WeBS Newsletter

British Trust for Ornithology

THE WILDFOWL & WETLANDS TRUST

RSPB

JOINT NATURE CONSERVATION COMMITTEE

Number 2 Summer 1994

# WETLAND BIRD SURVEY

In September 1994, WeBS will have been running for exactly one year. We hope you agree that the previous 12 months have run relatively smoothly, although we will be working hard to resolve any outstanding problem areas. For instance we intend sending your Annual Report for 1993-94 somewhat earlier in the year than the previous issue. Inserted in this newsletter is a slip detailing forthcoming count dates, a list of guidelines for completing the new WeBS form and an errata slip which can be cut out and inserted into your Annual Report. A few Local Organisers have requested we send out count dates earlier than we have this year and we aim to do this in future. Currently staff are involved in analysing the data you collected between July 1993 and March 1994. Only nine months of records are included because, with the advent of WeBS, the count year has changed from July - June to April - March. Highlights in this newsletter include a new survey (see below) and a counters' conference at Hull (see back page). One final reminder that, although Peter and Ray are both happy to deal with any queries, counters of inland (or non-tidal) sites are encouraged to contact Peter in the first instance, and those counting coastal (including estuarine) sites should contact Ray.

## A New Survey to Find The Missing Shorebirds on Britain's Open Coasts

*John T Cayford & Ray Waters (BTO)*

WeBS provides the best estimates of the numbers of waterfowl wintering in the UK. National totals of wintering waders are not, however, solely derived from the results of WeBS. For those species which occur predominantly on estuaries this may be the case, because the excellent coverage in recent years has meant that over 99% of estuarine waders are counted. For those species which winter in large numbers on open coasts, inland wetlands (e.g. reservoirs) or on agricultural habitats, national totals based only on the WeBS counts may seriously underestimate the true totals. One other habitat which holds significant numbers of the UK's wintering waders, but which remains one of the least surveyed, is the open coast or non-estuarine shores. Waterfowl are counted each year on 50 or so stretches of open coast as part of WeBS but this represents only a part of the total population.

However, on one occasion over 90% of the 12,000 km of non-cliff, open coast in the UK was surveyed by around 1,500 volunteers from the BTO and Wader Study Group. The Winter Shorebird Count, conducted mainly in December 1984 and January 1985, was funded principally by the BTO, RSPB, the then Nature Conservancy Council, Wader Study Group and EARTHWATCH. This survey was a milestone in wader monitoring, being the first and to date only comprehensive survey of waders on open coasts in the UK. A total of almost 300,000 waders of 19 species was recorded, with the most abundant species being Oystercatcher, Curlew, Turnstone, Dunlin and Redshank, followed by Ringed Plover and Purple Sandpiper. The results of the Winter Shorebird Count were particularly important because they allowed the first accurate estimates of the national populations of wintering waders to be calculated. These population estimates are particularly important for the conservation of waterfowl because they are used to define sites of 'national importance', which regularly hold 1% or more of the national population. Since the Winter Shorebird Count, national populations of several wader species wintering on estuaries have altered considerably which suggests that similar changes may have occurred on the non-estuarine coasts. There is now an urgent need to repeat counts of wintering waterfowl on Britain's non-estuarine coasts.

We are pleased to announce a WeBS pilot survey of waterfowl on Britain's non-estuarine coastal sites in winter 1994-95, with specific reference to Purple Sandpipers (see *BTO News*, No. 192).

Anyone interested in helping this winter, either by counting or acting as a local co-ordinator, is asked to contact Ray at BTO HQ for further details. We are particularly keen to hear from anyone who can help in Orkney, Shetland, the Western Isles or northern Scotland.

