WeBS Newsletter

British Trust for Ornithology

THE WILDFOWL & WETLANDS TRUST

RSPB

JOINT NATURE CONSERVATION COMMITTEE

Number 1 Summer 1993

WETLAND BIRD SURVEY

The Wetland Bird Survey (WeBS) is the name chosen to encompass the counting schemes for non-breeding waterfowl in the UK. In this article *Ken Smith (RSPB)* describes the concept of WeBS on behalf of the project's Steering Committee. WeBS represents a major step forward, bringing together into one the two existing long-running schemes (The British Trust for Ornithology's 'Birds of Estuaries Enquiry' and The Wildfowl & Wetlands Trust's 'National Waterfowl Counts'), covering both wildfowl and waders at inland and coastal sites. It will be run jointly by four organisations (BTO, WWT, RSPB and JNCC) and will combine the strengths of the existing count schemes leading to more efficient data handling and simplified communications with the team of volunteers who carry out the counts. By working together in this way it is hoped that precious resources will be freed to develop the scheme in important new areas.

There are no plans to change the existing counting or reporting arrangements in any substantial way. The major change the counters will see is a common recording form and slight changes in coding to allow common data entry and exchange.

The data collected by the former BoEE and NWC schemes are some of the most important and valuable for bird conservation in the UK and have been crucial in the establishment of scientifically-based management of waterfowl populations. The new scheme takes on the objectives of the old ones:

- To produce population estimates for wildfowl and waders through the non-breeding period by counting as many of the key waterfowl sites as possible.
- To maintain the programme of annual counting to monitor trends in the numbers of wildfowl and waders.
- To use the count data to highlight any adverse trends at particular sites which may require more detailed investigation.
- To use the count data to provide a sound basis for casework and the protection of important sites against adverse developments.

In addition, the advent of WeBS will allow a better planned approach to the development of counting of habitats not well covered at present, such as non-estuarine coasts. It will also provide a framework for planning integrated analyses of data already collected.

The four organisations which have come together to launch WeBS are convinced that by combining the two existing count schemes in this way we will realise real benefits. This will allow more resources to be devoted to the development of the scheme to the benefit of all those involved and particularly the birds.

Launch of WeBS

News of WeBS will reach the general public in October, when a national launch is planned, aimed particularly at influencing policy-makers and politicians. Details have yet to be finalised but the event is scheduled for the week before the first WeBS count (October 17). Unfortunately it will be possible to invite only a handful of long-serving counters. We wish it were possible to invite all 3,000 of you!

WeBS and You

WeBS comes into existence in October 1993. The first count will be on 17th October. The emergence of WeBS will have few repercussions for counters or local organisers of both the existing BoEE and NWC schemes. There are, however, some changes to current practices which we outline here. As before Peter Cranswick and Ray Waters will be happy to deal with any queries, but we suggest that, generally speaking, counters of inland (or non-tidal) sites should contact Peter in the first instance, and those counting coastal (including estuarine) sites should contact Ray.

The WeBS recording form

As you will notice, along with the birth of WeBS there is also a new form (some of you will receive yours shortly from your local organiser). However, we can assure you that we have made only the minimum changes needed to merge the existing NWC and BoEE forms, in consultation with 20 of the local organisers from both schemes. **Please take the time to read the instructions (which we have made as brief as possible) to guide you through completing the form.** Most sections are self explanatory and the key point to remember is that **very little has changed from the way in which you are used to completing the forms.** However, depending on whether you previously counted for the BoEE or NWC, you will have noticed some new sections.

The new WeBS recording form can, in the same way as the old BoEE form, be used to provide information from a large site that has been divided into many smaller count areas. For each species there are six columns so in the case of large sites the form can be completed in two ways, either (1) by providing counts for six different months for one count area, or (2) by providing counts from six different parts of the site for one particular month. Simply use more forms if your site consists of more than six count areas.

If you count a complex of gravel pits, for example, you may wish to write the individual counts for different pits in the six columns, using a different form for each month. The same principle applies to large estuaries which are subdivided into sectors.

