WeBS News

Newsletter of the Wetland Bird Survey

Issue no. 20 Summer 2004

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WeBS Alerts —

a standardised method of identifying changes in waterbird numbers in the UK

WeBS data have long been used to shape conservation, particularly to identify priorities. Here, ***Graham Austin****,* ***Sarah Jackson****,* ***Heidi Mellan****,* ***Jenny Worden*** *and* ***Peter Cranswick*** *explain a new approach being used to provide consistent and straightforward guidance to decision makers about potential conservation concerns highlighted by WeBS data…*

Continued monitoring of wintering waterbirds in the UK is essential if populations are to be managed and conserved effectively. A key use of data thus collected is to identify and measure changes in numbers, to highlight where conservation action should be directed.

The WeBS Alerts System has been developed to provide a standardised method of identifying the direction and magnitude of changes in numbers of waterbirds. Alerts are issued for those species that have undergone major declines and can be flagged for a number of spatial scales, from individual sites such as Special Protection Areas (SPAs) to the whole of the UK, and over a variety of time periods. The Alerts are advisory and, subject to careful interpretation, provide a platform from which to direct research and subsequent conservation efforts.

The Alerts process assesses the change in numbers over short-, medium- and long-term periods (5, 10 and 25 years, respectively). Raw counts are first converted into annual indices (using counts from those months in which wintering numbers of the particular species are most stable). A smoothed line is fitted through the indices using a 'Generalised Additive Model' (or GAM), a specialised statistical technique. Changes in numbers are then calculated using values from the smoothed trend.

A smoothed trend is used to iron out temporary fluctuations that are apparent when using raw index values. For example, natural temporary fluctuations, such as

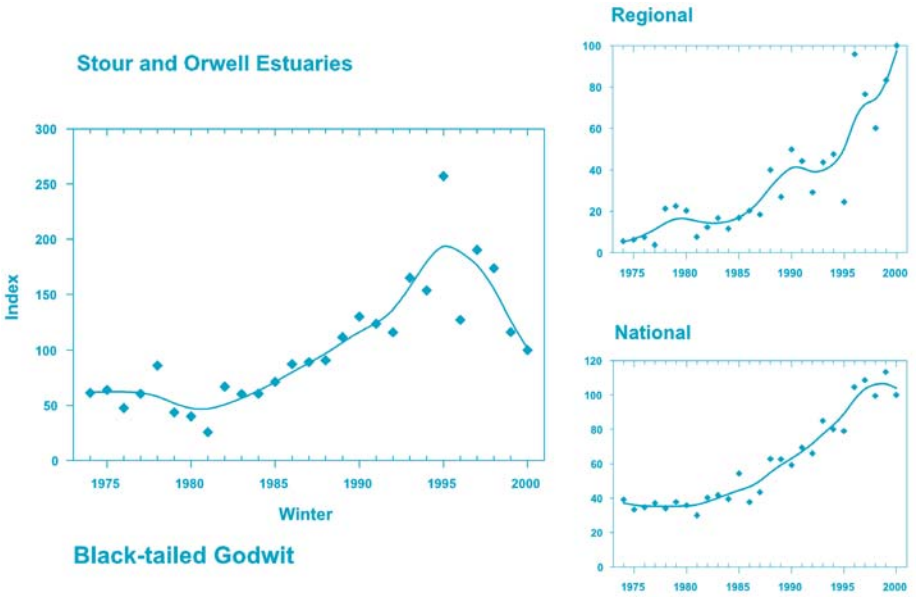

Figure 1. *Annual indices and smoothed trends for Black-tailed Godwit for the Stour & Orwell Estuaries SPA, Environment Agency Anglian Region and Great Britain as a whole (national).*

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The Wetland Bird Survey (WeBS) is the monitoring scheme for non-breeding waterbirds in the UK which aims to provide the principal data for the conservation of their populations and wetland habitats. The data collected are used to assess the size of waterbird populations, assess trends in numbers and distribution, and identify and monitor important sites for waterbirds. A programme of research underpins these objectives. Continuing a tradition begun in 1947, around 3,000 volunteer counters participate in synchronised monthly counts at wetlands of all habitat types, mainly during the winter period. WeBS is a partnership between the British Trust for Ornithology, The Wildfowl & Wetlands Trust, Royal Society for the Protection of Birds and the Joint Nature Conservation Committee (the last on behalf of the Countryside Council for Wales, English Nature, Scottish Natural Heritage and the Environment & Heritage Service in Northern Ireland).

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Cover photograph by Mark Pollitt.

Line drawings by Mark Hulme, Dan Powell, Cliff Robinson, Sir Peter Scott, Helen Shackleton.

Designed and typeset by Alcedo Publishing, Pennsylvania, USA • engli@mailsnare.net

Printed by Crowes of Norwich, UK • (01603) 403349 • graphics@crowes.co.uk

Printed on Barbican Laser Matt paper in Cheltenham ITC BT and M Gill Sans fonts

Published by BTO/WWT/RSPB/JNCC.

Editorial

April 2004 saw a major and truly international conference on waterbirds — and specifically their conservation. Organised by Wetlands International, over 450 participants from 90 countries met in Edinburgh, some 40 years after the first such meeting — coincidentally in Scotland, nearby at St Andrews. Since then, there have been six similar conferences, including in 1971 that in Ramsar, Iran, a location now immortalised as the familiar and thankfully shorter name of the first international convention regarding the conservation of waterbirds and wetlands which was ratified at that meeting.

The 2004 conference reviewed many aspects of waterbird status and conservation worldwide, and greater detail is given elsewhere in this edition of *WeBS News*, but it is worth highlighting here some key statements from a formal declaration of the participants at the close of the conference. Namely, that the conference was 'Alarmed at the perilous state of many populations of waterbirds…and at the continued decline in quality and extent of the world's wetlands' and that 'The conference parties…call in particular for urgent action to…underpin future conservation decisions with high-quality scientific advice drawn from co-ordinated…research and monitoring programmes notably the International Waterbird Census'.

Noteworthy, also, was the address to a meeting of the co-ordinators of the national waterbird monitoring schemes by Nick Davidson, Deputy Secretary General of the Secretariat to the Ramsar Convention, who remarked upon the absolutely critical and fundamental role that these schemes play in highlighting the conservation issues for waterbirds and wetlands at a global scale, and expressed his thanks for those efforts.

It is a pleasure to pass on this message to those who provide these data, and I hope that you might also feel justifiably proud that, by participating in WeBS, you are contributing to a worldwide and arguably the most important and effective monitoring scheme for conservation globally. And, in a brief moment of nationalistic fervour, we might also take pride in the fact that the UK scheme was used as the model for the now global counts; indeed, the IWC was shaped by the co-ordinators of what was then the National Wildfowl Counts at the Wildfowl Trust, Slimbridge. It is probably fair to say also that WeBS remains one of the pre-eminent national schemes and that it continues to influence the worldwide programme through, for example, the development of alerts.

Such periodic reviews are an essential part of any long-term goal or programme. WeBS partners have similarly been reviewing the operation of the scheme, and the outcomes of recent deliberations are reported elsewhere in this newsletter. Such a retrospective reflects and seeks to build upon the strengths of the scheme, and although the success of WeBS is, in my view at least, based primarily upon two key factors — the counter network, and the steerage and innovation of the four WeBS partner organisations — it is worth noting also the contribution of individuals.

Ray Waters, BoEE Organiser and then the first national organiser following the change to WeBS, sadly died earlier this year. Ray was influential in shaping the new scheme, and I remain grateful for his considerable help and assistance when the already longest-running and largest UK bird monitoring schemes were merged into one and he and I were charged with ensuring a smooth transition, and, indeed, that the new scheme should be bigger and better than the sum of its parts! My personal memories of Ray always make me smile, not least the striking image he cut at counter conferences with an unashamedly unconventional dress sense! A full retrospective is given by some of his friends on page 14.

Another key individual who has had considerable influence on WeBS is Mark Pollitt, who left WWT in February. Mark's ten years in WeBS saw some considerable advances in the scheme. Mark had a particular eye for detail and what is perhaps best described as a 'passion' for accuracy — a quality that will serve him and Dumfries & Galloway well in his new incarnation as their Local Biological Recorder. The amount and detail of data generated by WeBS grew substantially, both for the counts themselves and also, for example, counter information, over those ten years. Dealing with this mass of information is an unglamorous side to the job, but essential to the smooth running and operation of a scheme of this magnitude, and it is largely thanks to Mark's endeavours that this was managed effectively. Most importantly, Mark was very aware of the value of counters, and, without fail, he spent much time ensuring, as far as possible, that participating in the counts was as easy as possible (the considerable number of drafts and redrafts of recording forms and instruction sheets in particular bears testament to this, while the greatly enhanced WeBS Newsletter — both in style and content — was almost entirely of Mark's making). I hope you will agree and, like me, wish him well now that he has migrated to his beloved Scotland.

Peter Cranswick

Changes to WeBS

As noted in the last edition of *WeBS News*, all four partners have been reviewing the WeBS scheme in recent months, considering both advances to the programme of work and the most efficient and effective means of delivering a high quality scheme for the benefit of conservation.

Following the review, all partners have agreed that that the most efficient way of operating the scheme is for a single organisation to act as the 'operating partner'. Consequently, as from this summer, the BTO will take sole responsibility for delivering the scheme — from liaison with and feedback to counters, organising surveys, managing and providing the data, to reporting the results.

As part of the review, a number of new developments have been agreed and will be implemented over the coming years. Of particular relevance will be new facilities designed to assist and benefit counters. Central to these will be a dedicated WeBS web site. This will provide existing and new information for download, such as copies of recording forms, priority count dates, guidance notes, contact details and other relevant information. The WeBS annual report will also be available on-line, and it is likely that many of the larger and detailed tables of figures will be migrated to this medium over time. An exciting new development will be the ability for counters to submit their data on-line — providing quick feedback to partners of counts and, we hope, contributing in a small way to the 'paperless' office — though this major project will take some while to implement fully. This service should also allow counters ready access to their data, and assist partners by enabling counters to confirm the validity of data stored in the WeBS database. Of course, for those without easy access to the internet, or who simply prefer to use more traditional methods, paper copies of forms and reports will also be available and distributed through the existing channels.