# Long-serving Counters

Following our request in the last newsletter, we received a good number of replies from those who have been counting for 20 or more years (see table below).

| Start year | Name |
|---|---|
| 1947 | R M Curber, Frank Gribble |
| 1952 | David Billett, Lewis Nesbitt |
| 1953 | Bryan Sage |
| 1954 | John Stafford |
| 1957 | Peter Oliver, W E Richardson |
| 1958 | Mollie Drake, Geoff Naylor |
| 1959 | Andrew Shepherd |
| 1960 | Kathleen Atkinson |
| 1961 | J S Gilbert, Ellen & Albert Ellis |
| 1962 | Ted Johns, Fred Littlemore |
| 1963 | R E Youngman |
| 1964 | Maureen Rudge, John Wilson |
| 1965 | Jim Cheverton |
| 1966 | Beryl & Maurice Adcock |
| 1967 | R Stevens |
| 1968 | Michael Packard, Mary MacDuff-Duncan |
| 1969 | Beryl Hulbert, Bob Treen |
| 1970 | John Threadgold, J Irvine |
| 1971 | Don Madin, A S Cooke |
| 1972 | John Miller, Colin & Jennifer Tubbs, Ted Rand, Alan Heathcote, Mr & Mrs P Shakeshaft, Keith Mason |
| 1973 | J L Smith |

Two counters, Frank Gribble and R M Curber, deserve special mention as they have both been counting since the scheme officially started in 1947.

A common theme in the letters received was the increase in disturbance over the years, the main villain of the peace being jet-skis! Improvements in optical equipment available, aiding identification and counting considerably, were mentioned by many counters.

There were also several comments on the scheme itself. As expected, the new form was referred to on several occasions, and, although it took some getting used to, it was generally welcomed as a sensible improvement. Feedback to counters was also considered to have improved, although not by all. Don Madin recalled that there used to be monthly newsletters that summarised the counts, and that the September 1972 issue referred to WWT transferring data onto punch-tape!

The replies also contained much colourful, anecdotal information on counting over the years which we found both interesting and entertaining, and we have taken the liberty of including actual extracts from a letter from David Billett, organiser of the Langstone Harbour counts since 1952, which cover many of the issues that counters and organisers often raise:

"As individuals, we scattered around the harbour's shores, creeks and marshes throughout the daylight hours on weekends throughout the year and during the light evenings during the weekdays either on foot or bicycle. At the end of each day we usually gathered at Farlington Marshes to compare notes and compile the day's log.

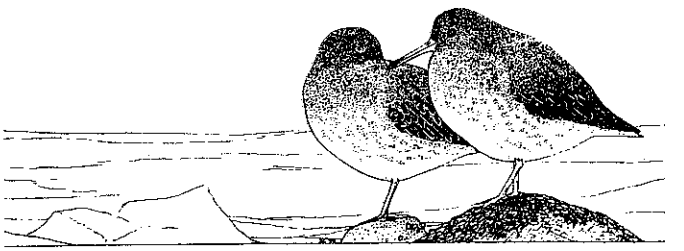
We had developed wader counting at the same time. One observer, Bryan Renyard, took his cycle across the ferry to Hayling Island and cycled the length of the railway line up the island's west shore counting the flight *on* during the rising tide (in fact Bryan, now 56, is still using the same bicycle he used at 15!). The remainder of us sat on the extreme southern point of Farlington Marshes from where we could count the flight *off* the central islands. If possible, we each took one species, but usually we had to do at least two.

Until the last five years or so I had managed to recruit the new counters with difficulty and often only for one season. Today, however, it is almost impossible to find people who will commit themselves for even one year *or* who are confident to identify at distance *or* have a sufficient attention span to cope with a two hour count. The young (under 25-30) are prone to hypothermia and have no idea of insulation principles involved in sitting on concrete in Jan or Feb in a NE 5-6.

Incidently, I spent my national service on Fishery Protection duties mostly north of the arctic circle in winter - four hours on an *open* bridge on lookout is *excellent* training for estuary counts and seawatches.

Of course, today Langstone is a very different place - area reduced by infilling creeks followed by development of roads and various recreational horrors. Windsurfers are the worst and now jet skiers (illegal because of speed but all uncontrollable) and hundreds of boats of various sorts. Ironically, the bird numbers, on the whole, are increasing! including Peregrines - now a daily presence which create havoc with the counts!"

Many thanks to all those who wrote to us. In addition to those who wrote in, we are also aware of several other counters who have been counting for a considerable number of years. We extend a big thanks to all for their dedicated service over the years.