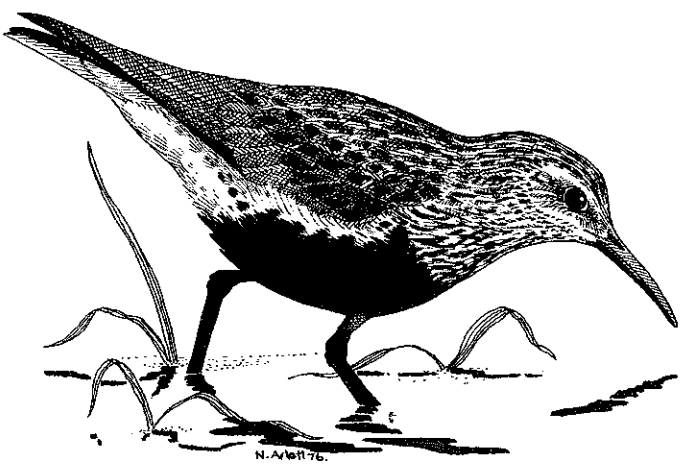
Some of the **Site Details** requested on the form are only required in certain instances. Those who count sites not divided into sectors (e.g. most counters of inland sites) need not enter **sub-site** nor **sector** names and those who count estuaries need not complete **grid reference** as these sites are well documented already.

In the **Bird Counts** section we have asked you to record if you feel counts may have been **gross under-estimates, no counts** and **nil birds**. This information allows us to interpret your counts more fully, especially for gulls and terns, since recording these groups is optional. A blank box normally means no birds were present. However, it can sometimes mean you were unable to count that species for a variety of reasons. Using these terms tells us what really happened.

The actual field techniques of counting remain unaffected by the advent of WeBS. Only a small number of you will need to complete **Alternative Methods** which apply mainly to dawn or dusk counts of roosting swans and geese (see recording form).

The **Count Conditions** and **Coverage** sections on the back page are vital to our understanding of your counts. We have, therefore, made these sections as simple and quick to complete as possible. The **Disturbance** section is optional but none-the-less very valuable, and we would encourage you to complete this also. Please remember to indicate in the appropriate box if you have NOT provided this information. For those of you who compile records on a PC and send us a printout, please ensure that this additional information is included.

In future, recording forms will be mailed to local organisers by the BTO. Further supplies of blank recording forms (and cards for those who use them) can be obtained from Ray Waters at the BTO, who will be responsible for maintaining an up-to-date address list of all counters.



By N Arlott

WeBS and You

When and where to return completed forms

There are some important changes to the procedures for returning count data. Individual counters should, as in previous years, return completed forms to their local organiser. **Would ALL organisers, however, please send completed forms to Peter Cranswick at WWT. If you do not have a local organiser, please return all completed forms direct to WWT.**

At present, most counting effort is concentrated on the winter period. While this is the most important period for wildfowl and waders, we are aware that many sites also support important concentrations of birds during the summer and that many counters wish to submit records for this period. Indeed, many estuaries are already counted throughout the year. You will thus have received enough count forms to cover two six-month periods. Should you wish to extend the "core" winter counts into the summer period, please add these additional counts to the forms. We intend that one form (or series of forms) should cover the October to March period inclusive, and the other the April to September period. To aid processing and speed the production of reports, we would thus ask all counters to **please return forms to your local organiser in two batches: one batch as soon as possible after the March count, the other after the September count.**

Many counters of large estuaries submit counts for individual months to their site organiser directly after the count, allowing site totals to be compiled quickly and submitted to headquarters. If you already do this, please continue this process.

Please be sure to return forms to your local organiser promptly as this assists them when sending batches of forms to WWT. Chasing the one late form not only increases their workload but can delay reporting procedures at headquarters. Many thanks for your help.

Note that WeBS starts in October 1993. Please send all counts made before then (i.e. using the existing BoEE or NWC forms), to the BTO or WWT respectively, as in previous years.

Count dates

WeBS gives the opportunity to unify the two slightly different systems previously used by BoEE and NWC to select count dates. We recommend that all counts be made on the Sunday nearest to high spring tides. The dates for the remainder of 1993 and for 1994 are:

1993

17 October	14 November	12 December

1994

16 January	13 February	13 March	10 April
15 May	12 June	10 July	21 August
11 September	9 October	6 November	4 December

Where necessary, however, please choose count dates which correspond with the optimum local tidal conditions. At many inland sites close to the coast, numbers of waterfowl are influenced by the state of the tide, as they move to or from a nearby estuary, for example. In these cases, we would ask counters to check with their local coastal organiser as to the time and date chosen for counting. This synchronisation is necessary to avoid double-counting or birds being missed.