The web developments will also provide a crucial new tool for WeBS partners, giving quick access to electronic data, from the boundaries of count sites to the count data themselves. This instant access will be of particular value in allowing partners to deal with conservation issues in the seemingly ever-shorter deadlines of today's world. Indeed, it should enable the Country Conservation Agencies to provide up-to-date counts and advice within the same day to senior officials and, when the situation demands, even to MPs and ministers.

With these new developments for increased communication with counters, it has, at least for the time-being, been decided to issue just one WeBS Newsletter per year, while the current annual counter conferences have been dropped. Whilst this format was known to be extremely successful, it was felt that considerable resources were spent reaching only a very small proportion of the counter network. Instead, greater resources have been allocated for WeBS staff to make more site and local visits, and, we hope, interact more closely with the network, both face-to-face and via email or phone.

Clearly, these changes are significant, but they do not alter the fundamental drive or makeup of WeBS which remains a partnership of four organisations committed to a monitoring scheme that underpins the conservation of waterbirds and wetlands, and committed, of course, to the network of counters upon which that scheme is based.

WWT, for those who are wondering, remains a key partner in WeBS and will, in equal measure with BTO, RSPB and JNCC, direct the scheme's development and oversee its delivery. We will continue to use our skills and expertise in wildfowl monitoring, research and conservation to ensure the success of WeBS. We will also continue to organise complementary surveys of waterbirds in the UK and, at that point, will approach counters to ask for your assistance — and we hope to continue the close and, in many cases, personal contacts that we have enjoyed for many years.

We hope you agree that these new developments will benefit waterbirds and conservation, and we hope that you will see improvements and enhancements from your perspective also. As with any changes, these may take a little while to bed in and, whilst we are confident that we can effect the changes smoothly and efficiently with the minimum of disruption (and great progress has already been made behind the scenes), we hope you will bear with us during this period should everything not go entirely according to plan!

Again, our considerable thanks for your continued support.

Peter Cranswick

WeBS Alerts

...continued from page 1

those caused by variation in the severity of conditions over the winter period, can differ in size and/or direction from longer-term trends, hindering their interpretation. Extreme values could trigger false Alerts if short-term declines are misinterpreted as longer-term trends. Thus, using the smoothed trend reduces the probability that a decline following a short-lived peak in numbers would be responsible for triggering an Alert; a decline from a period of sustained high numbers would, however, trigger an Alert and clearly would be worthy of investigation.

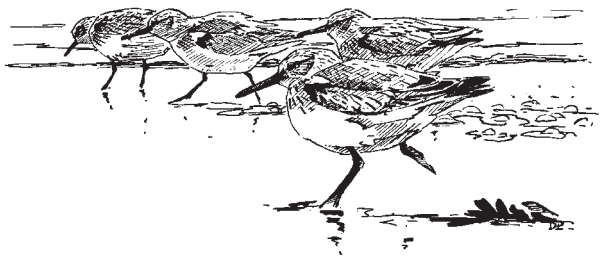
Increases or decreases in the smoothed trend are calculated as the proportional change over the relevant time period and are categorised according to its magnitude and direction: thus, declines of between 25% and 50% trigger Medium Alerts and declines of greater than 50% trigger High Alerts. Although they do not trigger Alerts, increases of 33% and 100% (values chosen to be those necessary to return numbers to their former size following declines of 25% and 50%, respectively) are also identified.

Figure 1 shows trends in the numbers of Black-tailed Godwit on the Stour & Orwell Estuaries SPA since the 1970s and the equivalent trends at the regional and national scales. Raw index values are shown as diamonds; the smoothed line, showing the underlying trend, is used to assess whether an Alert should be raised. In this case, a Medium Alert has been triggered for Black-tailed Godwits at the SPA over the most recent 5-year period.

A schedule has been identified that will assess national trends for all species annually, while protected sites (SPAs and SSSIs/ASSIs) with a waterbird interest will be assessed on a rolling cycle (once every three years for the former, six years for the latter). To date, the Alerts status of waterbirds has been reported for 61 designated sites (50 SPAs and 11 SSSIs) helping to focus attention on those species and sites giving particular cause for concern.

The full report can be found at http://blx1.bto.org/webs/alerts/index.htm where you can also download information for particular regions or sites. An example of the application of alerts is given in another article in this newsletter.

Graham Austin, Sarah Jackson, Heidi Mellan, Jenny Worden and Peter Cranswick

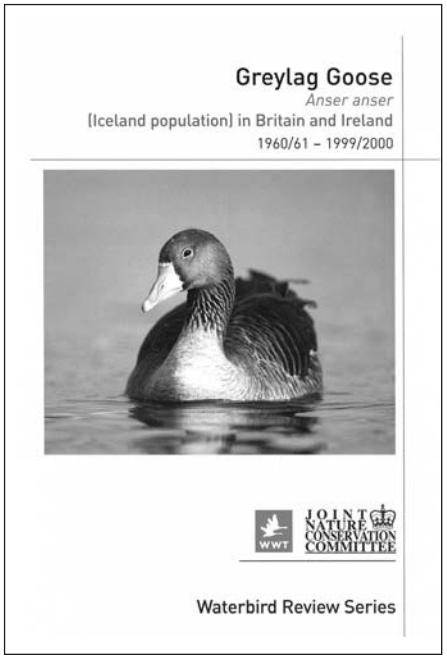


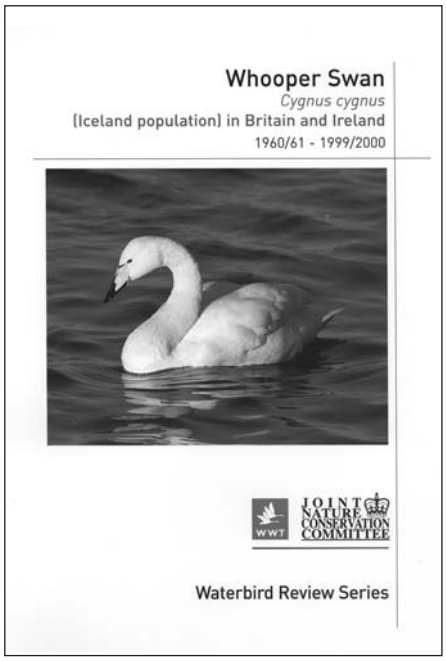
The Waterbird Review Series — the importance of site inventories for Britain's wintering goose and swan populations

The UK is of international importance to wintering geese and swans, with several populations wintering almost exclusively in Britain, including Icelandic Greylag and Pink-footed Geese, and Svalbard Light-bellied Brent and Barnacle Geese. Long-term monitoring of these and other important populations has helped determine their numbers, trends and distributions. It has also identified key wintering haunts — information crucial to their effective conservation and management at a variety of scales.

International agreements such as the African-Eurasian Waterbird Agreement (AEWA) call for coordinated conservation and research to ensure that such migratory waterbirds have favourable conservation status. The UK undertakes a wide range of conservation actions that contribute to AEWA's objectives, including habitat conservation, research, monitoring and management of human activities, to the benefit of migratory waterbirds. The Agreement specifically requires Contracting Parties to identify sites that are important for listed species, and to encourage their protection, management and, where appropriate, restoration.

In response, WWT and JNCC have published a series of site inventories for all major wintering goose and swan populations in the UK. The Waterbird Review Series collates up to four decades of data and information from long-term studies and monitoring programmes. In each review, abundance, distribution and ecology are described for the population concerned, particularly at sites in Britain and Ireland but also more widely across the population's range. A detailed inventory of sites of current and former importance is given, presenting numbers and trends, with a summary of the protection status and use of each site. These reviews will provide a valuable tool for conservation managers and decision makers, not only those with a concern for particular sites but also those with wider national and international perspectives. The inventories will also be of interest to professional and non-professional ornithologists.





These reviews have, for each population, highlighted deficiencies in our knowledge, the need for continued and enhanced monitoring, and priority areas for future survey and research. Monitoring has historically focussed predominantly on wetland sites but many swan and goose species feed on semi-natural and agricultural habitats, many of which have not been systematically considered when designating important areas (see article in this newsletter on the importance of feeding areas outside SPA boundaries — Inland feeding of Dark-bellied Brent Geese).

These inventories demonstrate once again the value of long-term monitoring schemes and thanks go to the many skilled and dedicated volunteers who contribute the waterbird data on which assessments such as this are based.

Jenny Worden

The Waterbird Review Series consists of the following titles and will be available on the WWT website www.wwt.org.uk:

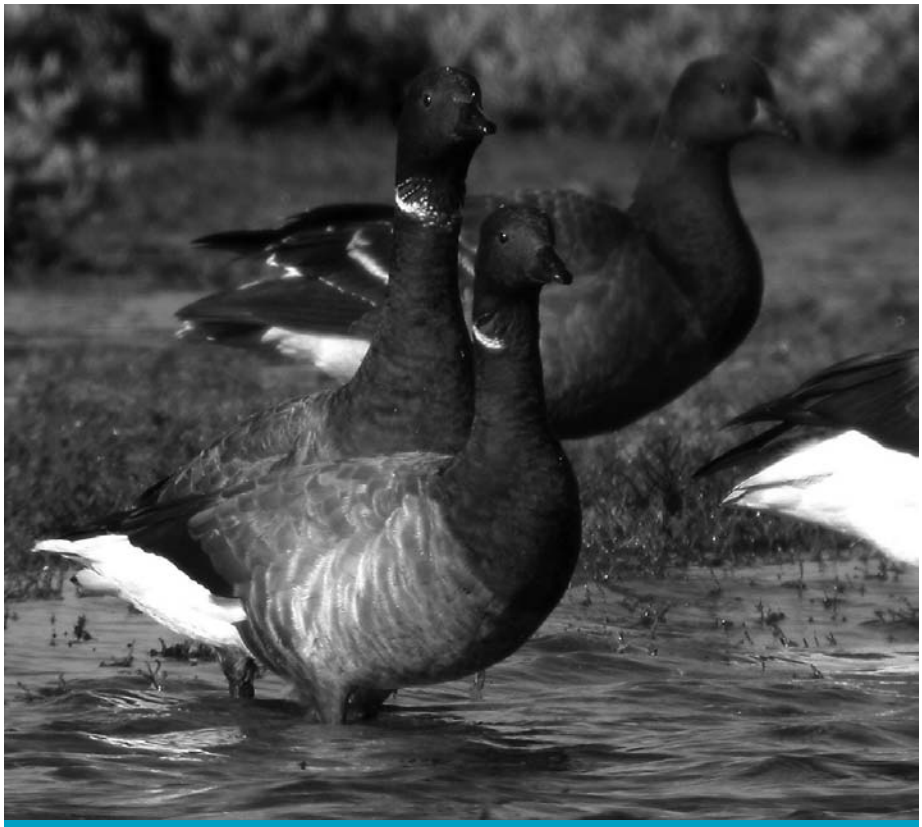
- The Mute Swan *Cygnus olor* (Britain and Ireland populations) in Britain and Northern Ireland 1960/61 – 2000/01
- Bewick's Swan *Cygnus columbianus bewickii* (Northwest Europe population) in Britain and Ireland 1960/61 – 1999/2000
- Whooper Swan *Cygnus cygnus* (Iceland population) in Britain and Ireland 1960/61 – 1999/2000
- Bean Goose *Anser fabalis* in Britain and Ireland 1960/61 – 1999/2000
- Pink-footed Goose *Anser brachyrhynchus* (Greenland/Iceland population) in Britain and Ireland 1960/61 – 1999/2000
- Greater White-fronted Goose *Anser albifrons albifrons* (Baltic/North Sea population) in Britain 1960/61 – 1999/2000
- Greylag Goose *Anser anser* (Iceland population) in Britain and Ireland 1960/61 – 1999/2000
- Barnacle Goose *Branta leucopsis* (Greenland population) in Britain and Ireland 1956/57 – 2002/03
- Dark-bellied Brent Goose *Branta bernicla bernicla* in Britain 1960/61 – 1999/2000
- Light-bellied Brent Goose *Branta bernicla hrota* (East Canadian High Arctic population) in Canada, Ireland, Iceland, France, Greenland, Scotland, Wales, England, the Channel Islands and Spain 1960/61 – 1999/2000
- Light-bellied Brent Goose *Branta bernicla hrota* (East Atlantic population) in Svalbard, Greenland, Franz Josef Land, Norway, Denmark, the Netherlands and Britain 1960/61 – 2000/01

