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).

Three recoveries of Redshank recaptured on the Wash in mid-autumn are all of birds originally caught in Ceredigion, mid-Wales later in autumn or in winter suggesting that they could be passing through the Wash on autumn migration and wintering in mid-Wales.

DT79573	Adult	28/10/19	Ynyslas NNR, Ceredigion	52 31N 04 03W		
	Caught by ringer	13/09/22	Admiral's Farm, Terrington, Norfolk		295km	E
DT24429	Adult	27/11/19	Ynyslas NNR, Ceredigion	52 31N 04 03W		
	Caught by ringer	04/09/23	Admiral's Farm, Terrington, Norfolk		296km	E

The third was caught on the Wash in its first year and was then recaptured (and colour-marked) in Wales two months later before being seen in Cheshire three years later in spring, possibly on spring migration to its breeding grounds.

DT61528	First-year	21/09/20	Admiral's Farm, Terrington, Norfolk			
(Colour-marked)	Caught by ringer	13/11/20	Dyfi estuary, Ceredigion	52 31N 04 01W	293km	W
	Colour-mark sighting	01/04/23	RSPB Burton Mere Wetlands, Cheshire	53 15N 03 01W	228km	WNW

LESSER BLACK-BACKED GULL

Away from the Wash, dead birds were reported in Dumfries & Galloway, Somerset and Lancashire (and two were reported locally).

HERRING GULL

In addition to several recovery reports of dead Herring Gulls, one was caught by East Norfolk Ringing Group at Eccles-on-Sea and another by mid-Lincs Ringing Group in Wyberton.

GC99123	Nestling	27/06/10	Inner Westmark Knock, Terrington, Norfolk			
	Caught by ringer	12/06/22	Wyberton, Lincolnshire	52 57N 00 02E	23km	NW
GC99668	Nestling	03/07/11	Inner Westmark Knock, Terrington, Norfolk			
	Caught by ringer	13/05/22	Eccles-on-Sea, Norfolk	52 47N 01 34E	90km	E

Carole Davis, maps Ryan Burrell

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Cleaning a fired net after a beach catch. (Cathy Ryden)

LONGEVITY RECORDS

The longevity of a bird is the elapsed time (given here in years and months) between the date of ringing and the date of the most recent recovery. This represents the minimum age for a bird ringed as an adult as the bird may already be several years old at the time of ringing. The recovery leading to the longevity record can be from the bird being caught by a ringer, through the reporting of a dead or sick bird or from a colour-mark sighting or metal-ring reading in the field.

Table 1 lists known longevity records for wader species that have been ringed by WWRG and reported to the BTO by the end of April 2024. The longevity record for species ringed by WWRG is shown in one column of the table alongside the BTO longevity record for Britain & Ireland. Some of the species ringed by WWRG have had few recoveries and so no longevity has been listed e.g. Curlew Sandpiper. Where a bird ringed on the Wash holds the BTO record, the details appear in *italics and are shaded*.