*By Steve Carter*

## Wader Study Group Conference

(Büsum, Germany, 21-23 October 1994)
Cost 118 DM (c. £50.00) plus travel from UK.

**Contact:**
Hermann Hötker, WSG Conference,
FTZ, Hafentörn, 2576 Büsum, Germany.
Tel: 04834-604280
Bookings needed promptly now.

**Hope to see you there!**

Further details in *Wader Study Group Bulletin* 72 or contact Ray Waters at BTO HQ.

# WeBS Low Tide Counts

*Julianne Evans (BTO)*

An important development this year has been the incorporation of the former BTO/RSPB National Low Tide Counts programme into WeBS. The main aim of the WeBS Low Tide Counts scheme is to collect and regularly update information on the feeding distributions of intertidal waterfowl on UK estuaries. The Low Tide Counts scheme augments the main WeBS data by providing detailed information on the way in which waterfowl distribute themselves on estuaries at low water.

The experience gained from organising two years of the National Low Tide Counts programme has been used to review all aspects of the scheme, from the counting methods to the treatment of the data at BTO headquarters. Wide-ranging discussions have already taken place involving the four WeBS partners (BTO, WWT, RSPB, and JNCC on behalf of EN, CCW, SNH and DoENI), taking into account all the comments received from counters. The overall conclusions were that, although no substantial changes will be made, there will be further refinements to the methods used. The recording form will be revised, which should prove easier for counters to use and allow quicker, more efficient data handling at BTO headquarters. Overall these changes should result in a better service to counters and better use of the data.

During the 1993-94 winter, a total of eight estuaries was counted: Strangford Lough, Tay, Duddon, Inner Thames, Chichester Harbour, Langstone Harbour, Poole Harbour and Kingsbridge. The enthusiasm of all the counters involved has been marvellous. Particular thanks must go to the counters who volunteer to take part in both the main WeBS counts and the Low Tide Counts and to those who have taken part in the Low Tide Counts for several years in succession. We are aware that the success of these schemes is entirely due to this continuing enthusiasm. We are also concerned that existing counters are not overloaded and we are therefore keen to mount a major recruitment drive.

Results from the two previous winters have highlighted the common factors affecting the distributions of species on a range of estuaries. They have also demonstrated differences in the use made of estuaries by waterfowl at different states of tide and been used to safeguard important parts of estuaries. These differences reflect ecological characteristics of the species concerned. The Low Tide Counts results should not be directly compared with the main WeBS counts because they fulfil a very different role. Taken together, however, the two schemes provide new insights into the usage of estuaries made by waders and wildfowl. The Low Tide Counts scheme will draw on the expertise of all four WeBS partners thus ensuring maximum use of this information for both conservation and research purposes.

## Use of Man-made Roost Sites by Waterfowl

*Derek Toomer (BTO)*

Roost sites must provide some protection from predators, from the elements and from disturbance. Waders can expend considerable energy in flying many kilometres to roost sites which fulfil these requirements, whereas wildfowl can roost on the open water.

A recent BTO study, funded by the Cardiff Bay Development Corporation, has shown that in some cases it is feasible to provide new man-made or man-modified roost sites to replace those which may be lost through development. Cardiff Bay, which supports important wintering populations of Shelduck, Teal, Dunlin, Curlew and Redshank, is currently undergoing major changes which will ultimately lead to the loss of the intertidal habitat when the barrage is built. In the meantime, a new road has destroyed some of the saltmarsh and creeks used by waterfowl and removed old jetties that were previously used for roosting by waders which feed in the bay. As part of the mitigation for this loss of habitat, Cardiff Bay Development Corporation funded the design and construction of a high tide roost island. An existing high area of the saltmarsh was further raised and the surfaces landscaped and covered in suitable gravel. Banks were created to screen it from the land and a deep channel cut to convert it to an island on high spring tides. After construction of this island, waders continued to roost on the remaining saltmarsh when it was uncovered by the tide but switched to the newly created high tide roost island when the saltmarsh was flooded. The results clearly demonstrate that waders may adapt to a new, semi-artificial alternative site following the development.