If it is not possible for you to count on the recommended dates above (or your local priority dates), please conduct the count as close to the date as possible.

Count Area Terminology

For some of you the terms *site*, *sub-site* and *sector* will be new, although at the headquarters of the BTO and WWT they are used in everyday language. These are useful terms of reference, especially for large complex sites. A site refers to a discrete, meaningful unit for waterfowl or, put in another way, waterfowl move frequently within a site but only occasionally between sites. In practice sites can be anything from a small pond to a large estuary. This means that some sites are too large to be counted by one person and are therefore subdivided into sectors. In all cases sectors represent areas that can be covered by one person and are often defined by obvious landmarks. In some large, complex sites the sectors may be amalgamated into a series of sub-sites. An example is the Forth estuary where the sectors are arranged in three sub-sites: the Inner, North and South Forth which contain five, eight and eight sectors respectively. Co-ordination between the different sectors of a site is essential to avoid double-counting or birds being missed. This crucial role is undertaken by our local organisers. It is important to be consistent by adhering to existing count boundaries as well as using the recognised names for site, sub-site and sector (local organisers should be able to help here).

Using WeBS Data for Conservation – *David A Stroud (JNCC)*

The data collected by WeBS counters are of very significant importance for the conservation of the UK's waterfowl populations and the wetland habitats on which they depend. Even counting small sites contributes to the overall national assessment of our waterfowl populations. The changing fortunes of these populations are reported annually through *Wildfowl and Wader Counts*, and the Joint Nature Conservation Committee and country conservation agencies depend on this information to advise the government, the EC and other international bodies as to necessary protection measures.

In order to sustain waterfowl populations it is also crucially important to maintain their wetland habitats. At a statutory level, this is mainly undertaken through the listing of many wetlands as Sites of Special Scientific Interest. Regrettably, this designation does not, in itself, confer complete protection on a site, but does ensure that should development be proposed, it is subject to careful and informed public scrutiny - usually through a public inquiry. In defending threatened sites, conservation bodies are heavily reliant on the data collected through WeBS, not only to demonstrate the importance of that particular site, but also to place it in the wider national context.

Sites of international importance can be designated under the Ramsar Convention and as Special Protection Areas under the EC Birds Directive. A continuing programme of such international designations by government is in hand. Detailed justification for such classification is required by government and these are made by JNCC and the country agencies drawing in large part on WeBS data. Designations of sites internationally important for their waterfowl populations in the last year include: Burry Inlet (Dyfed & West Glamorgan), Loch Spynie (Grampian), Loch Ken and Dee Marshes (Dumfries & Galloway), Loch of Lintrathen (Tayside), Upper Solway Flats and Marshes (Cumbria, Dumfries & Galloway), Hornsea Mere (Humberside), The Wash: Gibraltar Point (Lincolnshire), the Nene Washes (Cambridgeshire), the Ouse Washes (Cambridgeshire/Norfolk) and South Tayside Goose Roosts (Tayside).

Our obligations to such sites do not end with their designation, and we need to ensure that their management is appropriate so that their value for waterfowl is not only sustained, but also enhanced. Such monitoring is usually undertaken through the monthly WeBS counts, and the information gained feeds back directly to site management plans.

The Contracting Parties to the Ramsar Convention held their triennial meeting in Japan during June this year. They recommended that all Ramsar sites should have management plans. This recommendation is being taken forward in the UK. Indeed, many Ramsar sites, SPAs and SSSIs already have such management plans, information for which is provided through WeBS waterfowl monitoring.

In all these ways and through participating in WeBS, you the counter are making a real contribution to wetland conservation in the UK.

Thank you very much for your efforts; they are greatly appreciated!

