

Bait Digging

Removal of invertebrates from the mud-flats can cause local problems by disturbance of the sediments and occasionally, through direct competition with man. The alleged competition between fishermen and Oystercatchers *Haematopus ostralegus* for Cockles *Cerastoderma edule* on the Burry Inlet is well known and led to a large cull of birds. Bait-digging causes particular problems on a number of mud-flats in south-east England and also at Spurn Bight and Cleethorpes on the Humber and at Budle Bay, Lindisfarne. Oyster dredging at Chichester Harbour and at Dengie (Essex) can have considerable effects to shorebird feeding areas.

Wildfowling

Disturbance due to wildfowling can pose local problems. Whilst increasing numbers of wildfowlers are members of recognised clubs who organise, educate and control their members, there are several inter-tidal areas where the shooting is uncontrolled. At both Pagham and Chichester Harbours, the disturbance of roosting waders by wildfowlers (and sometimes birdwatchers) is a problem. Amongst the areas where shooting is uncontrolled are the Montrose Basin, the Fife coast of the Forth, Eden Estuary (East Fife), Inner Tay, Swale, High Halstow marshes (Thames), Donna Nook (Humber) and several parts of the Moray Firth. Conversely there are several areas where the shooting is controlled and disciplined including the Burry Inlet, the Dyfi, the Humber, the Dee, the Ribble and Lindisfarne, although at Lindisfarne visitors and bait diggers sometimes disturb the sanctuary area.

Sand Winning and other local problems

Sand extraction occurs on a number of inter-tidal areas. Detailed studies on the Ribble suggested that it had no impact on the use of the sand-flats by birds. In other areas such as the Taw-Torridge Estuary (presently subject to Public Inquiry) considerable disruption of sediments and wader feeding has been apparent. Sand winning presently takes place on the Ribble, the Tees, the Eden Estuary, Morecambe Bay, the Swale, the Stour in Essex, Tynningeham (Firth of Forth), Burry Inlet, South Gower, Swansea Bay and the Lower Dornoch Firth.

A wide variety of local problems affect the conservation of inter-tidal land. Some range from the almost comical (such as the disturbance of wader roosts by police dog training) to more important ones such as the MoD proposal to extend a runway in the Outer Hebrides, the local opposition against the declaration of Local Nature Reserves, the closure of the Port of Preston on the Ribble Estuary, the hoverport developments in Kent and Cheshire and the accumulation of radioactive waste in sediments at Auchencairn Bay (Solway).

The invasion of mud-flats by Cord Grass *Spartina* sp may become a severe problem in areas such as the Ribble, the Dee, Lindisfarne, the Dyfi, the Conwy and others since it promotes accretion and hence saltmarsh development at the expense of mud-flats. Obviously this has implications for wader feeding areas.

Prospects

The variety of number of threats/problems on inter-tidal areas in Britain can all too easily lead to a pessimistic and defensive outlook. Equally the problems must be faced and the conservation movement must have the best possible biological basis on which to support its arguments for the needs of waterfowl. The conservation of inter-tidal areas depends not only on NCC, RSPB and other conservation groups but also on the widest possible public support. The present knowledge of the distribution of waders and wildfowl on inter-tidal areas and of their movements needs to be supplemented by the study of the requirements of individual species during the non-breeding season. The response of those interested in catching and in watching waders to the project on wader movements in Western Europe has been marvellous. The outcome from their project promises to be a valuable contribution towards the conservation of inter-tidal areas.

Acknowledgements.

I would like to thank the Regional Staff of NCC who provided me with up-to-date information on their areas and Mike Pienkowski, Philip Oswald, Pat Doody and Roger Mitchell for reading this paper in draft.

Derek R. Langslow, Chief Scientist's Team, Nature Conservancy Council, Godwin House, George Street, Huntingdon, Cambridgeshire, GB.

WADER STUDY GROUP DATA FORMS: SECOND ADDITIONS

by Michael Pienkowski

Among the first set of completed new-style WSG forms to be received were several which used the forms in ways slightly different from those described in the instructions. In some cases this resulted from situations which occur (or have occurred) fairly frequently but which we had not anticipated. Accordingly, where practicable, we have tried to amend the data handling programs to cater for these. Some of these changes were described in WSG Bull. 30: 10. One further enhancement is noted below.

Moult code

In some situations (especially when large catches are being dealt with) full primary moult details were not taken but the fact that the bird was moulting its primary feathers was noted. This information can now be coded on the forms by entering '1' in the moult code space for that bird and leaving the primary moult score spaces blank. Similarly, the fact that a bird was in arrested primary moult (but details were not taken) can be noted by an 'A' in the moult code space and blanks in the primary moult score spaces.

Forms and instructions are available on request from:

M. W. Pienkowski, Dept. of Zoology, University of Durham, South Road, Durham DH1 3LE, GB.