

1984 WEST COAST SPRING PASSAGE PROJECT

by P.N. Ferns and M. Moser

A joint Wader Study Group / Birds of Estuaries Enquiry Project

Background

It was apparent from the results of the 1979 WSG Project on the Spring Passage of Dunlins, Sanderlings, Ringed Plovers and Turnstones through Britain (WSG Bulletin 29:10-13; 30:22-25, 31:36-40, 32:14-19, 33:6-10) that there was quite a rapid turnover of birds at most of the sites studied. Even when numbers remained apparently constant from one count to the next, a decrease in the proportion of birds with advanced summer plumage indicated that some individuals had departed and had been replaced by new arrivals. A knowledge of the rates at which different populations turn over during the migration period is vitally important in deducing the total proportion of the flyway population which any particular site supports. Although the length of time which individuals spend at a site during migration is on average much less than at their breeding and wintering areas, it is nonetheless total numbers (and not bird days or some other measure) which should be used to assess the national and international importance of such a site for specific flyway populations. Such numerical criteria may appear to give undue weight to sites which are used by large numbers of individuals for only a short period, but the loss of even briefly used staging posts could jeopardise the viability of the whole flyway. In both assessing the importance of individual sites and in order to understand more about the degree of flexibility of wader migration patterns we must measure the rate of turnover of birds at individual sites and discover how many sites they use in the same season.

One example will serve to illustrate the importance of this kind of information. In an assessment of the Delta area of Holland for birds, Saeijs & Baptist (1977) found it relatively straightforward to estimate wintering numbers, but they had to use a rather subjective criterion for both spring and autumn passage migrants. They simply summed all counts separated by 25 or more days during the migration period, based on the arbitrary assumption that this was the residence time for all species. If the real residence times were half this figure then clearly the importance of the Delta area would be underestimated by a half during spring and autumn.

We have therefore decided to institute a joint Wader Study Group/Birds of Estuaries Enquiry project to investigate this problem during the spring passage of Nearctic and N.W. Palaearctic waders through western Britain.

Objectives

The primary objectives of the project are to determine the network of sites used by spring migrant Dunlins, Sanderlings, Ringed Plovers and Turnstones around the Irish Sea area, and to measure their rates of turnover. This will require the catching and colour marking of these species at the main staging posts. The number of sites at which catching and marking can be carried out will inevitably be limited by the range of colour dye and temporary leg flag combinations which can be used. Each site will be given an individual plumage dye colour and position, and each catch at that site will have a different temporary leg flag colour. The counts will not attempt to pick out successive waves of migrants, but will simply record the broad trends in numbers and, most importantly, will monitor the rate of disappearance, and hence onward migration of colour marked birds.

Methods

At most sites, marking will commence in April and continue through May, but it is intended to make at least a few catches in March to monitor the departure of winter residents. The sites chosen for the catching programme (Figure 1) are as follows.

- Wembury and Exe, Devon (South West Ringing Group)
- Severn Estuary (Celtic Wader Research Group and Wash Wader Ringing Group)
- Menai Straits (Scan Ringing Group)
- Dee, Mersey and Ribble (South West Lancashire Ringing Group and Merseyside Ringing Group)
- Morecambe Bay (Morecambe Bay Ringing Group)
- Solway Firth (North Solway Ringing Group and Wash Wader Ringing Group)

All birds caught for colour marking will be fully processed to provide information on geographical origin and potential flight range, as in the 1979 project. With luck it may also be possible to obtain the mid April catches needed to test for the presence of Icelandic Ringed Plovers, British breeding Dunlins and southerly breeding Nearctic Sanderlings which should be on passage at this time of year but which went largely undetected in 1979.

At some of the sites where most birds are marked we hope to have some full time observers throughout the project. These observers will obtain consistent counts at regular intervals of about five days and will monitor the proportion of marked birds present. However, we also need to monitor as many other sites as possible along the flyway for marked birds. Birds of Estuaries Enquiry counters will be asked to help with this, but we would also like Wader Study Group members to contribute. The sites where counters have provisionally agreed to help with the project are shown in Fig.1. There are still a lot of gaps (e.g. west Wales, south-eastern Ireland, eastern mainland of Scotland), and we would also like to hear from volunteers at the sites already marked in Figure 1. since the more people we have looking out for marked birds the better. It would also be helpful to have at least a few observers looking out for marked birds in eastern Britain.

This project will also provide a useful extension to the NCC/EEC study of wader movements in western Europe being carried out from Durham in cooperation with the WSG. After analysis, our results will be passed on to the Durham team. The methods to be used in the 1984 West Coast Spring Passage Project have been thoroughly tested in a study carried out in the Solway Firth in 1983, some results of which are described by Mike Moser elsewhere in this Bulletin.