By Sir Peter Scott

Long-serving Counters

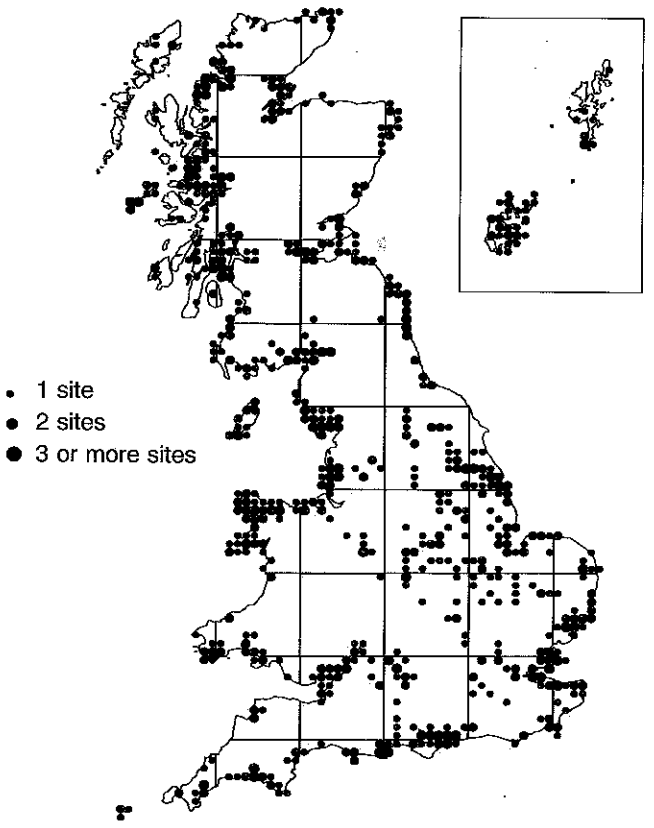
Although some of you may have only recently started counting wildfowl and waders, many of you will have been doing so for a considerable number of years. The counts began in 1947 and, while we are not aware of anyone who has been counting since then, it would not come as a complete surprise if you have (the last original organiser retired only last year). Since it is only in recent times that we have started keeping a record of counters on computer, we would be very interested to hear from anyone who has been involved in any way with the count schemes for 20 years or more. So, if you were sending in counts as long ago as 1973, please write and let us know. Any comments on how you feel the count schemes have improved (or worsened!) over the years would also be welcome.

WWT Shelduck Survey: An Update - *Simon Delany (WWT)*

Most of the information from the WWT 1992 survey of the Shelduck in Britain has now been received and entered onto a database at Slimbridge. The survey was in two parts: a spring count in April and May 1992 to obtain accurate population estimates for breeding and non-breeding Shelducks, followed up by a summer census from late June to early August to discover the relative importance of sites for breeding and to obtain a minimum estimate of breeding productivity.

The map shows the excellent coverage achieved by the spring survey, with nearly all coastal and inland sites known to be used by Shelducks in the breeding season (and many that are not) having been visited. We are extremely grateful to all counters and regional organisers for this tremendous effort. We have received information from a total of 1,173 sites in 612 10 km squares in Britain. This compares with 959 10 km squares holding Shelduck in the BTO's *The New Atlas of Breeding Birds in Britain and Ireland: 1988-1991*, although this total will have included many squares holding nesting birds inland of estuaries. The survey will have picked up these birds (or at least the males) on their territories on the estuaries. More than three quarters of sites covered in spring were visited again in the summer.

WWT Shelduck Survey: spring coverage



Data are still awaited from four regions covered in 1992, and coverage of 14 areas missed last year was organised in a 'mop-up' survey in 1993. Most of this information should be received in August. The number of suitable sites that were not covered was small, and the estimates that will be made to allow for these will comprise a very small proportion of the final population estimate.

The survey will allow the relative importance of British sites and regions for the Shelduck in summer to be assessed in considerable detail. The results will also provide a baseline against which future work can be compared. Analysis of the data will begin as soon as all the information is received, and results should be submitted for publication in early 1994.

Northumbrian Water Project

Anne Westerberg
Washington Wildfowl & Wetlands Trust Centre

In 1992, the Wetlands Advisory Service (the consultancy branch of WWT) began a two-year investigation into the ornithological status of reservoirs, and the impact of recreational activities on water birds, for Northumbrian Water Ltd. During the first year we have sought, through a detailed monitoring programme, to assess the ornithological importance of 35 reservoirs within the region, including 21 owned by Northumbrian Water. Twice-monthly daytime visits and regular evening roost counts are being made at these reservoirs throughout the year, largely by 18 regular volunteers, together with twice-monthly breeding bird surveys at Northumbrian Water sites from April to early August.

