

NUMBERS OF OYSTERCATCHERS AND COCKLES ON THE RIBBLE

(Abstract of talk at WSG Meeting at Uttoxeter)

by W. Sutherland

A considerable Cockle *Cerastoderma edule* spatfall in 1975 led to a dramatic, short-lived increase in the Cockle population on the Ribble Estuary, Lancashire, England. There was a parallel fluctuation in the numbers of Oystercatchers *Haematopus ostralegus*. The correlation between the two was high.

Much of the increase in the Oystercatcher numbers on the Ribble was due to the immigration of young birds. It appears that young birds seek a suitable estuary whilst adults tend to return to the one found whilst young.

This study contrasts with that on the Burry Inlet, S.Wales, where the numbers of Oystercatchers did not vary with the number of Cockles. It appears that dispersal is an important factor determining the number of birds on the Ribble, yet other population processes appear to affect the Burry Inlet Oystercatchers.

W.Sutherland, Edward Grey Institute, South Parks Road, Oxford, OX1 3PS, GB.

PURPLE SANDPIPERS *CALIDRIS MARITIMA* IN EASTERN SCOTLAND

(Abstract of a talk at WSG Meeting at Uttoxeter)

by R. W. Summers

The study of Purple Sandpipers *Calidris maritima* by the Tay Ringing Group started on a casual basis in 1967 with trapping at night by torch light on the Isle of May, Scotland. Clearer aims were defined in 1970. The seasonal changes in numbers were described for four sites and marked differences occurred between sites, but not between years. The total winter population from Berwickshire to Morayshire was counted by walking the shore at low tide. The maximum and minimum estimates were 4394 and 2993 for winters 1971-2 to 1973-4. Ringing recoveries indicate that Purple Sandpipers in eastern Scotland originate from Norway and analysis of bill lengths suggested that 86% were Norwegian and 14% may come from Iceland. The composition of the population in the Solway Firth and at Fair Isle differs from the population in eastern Scotland, in terms of sex and race. Some Purple Sandpipers, colour-ringed on the Isle of May, carried out short-distance movements within the Firth of Forth and along the Fife coast. Many birds returned to the same winter quarters in later years. Full results have been published elsewhere: *Scottish Birds* 8:299-308 and *Ornis Scand.*, in press.

R.W.Summers, Ministry of Agriculture, Fisheries & Foods, Tangley Place, Worplesdon, Surrey, England.

IMPLICATIONS OF THE SEVERN BARRAGE

(Abstract of talk at WSG Autumn Meeting at Uttoxeter)

by P. N. Ferns

The most significant implication for shorebirds of the proposal being considered by the Department of Energy, to construct a barrage across the Severn Estuary to generate electricity from tidal power, would be a considerable reduction in tidal range. This would reduce the size of the intertidal feeding area available to wading birds and Shelduck *Tadorna tadorna*, and almost certainly lead to a reduction in the wintering population of the estuary. Since the Severn is one of the most significant estuaries in Britain for shorebirds, and supports internationally important concentrations of Shelduck, Ringed Plover *Charadrius hiaticula*, Grey Plover *Pluvialis squatarola*, Dunlin *Calidris alpina*, Curlew *Numenius arquata* and Redshank *Tringa totanus*, such losses could be serious. The extent of these changes is going to be extremely difficult to predict, partly because there will be a major alteration in the pattern of sedimentation in the estuary, which engineers find it almost impossible to model. Changes in salinity are also likely, with a general freshening of the water upstream of the barrage. The most important site within the estuary for shorebirds is Bridgwater Bay and this is both a National Nature Reserve and a Ramsar designated site, mainly on account of its moulting population of Shelducks during the autumn.

In addition to these changes within the intertidal area, the barrage has a number of implications for the surrounding coastal levels which are below the existing high water mark. The installation of pumped drainage may be necessary on parts of the Somerset and Gwent Levels, and this is bound to lead to increasing demands for a general lowering of the water table. The levels are both botanically and ornithologically important. For example, a very high proportion of the Whimbrels *Numenius phaeopus* which pass through Britain during spring, feed on the damp pastures of the Somerset Levels. A lowering of the water table would result in a decrease in the area of permanent pasture and an increase in the area under arable cultivation, reducing the attractiveness of the levels to Whimbrels and to other species, such as Bewick's Swans *Cygnus columbianus*, Wigeon *Anas penelope* and Ruff *Philomachus pugnax*, which occur in internationally important numbers.

Dr. P.N.Ferns, Department of Zoology, University College, P.O. Box 78, Cardiff CF1 1XL, GB.