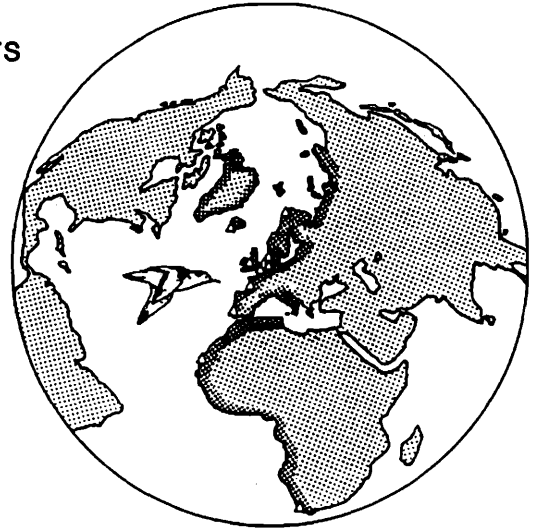


## INTERNATIONAL WADER MIGRATION STUDIES ALONG THE EAST ATLANTIC FLYWAY: PRELIMINARY RESULTS FROM SPRING 1986

by N.C. Davidson and T. Piersma



1986 was the second spring of this project, co-ordinated by the Wader Study Group. The project aims to find out how waders use the East Atlantic Flyway during a single migration, using a combination of catching, colour-marking and counting by groups and individuals throughout the flyway. Here we briefly summarise the information received so far about the migration of waders during spring 1986. We still lack some details of information from some participants: we urge anyone who has information on counts or observations of marked waders, to send them to us now, so that we can begin a more detailed analysis of the results. All observations of marked birds should be sent as usual to the WSG Colour-marking Register (Hector Galbraith, Department of Zoology, University of Glasgow, Glasgow G12 8QQ, U.K.).

Full details of the aims of the project during spring 1986 were given in *Bulletin* 45: 4-6. Briefly, a major aim has been to gain further understanding of the complexities of the migration of the Nearctic breeding population of Knots *Calidris canutus islandica*, capitalising on the discoveries made by the Durham/Tromsø Universities studies in northern Norway in spring 1985. This study found that a substantial part of the Nearctic Knot population used northern Norway as a staging post during May (see Davidson *et al.* 1986, *Ornis Scand.* 17: 175-179).

Additionally, by colour-marking other species of waders elsewhere on the flyway, the project aimed to increase the number of within-spring movements of waders beyond those reported from spring 1985.

### PRELIMINARY RESULTS

In this first assessment we focus chiefly on the movements of marked birds. We will subsequently incorporate more information on the numbers of birds and timing of migration.

#### Nearctic Knots

The various separate studies that linked up their work on Nearctic Knots through the project achieved considerable success in catching and marking birds. Over 200 Knots were dye-marked in late winter at Teesmouth and the Firth of Forth in eastern Britain. Some birds from these estuaries has moved by early spring to the Wash and the Moray Firth. This conforms

to patterns interpreted previously from ringing recoveries. Attempts to catch Knots on the Ribble and the Wash in early spring were unsuccessful, but 208 birds were ringed between January and June in the Netherlands Delta.

In late April 877 Knots were dye-marked and leg-flagged in the Wattenmeer by Peter Prokosch and colleagues. These birds included 5 that had been ringed in Balsfjord, north Norway in May 1985 by the Durham/Tromsø Universities team. Furthermore, a marked bird from this catch in the Wattenmeer was caught in late May 1986 in north Norway. Two others were seen during mid-late May in Iceland; one in the west and one in the north-east.

The Durham/Tromsø Universities project in north Norway caught over 600 knots of the 11 000 present in Balsfjord in May 1986. Most were fitted with a single colour-ring, with the aim of tracing the spring migration of this population in future years. An attempt to catch the 20 - 25 000 Knots of unknown origin in Porsangerfjord, in northernmost Norway failed narrowly.

Although attempts to catch Knots in west Iceland were unsuccessful, one Knot that had been colour-ringed in north Norway in early May was seen amongst a flock of 50-60 Knots in west Iceland 2 weeks later, in late May. Observations in north-east Iceland in May confirm that, as previously suspected, this coast is used by substantial numbers of Knots in May: up to 2000 were present on one 18 km stretch of coast alone.