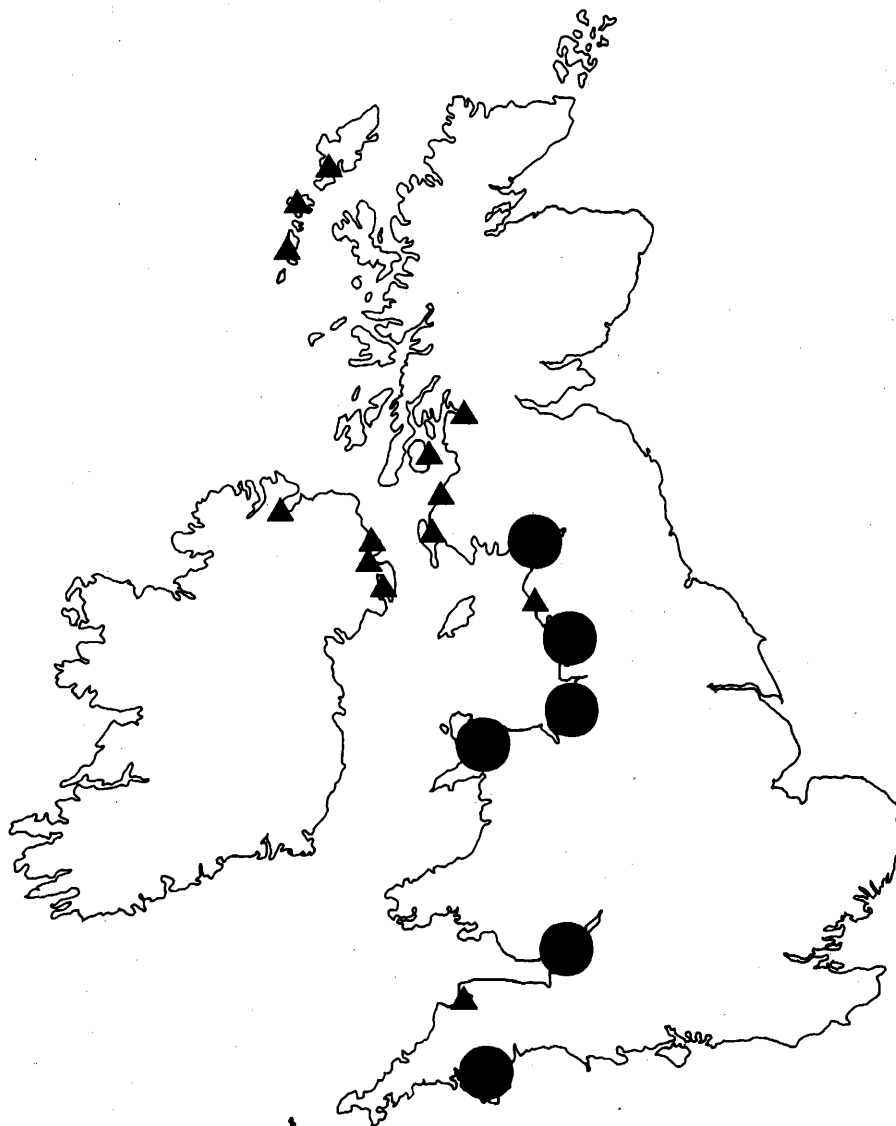


Figure 1. Proposed catching and marking sites for the 1984 West Coast Spring Passage Project (large circles). Triangles indicate sites from which provisional offers of help in counting birds have been received.

How to help

Anyone who would like to contribute to the project by counting Dunlins, Sanderlings, Ringed Plovers and Turnstones and monitoring the numbers of differently marked birds present during April, May and early June 1984 should complete the form enclosed with this issue of the Bulletin and return it to Mike Moser. We would like these counts to be carried out at intervals of 5 - 7 days. Discrete sites are ideal for this sort of counting, but we will have to cover the more extensive estuaries as well. Examining flocks of birds for marked individuals is best carried out when the birds are concentrated by the tide onto feeding areas at the top of the shore, rather than at densely packed roosts. Each participant will be sent full instructions and counting forms.

Wader ringers who would like to assist in the catching and colour marking programme should offer their services direct to the ringing groups concerned. The names and addresses of the contact for each group are as follows. Help would be especially welcomed in the Lancashire and Cumbria areas.

South West Ringing Group - R.S. Swinfen, 72 Dunraven Drive, Derriford, Plymouth, PL6 6AT (tel. 0752-704184).

Celtic Wader Research Group - P.N. Ferns, 38 Lakeside Drive, Cardiff, CF2 6DF (tel. 0222-759034).

Wash Wader Ringing Group - P.L. Ireland, 27 Hainfield Drive, Solihull, West Midlands. (tel. 021-704-1168).

Scan Ringing Group - D. Stanyard, Court Farm, Groeslon, Caernarfon, Gwynedd, L54 7UE (tel. 0286-881669).

South West Lancashire Ringing Group/Merseyside Ringing Group - D. Norman, Rosewood Cottage, Ridding Lane, Sutton Weaver, Runcorn, Cheshire (tel. 0928-711064).

Morecambe Bay Wader Group - J. Sheldon, Homeleigh, Newton-in-Furness, Barrow-in-Furness, Cumbria. (tel. 0229-62559).

North Solway Ringing Group - R.T. Smith, Applegarthtown, Locherbie, Dumfriesshire (tel. 038781-415).

Reference

Saeijs, H.L.F. & Baptist, H.J.M. 1977. Wetland criteria and birds in a changing delta. *Biol. Conserv.* 11: 251-266.