Table 1. Longevity records

Species	Ringed in Britain & Ireland			Ringed by WWRG		
<i>Oystercatcher</i>	<i>FV27597</i>	<i>41yr</i>	<i>1m</i>	<i>FV27597</i>	<i>41yr</i>	<i>1m</i>
Avocet	ER2787_52	32yr	11m			
Lapwing	DS30355	21yr	1m			
Golden Plover	2072773	12yr	0m	DN77939	6yr	5m
<i>Grey Plover</i>	<i>DR33258</i>	<i>25yr</i>	<i>1m</i>	<i>DR33258</i>	<i>25yr</i>	<i>1m</i>
Ringed Plover	NV68817	21yr	11m	BV85945	19yr	8m
Whimbrel	EK92102	24yr	1m			
Curlew	FV67501	32yr	7m	FA10051	29yr	11m
<i>Bar-tailed Godwit</i>	<i>DS66917</i>	<i>33yr</i>	<i>11m</i>	<i>DS66917</i>	<i>33yr</i>	<i>11m</i>
<i>Black-tailed Godwit</i>	<i>EP85107</i>	<i>26yr</i>	<i>10m</i>	<i>EP85107</i>	<i>26yr</i>	<i>10m</i>
Turnstone	XS56243	20yr	0m	CC88754	19yr	2m
Knot	CE25745	27yr	3m	CK68568	24yr	0m
Ruff	CC91720	9yr	0m	CE33211	6yr	7m
Curlew Sandpiper	BV70618	14yr	10m			
<i>Sanderling</i>	<i>BB52147</i>	<i>17yr</i>	<i>7m</i>	<i>BB52147</i>	<i>17yr</i>	<i>7m</i>
Dunlin	NS64038	19yr	3m	NR32469	18yr	11m
Purple Sandpiper	NV03868	15yr	2m	BV89291	11yr	11m
Little Stint	KR8--	3yr	11m			
Snipe	XC34292	16yr	0m			
Common Sandpiper	NV54164	15yr	1m			
Redshank	DB34864	22yr	2m	DN20546	17yr	0m
<i>Spotted Redshank</i>	<i>DR28508</i>	<i>7yr</i>	<i>5m</i>	<i>DR28508</i>	<i>7yr</i>	<i>5m</i>
Greenshank	DB34831	20yr	9m	DR96000	5yr	11m

There were four new BTO longevity records for waders in 2022 and 2023, all colour-mark sightings, demonstrating the contribution of colour-ringing to longevity records. These new records include one for Black-tailed Godwit, ringed and resighted by WWRG members on the Wash (see Table 2 for details).

Table 2 shows more details of the longevity records for species ringed by WWRG. Most of the WWRG longevity reports are of birds which have been recovered at or near the original ringing site. However, there are also four foreign recoveries which provide information on the wider movements of these birds. Three of these recoveries are for species for which there are very few BTO foreign recoveries, including the only recovery of a Ruff from Senegal, one of two recoveries of Spotted Redshank from Morocco and the only recovery of a Greenshank from Denmark.

Table 2. Details of WWRG longevity records

Species	Ring no	Ringing information			Recovery information		
		Age	Place	Date	Details	Place	Date
<i>Oystercatcher</i>	<i>FV27597</i>	<i>Adult</i>	<i>Friskney</i>	<i>30/07/76</i>	<i>Shot</i>	<i>France</i>	<i>04/09/17</i>
Golden Plover	DN77939	Adult	Terrington	24/07/97	Shot	Sutton Bridge	14/12/03
<i>Grey Plover</i>	<i>DR33258</i>	<i>2nd Summer</i>	<i>Terrington</i>	<i>13/07/79</i>	<i>Caught</i>	<i>Terrington</i>	<i>31/08/04</i>
Ringed Plover	BV85945	Adult	Heacham	31/08/80	Colour-mark sighting	Snettisham	20/05/00
Curlew	FA10051	Adult	Leverton	18/09/85	Caught	Friskney	01/09/15
<i>Bar-tailed Godwit</i>	<i>DS66917</i>	<i>Adult</i>	<i>Wolferton</i>	<i>22/08/74</i>	<i>Caught</i>	<i>Terrington</i>	<i>04/08/08</i>
<i>Black-tailed Godwit</i>	<i>EP85107</i>	<i>1st Winter</i>	<i>Holbeach</i>	<i>30/08/96</i>	<i>Colour-mark sighting</i>	<i>Snettisham</i>	<i>22/07/23</i>
Turnstone	CC88754	Adult	Terrington	28/08/72	Caught	Heacham	22/11/91
Knot	CK68568	Adult	N. Wootton	27/08/68	Caught	Friskney	01/09/92
Ruff	CE33211	1 st Winter	Wolferton	22/08/78	Caught	Senegal	20/02/85
<i>Sanderling</i>	<i>BB52147</i>	<i>Adult</i>	<i>Snettisham</i>	<i>18/07/70</i>	<i>Caught</i>	<i>Heacham</i>	<i>21/02/88</i>
Dunlin	NR32469	Adult	Benington	21/08/90	Caught	Butterwick	24/07/09
Purple Sandpiper	BV89291	Adult	Heacham	16/04/88	Caught	Hunstanton	08/04/00
Redshank	DN20546	Adult	Terrington	11/08/87	Caught	Terrington	29/08/04
<i>Spotted Redshank</i>	<i>DR28508</i>	<i>2nd Summer</i>	<i>Terrington</i>	<i>27/07/75</i>	<i>Shot</i>	<i>Morocco</i>	<i>12/01/83</i>
Greenshank	DR96000	Adult	Wolferton	22/08/82	Caught	Denmark	10/08/88

