INTERNATIONAL WADER MIGRATION STUDIES ALONG THE EAST ATLANTIC FLYWAY: NEWS FROM SPRING 1987

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We last reported on this Wader Study Group project, whose major aim is to link up the various wader research projects operating along the East Atlantic Flyway from Africa to the arctic breeding grounds, in *WSG Bulletin* 48. By co-ordinating some of the activities, particularly the catching and marking of waders, of the participating groups, the project is attempting to discover more about how waders move between wintering grounds, staging sites and breeding grounds during a single migration. This type of information is sadly lacking for many species, and is a serious limitation to understanding the migration phenology of waders. As reported in previous progress reports, the project has already had considerable success in expanding our knowledge of the migrations of some of the target species, although of course the findings are raising even more questions than they are answering.

In this brief report we summarise first news of the successes (and failures) of the participating groups during spring 1987. The summary amply illustrates the difficulty, as well as the great value, of collecting information to examine within-migration movements of waders. We have yet to hear news and/or details from some participating groups. If you have yet to contact us with news of catching, marking, counts or sightings (or the absence of them), please let us know as soon as possible.

As in previous years, a particular focus of the project in spring 1987 was the two subspecies of Knots *Caldiris canutus* that occur on the East Atlantic flyway. Work on the Nearctic-breeding *islandica* subspecies has attempted particularly to build on the new understanding of the migration system revealed by the Durham/Tromso University studies in northern Norway. In western France, Denis Bredin and the LPO caught and dye-marked 300 Nearctic Knots in late winter (February/March). We had hoped to trace these birds to their early spring staging areas further north, but as yet no reports of sightings have reached us.

In Schleswig-Holstein, over 100 Nearctic Knots died after flying into a lighthouse very soon after their arrival in mid March in the Waddensea. Analysis of the body condition of these birds is adding a valuable link in the studies of the migration energetics of these birds, adding on to the Durham/Tromso studies in Britain and Norway, and the continuing studies on the breeding grounds in Canada. Although Peter Prokosch working in the West German part of the Waddensea, caught only few Nearctic Knots this spring, he was very successful with Siberian Knots later in the spring (see below). The Schleswig-Holstein team also caught 158 Bar-tailed Godwits *Limosa lapponica*, another species that is an increasing focus of attention in the project, and 430 Dunlins *Calidris alpina*. Studies on Bar-tailed Godwits were successful also in the Netherlands: Joop Jukema and Theunis Piersma, working with wilster-nets in Friesland in the north-east Netherlands, caught over 200 Godwits in May.

Very few Knots have been marked in western Britain in recent springs, and so their presence on the recently discovered late spring staging areas has yet to be confirmed. In an attempt to remedy this, several ringing groups in western Britain, co-ordinated by Jeff Kirby, tried to catch Knots this spring, but the species failed to use suitable catching sites. However, amongst 900 Knots caught on the Alt Estuary in late February was one that had been marked in Balsfjord, north Norway, in May 1986. The groups were much more successful in catching other species. In total, 3078 waders were caught by Morecambe Bay, South-west Lancs, Merseyside and North Solway Ringing Groups, and 102 Turnstones *Arenaria interpres* and 15 Sanderlings *Calidris alba* were dye-marked.

Studies on Nearctic Knots further north, on late spring staging sites and breeding grounds, have been more successful, and have revealed further startling new findings. In May 1986, Knots caught in Balsfjord, north Norway were fitted with a single colour-ring, in an attempt to trace birds to their late spring staging areas in subsequent years. The attempt has proved both successful and confusing! Circumstantial evidence had suggested that Knots staging in Porsangerfjord, in the far north of Norway, are of Nearctic origin, like those in Balsfjord. A small team of Norwegian and British Knotters visited Porsangerfjord between mid and late May. Approximately 30 000 Knots were counted in late May, confirming population estimates from previous years. Amongst these birds were several that had been colour-ringed in Balsfjord in 1986. There was much ice in the inner parts of the fjord throughout May, and weather and catching conditions in the fjord were very difficult. However, the team managed to catch 20 birds, whose body size was consistent with Nearctic origin, and included one bird that had been ringed in eastern Britain during the last winter. Checks in Balsfjord suggested that numbers of Knots may have been lower than in previous years, but confirmed that birds colour-ringed there in 1986 had returned in 1987.

In 1986, Philip Whitfield confirmed that north-east Iceland is an important late spring staging area for several species of arctic waders, including Knots. In May 1987, he found that numbers of Knots were similar to those in

1986. Amongst these were at least 3 that had been colour-ringed in Balsfjord in 1986.

A team from Lund University, Sweden, has begun a detailed study of the migration and staging of waders in western Iceland. Gudmundur Gudmundsson reports that weather conditions this spring were very good, but that no marked Knots were seen. However they did catch and colour-mark 170 Knots and 57 Turnstones, including 5 carrying British rings, 2 with Dutch rings, and one with an Icelandic ring. One of the Knots that they marked has been caught subsequently, in early August 1987, on the Wash in eastern England, so confirming a pattern established from the earlier studies of knot migration in Iceland. Although no marked Knots were seen in Iceland, 20 colour-ringed Sanderlings were seen. Many had been ringed at Teesmouth, north-east England, confirming the previous' years observations in Iceland. A dye-marked Purple Sandpiper *Calidris maritima* , probably marked in northern Britain earlier in 1987, was also seen.