During 10 days in January 1993, 90 local ornithologists took part in North-East England's first ever regional water bird survey. Despite unfavourable weather, a magnificent total of 500 standing waters, 710 km of river and 220 km of coastline were surveyed within Northumberland, Durham, Tyne & Wear and Cleveland. Altogether, some 143,600 water birds were counted, with Black-headed Gull, Mallard, Knot, Dunlin and Common Gull being the most abundant species. The majority of dabbling ducks, Pochard, Tufted Duck, Scaup and several species of geese were recorded on standing waters. Little Grebe, Heron, Goldeneye, Goosander, Kingfisher and Dipper were mainly found on rivers, whilst the coast supported the expected large numbers of waders and between 2000 and 5000 each of Brent Geese, Shelduck, Wigeon, Eider and scoter.

In its second year, the project will focus more on experimental work. Investigatations into the effects on water birds of different numbers and densities of bankside anglers are scheduled for August and October 1993. Other experiments, designed to look more closely at the impact of watercraft and water sports, are planned for 1994.

Cold Weather Kills Waders – *Jacquie Clark (BTO)*

Cold weather in February 1991 resulted in high wader mortality on several estuaries in SE England. The Department of Trade and Industry (through the Energy Technology Support Unit) commissioned the BTO to investigate the role of severe weather in limiting wader populations.

Waders are well adapted to survive during short periods of cold weather. Their additional winter fat reserves can sustain them for a few days if their feeding grounds are frozen. In the last 15 years there have been several prolonged cold spells, but on each occasion waders have died in large numbers only on a few estuaries. Our study suggests that, in addition to weather conditions, the timing of high water on an individual estuary is an important factor in causing mortality. Waders appear to be more likely to die after a short period of cold weather if high water occurs around the middle of the day, because their feeding grounds are covered for a longer period.

This has implications for the conservation of estuaries. Many developments remove the upper shore mudflats which are the areas first exposed by the falling tide and last to cover on the rising tide. With continued upper shore development, wader populations may become more susceptible to periods of cold weather.

Which birds die?

Not all species are equally vulnerable. Smaller birds are at greater risk than larger birds since they only carry sufficient reserves to last short periods. However, the collection of corpses of dead waders has shown that Redshank are much more severely affected than all other species. Severe weather and mid-day high tides have also killed Grey Plover. There are differences within species, and for Oystercatcher, Grey Plover, Knot, Dunlin and Curlew, (but not Redshank) small individuals are most susceptible. This is not only because small birds typically carry smaller reserves, but may also relate to smaller birds having shorter bills, and hence finding it more difficult to locate their invertebrate prey when it burrows deeper into the mud to escape the cold. Smaller birds are also less able to defend food resources.

In 1991, a substantial number of Dunlin died on the Wash. Analyses of ringing recoveries showed that immigrants were more likely to die than those birds which regularly overwinter on the Wash. Perhaps those birds that regularly overwinter on a site know the best places to feed, whereas immigrants may have no previous knowledge of the area.

How quickly do populations recover?

Around two thirds of the Redshank wintering on the Wash died during the cold weather of February 1991. This gave a unique opportunity to discover how long it would take for the population to recover. We might expect that if many of the adult birds died, there would be room for a large number of juveniles to settle in the following winter and the population could return rapidly to its former level. However, this is not what has happened. Large numbers of juveniles did settle on the Wash in the winter following the severe weather, but not enough for the population to recover in the course of one year. Clearly it will be several years before Redshank reach their former levels.

The 1994 WWT/BTO Ruddy Duck Survey

Reducing the threat posed by introduced North American Ruddy Ducks to the endangered population of the White-headed Duck in the Mediterranean and western Asian regions has become one of the most urgent conservation priorities throughout the areas affected. Research into the problem is being co-ordinated by the UK Ruddy Duck Working Group, and an important part of this will be a national survey of the species organised by the WWT and the BTO next summer.

The principal aims will be to obtain as complete a population estimate and breeding distribution map as possible. It is hoped that three or more visits to each site will produce information on the timing of breeding (which is very varied in this species) and on breeding productivity.

Methodology for the survey will be finalised in September. The best time to make counts for an overall population estimate will probably be in April, during the period immediately prior to breeding. It is likely that we will be asking for one count at this time, followed by two or more visits during the summer to record evidence of breeding. We will probably be asking for basic information on habitat characteristics of the sites covered. Because Ruddy Ducks are very secretive in the breeding season, the survey will require tight co-ordination and thorough fieldwork – a challenge that we hope co-ordinators and counters will relish.

