7TH INTERNATIONAL WORKSHOP ON THE ECOLOGY OF SHOREBIRDS

PRELIMINARY NOTICE

Held under the auspices of the International Waterfowl Research Bureau and the Wader Study Group

A first notice is given of the above meeting, which will be held on 12-16 May 1986 at Hollviksnas, near the Falsterbo peninsula in SW Scania, South Sweden.

At the last workshop held in Cardiff in September 1983, it was agreed upon that a time lapse of 2-3 years was desirable before the next meeting. Many participants also expressed a wish to see the next workshop arranged in Sweden and during the breeding season.

Preliminary arrangements have now been made and we would like to encourage everyone working with shorebirds to attend the meeting. The workshop will primarily focus on waders, but contributions on other groups of shore birds are also welcome. At this early stage of preparation, decisions have not yet been taken on what special themes should be included in the workshop, but certainly studies conducted during breeding seasons will be given much attention. We hope to invite a few contributions of special interest and contacts have already been made with wader workers in eastern Europe.

During the workshop a whole day excursion to some interesting wetlands in Scania will be arranged. We will visit breeding localities for interesting species like Ruff, Dunlin, Black-tailed Godwit, Avocet, Kentish Plover, Golden Plover, Jack Snipe, Wood Sandpiper and Green Sandpiper. For participants staying until the Saturday or Sunday, extra excursions can be arranged and for "morning alerts" nice birding areas lie in the close vicinity of the conference centre in Hollviksnas. Full accomodation in Hollviksnas should cost between £75 and £125 (at today's exchange rates).

A final announcement with a more detailed program should appear in the August 1985 issue of the *WSG Bulletin*, but we would be pleased to receive preliminary bookings now from anybody who wishes to attend the workshop.

For further information and preliminary booking, please write to one of:

S.A. Bengtson, Museum of Zoology, Helgonav. 3, S-223 62 Lund, Sweden.
P. Andell, Dept. of Animal Ecology, Ecology Building, S-223 62 Lund, Sweden.
P.E. Jonsson, Dept. of Animal Ecology, Ecology Building, S-223 62 Lund, Sweden.

WSG PROJECT ON THE EFFECTS OF SEVERE WEATHER ON WADERS: FOURTH PROGRESS REPORT

by Nick Davidson & Nigel Clark

This is a brief report summarising the work of the project during the 1984/85 winter. A more detailed analysis and report will appear in the August 1985 *Bulletin*. Would participants please return any outstanding forms and information so that we can make the fifth progress report as complete as possible. We would like to hear also from anyone else who can contribute any additional comments or information about the impact of the 1984/85 winter on waders.

The 1984/85 winter in Britain was more severe than either of the previous two winters during which the project has been running. There were two periods of severe weather. The first began in early January, and lasted for about 3 weeks. A statutory wildfowling ban was introduced in England and Wales, and shortly afterwards also in Scotland. Weather conditions were most severe in south-eastern England, where there were heavy snowfalls, although winds were generally light. After a mild period of about 2 weeks, a second severe spell began on 8 February and lasted for over 2 weeks. Again the weather was most severe in south-eastern Britain. This time, in addition to very low temperatures and heavy snowfall, there were very strong easterly winds for several days, so that windchills were very high. Temperatures over much of continental Europe were even lower than in Britain. Freezing weather extended south to the Mediterranean, and there was heavy mortality of Flamingos *Phoenicopterus ruber* and herons and egrets in the Camargue (S. Gregory pers. comm.).

The information collected during the two previous mild winters will allow us to directly compare the numbers and identities of wader corpses at specific sites round Britain, and so understand more precisely the impact of the severe weather. It has been for just such an occasion as the recent severe spell that we have needed to collect this information during mild winters. For those sites which were covered first during the 1984/85 winter, we will need to collect, wherever possible, such comparative information in future mild winters.

Figure 1 summarises a first assessment of the impact of the severe weather on waders. Higher