The BTO longevity records for species in Britain and Ireland (since 1959) have been extracted from the most recent online ringing report (<https://app.bto.org/ring/countyrec/results2023/longevity.htm>). WWRG-generated longevity records are in italics and highlighted.

Carole Davis



Sunset at Friskney. (Chantal MacLeod-Nolan)

LIST OF MEMBERS

David Allen	Chris du Feu	Kelvin Philpott
Guy Anderson	Richard du Feu	Mike Pienkowski
Martin Anstee	Dennis Elphick	Chris Quay
Graham Appleton	Samantha Franks	Dean Rea
Mike Archer	Lizzie Grayshon	Clive Richards
Francis Argyle	Ros Green	Elli Rivers
Adham Ashton-Butt	Louise Greenwood	Barrie Roberts
Phil Atkinson	Carol Greig	Anthony Roberts
Sharon Atkinson	Neil Hagley	Rob Robinson
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Dawn Balmer	David Hodgkinson	Kevin Sayer
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Brian Barrett	George Jackson	Nicholas Shaw
Steve Barton	Phil James	Bernard Siddle
Ruth Bell	Leigh Kelly	Rick Simpson
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Ray Bishop	Becky Laidlaw	Jen Smart
Katharine Bowgen	Lynne Lambert	Meg Speck
Nick Branson	Reg Langston	Jenny Spencer-Jones
David Brooks	Christina Lawrence	Mark Stanley
Molly Brown	Francois Lemoine	Derek Stanyard
Birgitta Buche	Roderick Leslie	Keith Stedman
Roger Buisson	Kate Lessells	David Steventon
Ryan Burrell	Julian Limentani	Edward Stubbings
Jan Butchers	Patricia Lockwood	Mike Swindells
Ian Buxton	Hugh MacGregor	Rachel Taylor
Andy Camp	Jim MacGregor	Cora Thomas
Phil Cannings	Alexander Mackintosh	Robert Thomas
Andrew Carter	Chantal Macleod-Nolan	Bob Tridgett
Tim Chinn	Kevin May	David Turner
Nigel Clark	Robert McAllester-Jones	Kirsty Turner
Jacquie Clark	Keeley McCabe	Florence Turner
Gary Clewley	Louise McCartney	Tim Turner
Matthew Clint	Niamh McHugh	Nick Upton
David Coker	Caroline McLelland	Alison Wakeham
Will Connock	John Middleton	Ruth Walker
Jim Cook	Pat Minton	Matthew Wallace
Jane Cooke	Wayne Morris	Robin Ward
Ian Cooksey	Lys Muirhead	Daphne Watson
Seb Cooksey	Rob Murray	Alistair Wilson
Graham Couchman	David Neal	Saskia Wischniewski
Jodie Crane	Luke Nelson	Lucy Yates
Ruth Croger	Alan Nelson	Sabine Zelz
Carole Davis	Paul Noyes	Ina Zweiniger
Steve Dodd	Stephen Palmer	
Alexandra Dodds	Robert Pell	
Louis Driver	Hannah Phillips	

