

# UK SPA SCIENTIFIC WORKING GROUP

## 17 January 2002

### Developing the Wetland Bird Survey

#### Background on the process

The Wetland Bird Survey (WeBS) is a joint scheme of the British Trust for Ornithology (BTO), The Wildfowl & Wetlands Trust (WWT), Royal Society for the Protection of Birds (RSPB) and Joint Nature Conservation Committee (JNCC) to monitor non-breeding waterfowl in the UK. The principal aims of the scheme are to identify population sizes, determine trends in numbers and distribution, and to identify important sites for waterfowl. WeBS Core Counts are made annually at around 2,000 wetland sites of all habitats; estuaries and large still waters predominate. Monthly co-ordinated counts are made mostly by volunteers, principally from September to March, with fewer observations during summer months. WeBS Low-tide Counts have been made in 62 estuarine sites throughout the UK. Counts are not made annually, but are repeated typically every six years, however, more frequent coverage has been made on some sites. Co-ordinated counts are made monthly from Nov to Feb.

The scheme produces an annual report, *Wildfowl and wader counts*, which is widely disseminated and will be familiar<sup>1</sup>. This summarises the counts for the preceding count year. Data from other sources, e.g. roost counts of grey geese, are included in these reports where relevant.

#### Current and planned activity

A range of activity is currently underway to underpin and enhance the capabilities of WeBS. These include:

##### **The Count Unit Definition Inventory (CUDI)**

Not all count sectors used by WeBS exactly match statutory sites boundaries. This issue is being addressed through the WeBS CUDI project. This is progressing through a series of phases:

- i. Provision of maps of existing count sectors by all WeBS counters, and collation of these;
- ii. A pilot project to assess the degree of mismatch between count sector boundaries on a small sample of estuarine SPAs;
- iii. A full assessment of the match between WeBS count sector boundaries on all SPAs;
- iv. Consideration of exactly which count sector boundaries need realigning on which SPAs and for what reason;
- v. Negotiation with counters to achieve these changes;
- vi. Steps iii to v above for all waterbird Ramsar sites; and
- vii. Steps iii to v above for all waterbird ASSIs/SSSIs.

Stages i to iii above are complete. Stage iv is due for discussion within the WeBS partnership. The issues are complex and in making any changes to count regimes it will be important to maintain the ability for future analyses to map onto units used in the past. This is especially important for work such as the Alerts system (below).

Stages v, vi and vii have yet to commence.

##### **The Integrated Waterbird Database**

A fully integrated database system is under development by the WeBS Secretariat. This will have the ability to store and retrieve not only data collected under the core counts scheme, but also the multiplicity of other waterbird count data collected and reported (e.g. non-estuarine wader counts, grey goose censuses, etc.). Low-tide count data will be managed by BTO to an identical format to the IWD.

The IWD will have the capability to deliver desk-top access to relevant data for staff of the WeBS partnership as well as web-based access to certain elements of data (initially the level of data presented in *Wildfowl and wader counts*).

**Re-estimation of national population sizes of wintering waterbirds in Great Britain and All Ireland**  
See paper on *National and international waterbird population estimates*.

It is also pertinent to note that means of relating count units to land class categorisations are currently under discussion. This may allow a pseudo-stratification of data from counts against land classes and hence better precision in deriving population estimates. It will also provide guidance as priorities for any necessary sampling of remoter areas where current count coverage is poor.

**The development of a WeBS Alerts scheme**

Work is currently underway to develop an alerting system for WeBS. This aims to use annually collected counts of non-breeding waterbirds to provide an objective means of indicating the significance of the changing numbers, against defined thresholds, of:

- UK populations of some non-breeding waterbirds;
- numbers of particular species on those sites which have been statutorily designated for them; and
- patterns of population changes at other scales (e.g. regional or country).

The alerting system depends on the analysis and interpretation of population trends over pre-defined periods to enable current changes in numbers to be placed in the context of the past.

The immediate work derived from research undertaken by BTO was presented at a workshop held in Peterborough in autumn 1998. That workshop reviewed previous alerting work with a range of national and international specialists and organisations, and made recommendations for the future development of both national and site-based alerts systems for non-breeding waterbirds.

Since then, a three-year pilot programme has been undertaken to develop the concept. Work in the next year (2002/3) involves:

- i. The drafting (funding permitting), by BTO, of a scientific paper outlining the alerting methodology, and its submission for publication early in the year, with the aim of acceptance for publication by mid 2003.
- ii. Following agreement on presentational options in mid-2002, the preparation of a 'full' dummy presentation of WeBS alerts using 2001/2 data. This would be prepared over winter 2002/3 and the alerting mock-up would be circulated in February 2003 to wide range of users in country agencies, RSPB and elsewhere. We would pro-actively seek feedback from users via an associated questionnaire.
- iii. Modifications may then be made in presentational options, in the light of feedback, prior to the 'public' launch of WeBS alerting. This would now occur in the annual report for count season 2002/3 (anticipated publication March 2004). By this time, the methodology paper will have been published.

**The Low Tide Count Atlas**

Work is well underway to prepare an atlas of the low tide count data collected in the first seven years of the scheme. The atlas will give a detailed overview of the scheme, illustrate the distribution of selected species in each of the sites covered, provide a UK overview of each species at low tide and will provide practical advice on the use of low tide data for conservation work. Publication is planned for summer 2002.

**SPAs not currently surveyed by WeBS**

A number of SPAs are not currently surveyed by WeBS on a regular basis. These tend to be in the remoter areas of Scotland. Waterbird data for these sites have historically been derived from either *ad hoc* surveys or professional surveys aimed at SPA identification.

An initiative is currently underway between the WeBS partners and country agencies to derive a priority list of sites for long-term monitoring by WeBS. Part of this process (linked to the Common Standards Monitoring initiative – see separate paper) will address monitoring needs at these un-surveyed sites and assess whether it is feasible or not for WeBS to extend its coverage.

## Implications for the future development of the UK SPA network

All the initiatives above will have implications – to varying degree – for the SPA network. Of particular importance is the completion of the Integrated Waterbird Database (which will greatly enhance routine reporting capabilities) and the CUDI project.

## Recommendations

In the light of the activity outlined above, it is recommended that the UK SPA Scientific Working Group:

- **Invite** WWT and JNCC to report on progress in developing the Count Unit Definition Inventory later in 2002 in the light of current discussions regarding the issues involved in matching the boundaries of count units and those of statutory sites.
- **Invite** WWT and JNCC to report on progress in enhancing the reporting capability of WeBS for SPAs once the IWD is established (*i.e.* establishment of annual statistics of waterbird numbers on the SPA network drawn annually from WeBS data).

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8 January 2002

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i Musgrove, A., Pollitt, M., Hall, C., Hearn, R., Holloway, S., Marshall, P., Robinson, J. & Cranswick, P. 2001. *The Wetland Bird Survey 1999-2000: Wildfowl and Wader Counts*. Slimbridge: BTO, WWT, RSPB & JNCC. 201 pp.