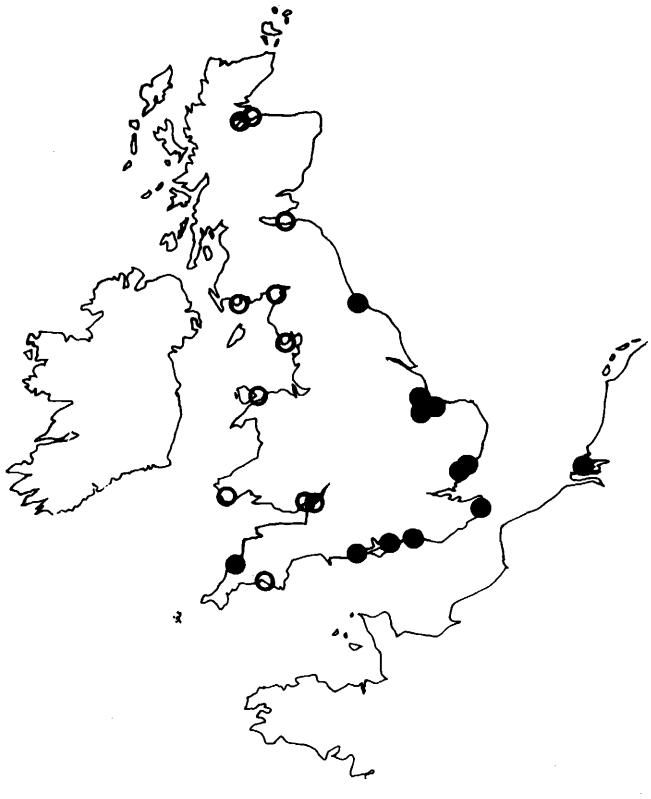

Figure 1. Sites at which mortality of waders was higher in January and February 1985 than in recent mild winters (●), and sites where mortality was similar to that in recent mild winters (o).

than usual mortality (assessed from tideline counts of corpses) is apparent chiefly in south-eastern England, especially around the Wash and East Anglia. In south-west England mortality was mostly of Lapwings *Vanellus vanellus* which may have moved from further east. Lapwings were also reported dying on the Portugese coast. There is no evidence of increased mortality during either severe spell in Wales, north-west England or Scotland.

Mortality was higher during the February than the January severe spell. In February the regulated size of the fat reserves of waders is less than in January, so birds can survive for only a shorter time if forced by severe weather to draw on their reserves. Mortality was especially high on the western shore of the Wash, where over 300 wader corpses were found along a 17 km stretch of shore in February. As in most previous severe spells, the waders most seriously affected were Redshanks *Tringa totanus*. Dunlins *Calidris alpina* were found dead and dying from starvation especially at Teesmouth and in Langstone Harbour (Hampshire). Some at Teesdmouth had died at night whilst sheltering behind rocks on high water roosting sites.

At Teesmouth there is some evidence that raptors killed many more waders, mostly Dunlins and Knots *Calidris canutus*, during the severe weather than in the mild weather. The birds killed by raptors were in generally poorer than usual body condition for the time of year.

Exemptions from bans on wader catching during severe weather in winter 1984/85 were negotiated by WSG in consultation with the Nature Conservancy Council and British Trust for Ornithology. We are analysing the data on weights and identities of live birds collected during the severe weather, to detect any sub-lethal effects of the severe weather on condition. An initial appraisal indicates that most waders caught in northern and western Britain were close to their normal body condition, but that Golden Plovers *Pluvialis apricaria* and Dunlins on the Firth of Forth lost condition during the February cold spell, and that some waders may have stored additional fat (over their normal amount for the time of year) at the start of cold weather.

There is little evidence of long-distance cold weather movements by most estuarine waders, although Dunlins are though to have left the Dutch Wadden Sea and Delta areas (E. Marteijn pers. comm.). Some movements between adjacent estuaries did occur on the Suffolk and Essex coasts: as mudflats on some estuaries began to freeze over, Oystercatchers *Haematopus ostralegus* and Black-tailed Godwits *Limosa limosa* moved to feed on the Orwell estuary. As in previous severe winters, some Grey Plovers *Pluvialis squatarola* that arrived at Teesmouth were birds that appear only during severe winters (D.J. Townshend pers. comm.). These birds are believed to spend mild winters on the coasts of continental Europe.

We have now made a detailed examination of over 500 wader corpses that have been sent to us during the last 3 years: a particularly unpleasant task in the case of some corpses! These birds have, wherever possible, been measured, aged and sexed, and that we are now making a detailed analysis of identities of waders dying during mild and severe weather. The body condition (fat and protein reserves) is being measured on as many intact corpses as possible (over 150 birds). An initial assessment shows that almost all birds that died during severe weather did so after they had exhausted their fat reserves, but that the size of the protein reserves remaining at death were more variable. This suggests that waders die when they can no longer mobilise energy reserves fast enough to supply their high energy needs during freezing, windy, weather.

One effect of the severe weather has been to greatly increase the amount of administrative work involved in running the project, and we apologise for any delays in responding to participants.

Our thanks to the many participants who braved the extremely unpleasant weather this winter to collect information for the project, and especially to Rob Watson and his colleagues for coping so admirably with several cubic feet of frozen waders from the Wash. The information that the project has yielded this winter is allowing a much more detailed picture of the effects of a severe spell to be built up than has been previously possible.

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