Inland feeding of Dark-bellied Brent Geese

In 2003, WWT undertook a survey to identify and characterise inland feeding areas of Dark-bellied Brent Geese around the 19 UK SPAs selected for this population. To investigate use of cropped habitats by this species, a questionnaire was designed and sent out to relevant local experts for each SPA. This enabled general patterns in habitat use across the SPA suite to be determined but, because of differences in the amount and type of information, they should be treated with caution.

Inland feeding was recorded at all sites for which information was provided. The use of inland feeding areas was recorded to varying extents at all surveyed sites in winter, at nine sites in autumn, and ten sites in spring, although at most sites, a large proportion of the total number of birds found during WeBS counts was noted to use inland areas. For each SPA, inland feeding areas are generally located just outside the SPA boundary. Overall, at the18 sites for which data had been provided, feeding on permanent pasture was recorded at 38%, on fertilised pasture at 63%, on winter cereals at 88%, on oilseed rape at 38%, on golf courses at 19%, on amenity/recreational land at 25%, and on other grassed habitats at 19%. There were no records of birds feeding on spring cereals.

Seasonal differences in the use of inland habitats across the SPA suite are shown in Figure 1. The relative use of different habitats by Dark-bellied Brent Geese remained very similar through the non-breeding season, with winter cereals being used more frequently than any other habitat in each of the three seasons. The amount of time spent feeding on improved permanent pasture, winter cereals and oilseed rape peaked in winter. In contrast, the use of permanent pasture increased through until spring. Birds only used golf courses and amenity/recreational land after November.



Dark-bellied Brent Geese / Paul Marshall

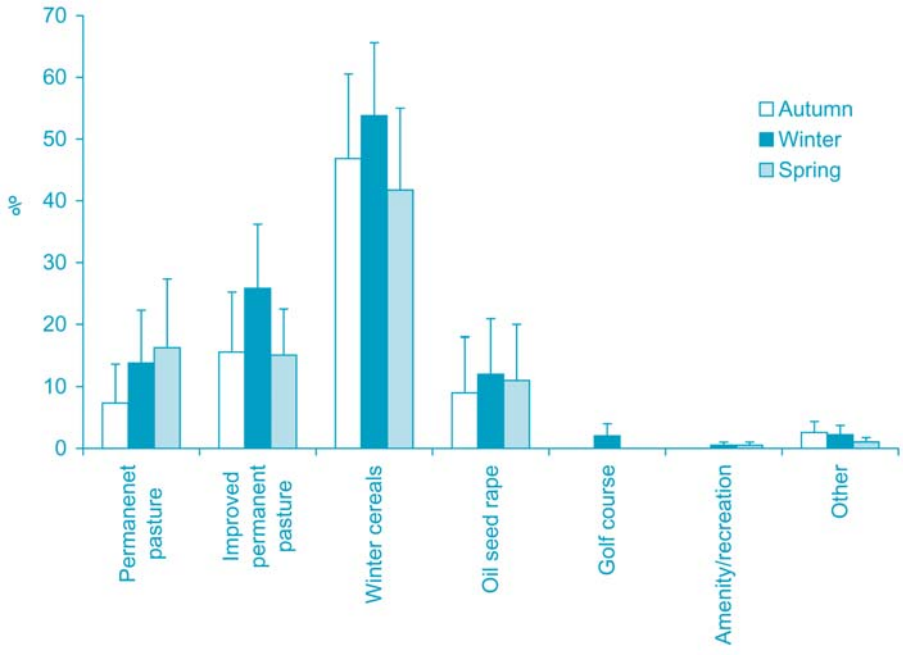


Figure 1. *Mean percentage use of different inland feeding habitats by Dark-bellied Brent Geese in and around SPAs in the UK (errors bars represent one standard error)*

This study has highlighted the importance of inland feeding areas for Dark-bellied Brent Geese outside the UK SPA suite. Consideration should thus be given to the inclusion of these areas within the SPA as part of a functional site for the birds, in keeping with the principle of the 'most suitable territories'. It has also demonstrated that, although there is a large amount of information gathered on habitat use by this species, detail varies markedly between sites and information is generally not collected using any standard methodology. To improve the monitoring of habitat use for this and other large herbivorous waterbirds, there is a need to develop internationally standardised methods to inform the future conservation and management of international site networks.

Helen Rowell

Rowell, HE & JA Robinson. 2004. *Feeding areas for Dark-bellied Brent Geese Branta bernicla bernicla around Special Protection Areas (SPAs) in the UK*. The Wildfowl & Wetlands Trust, Slimbridge.

Conservation .....Update

waterbirds AROUND THE WORLD

Waterbirds around the World

The largest global waterbird conference for a decade took place in Edinburgh on 3-8 April 2004. Organised by Wetlands International, the UK and Dutch Governments, over 450 delegates from 90 countries assembled to assess the status and conservation of the world's waterbirds.

It was timely that such a gathering took place in 2004, 40 years after the first European wildfowl conference was held in St. Andrews, and 10 years after the major 'Anatidae 2000' conference was held at the European Parliament in Strasbourg. 2004 is also the 25th anniversary of the Convention on Migratory Species (Bonn Convention) and the EC Directive on the conservation of wild birds, as well as the fifth anniversary of the African-Eurasian Migratory Waterbird Agreement.

WeBS partner organisations were well represented at this meeting. WWT convened symposia on Flyway management for species of conservation concern and on implications of climate change for waterbirds, and BTO staff convened a symposium on migration and flyway atlases. A number of presentations and posters that made use of WeBS data were also given, including a review of the importance for waterbirds of the UK SPA network, the WeBS Alerts system and the Waterbird Review Series.

Listening to the presentations and discussions at this conference, it was clear that conservationists have amassed a vast amount of knowledge of the world's waterbirds in recent decades, and achieved many conservation successes. But it was clearer still that immense challenges remain. Large-scale issues such as threats posed by climate change and dramatic declines of some southern ocean seabirds, in particular albatrosses, received much attention and helped to publicise the Conference and its messages. But many other more straightforward challenges were also highlighted. For example, for nearly a quarter of the world's waterbirds we do not have a basic population estimate, and for a half there is no indication of the trend of the population. As all WeBS counters will be aware, such information is a basic prerequisite to sound conservation, and these gaps are something that the global conservation community should urgently strive to address - not least given the expressed desire of world leaders to stop the biodiversity declines by 2010.

Thus, the importance of accurate and repeated population estimates could not have been emphasised further at this conference. They are the building blocks of waterbird conservation and WeBS counters can therefore be justifiably proud of their contribution to one of the most effective waterbird monitoring schemes in the world.

The Conference ended by producing 'The Edinburgh Declaration', a top-level summary

Identifying possible factors in waterbird declines on Special Protection Areas

The WeBS Alerts system described on page 1 was employed in a recent study by BTO and WWT which examined waterbird population trends on English and Welsh SPAs. The study was commissioned by the Environment Agency (EA) as part of its programme of reviewing possibly damaging activities for which consent has been given. WeBS Alerts do not aim to identify or explain the causes underlying declines on a site but rather focus attention on those sites or those species on a particular site giving particular cause for concern. The EA project took the Alerts process one step further by attempting to assess the factors affecting population trends.

Phase I of the study used the WeBS Alerts methodology to identify declines and those sites where there was particular cause for concern. In total, 24 sites warranted further investigation: the Dee Estuary, Walmore Common, Severn Estuary, Chichester & Langstone Harbours, Medway Estuary & Marshes, Solent & Southampton Water, Abberton Reservoir, Benfleet & Southend Marshes, Blackwater Estuary, Colne Estuary, Hamford Water, Ouse Washes, Stour & Orwell Estuaries, the Wash, Lindisfarne, Lower Derwent Valley, Northumbria Coast, Teesmouth & Cleveland Coast, Duddon Estuary, Martin Mere, Mersey Estuary, Morecambe Bay, Ribble & Alt Estuaries and the Upper Solway Flats & Marshes.

Phase II of the work began with an assessment of whether trends in species' numbers at each SPA might be explained by regional or national trends. Environmental factors such as climate change, changes in wintering numbers owing to changes in productivity on the breeding grounds, and regional improvements in water quality, were considered. Relationships between long-term trends in local climate and changes in bird numbers were explored, and trends mapped to identify clustering of large-scale declines of one or more species.

