

Wintering Golden Plover

Title

Wintering Golden Plover 1976/77-1977/78

Description and Summary Results

It had been known for many years that Britain and Ireland were very important areas for wintering waders (and other waterfowl). Many of these were concentrated into estuaries and hence the Birds of Estuaries Enquiry (now part of the Wetland Bird Survey WeBS) was set up starting in the winter of 1969/70 to count all waders and waterbirds.

However two waders in particular, Lapwing *Vanellus vanellus* and Golden Plover *Pluvialis apricaria*, occur primarily in inland areas and on farmland all across the country and not just near the coast. In the mid-1970s the Lapwing was thought to be very widespread and too common and scattered to be able to make meaningful estimates of the total numbers and distribution, but the Golden Plover was thought to be more concentrated into particular areas and to be fewer overall. It was also thought that Britain held a fair proportion of the European wintering population and therefore had a major responsibility for its conservation. Hence a complete survey was feasible.

So, in the winters of 1976/77 and 1977/78, a survey was organised with the aim of identifying those parts of Britain which held large numbers of Golden Plovers. These were likely to be British-bred birds moving down from their upland breeding grounds as well as influxes of foreign birds. A further important aspect of the survey was to examine which types of land were used most by the birds. There were extensive agricultural changes taking place at the time, in particular the conversion or 'improvement' of old grassland. Coverage was extremely variable, but how this influenced the distribution patterns suggested is not clear. However, in January 1977, Northern Ireland and parts of Yorkshire and Cornwall were important areas where coverage was definitely very poor. In the second winter coverage was again poor in Cornwall and in parts of Wales.

The results indicated that the Golden Plover was among the five most numerous waders wintering in Britain and Ireland. On all four specific count dates total numbers exceeded 170000 -- the highest being the midwinter count in 1977/78 with over 230000 birds. There were considerable regional differences, with numbers consistently higher in some regions than others. NE and NW Britain held the most, and in the southern half of England, the southwest was particularly important -- especially in hard weather -- but SE England and East Anglia also held large numbers. In Scotland, most were in the south.

Overall numbers were highest in midwinter. Everywhere except E Scotland and NE England showed substantial increases between November and January, but numbers then dropped in most regions, perhaps a result of the severe weather before the February count.

Most of the large flocks (more than 1000 birds) were reported on or near the coast, especially between the Firth of Forth and Tyneside, on the Sandwich/Stour marshes in E Kent, on the Lancashire/ Merseyside coast (including the Ribble), on areas bordering the Solway Firth, and the Strangford Lough area of Northern Ireland. Important inland areas were the lowlands of Yorkshire and N Humberside, the Cheshire Plain, and Cornwall.

Especially few large flocks were noted in the Midlands and East Anglia, although there were

substantial numbers overall in the latter occurring in small to moderate and widely distributed flocks.

There were clear differences in the usage of different habitats. Grassland, especially permanent, was preferred widely for feeding and cultivated land was selected for roosting. Intertidal habitats were not important for feeding Golden Plovers although they were used for roosting.

Methods of Data Capture

Advance publicity was given and potential observers were encouraged to familiarise themselves with the wintering areas long before the actual count dates. They were helped in this by the organisers preparing lists of possible traditional wintering areas compiled from local bird reports. Main count dates were coordinated for specified weekends so that (as far as possible) birds would not be duplicated. In the first winter (1976/77) observers were asked to count Golden Plovers on 8-9 January 1977, and in the second on 26-27 November 1977, 31 December 1977-1 January 1978, and 4-5 February 1978.

The information given on each recording card related to one area of countryside -- in many cases the range of a single flock. The location of each flock was recorded by a grid reference, the time of each sighting, the number of birds and the habitat -- divided into: 1) grassland -- permanent pastures and temporary grasslands (leys); 2) cultivated land -- cereal crops (sown in the autumn or winter), ploughed land, stubble, fallow land and root crops; and 3) coastal -- saltmarsh, intertidal flats and rocky foreshores (including shingle).

Additional counts outside the co-ordinated dates, and information on the behaviour of the birds and weather conditions, were also encouraged. In the second winter observers were asked to provide a sketch map of the area covered.

Purpose of Data Capture

1) To identify those parts of Britain holding large numbers of Golden Plovers; 2) to examine which types of land were used most by the birds during the winter.

Geographic Coverage

All of the UK.

Temporal Coverage

The winters of 1976/77 and 1977/78. In the first observers were specifically asked to count birds on the weekend of 8-9 January 1977, and during the second three nationwide co-ordinated counts were made: on 26-27 November 1977, 31 December 1977-1 January 1978, and 4-5 February 1978.

Other Interested parties

The survey was organised and run by the BTO. David Lloyd did this as a volunteer organiser and Rob Fuller as part of his job. Funding for the project came from the Commissioned Research Programme of the Nature Conservancy Council.

Organiser(s)

David Lloyd and Rob Fuller

Current Staff Contact

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Publications

The main report of the survey is:

Fuller, R.J. & Lloyd, D. 1981. The distribution and habitats of wintering Golden Plovers in Britain, 1977-1978. *Bird Study* 28: 169-185.

The survey was noticed in *BTO News* numbers 80, 81, 82, 85, 87, 88, 89, 92 and 95.

Available from NBN?

No.

Computer data -- location

None.

Computer data -- outline contents

N/A.

Computer data -- description of contents

N/A.

Information held in BTO Archives

1 Archive Box contains all the data and some correspondence relating to the survey. All data have been scanned.

Notes on Access and Use

Other information

Notes on Survey Design

Specific Issues for Analysis

Flocks of Golden Plovers can be very mobile so duplication of counts was not always obvious. Where it was not obvious flocks more than 2km apart were regarded as separate while those closer were regarded as duplicates. Whenever flocks had been counted more than once the highest count was used.

Because of difficulties in counting the birds, if a larger number of birds was recorded within five days of the co-ordinated count date this figure was used rather than the 'official' count figure. If an area had not been covered at all on the co-ordinated count date, but a count was available that was no more than ten days earlier or later, then this was used.

It was only during the course of the survey that it was realised that Golden Plovers used different habitats for feeding and roosting, but unfortunately observers were not asked to specify the activity of each flock. Information on habitats was only used where the observer specified the activity of the birds (feeding or roosting). Birds described as 'resting' were not used in this analysis, and the only data analysed were those collected on the three co-ordinated counts in the second winter.

The behaviour of Golden Plovers is such that even in areas where observers are familiar with the wintering grounds it can be extremely difficult to be certain that all birds have been located and counted. In some cases it was clear that people were visiting only a small number of fields where birds had been seen in the past and had not done a comprehensive search. Even where general coverage was good the numbers counted can only be regarded as a minimum estimate of the total actually present. However, assuming that the birds behave in a similar manner in all parts of the country, and that major wintering areas were not poorly covered, then the results will still give a reasonable picture of the national distribution.