The full background to research currently being undertaken on Ruddy Ducks in the UK is provided on a separate information sheet. Anybody with any queries should contact Simon Delany at WWT.

The National Low Tide Count Scheme - *Julianne Evans (BTO)*

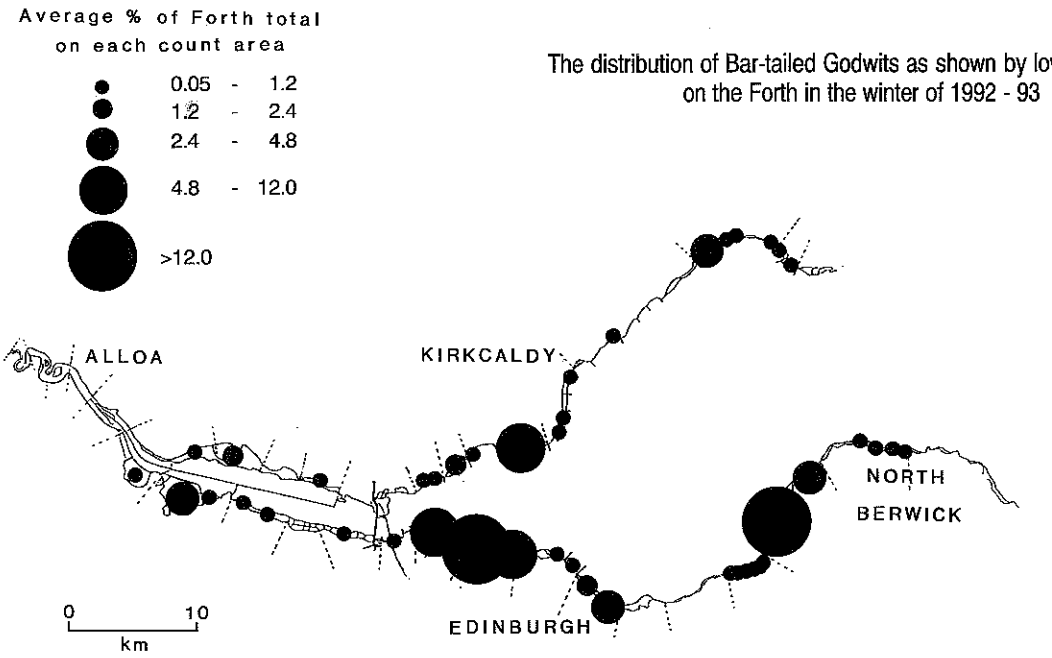
The 1992/93 winter saw the start of the BTO's programme of Low Tide Counts (funded by the RSPB and the BTO). The long-term aim of the scheme is to cover each of the 59 main estuaries in Britain at least once every five years. This means that 10-15 estuaries need to be covered each winter on a rotational basis. Thirteen estuaries were covered during the 1992/93 winter with several more already being covered using comparable methods. Each of these estuaries was counted at least four times once a month from November to February inclusive, in the period between two hours before and two hours after low tide. Because waders and wildfowl are mobile and may make use of several different feeding areas within a tidal cycle and in the course of a season, these low tide counts only provide a 'snapshot' of bird distribution. Carried out in a systematic way, however, they provide a reliable means of comparing the importance of different mudflats. This information is invaluable in predicting the effects of development or disturbance and, if necessary, supporting appropriate conservation measures.

For the first time, by carrying out low tide counts nationally using identical methods on each estuary, it has been possible to map waterfowl distribution in a systematic way. The 1992/93 fieldwork has reinforced what we already know about some species as well as providing some exciting new results.

In some cases, the distribution maps produced from the low tide counts have reflected a particular habitat preference. A classic example is Turnstone, a species whose distribution within any estuary is very closely linked to the availability of rocky or stony shores. In other cases the distribution is clearly linked to a specific food source. Oystercatcher distribution on the Exe, for example, reflects the position of the mussel beds on the estuary.

One of the most exciting results has been the dataset collected on godwits, particularly on estuaries where the two species occur together. A review of the literature reveals that Bar-tailed Godwits are traditionally thought to favour the sandier areas of large estuaries, whereas Black-tailed Godwits are said to prefer muddy estuaries. The distribution maps from this winter's fieldwork back up these anecdotal observations with hard facts for the first time. In all cases, Black-tailed Godwits were shown to concentrate on the inner estuary at low tide, whereas Bar-tailed Godwits seemed more widely distributed but favoured the outer half of the estuary. The diet of the two species is apparently very similar; both were recorded taking a mixture of worms and bivalves. There is great potential for further research, particularly in view of the important increase in Black-tailed Godwit on Britain's estuaries over the past 30 years.

