INTERNATIONAL WADER MIGRATION STUDIES ALONG THE EAST ATLANTIC FLYWAY: PLANS FOR SPRING 1988

Nick Davidson & Theunis Piersma

This is the fourth consequtive spring in which WSG has co-ordinated studies of how waders migrate along the East Atlantic Flyway. During these last four years the various groups, individuals, and expeditions have discovered much new information about how several species of arctic-breeding waders migrate back to their breeding grounds. As before, WSG involvement aims to compliment the detailed studies being carried out at various migration staging areas and parts of the breeding grounds, by co-ordinating the collection of information aimed at discovering how individual waders move between sites during a single migration along their route between their wintering grounds and their breeding area. Full details of the project, and the methods involved, are described in WSG Bull. 42: 5-9.

As we had anticipated, the information gathered in each spring from the comparison of timing of migrations, and the catching and marking of birds, is gradually increasing our understanding of how birds move along this flyway. We will continue to co-ordinate the collection of information whilst teams are working in the various parts of the migration routes.

The reports of studies at several places on the Atlantic Flyway last spring have recently reached us. These serve to illustrate some of the advances in understanding the migration routes of waders. In our last progress report (WSG Bull. 50: 5-6) we reported that a small team of British and Norwegian researchers had visited Porsangerfjord, in the far north of Norway in May 1987. This visit was an attempt to confirm whether or not Knots *Calidris canutus* staging at that site belong to the Nearctic breeding population, as had been suggested by circumstantial evidence summarised by Davidson et al. 1986 (Ornis Scand. 17: 175-179). Previously these birds had been believed to belong to the Siberian breeding population. The summary report of this visit (Wood,A.G., Strann, K.-B., Symonds,F.L. & Nilsen,S. [1988] Knot Research at Porsangerfjord.) confirms the presence of over 28,000 Knots in late May. The mesurements of a small sample of Knots caught there in late May showed that the birds in Porsangerfjord were of very similar size to the Nearctic breeding population. Of the 20 birds caught, one had been ringed in mid-December in the previous winter on the Wash in eastern England. This also is consistent with the England. This also is consistent with the Nearctic breeding origin of Knots staging in Porsangerfjord in spring. This confirmation of probable Nearctic breeding origin confirms that the fjords of northern Norway are a staging area of major international importance: up to one-quarter of the Nearctic population of one-quarter of the Nearctic population of islandica Knots occur there in May, as a final staging area before flying to their breeding grounds. As yet we cannot precisely identify to which breeding grounds these birds fly, since none have yet been discovered on their breeding grounds.

Another major contribution to the spring migration system along the East Atlantic Flyway comes from the completion of Peter Prokosch's doctoral thesis: Prokosch,P. 1988. Das Schleswig-Holsteinische Wattenmeer als Fruhjahrs-Aufenthaltsgebeit arktischer



Watvogel-Populationen am Beispiel von Kiebitzregenpfeifer (*Pluvialis squatarola*, L. 1758), Knutt (*Calidris canutus*, L. 1758) und Pfuhlschnepfe (*Limosa lapponica*, L. 1758). University of Kiel. This covers in great detail the spring migration of Grey Plovers, Knots and Bar-tailed Godwits through the Schleswig-Holstein part of the Wadden Sea. We will report on the results of this work in more detail later.

Information on waders on their breeding grounds has been harder to come by, and as yet we have not been able to trace birds directly from their late spring staging site to their breeding area through sightings of colour-marked birds or capture of ringed birds. Participants in the WSG project visited several parts of Greenland last year. In addition to the highly successful visit by Peter Prokosch to Thule in north-west Greenland (reported in summary elsewhere in this *Bulletin*), Micheal Lea visited Hurry Inlet near Scoresbysund, in east Greenland in July 1987, but found no maked birds amongst the Ringed Plovers Charadrius hiaticula, Dunlins Calidris alpina, Turnstones Arenaria interpres and Sanderlings Calidris alba there. Only one Knot was heard, but snow cover was still extensive (c. 50%) even in July and so may have affected the breeding season. Similarly Knots were scarce in Germania Land in north-east Greenland, where David Cabot heard only one bird.

PLANS FOR SPRING 1988

As in previous years of this project there will be many participants catching, colour-marking, ringing and counting waders along the East Atlantic Flyway this spring, from southern Africa to arctic Canada and Greenland. As before there will be particular emphasis on the colour-marking and resighting of colour-marked birds as a means of precisely identifying links between sites used by birds in a single season. As in previous years, much of the work will be focussed on Nearctic and Siberian Knots. There is also increasing interest in the spring migration of Turnstones and Bar-tailed Godwits, and many of the participating projects will work also on other species of waders. Below we summarise, starting from the south and (like the birds) moving north, the various groups and there aims.

After a gap of several years, enforced because the waders were roosting within a military training area and so could not be caught, Les Underhill will again be catching and dye-marking waders at Langebaan Lagoon in north-western South Africa.

Dye-marking of waders at Langebaan may be particularly useful this spring, since a Dutch team will again be operating on the Banc d'Arguin in Mauritania. Between 10 April and 15 May, a WIWO team including Theunis Piersma, Meinte Engelmoer, Pete Duiven and Henrech Bruggemann, will form part of the Netherlands Sea Research Council expedition to Mauritania The Dutch team will be making observations on behaviour and migration, including departure times and flight paths throughout the expected departure period of the birds. The work will include the catching and weighing of birds, with attention focussing on Siberian Knots. A major aim is to collect data on weight gains for a longer period prior to departure than is currently available. This information will fill a gap in the detailed study of the spring migration of Siberian Knots from Africa through Europe, co-ordinated by Theunis Piersma, Peter Prokosch and Denis Bredin and reported on in previous Bulletins.