Following this initial appraisal, factors that may have potentially caused declines at these sites were investigated - considering both those related to EA consents and other factors. This part of the study involved consultation with local experts, many of whom were WeBS counters with detailed and long-term knowledge of their particular site. The help we received from those counters who kindly completed questionnaires and participated in discussions held locally was invaluable, and thanks go out to all those who were involved.

A wide variety of factors were identified as potentially affecting waterbird numbers at the site level. These included changes in water quality (such as those resulting from the implementation of the recent Bathing Water and Urban Waste Water Treatment Directives — which have reduced organic inputs into coastal waters), pollution, changing water levels, dredging, increased recreational disturbance, habitat change and severe weather events. In addition changes in waterbird numbers at adjacent sites were also considered important in a number of cases.

As expected, assessing the various issues that could potentially be affecting the numbers of waterbirds present on English and Welsh SPAs is a complex process and has indicated a need to develop more detailed studies. Particular care is needed in interpreting these findings since this work has relied on essentially correlative analyses which aim to narrow down the likely factors involved in waterbird declines, rather than prove causal links. Nevertheless, the findings can be used to stimulate appropriate further research.

Jenny Worden and Niall Burton

Wigeon / Paul Marshall

Electronic and on-line data submission

While most WeBS counts are returned using the recording sheets sent out to counters each year, we are increasingly receiving data in a variety of electronic formats. Whilst we welcome all counts, the increasing quantity of such submissions means that a number of issues are becoming increasingly significant.

WeBS recording sheets are sent to a data inputting service for computerisation and received back as a single computer file in a standard format. These records are then loaded into the master database using standardised routines that perform many 'housekeeping' tasks (trapping errors, looking for duplication, cataloguing site coverage etc). Ironically, the processing of electronically submitted counts is often more time consuming to deal with than for conventional recording forms.

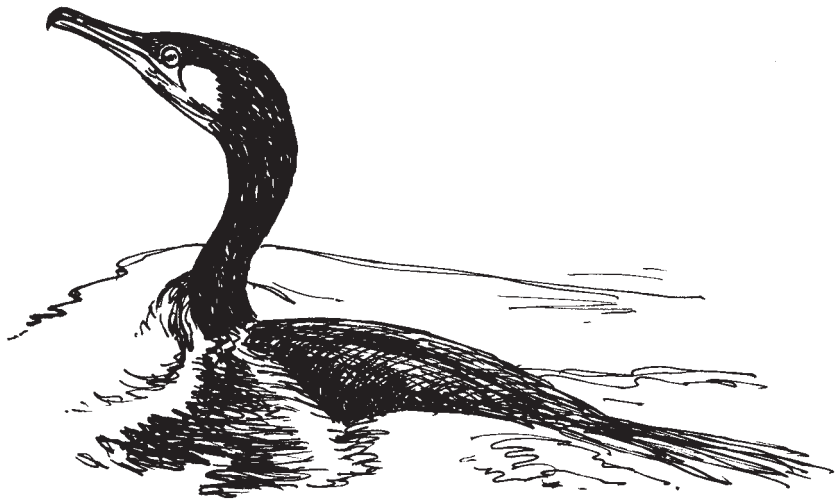
The problem arises because of the wide range of formats used by those submitting counts electronically, which may change from year to year and have been exported from a variety of software packages. Thus, each submission has to be dealt with as a special case. This was not so much of a problem in the past, but is becoming more of an issue as the quantity of counts received in this manner increases. In some cases it may be cost effective to reorganise these data to match our expected format, although we may often have to make some assumptions about the format provided. This enables us to append these counts to the standard file received from the data inputting company and load it using our standardised routines.

In the next year or so we intend to develop on-line submission of counts, using a similar approach to several existing schemes and with which you may already be familiar (e.g. Breeding Bird Survey, Garden Bird Watch, Migration Watch). We hope this will develop as a major means by which WeBS counts are collated in the future — we will still, however, be accepting paper forms for many years to come! We recognise also that some people may still wish to send us electronic data, but not to submit counts on-line. In order to reduce the problems mentioned above, WeBS will provide a specified format for electronic data, to be in place before the current year of WeBS data (April 2004 to March 2005) is due for submission. We will send out details to all counters who have submitted electronic data in the past and, obviously, will be happy to provide details to anyone considering supplying data in this way.

While counters choosing to submit data in this manner will be under obligation to follow this WeBS standard, we hope that most will be happy to do so as this will greatly reduce the resources we will have to devote to dealing with electronically submitted data. RSPB are currently working with the authors of the MapMate recording package, with which some of you may be familiar, to develop a WeBS recording module and we hope that an export facility to produce submission files of the WeBS specified format can be included. However, existing MapMate users should be aware that we cannot yet guarantee that we will be able to accept digital data generated by MapMate for the coming winter.

Finally, please rest assured that paper forms will always be welcomed and we will continue to accept and do our best to process all electronic data received regardless of format! However, with a few tweaks we should be able to improve the system for all involved.

Graham Austin and Andy Musgrove



Conservation .....Update

of the issues considered by the Conference that was endorsed by conference participants. This declaration is targeted at government and international decision-makers, and aims to raise the profile of these issues among them.

Further information about Waterbirds around the World, including the text of the Edinburgh Declaration can be found at http://www.wetlands.org/GFC/Default.htm

Richard Hearn

Dibden Bay

On 2 October 2000, Associated British Ports (ABP) submitted formal proposals to build a new £600 million container terminal at Dibden Bay, Southampton. Interested parties had until 13 November to register their comments, and in this time over 4,000 objections were made.

One of the main concerns was that the proposed development would have a detrimental effect on two Special Areas of Conservation, an SPA and a Ramsar site. It would also affect eight SSSIs. The area is of international importance for wintering wildfowl, and the Solent and Southampton Water SPA is used by 50,000 waterbirds every winter. Around 15,000 birds feed in Southampton Water and Dibden Bay represents rich feeding grounds for Oystercatchers, Grey Plover, Wigeon, Curlew and Lapwing. The area also supports internationally important numbers of Dark-bellied Brent Geese. The area behind the foreshore (known as 'the reclaim') has been designated an SSSI, and is used by 2,500 waterfowl and provides ideal breeding ground for Lapwing. The area is also an important habitat for nationally rare insects.

The proposals would have meant a loss of over 40 hectares of intertidal mudflats that fall within the Solent and Southampton Water SPA and Ramsar site, and the loss of approximately 240 hectares of the reclaimed Dibden Bay SSSI. This would have meant the loss of waterbird feeding grounds.

A Public Inquiry on the plans for Dibden Bay was opened on 27 November 2001. The Inquiry heard evidence from a large number of local people, government bodies and conservation organisations. ABP had disputed the extent of the damage the proposals would cause, and the extent of the measures required to offset the harm. These issues were tested at the Inquiry. The Public Inquiry closed on 12 December 2002.

On 20 April 2004, it was announced that the proposals for Dibden Bay had been rejected. In turning them down the Transport Minister Tony McNulty said: 'One important factor in making the decision was the environmental impact of the proposals on internationally protected sites.'

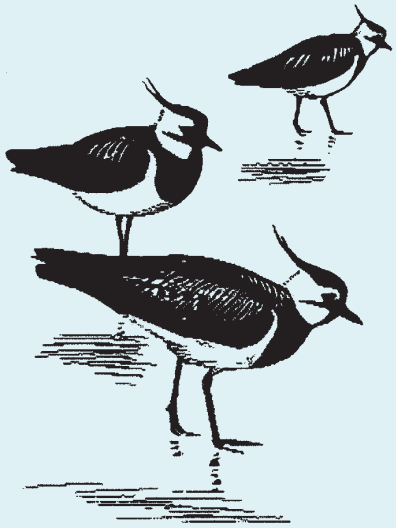
Following the collapse of ABP's plans there are calls to open Dibden Bay to the public. Campaigners say the site would provide the Waterside, one of the most densely populated parts of Hampshire, with an ideal leisure area. Dibden Bay is part of a strategic gap between

Conservation .....Update

Hythe and Marchwood and any plans to build houses there would now almost certainly be rejected. Waterside residents hope that ABP will eventually agree to sell the land to Hampshire Wildlife Trust or Hampshire County Council, which has a strategy to preserve coastal areas.

A significant amount of the data used during the inquiry was provided by WeBS counters. Such an outcome demonstrates the importance and role of WeBS data in major decision-making and the protection of important wetland areas. It is also a testament to the dedication and continuing hard work of volunteer counters.

Helen Rowell



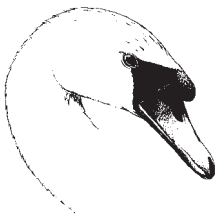
Major new analysis of wader population status in Africa and western Eurasia published

The International Wader Study Group (WSG) has just published its major review of the status of 131 populations of 55 species of migratory waders (shorebirds) in Africa and Western Eurasia in its occasional series International Wader Studies.

For the East Atlantic Flyway, the review updates the assessment made by Cor Smit and Theunis Piersma in the 1980s and which was published in 1989. For other flyway systems in Africa and Western Eurasia, the review provides the first systematic population reviews. The publication contains accounts for each of the species and their populations, summarising current knowledge of population status and trends. Extensive analyses consider thematic, taxonomic and geographic status and issues.

The 259 page review and supporting data can be found on WSG's web-site www.waderstudygroup.org and will provide a major source of information for conservationists and researchers.

. . . Special Surveys . . .



Mute Swan Census 2002

To track the fortunes of the UK's breeding Mute Swans, a national census is organised roughly every ten years. The most recent, in 2002, was organised by WWT, the Swan Study Group and the Scottish Ornithologists' Club. Coverage of the whole country has been attempted previously but was deemed impractical; instead, coverage of randomly selected 10-km squares was undertaken, reducing the amount of fieldwork with the added benefit that this technique allows the calculation of a population estimate with confidence intervals. The Swan Study Group already surveys large tracts of the country annually as part of local or regional studies; in addition, squares which held high numbers of birds in previous censuses were automatically selected, so that a large proportion of the population could be counted; the number of swans that would then be estimated by extrapolation (based on randomly selected squares from 'high' and 'low' density squares, according to the previous census) was thus a relatively small proportion of the total and, just as importantly, a relatively small proportion of the fieldwork, reducing the need for observers to visit squares with no or few birds.