Several studies on breeding grounds in Greenland and northern Canada have been involved in the project. However, none has yet reported any colour-marked Knots. After catching Knots in the Waddensea, Peter Prokosch worked on breeding Knots in the Thule area of north-east Greenland. Summer weather conditions were extremely good, and chicks were already present on 30 June. Although they found no marked birds, the team ringed 3 adults and 21 chicks.

Nick Davidson and Guy Morrison spent two weeks in late May and early June at Alert, on the northern tip of Ellesmere Island, Canada, studying the behaviour and condition of Knots and Turnstones during the period of their arrival on the breeding grounds. Weather conditions and snow-melt appeared average, a few Turnstones had already arrived by 27 May, and the first Knots were seen on 30 May. Numbers of both species around Alert were lower than in some previous springs, and no colour-marked birds were seen. However, two Knots had been previously caught by Guy Morrison at Alert in early June 1986, and one carried a British ring. Similarly, one Turnstone had originally been ringed at Alert in early June 1986. Another had been ringed in north-west England in early May 1985, and has subsequently been recaptured at the same site in late August 1987.

The Siberian breeding population (*canutus*) of Knots is also a focus of attention of the WSG project. In much warmer climes than the breeding grounds, a Dutch expedition to Guinea-Bissau, in West Africa, in December 1986 and January 1987 was very successful, and caught about 1500 waders, including 200 Bar-tailed Godwits, 200 Curlew Sandpipers *Calidris ferruginea*, one of which had been caught previously in Bulgaria in July, 150 Turnstones *Arenaria interpres*, including a bird ringed in Finland in May, 100 Whimbrels *Numenius phaeopus*, and 19 Dunlins *Calidris alpina*. These Dunlins are particularly interesting since they are at the extreme southern end of their wintering range. The Guinea-Bissau study team caught about 500 Siberian Knots, many already carrying rings, although no birds were dye-marked. Amongst the ringed Knots was one caught in August 1986 in southern Norway, and another in July 1973 on Schiermonnikoog in the Waddensea.

Further north, Denis Bredin caught 300 Knots in mid-May, out of a maximum population of 25 000 birds. Regular counts and studies of turnover found that as in previous years birds stayed for about one week. Maximum numbers were higher than in 1986, but lower than in 1985. To complete a very successful season, the LPO team caught also about 2 000 Dunlins in late winter and 1 500 Dunlins in spring. In Schleswig-Holstein, Peter Prokosch continued his work on Siberian Knots, catching 375 birds (including one ringed in Holland and another carrying a French ring) on 19 May, and another 17 between 21-25 May.

Studies of waders in the Delta region of southern Netherlands, conducted by the Delta Institute for Hydrobiological Research and the Division of Tidal Waters in Middelburg, continued. Monthly counts were made, and between March and May 650 waders, including 94 Grey Plovers *Pluvialis squatarola*, 51 Bar-tailed Godwits, 390 Dunlins and 93 Turnstones were caught.

DETAILED ANALYSIS OF RESULTS FROM THE PROJECT

These progress reports of the project that appear in the *Bulletin* aim to give just a rapid summary of the main activities and results of the project participants. Several more detailed analyses have utilised information stemming from the project, or are in progress. Colour-mark sightings from the project have greatly aided the re-assessment of the spring migration of Nearctic Knots, published by Uttley *et al.* in *WSG Bull.* 49, *Suppl.*. We intend that, in general, analyses of the data for each target species should be undertaken by small working groups composed of waderologists with a particular interest in the species. The first of these groups reported their first findings about the spring migration of Siberian Knots in *WSG Bull.* 49: 9-10. A similar progress note on the spring migration of Bar-tailed Godwits is being prepared.

Theunis Piersma is also making an appraisal of the nature and quantity of the information collected so far in the project, so as to highlight gaps and identify priorities for the project in the future. As a further spin-off from the project and its associated participants, we are in the early stages of planning a workshop in 1989 on the migration systems of Knots. This will aim to bring together as many Knot workers as possible from worldwide. Further details will be published in *WSG Bulletin* soon.

Many of the studies participating in the project are aiming to continue in future years, and so there would seem to be much scope for carrying on with the international aspects of data collection in the future. We will be discussing the future of the project at the WSG annual meeting in Poland in September 1987, and will give further information about plans for 1988 in *Bulletin* 51 (December 1987).

Finally, and as ever, our thanks to the very many participants who have contributed in so many ways to the success of the project in the last year. And if any of you has not yet sent in information about your project activities for spring 1987, then please do so as soon as possible.

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