INTER ESTUARINE MOVEMENTS OF SHOREBIRDS (Abstract of contribution to the WSG Nottingham meeting)

by Patrick J. Dugan

The use, by individual shorebirds, of a network of estuaries rather than a single estuary during one winter is an area of wader biology attracting increasing attention at the present time. The important conservation implications of such movements are becoming more fully realised. During the winter of 1979-80 many Wader Study Group members will be involved in marking waders at the Tees and Forth estuaries, the Wash and Dutch Waddenzee to investigate movements between these and other areas. As background to this study present knowledge of the use of a network of east coast estuaries by Knot Calidris canutus, Bar-tailed Godwit Limosa Lapponica and Grey Plover Pluvialis squatarola is outlined.

Data from the Birds of Estuaries Enquiry show the annual pattern of use by Knot of the estuaries of north-eastern Britain (Humber, Tees, Lindisfarne and Forth) and the Wash. Numbers of birds on all the north-eastern estuaries show similar patterns. Numbers increase from late October and early November to a mid-winter peak followed by a decline to the pre-increase level by the end of March. On the Wash numbers rise between October and November to a mid-winter plateau and decline to the October level by March. Analyses of ringing recoveries have attempted to establish the origins and destinations of these birds' movements. However, interpretation of recoveries in winters subsequent to the one of ringing (further analysis in progress) is extremely difficult and the results open to question; therefore only recoveries within the winter of ringing are presented. Recoveries of this nature on the Humber (2) and Tees(1) of birds ringed on the Wash demonstrate that some of the birds on the north-eastern estuaries come from the Wash. However, these recoveries only give information on two inter-estuarine links and are too few to enable confident statements on the origins of all the birds to be made. Further, in most cases the recoveries are not sufficiently soon after ringing for the timing of the movements to be determined with accuracy and assessment of when and consequently why the movements occur is not possible. In the absence of other within-winter recoveries interpretation of the count data is thus open to considerable speculation.

To overcome some of these problems Knot were colour marked in 1978/79 in a pilot study of the role of the Tees estuary in a network for this species. Two distinct movements of birds from the Tees to the Forth in late December and late January and one, possibly via the Forth, to the south-west coast of Scotland were detected. The study is being expanded in 1979/80.

Counts of Bar-tailed Godwits from the East coast show a marked decrease in numbers on the Wash between September and October coinciding with an increase of similar magnitude in numbers using north-eastern estuaries. One ringing recovery from the Wash to the Humber in the same winter indicates some movement to the North from the Wash. However more data are needed to confirm that the correlation between change in numbers in the different areas is due to interchange of individuals. Movements between the Tees and Lindisfarne were demonstrated by sightings of a colour-marked individual on the Tees in September and on Lindisfarne in late winter of the same season. Again more data are required.

Counts of Grey Plover show the existence of fluctuations in numbers not attributable to autumn or spring passage in population levels on different estuaries. Nothing is known of the movements of birds resulting in these changes in numbers.

Investigation of the questions raised in this study is in progress through the dyeing scheme underway this winter (see elsewhere in this Bulletin). It is hoped to report on the results of this later.

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THE "CRAMP, STRESS MYOPATHY, OVER-STRAINING" SYNDROME IN CAPTURED LARGE WADERS

Recent developments and rising interest in catching Curlews <u>Numenius arquata</u> in Britain has once again high-lighted this problem. In the following note Derek Stanyard reports on recent experiences. Discussions at the WSG autumn meeting added further information - including the observation that not everyone read all of Bulletin 24 where a review of a paper from South Africa (van Heerden 1977) contained many of the comments which were later put forward as unique observations at the meeting! We suggest that interested readers and prospective Curlew catchers refer back to that note (Green 1978) before reading on.

Undoubtedly Curlew trapping presents special problems and every would-be catcher must be prepared to make special arrangements when their capture is planned. A design for a suitable keeping cage is given after Derek Stanyard's note followed by guidelines which we hope will be helpful to Curlew catchers. We should be pleased to receive further information to hand on to our readers.

FURTHER NOTES ON CURLEW CRAMP AND KEEPING CAGES

by D.J.Stanyard

Introduction

The recent increase in catching large waders, particularly Curlew Numenius arquata, has high-lighted the problem referred to by British ringers as 'the cramp condition'. Various people have theorised on its possible causes but so far there are no definite conclusions apart from van Heerden's (1977) report. With one Curlew study in progress and further ones planned by west coast groups it is appropriate for the Wader Study Group to discuss the problem and draw on past experiences to set out quidelines for future activities.

Report on two catches of Curlew made by SCAN in autumn 1979 at Aber, Gwynedd, Wales

During August and September this year SCAN (a wader ringing group active in North Wales) made two catches of Curlew – one of 50, the other of 60 birds. On both occasions we operated with a team of eleven persons and expertise varied from six experienced cannon netters in August to ten in September. Both catches were made under similar circumstances. Four nets