Coverage was achieved for all but 97 (8%) of the selected 1,100 10-km squares. Provisional results suggest that the population numbers 31,7000 (with upper and lower 95% confidence intervals of 28,600 to 35,200): this comprised 6150 breeding pairs and 19,400 non-breeders. This represents a continued increase during the 1990s of 23% (following an upturn in 1987 coinciding with a ban on the sale of lead fishing weights and milder winters). When the breeding and non-breeding components for 2002 are considered separately, however, these figures suggest a reduction in the rate of increase of breeding pairs. More details will be provided in a future edition of WeBS News once these provisional figures have been finalised.

Many thanks to Allan and Lyndesay Brown, who organised the survey in Scotland, to Jon Coleman and the Swan Study Group and, in particular, to the many counters — and especially the Local Organisers — for their considerable efforts in making this survey a success.

Robin Ward and Peter Cranswick

The Naturalised Goose Survey 2000

During summer 2000, a survey of naturalised geese — primarily Canadas and Greylags — was carried out in Britain and Ireland. Two separate but complementary approaches were used to estimate total numbers: a survey of randomly selected 1-km squares during late spring (enabling estimates with confidence intervals) with a follow-up visit in late summer organised by BTO, and a site-based component in late summer which sought to survey as many sites as possible known or suspected to support geese. Here we provide information on the site-based aspect; details of the results from the sample survey will be provided in a future edition of WeBS News.

The site-based survey focused primarily on Canada Geese and re-established Greylag Geese, but covered all species of non-native geese, including escapes and exotics, and covering hybrids also. As in previous surveys, fieldwork was carried out between 22 June and 21 July, which also allows an assessment of breeding success. Further, since migrant geese are not present in Britain at this time, it enables naturalised birds of certain species — particularly Greylag Geese, but also White-fronted and Pink-footed Geese — to be identified with confidence. Many non-breeders congregate at predictable moult sites at this time, making survey easier and also identifying the importance of sites at this time of year when, traditionally, few waterbird surveys are undertaken. Thus, the survey aimed to update numbers and distribution since the last national survey in 1991, to provide information on numbers at important sites, and to assess productivity.

Counters were asked to survey the sites they regularly monitored as part of WeBS, as well as any additional sites not usually surveyed for WeBS but which were known or thought to hold naturalised geese: it has been suggested that much of the growth of the Canada Goose population in Britain may be occurring on new or small sites that are not usually surveyed by WeBS or that have not been surveyed for long enough to contribute to the national indices. A total of 1,594 sites within 703 10-km squares were visited during the survey period, with 577 of these sites recording nil counts.

A total of 17 species of geese were recorded (Table 1). The counts of Canada Geese and re-established Greylag Geese were similar to those counted by WeBS, although that for Canadas was 14% lower than that recorded in 1991, while the Greylag total was 31% higher. Altogether, 22 types of hybrid were recorded, though crosses between Canada and Greylag Geese were the most common. The number and variety of hybrids attest to the difficulty that many escaped or introduced

exotics have in finding a mate of the same species.

Canada Geese were most numerous in Hampshire, Sussex and Kent and north through England to Cumbria, with the highest densities occurring in the lower catchment of the Thames. High densities were also found in the Midlands and northwest England. The most important site for Canada Geese during the survey was the Mersey Estuary, with a total of 1,350 birds, though most sites were found to hold only small numbers of birds, as in 1991. Of the birds recorded, 91% were aged and, of these, 15% were juveniles. Average brood size varied markedly between different regions (from 3.27 to 4.67). The highest numbers of re-established Greylag Geese were found in Norfolk and in Buckinghamshire, Northamptonshire, Bedfordshire and Cambridgeshire, while there were also large numbers in Cumbria, Anglesey, Yorkshire, the east Midlands and southeast England. The species had a scattered distribution over much of Scotland and most of Wales, but was virtually absent from southwest England. The largest count was at Hornsea Mere, with a total of 834 birds. As with Canada Geese, most sites holding Greylags held only small numbers. A total of 20,295 (79%) were aged and, of these, 24% were juveniles.

Barnacle, Egyptian, Snow, Bar-headed and Pink-footed Geese were also recorded as having bred successfully and these small populations may have the potential for an increase in future. It is possible that at least some of the individuals were from wild populations, present in Britain during the winter but which failed to leave in the spring, probably as a result of disease or injury. Most, however, are likely to have been associated with, or escaped from, waterfowl collections.

The totals of both Canadas and Greylags were lower than the current estimates, based on WeBS data, of 96,000 and 28,500, respectively (these are not counted totals, but allow for missed birds) and those obtained during a pilot survey using random 1-km squares in 1999. These suggest that the population of Canada Geese in particular is so large and — most importantly — widespread on small sites that effective estimates of population size require at least an element of sampling of habitats supporting low densities.

A key issue is the difficulty of separating the three Greylag Goose populations in the UK (namely Icelandic, NW Scottish and naturalised birds), particularly given the spread of the two breeding populations in Britain that seem likely to meet if not overlap and interbreed in the near future. A more detailed understanding of the NW Scotland and, particularly, re-established Greylag Geese is highly desirable, particularly given the current different conservation status of these populations. It is recommended that coordinated counts of NW Scotland and re-established Greylag Geese be conducted more frequently and at least every five years. It is also recommended that annual assessments of reproductive success in these populations — currently poorly monitored — are designed and implemented to help understand the growth and spread of these populations.

Many thanks are due to those counters who participated in the survey.

Helen Rowell, Colette Hall and Peter Cranswick

Rowell, HE, RM Ward, C Hall & PA Cranswick. 2004. *The Naturalised Goose Survey 2000*. The Wildfowl & Wetlands Trust, Slimbridge.

Table 1. The number of adult and juvenile geese counted during the Naturalised Goose Survey

Species	Adults	Juveniles	Unaged	Total
Canada	42,066	7,500	5,021	54,587
Greylag	15,518	4,777	5,345	25,640
Barnacle	564	129	0	693
Egyptian	219	145	211	575
Snow	54	10	22	86
Bar-headed	48	4	0	52
Pink-footed	31	2	0	33
Emperor	14	0	0	14
Swan	9	0	0	9
White-fronted (both races)	7	0	0	7
Unidentified	6	0	0	6
Dark-bellied Brent	4	0	0	4
Red-breasted	3	0	0	3
Lesser White-fronted	2	0	0	2
Bean	1	0	0	1
Totals	58,546	12,567	10,599	81,712
Hybrid geese	247	50	4	301
Domestic geese	856	78	26	960
Grand totals	59,649	12,695	10,629	82,973

The WeBS Dispersed Waterbirds Survey 2002/03

Although WeBS aims to assess numbers of waterbirds on all wetland habitats in the UK, inevitably, efforts are concentrated on the larger wetlands with high numbers of birds — relatively little is known about the numbers of waterbirds such as Mallard, Moorhen, Little Grebe and Grey Heron that winter on small water bodies, streams, flooded fields, ditches and dykes. The Dispersed Waterbirds Survey (DWS) aimed to improve the population estimates of these waterbird species on areas within Britain not currently counted by other WeBS surveys. The intention was to compare estimates generated using the data from this survey with published national population estimates to indicate, firstly, those species for which the DWS could be a useful source of additional information for calculating national population estimates and, secondly, those species for which sites included in the DWS could improve overall WeBS coverage.

Fieldwork for this survey was carried out during the winter of 2002-03. Volunteers were asked to survey intensively 1-km grid squares, recording numbers of waterbirds in different broad-scale habitats (e.g. river, woodland, arable, etc.) in a single visit during 2002/03. Just over half of the WeBS Local Organiser network assisted with the survey and forms for a total of 1,230 1-km squares in Britain were allocated (Figure 1). Coverage of just half of these was requested and completed forms were returned for 54% of the target squares. The selection of target squares was stratified according to the proportion of urban, wet, upland and lowland areas in the square.

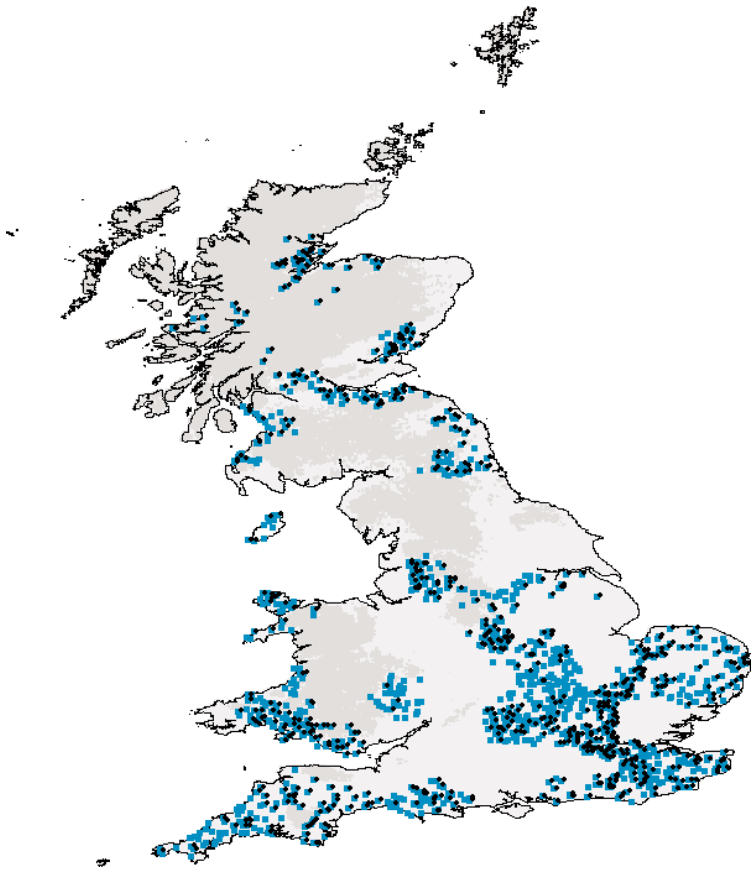


Figure 1. *1,230 1-km squares were allocated to participating WeBS local organisers (blue squares) of which 54% were surveyed (blue squares with black dot). Upland areas are shown in grey.*

Collectively, 108 species were recorded on 59 different habitat types, in a total area exceeding 132,000 ha.

For 16 of the 20 species for which it was possible to calculate national population estimates, DWS estimates were much larger than published national estimates (Figure 2). Furthermore, for 12 of these, DWS estimates were more than double the size of the published estimates. This was not the case for numbers of Great Crested Grebe, Pochard and, in particular, Moorhen: the existing estimate of about 750,000 of the last species, although very approximate, was much higher than the DWS estimate of 215,000.