These differences between species can make low tide counting a very rewarding experience because of the insight it gives into the complexities of bird behaviour. We hope that everyone who took part found it so. The results of this, the first winter of the National Low Tide Count Scheme, have proved the value of all their hard work.



The distribution of Bar-tailed Godwits as shown by low tide counts on the Forth in the winter of 1992 - 93

Wader Study Group Conference
(Ipswich, October 1993)

The Wader Study Group (WSG) brings together wader enthusiasts, both professional and amateur and from all five continents. This highly active association promotes co-ordination and co-operation of all those interested in waders. In 1993 the annual WSG conference will be held in the UK at Ipswich, Suffolk at the kind invitation of the Suffolk Wildlife Trust. WSG conferences are packed with interesting, informed talks, interspersed with lively workshops and highly enjoyable social activities! This year's theme, 'Field Techniques', is particularly relevant to all counters. The provisional cost this year is particularly low at only £40 for the weekend. This covers all meals from dinner on Friday 29 October to lunch on Sunday 31 October, as well as accommodation for the two nights. In addition, a conference fee of £15 will be payable by all those attending to cover administration costs. The general conference is open to all wader watchers, WSG members and non-members alike, and will be followed on Monday 1 November by a workshop on Dunlin migration. For further details and booking forms please contact Rodney West, c/o Suffolk Wildlife Trust, Brooke House, The Green, Ashbocking, Ipswich, Suffolk.

Where have all the colour-ringed Dunlin gone?

Over the past two years over 2,000 Dunlin have been colour-marked as part of projects involving the breeding grounds in Norway and on the migration sites through the Baltic and the Wadden Sea. We would expect that some of these birds would come to Britain to moult and winter. However, there has not yet been a single sighting of a colour-ringed Dunlin from these studies. Could it be that they don't come to Britain at all, or are we missing them amongst large flocks on estuaries? If you ever have the opportunity to take a good look at a flock of Dunlin, or any other species of wader, it is always worth looking to see if they have colour rings. Such sightings give us very useful information about the migration of waders using British estuaries.

If you see any colour-marked Dunlin, or any other colour-marked waders, please send your records to Jane Marchant, Wader Study Group (colour-mark sightings), PO Box 247, Tring, Hertfordshire.

WWT Late Summer Survey

Please remember to return your counts from this survey to your regional organiser as soon as possible after the September count. Both the summer and the September counts should be written on the same NWC form. The October count will be the first to be recorded on the new WeBS form.

Counters Needed

Few areas of the country can claim to have a surplus of counters but, fortunately on the other hand, only a few are desperately short of counters. However we are in real need of help in the following areas:- Lindisfarne, Carmarthen Bay, the Humber, Hereford & Worcester, Powys, Central, Highland & Islands, Dumfries & Galloway, North Humberside and Devon. If you know anyone who may be persuaded to join us please let Peter or Ray know.

International Waterfowl Census

As in previous years, we would be grateful for counts from as many sites as possible in January, as part of the International Waterfowl Census. This has been conducted by the International Waterfowl and Wetlands Research Bureau since 1967 at sites throughout the Western Palaearctic. Please simply complete a separate count form for each site. However, please make sure that these counts do not compromise counts at your regular site(s).

Prioritisation of WeBS

Increasingly, counters are asked by the BTO, WWT and other organisations to help in various bird surveys. We very much hope that, where possible, you will participate in these but, nevertheless, will continue to give highest priority to WeBS counts. It is these that provide the essential long-term run of data, often used as the first line of defence in protecting wetlands, as well as providing the foundation-stone on which further research is based. We do hope WeBS will be 'top of your list'.

MANY THANKS FOR ALL YOUR HELP

The growth of the various count schemes into WeBS, arguably the biggest and best count scheme of its kind in the world and the envy of many other countries, results largely from the tremendous volunteer input from you, the counters. We hope that you will continue to support the scheme in its new form as WeBS, and through it, the conservation of waterfowl and wetlands throughout the UK and abroad.

WeBS NATIONAL ORGANISERS

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