

Non-estuarine Waterbirds Survey II

Title

Non-estuarine Waterbirds Survey (NeWS) II

Description and Summary of Results

The United Kingdom is internationally important for its numbers of wintering waterbirds, and many of these are monitored annually by the Wetland Bird Survey (WeBS) counts. However, the WeBS counts are mostly made on estuaries and inland waterbodies, therefore leaving the majority of the coastline uncounted. It is known that important populations of several species occur around our shores outside of estuaries, and consequently are not monitored annually.

In a bid to boost our knowledge of waterbird populations around the coastline, the 1984/85 Winter Shorebird Count (WSC) was organised by the BTO, and found that the non-estuarine coast held particularly important numbers of Ringed Plover *Charadrius hiaticula*, Sanderling *Calidris alba*, Purple Sandpiper *C. maritima* and Turnstone *Arenaria interpres*. Building on the success of the WSC, a repeat survey, the Non-estuarine Coastal Waterbird Survey (NeWS), was carried out over the 1997/98 winter. Comparing the results from NeWS to those of the WSC revealed declines in the numbers of Ringed Plover (-15%), Sanderling (-20%), Purple Sandpiper (-21%), Bar-tailed Godwit *Limosa lapponica* (-44%) and Turnstone (-16%). NeWS also suggested changes in the winter distribution of Ringed Plover and Purple Sandpiper, with the greatest densities of birds then recorded on the Western Isles. These changes could be linked to our changing climate, with milder winters allowing birds to winter further north.

In the winter of 2006/07 the BTO repeated the survey. There was plenty of anecdotal information to suggest that the populations of Purple Sandpiper and Turnstone at least had further declined since 1997/98. The survey built on the successful 1997/98 NeWS, and updated estimations of wader populations both within the UK and along the Eurasian Western Flyway.

The majority of observers were those already carrying out WeBS counts on nearby sites. Hence their experience of the species expected and usually the local area led to a high degree of confidence in what was recorded. The random sampling design ensured that the counts were representative.

There has to date not been a full report of this survey.

Methods of Data Capture

The priority for the survey was to count waders on the intertidal area, but counts of all species of waterbird on these areas were requested and the counts also included both those offshore and inland of the coastal section whenever possible. Only a single count of any piece of coastline was required between 1 December 2006 and 31 January 2007 (ideally

as close to mid-January as possible to coincide with the January International Waterbird Count) and within a 7 hour period commencing 3.5 hours before the advertised time of low water and finishing 3.5 hours after low water.

It was acceptable, although not ideal, to cover a stretch of coast in more than one visit. It was also not necessary to cover the whole stretch on a single coordinated count or even on consecutive days, although it was stated that they should not be too far apart.

All waterbird species were to be counted -- ie waders, wildfowl, divers, grebes, cormorants, shags, herons and egrets -- and they were to be recorded separately in three habitats:

a) the intertidal shore between the high and low tide marks (essential); b) the sea adjacent to the coast, to as far out as possible (unless particularly difficult); and c) the inland areas visible from or near the high water mark (unless particularly difficult).

Observers were asked to ensure that they covered the entire intertidal habitat and count all wader species within this area. On some areas of coastline, the sheer number and diversity of birds present, the weather conditions and the local geography made accurate recording of every species impracticable. In these circumstances an approximate count was considered better than no count, and observers were asked to bracket such counts (indicating they were a 'best guess'). It was also noted to be important to distinguish between No Count -- ie a species was present, but impossible to count -- and No Birds. Unlike the previous survey (which was complete) a representative sample of the previous NeWS count sections was selected for survey. The sections to be counted were supplied to local organisers as a list in descending order of importance, with the 'key' sections for coverage at the top of the list, and those of lesser importance at the end. These were based on those covered previously, and included sections known to have held both large and small numbers of waterbirds. Regional Organisers were asked to ensure that at the very least, the 'key' sections were covered.

The original count stretches were designated by field-workers who took part in the 1984/85 Winter Shorebird Count with some modifications following NeWS 1. Boundaries were usually defined by such as changes in substrate (eg rock meeting sand), rock outcrops etc or to enclose recognisable features such as a marina.

Ideally, the counts were carried out in good weather conditions, and started on a falling tide. Observers were asked to do their best to avoid double-recording and not to count birds only seen flying past.

Purpose of Data Capture

To update the status (numbers and distribution) of waterbirds, especially waders, along the non-estuarine coasts of the UK.

Geographic Coverage

2500 randomly chosen sample stretches of coastline from throughout the UK were selected for surveying. These were taken from those stretches which had been surveyed during the 1997/98 NeWS 1 survey.

Temporal Coverage

For each site one count was requested from 1 December 2006 - 31 January 2007 and it was to be done within a 7 hour period commencing 3.5 hours before the advertised time of low water and finishing 3.5 hours after low water.

Other Interested parties

It was organised and run by the BTO and endorsed by the WeBS partners (BTO, WWT, RSPB and JNCC). It was funded by the BTO, Joint Nature Conservation Committee, Natural England, Countryside Council for Wales (now Natural Resources Wales), Scottish Natural Heritage and the Northern Ireland Environment Agency -- specifically not through the WeBS partnership and not directly by RSPB.

(Previous surveys had been funded by: BTO and Nature Conservancy Council (1984/85) and the WeBS partnership (1997/98).)

Organiser(s)

Niall Burton

Current Staff Contact

webs@bto.org

Publications

None as yet.

Available from NBN?

No.

Computer data -- location

BTO Windows Network: a data directory within the NeWS directory.

Computer data -- outline contents

Definitive bird data are held in an Excel Workbook. There is also an associated GIS project defining coverage and an Excel extraction from this. Data for all three surveys (1984/85, 1997/98 and 2006/07) are contained in these files.

Computer data -- description of contents

GIS data, Count data and Visit data are in separate files.

Information held in BTO Archives

2 Archive boxes contain completed data sheets, 1 Archive box contains sheets for stretches not counted, 1 Archive box contains maps.

Notes on Access and Use

Requests for access to these data are treated as a WeBS data request. Note that the differential coverage of habitats (landward, intertidal and on the sea) between the three surveys means interpretation of some of the figures is not straightforward, and therefore requires some in-depth understanding to be able to do this correctly. Please consult as necessary before use.

Other information needed**Notes on Survey Design****Specific issues for Analysis**