## The Provision of Refuges for Waders

*Mark Rehfisch (BTO)*

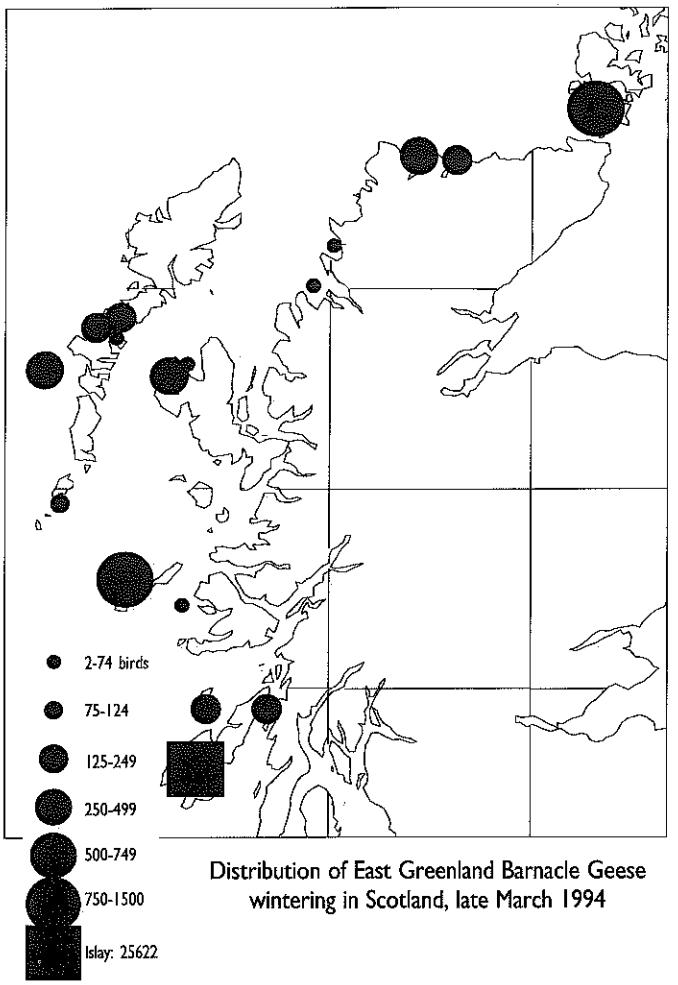
Estuaries are often highly disturbed by economic exploitation and leisure activities. Disturbance to waterfowl can affect breeding, roosting and feeding behaviour. A wader that is regularly disturbed at its high tide roost and forced to fly will have to increase its feeding time to compensate for increased energy consumption. English Nature, the statutory conservation body for England, has decided to test the value of establishing a network of refuges where waders can roost largely protected from human disturbance. As a first step, it was necessary to measure the distances between the different roosts used by individual waders so that the refuges could be placed at appropriate intervals. The BTO was commissioned to analyse the information obtained from the 250,000 waders ringed at roost on the Wash by the Wash Wader Ringing Group to assess wader mobility. We were surprised to find that birds that can fly enormous distances in a short period of time during migration only move very short distances between roosts. In general, juveniles moved further than adults. From the evidence on the Wash, refuges designed to be available to half of the population of Grey Plover should be 3 km apart, 7 km apart for Redshank and 6 km apart for Dunlin. Any series of refuges (providing protection from all types of disturbance) needs to consider these different requirements of the various species.

# Greenland Barnacle Geese in Scotland, March 1994

*Simon Delany & Malcolm Ogilvie (WWT)*

The population of the Barnacle Goose which breeds in east Greenland winters on islands in north and west Scotland and Ireland. The majority winter on Islay, but the remainder are scattered; more than 100 sites having been used since surveys began in the 1950s. Away from Islay, Orkney, Coll and Tiree where regular ground counts are now conducted, the only feasible census method is aerial survey. The 1994 aerial survey was conducted on four days between 21 and 29 March and was co-ordinated with Irish surveys to give international coverage.