Last, but not least, Guy Morrison visited the breeding ground of Knots at Alert, Ellesmere Island, in the Canadian arctic, in early June. Although he saw no colour-marked birds, he caught over 40 Knots, amongst which was one with a British ring.

#### Other Species and Subspecies

Knots of the presumed Siberian breeding population could not be caught at Langebaan Lagoon, South Africa, this spring as they had altered their roosting habits and chose to roost within a military zone. However 19 Knots also presumed to be of this race were caught and colour-marked in Charente Maritime, France during mid-May.

The Project Banc d'Arguin team in Mauritania caught 940 waders of various species between February and April, and fitted most with coloured leg-flags. Daily counts of departing birds were also made.

J. Dominguez and colleagues counted waders on 5 estuaries in north-west Spain between early April and late June, and saw also one colour-marked Dunlin *Calidris alpina*.

During April and May in the Netherlands Delta region 53 Ringed Plovers *Charadrius hiaticula*, 500 Sanderlings *Calidris alba*, 353 Dunlins, 17 Grey Plovers *Pluvialis squatarola* and 66 Bar-tailed Godwits *Limosa lapponica*. The last 2 species were colour-marked. Regular counts of waders were made in the Delta and several parts of the Wadden Sea. Small numbers of waders, including 250 Bar-tailed Godwits) were caught in several parts of the Wadden Sea/Wattenmeer.

In north-east Iceland P. Whitfield detected substantial passage during May of Turnstones *Arenaria interpres*, and also some Sanderlings. One Turnstone had been colour-ringed at Teesmouth in a previous autumn. In west Iceland, G. Gudmundsson and colleagues found 6 colour-ringed Sanderlings out of 1030 examined in May. At least 4 had been marked originally at Teesmouth, confirming a pattern first discovered in May 1985.

On Ellesmere Island, Guy Morrison caught over 60 Turnstones, 4 of which carried British rings.

#### CONCLUSIONS SO FAR

The international link-up between teams working on Nearctic Knots has proved highly successful in establishing some further links in the spring migration system of this population, notably that birds from the same population in the Wattenmeer go to late spring staging sites in both Iceland and Norway, in confirmation of the within-spring link between the Wattenmeer and north Norway in May, in confirmation of north-east Iceland as a May staging site, and also the somewhat surprising movement of a Knot from Norway to Iceland during May. As always these findings have raised many more questions than they have answered.

The numbers of colour-marked waders of other species reported so far this spring has been disappointing, compared to the results for spring 1985. Nevertheless, the sightings of colour-marked Sanderlings and Turnstone have added usefully to understanding the spring migration phenology of these species.

#### THE FUTURE

There will be a short meeting of major participants during the WSG Conference at Broxburn, Edinburgh in mid-September, to discuss analysis of the results collected so far, and to plan for spring 1987.

It is evident that the valuable amount of new information on wader migration that the project is producing makes its continuation important. We anticipate that a major target for spring 1987 will again be Nearctic Knots. It is already likely that there will be teams again studying Nearctic Knots in Britain, the Wattenmeer, Norway and Iceland, and probably also Greenland and Canada.

The scope of studies on other species and subspecies is as yet unclear, but it is probable that some colour-marking will be again attempted at several sites. Full details of the project in spring 1987 will be published in *Bulletin* 48 (December 1986).

The information gathered by this project will be an invaluable input into the review of our current understanding of wader migration along the East Atlantic Flyway, that will form part of the Workshop on the Conservation of International Flyway Populations of Waders at the WSG Conference in mid-September 1986.

#### AND FINALLY.....

Our enormous thanks to all those who have participated in the project in so many ways during spring 1986, and who have provided information readily and enthusiastically. It is only because of such international co-operative work that our progress in understanding wader migration can be so good. Our commiserations to those who have laboured in vain in catching and looking for marked birds. It may be a small consolation that negative information is often as much use as positive information: do keep us informed of both your successes and failures!

If you have not yet joined the international network, but could help by counting and checking for marked birds, then we urge you to participate next spring and make 1987 as successful a spring as those of 1985 and 1986.

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