Winter Plovers 2006

Title

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Description and Summary of Results

Numbers of most species of waders are monitored effectively by the Wetland Bird Survey (WeBS). The two most widespread species which are not are Lapwing *Vanellus vanellus* and Golden Plover *Pluvialis apricaria*. Some individuals do occur on wetlands, at least some of the time, but many others are more widely scattered on fields.

Information from WeBS in the early 2000s was suggesting that there had been some marked changes in numbers and distribution of both these species and so a survey was organised to find out.

Golden Plovers had been subject to a specific survey in the winters of 1976/77 and 1977/78 and that had generated an estimate of about 200000 birds in Britain. Lapwings had not been specifically counted. Since then various surveys had tried to estimate numbers, including the Winter Atlas (early 1980s) and Dispersed Waterbirds Survey (2002/03), and these estimated the population to be around 500000 Golden Plover and 1.5 million Lapwing in Great Britain, but admitted that actual counts and number of occupied squares on which particularly the Dispersed Waterbirds Survey figures were based were rather few. There were particular difficulties as these species are neither widespread enough to be possible to count using a completely random survey nor sufficiently concentrated to be able to do a complete count.

In the event, between 1550 and just over 1800 WeBS sites were surveyed in each month (October 2006 – February 2007) with 85% visited in at least three of them. In addition 429 Key tetrads were visited at least once, 523 random tetrads similarly and there were nearly 7000 casual records. Taking all problems of double-counting, likelihood of overestimating and the unknown error factors inherent in WeBS counts it was estimated that the number of Golden Plovers peaked in November at around 400000 birds and of Lapwings in February at about 620000 birds with a precision thought to be no more than 10-15%. (Note that these are figures for Great Britain and not necessarily directly comparable to earlier figures which may have included the whole of Ireland.)

Methods of Data Capture

A combination of methods was used for the survey due to the concentrations of birds onto wetlands and the wide dispersion of birds in open countryside. And to attempt to avoid too much double-counting some preferred dates for all counts were designated to correspond with the set dates for WeBS counts.

Four survey methods were used: 1) major estuaries and inland sites – the counts for WeBS for October to February were used for this survey as well; 2) key sites – a short list of key sites in each region was generated from information in local bird reports and from local expert knowledge, many of them part of poorly defined "flock ranges". Single or clusters of tetrads were designated as survey areas from these and observers were asked to survey as

much as possible of the tetrads counting both plovers as well as any Curlew *Numenius arquata* and gulls Laridae that were found; 3) random tetrads – these were selected as: a) the most southwesterly tetrad (tetrad A) in each 10-km square; then b) all those areas already being covered by one of the above methods and all unsuitable ones (eg upland) were removed; then c) within each region they were ordered randomly and regional organisers asked to survey the first half of them although some tetrads which were unsuitable, eg urban, were removed as "desk zeroes"; 4) casual records – notes of any significant flocks and casual records were extracted from Bird Track.

Purpose of Data Capture

To obtain as accurate an estimate of numbers of Lapwing and Golden Plover in winter over Great Britain in each month.

Geographic Coverage

All of Great Britain, covering major known sites (wetlands and areas of farmland known to hold flocks) and a random sample of others.

Temporal Coverage

The survey asked for counts to be done from October 2006 to February 2007 with a preferred counting date in each month coinciding with the dates selected for WeBS Core Counts.

Other Interested parties

The survey was funded by the partnership between BTO and the Joint Nature Conservation Committee (on behalf on Natural England, Scottish Natural Heritage, Countryside Council for Wales (now Natural Resources Wales). (The partnership included the Council for Conservation and the Countryside in Northern Ireland although Northern Ireland was not included in this survey.)

Organiser(s) Simon Gillings

Current Staff Contact archives@bto.org

Publications The report of the survey is: Gillings, S. & Fuller, R.J. 2009. How many Eurasian Golden Plovers *Pluvialis apricaria* and Northern Lapwings *Vanellus vanellus* winter in Great Britain? Results from a large-scale survey in 2006/07. *Wader Study Group Bulletin* 116: 21-28. It was noticed in *BTO News* numbers 264, 265 and 266.

Available from NBN?

No.

Computer data -- location

BTO Windows network central space.

Computer data -- outline contents

A database containing details and counts of selected tetrads. A file containing all casual records. WeBS counts are incoroporated into the WeBS Oracle database.

Computer data -- description of contents

A MSAccess database contains details of the tetrads which were selected, those which were surveyed and the counts.

This is extracted into an Excel file for each of Lapwings and Golden Plovers with columns for Tetrad, BTO Region, Unsuitable (True or False), Information Returned (True or False), and counts for October to February (blank = no count, zero= count but no birds, pocitive number = count of birds).

An Excel file containing the submitted casual records and an extract from Bird Track for the period. Columns are: 1-km square, source (BirdTrack (BT) or Casual Record Form (CRF)), Name of site, Date (as DD/MM/YYYY), month (taken from date), Golden Plover Count and Lapwing Count. For the last two a -1 means not recorded.

Information held in BTO Archives

Notes on Access and Use

Other information needed

Notes on Survey Design

Specific Issues for Analysis