A provisional total of 38,355 birds was counted in Scotland and Ireland, an 11% increase on the previous complete survey in 1988. In 1994, a total of 2,358 was counted in 15 flocks during the Scottish aerial survey, with ground counts of 25,622 on Islay, 1,275 on Coll and Tiree, 800 on Orkney and 200 in the Sound of Jura, bringing the overall Scottish total to 30,255.




Distribution of East Greenland Barnacle Geese wintering in Scotland, late March 1994

The proportion of the population wintering on the island of Ireland has remained unchanged at 21%. Islay held 67% of the overall population compared with 59% in 1988. The proportion of birds in Scotland found on small, uninhabited islands fell from 19% (5,127) in 1988 to just 8% (2,368) in 1994, and the number of concentrations exceeding the threshold for international importance (320) fell from 10 to six. Two formerly important haunts, the Shiants and islands in the Sound of Barra, had no birds at all on this survey. In contrast, a general increase in the number of birds found on inhabited, cultivated islands appears to have taken place. Thus there have been increases on Islay, Colonsay, Coll and Tiree, whose combined populations rose from 81% of the Scottish population in 1988 to 92% in 1994.

The attractiveness of uninhabited islands to Barnacle Geese is possibly related to use by farmers for sheep grazing. The recent requirement to dip sheep twice each summer to control sheep scab may have deterred farmers from grazing remote islands because of the expenditure of time and money required to move sheep twice each summer. This may have caused a reduction in the quality of habitat available to Barnacle Geese, increasing the tendency for them to winter on cultivated islands. At present, much money is spent on Islay for goose conservation management. It might be worthwhile improving the management of outlying islands to increase their attractiveness to geese, perhaps by subsidising farmers to improve their management in the form of sheep grazing. Such an improvement in management by RSPB appears to have been successful in attracting more geese to winter on Eilean Hoan, the one small uninhabited island which recorded an increase in numbers between 1988 and 1994.

## Seminar on Fish-eating Birds

*John Holmes (JNCC)*

There is widespread concern amongst anglers and fisheries managers over the impact of fish-eating birds on fish stocks in rivers, lakes and ponds. This concern is focused especially on Cormorants, Goosanders and Red-breasted Mergansers and, to a lesser extent, on Grey Herons. A seminar on fish-eating birds was held in February by English Nature and the Joint Nature Conservation Committee. It was attended by all four WeBS partners, representatives of statutory and voluntary conservation organisations, as well as the Ministry of the Environment for Northern Ireland, Scottish Office and Welsh Office. The aims of the seminar were to:

- review the status, trends and distributions of the above species.
- review current understanding of interactions between fish-eating birds and fisheries and identify gaps in our knowledge.
- review methods of deterrence and control.

The conclusions of the seminar emphasised the need for more specific research, using experimental approaches to quantify impacts in different situations and to assess the effectiveness of damage limitation techniques such as shooting. The need for a better understanding of the movements of these species between sites was also identified. Following the seminar, the Department of the Environment decided to convene a working group to take forward some of the research ideas.

# Changing Fortunes on The Somerset Levels

*John Quinn and Mike Bell (WWT)*

WeBS data have shown that the Somerset Levels and Moors is an internationally important site for Bewick's Swan, Teal and Lapwing, and nationally important for a further five waterfowl species. Thanks to RSPB funding, WWT has recently completed an analysis of all historical waterfowl count data from the Levels, the results of which will be used by those involved in their management.

The aims of the study were to assess the relative importance of the 20 main areas for waterfowl, to examine long-term trends and to assess the effectiveness of the current counting procedure. The RSPB reserve at West Sedgemoor was found to be of outstanding importance and accounted for 50% of the total value of the Levels, where "value" took into account species diversity, abundance and the national significance of numbers. The remaining waterfowl were spread fairly evenly over many of the other areas. One interesting trend to emerge was that many of the areas that were important for wildfowl were unimportant for grassland waders like Lapwing and Golden Plover, and *vice versa*.

