EDITORIAL: SANDERLING STUDIES

Apart from the usual items and a range of articles we have brought together several contributions about Sanderlings Calidris alba for this issue. If this leads to further studies on Sanderlings we shall be delighted. The time is opportune. Several articles point to the interest in local movements of Sanderling flocks and the species is one of the highest priorities for study in the WSG project on Movements of Wader Populations in Western Europe. Furthermore the Sanderling is a common coastal wader and compared with other common species we know remarkably little about its migrations in the W.Palaearctic. This is partly because of its remote arctic breeding grounds and long non-stop migrations and partly because of its non-breeding distribution on open shores, away from estuaries and the activites of most wader ringing groups. More studies on Sanderlings would be welcome. We have even changed our cover design for this 'Sanderling special', thanks again to Ray Bishop.

STUDIES ON SANDERLING AT TEESMOUTH, NE ENGLAND

by P.R.Evans, D.M.Brearey and L.R.Goodyer

Introduction

The coastal rocks and beaches, both south and north of the estuary of the River Tees, Co. Cleveland, support up to c.1200 Sanderling Calidris alba from late July to late May each year, i.e. throughout the 10 months of the year when the birds are absent from their arctic breeding grounds. Some of their main feeding grounds fall within an area covered by the South Gare and Coatham Sands "Site of Special Scientific Interest", designated by the Nature Conservancy Council in 1969 (Fig.1). Unfortunately, this area is also scheduled for reclamation, to provide land for Stage 3 of the British Steel Corporation's Redcar works, under the terms of the 1976 Co. Cleveland Structure Plan. Against this background we began a study in autumn 1976 of the biology and behaviour of Sanderling at Teesmouth. The main aims were (i) to measure minimum year-to-year survival rates and the degree of site-faithfulness of wintering birds (ii) to identify their foods and habitat requirements at different times of the year, and (iii) to obtain information on biometrics and movements of birds using the Tees. Allied to this, D.M.B. undertook a special study of foraging behaviour, using cine-film and tape-recorded commentaries; this study forms an important part of his doctoral thesis (Brearey, in prep.).

Methods

Sanderling have been caught by cannon-netting and clap-netting since March 1976. Most birds were ringed with unique combinations of colour rings as well as B.T.O. rings, and since July 1980 have been dye-marked as well, with picric acid on the whole of the underside. Counts and searches for marked birds on the south side of the estuary have been made by L.R.G. since autumn 1976, and on the north side since 1978, whenever possible at weekly intervals. Most counts have been made from a vehicle driven along the sands, at those stages of the tidal cycle when birds are most concentrated into a few areas (see later). Densities of potential invertebrate prey have been measured at intervals throughout the winters of 1977/78 and 1978/79 on the south side of the estuary, and more recently on both sides of the river.

Results (i) Survival rates

A high degree of site faithfulness is shown by individual Sanderling, such that each Tees-marked bird has usually been seen at Teesmouth at some time during each winter, if it is alive. However, some individuals are seen much more regularly than others. Using even single reliable sightings during a winter as evidence of survival, the following minimum survival rates have been obtained:

Fig.1. Intertidal land south of the Tees estuary.