A survey of this type enables the assessment of the importance of little-surveyed habitats for waterbirds. Indeed, for most of the species analysed it would appear that such areas do support substantial proportions of the national population. Thus, to improve the current national population estimates the inclusion of such habitats within schemes such as the WeBS Core Counts requires further consideration. In this respect, repetition of the survey, attempting to improve on current coverage, would give an indication as to those areas and habitats most suitable for future incorporation into existing WeBS surveys. Improved species monitoring would enable more targeted efforts as regards their conservation, either in the form of protected area selection or through the implementation of wider countryside measures.

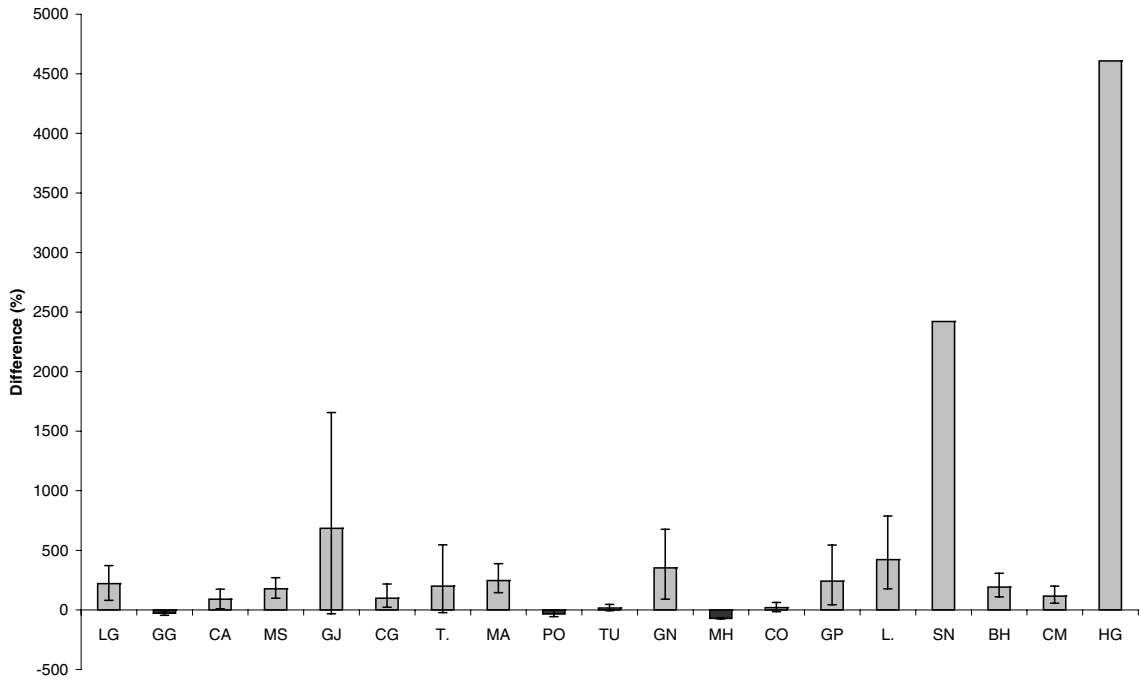
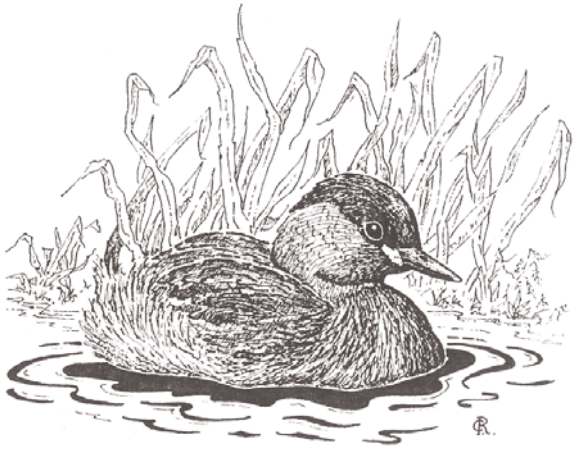


Figure 2. *The difference (%) between national population estimates derived from the DWS data and published estimates for Little Grebe (LG), Great Crested Grebe (GG), Cormorant (CA), Mute Swan (MS), Greylag Goose (GJ), Canada Goose (CG), Teal (T.), Mallard (MA), Pochard (PO), Tufted Duck (TU), Goldeneye (GN), Moorhen (MH), Coot (CO), Golden Plover (GP), Lapwing (L.), Common Snipe (SN), Black-headed Gull (BH), Common Gull (CM) and Herring Gull (HG). Error bars show 90% confidence limits around the DWS estimates. For clarity, error bars for SN and HG have been omitted.*



The discrepancies discovered between published national estimates and the DWS extrapolations could clearly be the result of a number of reasons. For example, it is likely that the DWS still under-estimated the true numbers of many species either because the most suitable habitats (e.g. reedbeds and other dense waterside vegetation) were not fully covered or because some species are particularly secretive (e.g. Jack Snipe).

Finally, we would like to say a big thank you to everyone who participated in the DWS, particularly the Local Organisers who coordinated volunteers in each region. The findings from the DWS are currently being written up as a refereed paper for a scientific journal. Further information is available to counters who would like it.

Sarah Jackson and Graham Austin

European census of wintering Great Cormorants

Evidence for recent increases in Cormorant numbers throughout Europe has originated for the most part from censuses of breeding colonies. Comparatively little is known, however, about numbers and distribution during the winter. Consequently, Wetlands International's Cormorant Research Group organised a European survey of Cormorants in January 2003 to assess winter numbers and distribution. The census involved counting Cormorants at night roosts at both inland and coastal sites throughout Europe and North Africa. WWT co-ordinated the survey in Great Britain.

An inventory of Cormorant roost sites in Britain was previously conducted in 1996-1998 and this identified 285 sites supporting breeding colonies and/or inland roosts in Great Britain. The information gathered during the inventory was largely descriptive — no count data were collected for roost sites.

In January 2003, a total of 214 sites in Britain were visited and count forms and inventory questionnaires collected for most of these. Of these, 130 were revisits to sites previously identified, with an additional 74 new roosts recorded. Cormorants were counted at roost sites in 61 from a total of 85 WeBS regions in Britain. Combined with the previous inventory, the results of the January 2003 survey have provided information on 363 confirmed or potential roost sites in Britain.

The number of Cormorants recorded at dusk roosts in Britain is shown in Table 1. There is a notable concentration of large roosts in southern England, particularly at inland sites. The highest total counts by region were recorded in Cambridgeshire, Essex, Greater London, Kent and Norfolk (>500 birds). The largest roosts (>300 birds) were recorded at Little Paxton Gravel Pits (Cambridgeshire), Abberton Reservoir (Essex), Walthamstow Reservoir (Greater London) and Queen Elizabeth II Reservoir (Surrey). Roosts holding 200–300 birds were recorded at Rostherne Mere (Cheshire), Dungeness RSPB Reserve (Kent), Rutland Water (Leicestershire) Besthorpe & Attenborough Reservoirs (Nottinghamshire) and South Stoke (West Sussex).

Approximately 26% of roosts were classed as coastal sites (open coast and estuary) and 74% as inland (lake and river), with 75% of inland sites situated on lakes. Most of the newly identified roost sites were located inland (67%) and this seems to be a result of infilling rather than expansion of the wintering range.

Differences in roost size were seen across different habitats. Roosts located on rivers and non-estuarine coast tended to be relatively small, while the largest roosts were found most frequently on inland lakes. Roosts at coastal sites were most commonly found on piers/jetties and at ground level, with inland roost sites mostly situated in trees.

The total number of Cormorants counted during this survey represented 71% of the peak count recorded by WeBS in winter 2000/01 and 50% of the estimated population size for Great Britain. Although less than half of sites identified by the 1997/98 inventory were visited in 2003 (it was not possible to arrange complete coverage owing to the relatively short notice given for the international survey), the total number of birds counted suggests that a full national survey of roost sites would result in a higher number of birds than currently counted by WeBS.

At only 15% of coastal roosts and 17% of inland roosts identified in this survey was breeding known to be attempted. Most Cormorants in the UK belong to the North Atlantic race *Phalacrocorax carbo carbo* which breeds around the coasts of Iceland, Norway, Russia, Northern France, Britain and Ireland. The continental race *P. c. sinensis* — which breeds inland in northern Europe, mainly the Netherlands, Denmark, Germany, Poland, Sweden, the Czech Republic and Slovakia — has also been recorded in the UK. Recent estimates of the proportion of Cormorants in the UK that are sinensis range between 2–20%. The expansion of inland wintering sites has been coincident with the steady increase in numbers of inland breeding birds, a significant proportion of which are sinensis, particularly since the mid 1980s. Inland breeding colonies have become established at former winter roosts, suggesting that the availability of food resources, safety from predators and low disturbance govern choice of both winter and breeding sites.

The expansion of both inland wintering sites and breeding colonies has led to

Table 1. Total number of Cormorants counted and number of roosts visited in January 2003 (where count data were available).

Country	Number of roosts visited in 2003	Number of roosts identified in 1997/98	Total number of Cormorants in 2003
England	158	204	9,866
Scotland	29	55	1,193
Wales	15	26	490
Total	202	285	11,549

conflict with inland fisheries. Long-term monitoring is essential to ensure that the impacts of any licensed control at sensitive sites do not compromise the conservation status of the species. A full national roost survey is recommended every nine years to produce a national population estimate. In addition to ongoing WeBS counts which provide valuable data on site-specific use by Cormorants, a sample of roosts and WeBS sites monitored annually using a sampling approach would enable national population indices to be produced and help to assess the impact of any control measures on Cormorant numbers.

Thanks go to the many WeBS counters who participated in this survey and at such short notice.

Jenny Worden

Worden, J, C Hall and PA Cranswick. *Cormorant* Phalacrocorax carbo *in Great Britain: results of the January 2003 roost survey*. The Wildfowl & Wetlands Trust, Slimbridge.