Denis Bredin will be continuing his work on the migration of Knots through western France. Although there are less intensive plans for catching this spring, there will be regular counts, with work concentrating on Nearctic Knots.

Work on Knots and other waders will continue on the West German Wadden Sea in Schleswig-Holstein. Peter Prokosch will be making catching attempts in two periods of May: one in early May aimed catching Nearctic Knots, and another in late May aimed at Siberian Knots.

The BTO/WSG West Coast Spring Passage project, co-ordinated by Mike Moser, studied the spring migration of particularly Ringed Plovers, Sanderlings and Turnstones through the estuaries of the west coast of Britain in several recent springs. Completion of the analysis of the results of this work, which yielded much new information about how waders moved between the estuaries of this coastline, is now a high priority for the current Birds of Estuaries team at the British Trust for Ornithology. Amongst the preliminary findings of the work has been evidence that Turnstones pass rapidly through western Britain in spring, and that most individuals appear to stop at only a single estuary in Britain during this migration. Very few Turnstones caught and dye-marked in south-west Britain were seen again further north. However several marked Turnstones were seen on the coasts of the Outer Hebrides in May. This spring, Robert Prys-Jones and Jeff Kirby of the BTO plan to visit the Outer Hebrides to look in more detail the importance of this area as a staging site for Turnstones and other waders. Work will involve catching, colour-marking and observations of population turnover. One aim is to assess whether birds pass on to stage later in Iceland, or whether they are capable of flying direct to Greenland (or even further) after stopping in the Outer Hebrides.

After the highly successful work of the last three springs in identifying the Nearctic origins of Knots staging in Balsfjord and Porsangerfjord in northern Norway, the detailed work by the joint Durham/Tromso Universities team will not be continuing this spring. However we hope that some checks for arrivals and departures and the presence of colour-marked birds will be made in Balsfjord.

There will be more extensive studies continuing in Iceland during spring 1988. The team from Lund University, Sweden, led by Thomas Alerstam, will be continuing their comprehensive studies on the spring migration of waders and wildfowl through western Iceland, which began in detail in spring 1987. The studies will be made particularly by Gudmundur Gudmundsson and Ake Lindstrom. Catching and marking of birds will be attempted, as well as counts, observations of marked birds and feeding observations. Work will focus on the foraging ecology of Knots, and the collection of departure weights.

The vasteness of the arctic breeding grounds of waders makes coverage of the breeding grounds in a project such as this much more difficult even than covering their spring staging areas. However participating teams will be visiting several parts of the Nearctic breeding grounds during this spring and summer. Michael Lea and a small team will visit Hold-with-Hope in north-east Greenland and will be making observations and sound recordings of waders.

Further west, a Joint Services Expedition will spend the summer at Borup Fjord in western Ellesmere Island. Philip Whitfield will be joining the expedition for part of the time, and one of the objectives will be to make studies of breeding Turnstones there.

This work will complement that already under way at Alert, in the far north of Ellesmere Island, being carried out by Guy Morrison nad Nick Davidson. The studies there on the body condition, energetics and behaviour of Knots and Turnstones after their arrival in late May and early June will be continued this spring.

As in previous years, WSG is acting as the co-ordinating group for the international aspects of these projects. We would of course be delighted to hear from any others who are going to be actively working on wader migration along the East Atlantic Flyway this spring, and who would be able to contribute to the collection of information on the migration of waders. Also we apologise for any groups we have left off this summary of plans for 1988 - please let us know about your plans and work.

Many of the participating groups will be marking waders of several species, including Knots and Turnstones in various ways as part of studies into population turnover at single sites, and movement between sites. This spring, waders may be carrying a dye-mark of various colours, a colour-ring or rings, or a coloured leg-flag. Some birds may have a combination of these marks. Movements of colour-marked birds are a vital source of information for this project, so help from anyone able to make checks of flocks of waders this spring is especially valuable. Equally, information from anyone able to contribute regular counts of waders from a site is very useful.

Sightings of colour-marked waders should, as always, be reported through the WSG Colour-marking Register, so that the information can be passed on correctly to the markers. However, please note that the address for the Register has now been changed to the new WSG postal address: WSG, PO Box 247, Tring, Herts. HP23 5SN, U.K.

We wish all success to all those working on the spring migration of waders everywhere, and look forward to hearing all their news and information.

Nick Davidson, c/o Nature Conservancy Council, Northminster House, Peterborough PE1 1UA, U.K.

Theunis Piersma, Gasthuissstraat 32, 1791 GL Den Burg, Texel, The Netherlands.

STOP PRESS. First news of the 1988 spring passage project is most exciting. Les Underhill and colleagues have caught and dye-marked over 30 Siberian Knots at Langebaan Lagoon in South Africa in late March 1988. Two were resighted on sandflats about 8 km away a few hours later. The team hope to catch at least 100 birds before the northwards departures in April. 250 Curlew Sandpipers were caught also, including 16 recaptures, two of which were of birds over 10 years old.

Our congratulations to Les on the first success of the spring 1988 season. We also ask all observers everywhere along the East Atlantic Flyway to keep a special look-out for the yellow-dyed Knots during spring 1988. Tracing the movements of these Knots from South Africa is a particularly important point in the studies of Siberian Knot migration, since there is uncertainty as to how far north these birds reach in a single spring (for a recent report on the status of these studies see WSG Bull. 49: 9-10).

