

# Non-estuarine Waterbirds Survey III

## Title

Non-estuarine Waterbirds Survey (NEWS) III

## 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. Building on the success of the WSC, a repeat survey, the Non-estuarine Coastal Waterbird Survey ([NEWS I](#)), was carried out over the 1997/98 winter. In the winter of 2006/07 the BTO repeated the survey ([NEWS II](#)).

The latest repeat of the survey (NEWS III) was carried out in the winter of 2015/16. 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 was retained from NEWS II to ensure that the counts were representative. NEWS III covered 9183 km or 53% of the UK's non-estuarine coast. Abundance estimates and confidence limits were calculated for 13 key wader species wintering on the non-estuarine coast. Overall, four species of waders wintering on the non-estuarine coasts of the UK have decreased or shifted their range since the winter of 2007/08: Lapwing (-57%), Curlew (-31%), Redshank (-37%) and Turnstone (-32%). Only one species increased: Sanderling (+79%). Possible reasons underlying these changes are discussed in the results paper (see Publications section below).

## 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 2015 and 29 February 2016 (fieldwork was extended to the end of February due to strong winds and heavy rain earlier in the season). NEWS III was the first NEWS survey to encourage multiple visits during the season but for the purposes of the analysis, priority was given to visits carried out closest to 15th January (to coincide with the January International Waterbird Count).

All waterbird species were to be counted – i.e. 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. They were also asked to score the extent of deposits of beach-cast seaweed, enabling estimates of relative amounts of this resource to be produced. Full instructions can be seen [here](#).

For NEWS II a representative sample of the NEWS count sector was selected for priority survey to avoid bias from preferential selection of more productive areas of coast. For NEWS III, the same samples which had been randomly selected for NEWS II were retained as priority sectors, in order to prioritise obtaining paired data for the sections surveyed previously. The sections to be counted were mapped in WeBS Online for Local Organisers who could only allocate additional non-priority sectors once all the priority sectors in a region had been allocated. The aim was to achieve overall coverage equating to at least 50% of the non-estuarine coast in the UK.

Each NEWS III sector was approximately 2 km in length. The original count stretches were designated by field-workers who took part in the 1984/85 Winter Shorebird Count with some modifications following NEWS I and NEWS II. 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 and make comparisons with the previous surveys.

### **Geographic Coverage**

2030 of the 2560 priority sample ~2km sectors of coastline in the UK were covered during NEWS III, and in total 4059 of the 7631 sectors of coastline including non-priority sectors were covered.

### **Temporal Coverage**

For each site one count was requested from 1 December 2015 – 29 February 2016 and observers were asked to carry out counts from the shore at low water (functionality to

record counts at high tide was added for this survey; however counts at high tide represented less than 0.5% of all counts).

### **Other Interested parties**

It was organised and run by the BTO and endorsed by the WeBS partners (BTO, RSPB and JNCC, in association with the WWT). NEWS III was supported financially by Scottish Natural Heritage, Natural England, Natural Resources Wales, the Department of Agriculture, Environment and Rural Affairs, Northern Ireland, the WeBS partnership and the Irish Wetland Bird Survey (a joint project of BirdWatch Ireland and the National Parks and Wildlife Service).

### **Organiser(s)**

Dawn Balmer, Heidi Mellan and Teresa Frost

### **Current Staff Contact**

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### **Publications**

Humphreys, E.M., Austin, G.E., Frost, T.M., Mellan, H.J, Boersch-Supan, P., Burton, N.H.K. and Balmer, D.E. 2020. Wader populations on the United Kingdom's open coast: results of the 2015/16 Non-Estuarine Waterbird Survey (NEWS-III) and a review of population trends. *Bird Study* **67**: 371-384. Doi: <https://doi.org/10.1080/00063657.2021.1884184>

Graham Austin, Teresa Frost, Heidi Mellan, Dawn Balmer 2017. Results of the third Non-Estuarine Waterbird Survey, including Population Estimates for Key Waterbird Species. Research Report no. 697. British Trust for Ornithology, Thetford, Norfolk ISBN: 9781908581860 69pp

### **Available from NBN?**

Yes

### **Computer data -- location**

All data are stored in the BTO's online Oracle database

### **Computer data -- outline contents**

Definitive data are held in Oracle, including bird data for the previous surveys (1984/85, 1997/98 and 2006/07).

### **Computer data -- description of contents**

Visit, observation, habitat, wrack, disturbance and location data are stored in Oracle tables, as are results outputs including coverage and regional population estimates.

**Information held in BTO Archives**

None – all data are held online.

**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**