International Swan Census January 2005

The latest Wetlands International Swan Specialist Group census of Bewick's and Whooper Swans will take place in January 2005. As before, counts will be co-ordinated throughout Europe to provide accurate estimates of these populations, particularly since many birds occur away from those wetlands covered by the regular waterbird monitoring schemes, such as WeBS. Counts of Iceland Whooper Swans will be co-ordinated throughout Iceland, Ireland and Britain by WWT, BirdWatch Ireland, The Irish Whooper Swan Study Group, the Icelandic Institute of Natural History and the Icelandic Society for the Protection of Birds.

The census date is 16 January 2005, the same as that for WeBS, and as in previous years, we will collate all WeBS counts of these species. We are, however, particularly keen for additional counts of birds using sites not regularly counted for WeBS, such as along river valleys, and non-wetland areas, such as agricultural fields. At some wetland sites, even those counted for WeBS, dawn or dusk counts of roosting birds may be the most effective approach. In addition, we are seeking to record information on breeding success, habitat use and ring numbers.

Recording forms and instructions will be distributed to all WeBS regions that hold significant numbers of birds later this autumn. If you have any queries, please contact Jenny Worden or Peter Cranswick at WWT Slimbridge. Many thanks in advance for your help.

The 2003/04 – 2005/06 Winter Gull Roost Survey (WinGS)

The latest Winter Gull Roost Survey began last winter with counts of the most important roost sites across the country. Volunteers braved mixed January weather to report on gull numbers at sites throughout the UK, both at inland waterbodies and on the coast. At the time of writing, forms had been received for 371 (78%) of the 474 key sites identified from previous surveys — a wonderful effort by all involved.

Results from the counts at these key sites (and other additional sites surveyed) will be used to determine how gull numbers have changed over the last 50 years. The first Winter Gull Roost Survey was undertaken in 1953 (with greatest coverage in England and Wales) and others in 1963, 1973, 1983 and 1993. Over this time numbers of gulls in both the winter and breeding seasons have increased greatly, partly as a response to greater food availability — from rubbish tips and, initially, commercial fishery waste — though also as a result of reduced human persecution. Although results from Seabird 2000 suggest that the breeding population of Herring Gull is now in decline.

As well as looking at population change, WinGS also aims to provide population estimates for the five main gull species that winter in the UK: Black-headed Gull, Common Gull, Lesser Black-backed Gull, Herring Gull and Great Black-backed Gull. To be able to do this it will also be necessary to estimate gull numbers away from key sites by surveying randomly selected tetrads inland and randomly selected stretches of coast.

Surveys of tetrads began in the winter of 2003/04 and will continue this coming winter. Thus far, we have received forms for 258 (37%) of 701 sites. Surveys of randomly selected stretches of coast are planned for winters 2004/05 and 2005/06.

The tetrad results received so far indicate that small roosts do occur away from key sites and have also highlighted some more important roosts that might otherwise have been missed — for example, a count of 4,900 gulls at Thurlby Gravel Pit in Lincolnshire.

If you are interested in taking part in the survey this coming winter, please contact your BTO Regional Representative or Alex Banks (alex.banks@bto.org) at the BTO who has taken over from John Calladine as

Herring Gull / Paul Marshall

National Organiser for the last two winters of the survey.

WinGS is funded by the Countryside Council for Wales, English Nature, the Environment and Heritage Service (Northern Ireland), the Joint Nature Conservation Committee, Scottish Natural Heritage and Northumbrian Water.

Alex Banks and Niall Burton

The Greenland Barnacle Goose in Britain and Ireland

Since 1959, the Greenland population of Barnacle Geese (which breeds in north east Greenland and winters on the north and west coasts of Scotland and Ireland) has been counted at approximately five-year intervals to determine total numbers and distribution. In Scotland most birds are found in the Inner and Outer Hebrides and as far north as Orkney. On the west coast of Ireland, the main concentrations occur between the Dingle peninsula, Co. Kerry and Inishowen in north Co. Donegal. Although some wintering sites can be surveyed by ground counts, most are on uninhabited, comparatively remote islands making ground counts an unrealistic option. Instead, ground data are supplemented by aerial survey and two survey teams cover the entire wintering range by light aircraft, achieving a complete population count in just a few days — at least, if all goes according to plan.

The surveys are usually conducted in March or early April, avoiding the short daylight hours and frequent bad weather conditions in mid winter which hamper aerial survey. All islands known to have held geese are surveyed, as are adjacent islands and coast that appear suitable. Flying altitude of 150-200 m, most flocks are flushed as the aircraft approaches. One observer then makes a visual estimate of

numbers at each location — a challenge in a fast moving aircraft with only a few moments to count, perhaps, several hundreds of geese, and for this reason a second observer attempts to photograph the geese (often, an equally difficult task!). Photographs are then used to verify the visual estimates and assess the accuracy of counts.

The most recent international census, funded by JNCC, WWT and the Irish National Parks and Wildlife Service, was undertaken in spring 2003. A total of 323 islands and mainland sites were visited. In Scotland, 47,256 geese were counted, and 9034 in Ireland. Of interest is the flock of 96 Greenland Barnacle Geese recorded at the Dyfi estuary, Wales, which arrived and departed within a few days of the Greenland White-fronted Geese at the site, and are thought to be part of the Greenland stock. Records show that a small flock of Barnacle Geese regularly wintered in Pembrokeshire until the late 1980s and early 1990s when the flock abandoned the area. Coincidently, a small number of Barnacle Geese appeared on the Dyfi Estuary in the 1980s and numbers here have steadily increased. Inclusion of this small Welsh flock brings the total to 56,386.

This total represents the largest number of geese recorded to date (see Table 1). Since the first full census in 1959, Greenland Barnacle Goose numbers have steadily increased except for a number of years in the 1980s when numbers declined during a period when shooting intensity on Islay increased. Potential decreases in mortality owing to a decrease in shooting over recent years and the introduction of goose management schemes, aimed to benefit geese, probably underlie the recent population growth.

Results of recent censuses have indicated that the population increase is largely the consequence of increases at a small number of key sites. Currently, Islay, Tiree, Coll, South Walls in Orkney, Inishkea Islands and Ballintemple/Lissadell are the sites which hold most geese. Overall numbers at these key sites have increased more than six-fold since 1959, while total numbers outside these areas are still increasing, albeit at a lower rate (less than a three-fold increase overall).

Geese have decreased in number on some uninhabited islands, probably as a result of habitat changes following the cessation of grazing. In contrast, habitat changes caused by intensification of farming methods have benefited geese elsewhere.

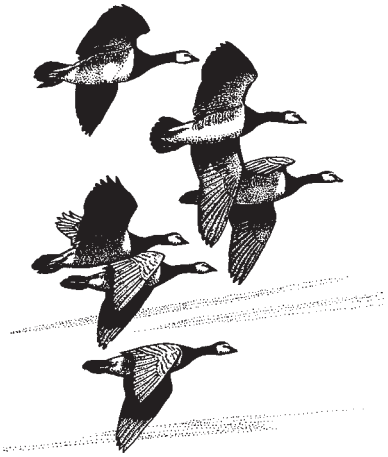
Continued monitoring is essential to enable revision of population estimates and to assess status at sites of national and international importance. Recent increases have led to local conflicts caused by intensive goose grazing on agricultural fields. Goose management schemes have been established on Islay and elsewhere to manage these conflicts.

The full report for the spring 2003 Greenland Barnacle Goose Census is available on the WWT web site.

Jenny Worden and Peter Cranswick

Table 1. Percentage change in Barnacle Goose numbers in Scotland, Ireland and Wales between March 1999 and March 2003.

	March 1999	March 2003	Change (%)
Islay	35,172	36,478	3.7
Scotland excluding Islay	10,287	10,778	4.8
Scotland total	45,459	47,256	4.0
Inishkea Islands	2,841	2,052	-27.8
Ireland excluding Inishkea Islands	5,823	6,982	19.9
Ireland total	8,664	9,034	4.3
Wales		96	
Population total	54,123	56,386	4.2



Worden, J, CR Mitchell, OJ Merne & PA Cranswick. 2004. *Greenland Barnacle Geese* Branta leucopsis *in Britain and Ireland: results of the international census, spring 2003*. The Wildfowl & Wetlands Trust, Slimbridge.

Golden Plovers

Work is continuing to summarise counts received for last October's Golden Plover survey. At the time of writing, counts totalling over 70,000 Golden Plovers have been received for non-coastal areas. Most of these were on English and Scottish farmland. The results of this survey will be combined with those from the standard October WeBS Core Counts, although the degree of overlap, and gaps in coverage, will clearly have to be determined carefully. We hope that the final results will prompt more interest in the status of Golden Plovers, about which there are still many more questions to be answered.

Simon Gillings

Golden Plovers / Paul Marshall

Ray Waters 1952–2004

*Suffolk WeBS counters, **Mick Wright**, **Nick Mason** and **Steve Piotrowski**, remember former BoEE and WeBS National Organiser, Ray Waters.*

Earlier this year, we learnt the very sad news that Ray had died after a long battle with cancer. Ray died in January, far too early, and leaving Chris and two young boys, Leo and Gus. He had been ill for a year with cancer that started in his bowel and spread quickly to his liver.

From the age of five Ray developed an interest in birds and remained active in this field (and indeed within many fields of wildlife) for the rest of his life. He attended Northgate Grammar School and then went onto the Royal College at Egham in Surrey, where he studied Zoology and Botany (attaining a BSc in Zoology). Having graduated, Ray trained for a career in teaching at Keswick near Norwich.

Ray enjoyed a varied career, which included wardening for the RSPB at Aylesbeare Common (Devon) and at Winterton Dunes National Nature Reserve in Norfolk. Eventually, Ray joined the BTO and became a key staff member for over eight years, moving with the Trust from Tring to Thetford. Initially he organised the Birds of Estuaries Enquiry (BoEE), and latterly the Wetland Bird Survey. However, Ray's involvement with waterbird monitoring and the BTO had begun at a much earlier age, back in his school days when he helped with the BoEE counts on the Orwell Estuary, and when he was joint BTO Regional Representative for Suffolk (along with Mick Wright) between 1985 to 1991. It was during 1985 that he also became the joint Project Officer for the Suffolk Ornithologists Group, and over the following years organised and reported back on many surveys, culminating with the mammoth task of organising the five-year Atlas of Breeding Birds of Suffolk. Whilst working at the BTO Ray became a co-author of the annual Wildfowl and Wader Counts report, contributed many articles to the WeBS Counters' Newsletter and organised several conferences. Away from work, Ray was always a keen birder, and over the years was party to many rare bird finds (BTO staff enjoyed seeing a fine Red-footed Falcon he found near his house and a Little Bunting that he discovered coming to his garden pond!). Several birding trips to 'unfashionable' parts of Eastern Europe and Africa provided valuable and interesting experiences!

Ray's sporting prowess was well known to his friends and colleagues, and he particularly excelled at badminton, volleyball and squash. He remained a staunch supporter of Ipswich Town Football Club, even taking his children to see the local derby match against Norwich City shortly before he died.

Ray was a conservationist, an activist and 'green'. When local Suffolk ornithologists were gathering evidence for the Felixstowe Dock enquiry during the mid 1980s, Ray was at the forefront of the campaign to save the Fagbury mudflats. One of the lasting memories of this period was that of Ray, standing outside Ipswich County Hall as a lone protester, with a model of a crane tucked under his arm and an image of a Redshank hanging from the jib.

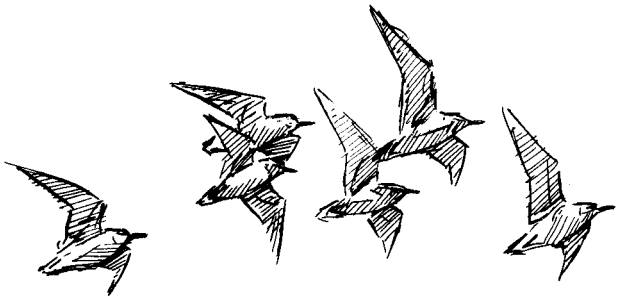
He was a keen and active member of Servas, an international organisation trying to promote world peace. Green issues also took up his time and he was, for a long time, one of the organisers of 'Fruits of the Earth' where he worked voluntarily most weekends. He adopted a green lifestyle and had an acute dislike of waste and excess throughout his life. Ray was consistent, as honest as you can get, and at the same time quite bloody-minded. However, no one can deny that he was truly committed to the cause and worked tirelessly to achieve his objectives.

After living in an old camper van in the BTO car park for a few weeks, Ray found the perfect house — an old railway cottage deep within Thetford Forest, and he and Chris set up home there, where the Adders and Golden Pheasants in the garden were almost as legendary as the 'wild parties' every summer. And of course there were the obligatory games of volleyball along the drive.

When Ray and his family moved to Rendlesham in Suffolk he soon became ill. At the end he spent most of his hours at his beloved Shingle Street where all he could do was to watch Snow Buntings from the car and then drive a short distance to look for owls at dusk. Ironically, on the day that his ashes were spread on the sea at Shingle Street, a Citrine Wagtail appeared there.

He had many friends, who will all have their own personal memories of him. He will be sorely missed by many but has left us with a wonderful legacy of his sound views and love for life.

Our sympathies go to his partner Chris and sons Leo and Gus.



WeBS Low Tide Counts

The winter of 2003/04 saw Swansea Bay counted at low tide for the first time, with at least twelve other estuaries also covered for the scheme. These were the Adur Estuary, Belfast Lough, Breydon Water, Burry Inlet, Morecambe Bay (north-west part, at mid-tide), Firth of Forth, Humber Estuary, Langstone Harbour, Lindisfarne, Stour & Orwell Estuaries and Strangford Lough. Low Tide Count data are currently being input and will shortly be uploaded to the database. If you have any outstanding forms to return, now is the time to do so!

We are looking forward to the winter of 2004/05, with plans to cover further new estuaries and also to organise counts on some estuaries not counted for a long period of time, including the Colne Estuary and Crouch-Roach Estuary. Please contact the WeBS Office if you are interested in participating.

A big thank you to everyone involved with Low Tide Counts — the sustained support for the survey is greatly appreciated. As the scheme enters its thirteenth winter, the extent of coverage and consistency of counts across estuaries continues to impress.

Alex Banks

Bulletin Board

Tanzania National Waterbird Count

The second national count of waterbirds in Tanzania will be held in January 2005 — ten years after the first count took place. The count, co-ordinated by the Tanzania Wildlife Research Institute (TAWIRI) (www.tawiri.org), aims to provide training for Tanzanians in bird identification and monitoring techniques, determine population estimates at selected wetlands and establish a monitoring scheme for wetland avifauna in Tanzania. TAWIRI are asking for volunteers to help with both the training and the survey. If you are interested in taking part or would like further details please contact Maurus Msuha, Project Manager, Tanzania Wildlife Research Institute, Tanzania Carnivore Monitoring Project, PO Box 661, Arusha, Tanzania.

List of priority Core Count dates

The priority count dates for WeBS Core Counts are as follows:

2004

18 July
22 August
19 September
17 October
14 November
12 December

2005

16 January
13 February
13 March
10 April
8 May
26 June
24 July
21 August
18 September
16 October
6 November
4 December

Colour-ringed Light-bellied Brent Geese

The East Canadian High Arctic Light-bellied Brent Goose Branta bernicla hrota breeds in Canada's eastern Queen Elizabeth Islands with the great majority wintering on the coastline of Ireland and smaller numbers on the Channel Islands and northern France. In the last four years many successful expeditions and cannon netting trips have been undertaken by WWT to colour-ring Canadian Light-bellied Brent Geese in Northern Ireland and on the species' spring staging sites in Iceland. This has resulted in over 350 birds having now been colour-ringed, each bird bearing two rings (one on each leg) with code (one letter on each ring). Sightings of these birds will form an integral part of the data being gathered to provide baseline information about this population. Please send any sightings of these birds to: Graham McElwaine, 100, Strangford Road, Downpatrick, Co. Down, Northern Ireland BT30 7JD Graham.McElwaine@virgin.net

Colour-marked Light-bellied Brent Goose / Graham McElwaine

All sightings of colour-ringed wildfowl can be sent to WWT's Ringing Officer, Richard Hearn, who will then forward them where necessary to relevant species recorders. Contact details: Richard Hearn, The Wildfowl & Wetlands Trust, Slimbridge, Glos. GL2 7BT; Richard.Hearn@wwt.org.uk

Robin Ward

WeBS Low Tide Count Atlas

The atlas produced from the first seven winters of the Low Tide Counts, Estuarine Waterbirds at Low Tide, has now been distributed widely, including to all counters who have been involved with the scheme. On 26 January this year, the book was officially launched at Far Ings Lincolnshire Wildlife Trust nature reserve on the Humber, where the Minister for the Environment, Elliot Morley MP, was presented with his copy. Elliot has long been a keen birdwatcher and has continued to maintain a steady involvement with WeBS, both Core Counts and Low Tide Counts. Elliot accepted his copy on behalf of volunteer WeBS counters and said,

'I am delighted to see this book published and to receive my copy. Free copies are being given to the dedicated volunteer counters who have collected these data, in recognition of the excellent information that has been provided to those concerned with the conservation of our estuaries. We are fortunate in this country to have such a pool of knowledge and commitment to utilise in this way.'

Andy Musgrove

Andy Musgrove (left) and Elliot Morley MP (right) / JNCC

WeBS Counters' Conference
— Llanfairfechan, Wales —
Saturday 20th March 2004

The 2004 WeBS Counters' Conference took place at the Split Willow hotel in Llanfairfechan, North Wales, on a gloriously sunny yet exceedingly windy day. An excellent turnout of local counters was treated to a range of interesting and informative talks on diverse subjects, from wetland creation and reserve management to the assessment of population trends at local and national levels.

The conference was opened by Mike Duckham, assistant warden of the Conwy RSPB reserve, who presented a comprehensive overview of the progress of current management activities, with particular mention of the role of JCB diggers in habitat creation. The reserve itself was created as compensation for the loss of a local SSSI and comprises a range of habitats, including ponds and patches of rough ground to encourage additional breeding Lapwing into the area. Following this, Helen Baker (JNCC) became tour guide for the UK Overseas Territories, being especially careful to draw attention to current temperatures in each of the Territories concerned and the possibility of valuable fieldwork in these areas in association with local ornithologists.

Following tea and coffee where much light-hearted discussion concerned expeditions to the more popular Oversees Territories, Sarah Jackson (BTO) provided an overview of the WeBS Alerts scheme with particular reference to the declining numbers of waders in Wales. Currently, more Alerts have been triggered for Wales than for the rest of Great Britain. The suggestion was that climate change and a preference for muddier sediments are resulting in a redistribution of birds towards estuaries in the south and east of Britain and away from wintering sites along the west coast. Peter Cranswick (WWT) then gave a thorough account of offshore aerial surveying of Common Scoter numbers in Wales. Particular reference was made to the importance of such surveys in informing the selection of suitable locations for offshore wind farms in the area and to the major new information on the winter distribution of scoters that has been collected as a result.

Over lunchtime, the favourable weather conditions encouraged many to brave the wind and stroll down to the coast. The first talk of the afternoon session by Catherine Gray (CCW) followed on from the Alerts talk given earlier and looked in detail at the changing numbers of Oystercatchers on Welsh SPAs. This talk concentrated on the application of rather complex and detailed population models to address the implications of changes within the cockle and mussel densities and the occurrence and coverage of mussel crumb on Oystercatcher numbers. Tony Pickup of CCW then talked about the creation and development of the Goldcliff reserve on the Severn, from agricultural land to wet meadows and saline lagoons. This scheme was undertaken as a part of the compensation for the flooding and subsequent loss of valuable habitat within Cardiff Bay. To comply with the European Directive on the conservation of wild birds, the site is required to support nationally important numbers of at least two species after five years and Tony showed that good progress was being made towards these targets.

The final talk of the day was the combined efforts of the Liverpool Bay Wader Study Group and was the most hi-tech of the day incorporating visual and sound effects galore! Steve Cross described the status and trends for a variety of waterbird species wintering in the area and highlighted the vast amount of information provided by counters in the area. The conference ended with a general discussion of the recent changes made to the organisation of WeBS. Particular points raised included the desirability of on-line submission of counts, the possible inclusion of raptors and gulls into WeBS Core Counts, and new points of contact for counters. All in all, a very interesting and stimulating day.

Sarah Jackson

Sanderling / RSPB Images

Many thanks for all your help

The great strength of WeBS, arguably the biggest count scheme of its kind in the world and the envy of many other countries, lies in the tremendous volunteer input from you, the counters. We hope that you will continue to support WeBS, and through it, the conservation of waterbirds and wetlands throughout the UK and abroad.