Long-term trends for most species were remarkably similar, not just on the Levels as a whole but across individual areas also. This is probably explained by the influence of water levels which are primarily dictated by rainfall, flooding and drainage regimes. The typical trend for many species was of high numbers in the late 1960s and early 1970s followed by low or very low numbers until the late 1980s. Numbers have increased in recent years although they continue to decline on a few areas. The recovery has been due to very wet winters, the efforts of the RSPB at West Sedgemoor and the effectiveness of the government-backed Environmentally Sensitive Area (ESA) scheme, which offers financial incentives to farmers to allow flooding on their land. It is expected that, when fully operational, the scheme will have a major positive impact on waterfowl numbers.

The extensive low-lying floodplains of the Somerset Levels and Moors present a special challenge for waterfowl counting and it has only been in recent years that most of the main areas have been covered in all winter months. Although our analysis has shown that quite a few of these areas have held very few birds in recent years, it is very important that they should continue to be monitored because the ESA scheme may change their value in the future.

Thanks to the concerted effort of several conservation organisations, government bodies and WeBS, the future of the Somerset Levels and Moors looks more promising. It is essential that the WeBS scheme continues to monitor the effectiveness of these conservation measures.

# Cormorants and Their Licensed Control in Britain

*Des Callaghan (WWT)*

Concern is growing amongst fishery organisations that Cormorants are responsible for significant damage to fisheries in Britain, especially in the light of population increases and greater usage of inland freshwaters. Complaints about Cormorants are now common in Britain, especially at stillwater and river game fisheries. Such complaints occur mainly because of concerns regarding damage to fish populations owing to Cormorant predation and/or injury inflicted upon fish which have been grasped by the birds but not consumed. Accusations of such impacts are often based on subjective information, and bird conservationists and fishery managers have called for quantitative evidence to assess the true scale of Cormorant impact on fisheries.

Using WeBS data, the total winter population was estimated to have reached 19,000 in 1990-91, increasing by c. 6% per annum during 1987-88 to 1991-92. Previously intensively persecuted, Cormorants are now protected under The Wildlife & Countryside Act 1981. However, licences may be issued to kill Cormorants '..for the purpose of preventing serious damage to fisheries..' if it can be demonstrated that the birds are causing serious damage to the fishery, and that reasonable, non-destructive control methods have been attempted to prevent such damage. Between 26 and 51 licences were issued annually in Great Britain for the killing of Cormorants during 1983-1992, and between 100 and 900 birds were shot each year. Most (97%) were shot in Scotland, where licences are mainly issued to the owners of river fisheries and virtually all licences that have been applied for have been granted. In contrast, all licences issued in England and Wales up until the start of 1992 were granted to alleviate problems on stillwater fisheries.


The licensed control of birds continues, despite there being little evidence that Cormorants cause serious damage to fisheries or that killing to reinforce scaring is an effective method to alleviate such damage. Research is needed in order to set guidelines which identify when serious damage is caused by Cormorants, and what management strategies are the most cost-effective for alleviating such impact. WWT are currently working with The Association of Stillwater Game Fishery Managers to provide an assessment of Cormorant occupancy and impact at stillwater fisheries in England and Wales. The results of this research will be of fundamental importance for the formulation of future strategies concerning this issue.

# Use of WeBS Data by RSPB Regions

*Ken Norris (RSPB)*

RSPB regional staff find WeBS data invaluable for their conservation work. A number of examples from the RSPB's southeast regional office are typical of how WeBS data are used throughout the country. WeBS data have been used to define the boundaries of wetland sites for designation as SPA/Ramsar sites. These include internationally important sites for waders and wildfowl such as Portsmouth Harbour, and the Thames and Medway estuaries. WeBS data will be used in the preparation of estuary management plans. Existing data will be valuable for identifying important concentrations of roosting birds, and in future the WeBS Low Tide Counts scheme will provide important information on the location of feeding birds. Although many planning applications only affect relatively small areas of intertidal habitat, WeBS data provide an accurate assessment of the importance of these small areas within the wider estuarine context. A current example is that of Lappel Bank in the Medway. WeBS data have demonstrated that this is an important part of the estuary, and form the basis of a High Court case in which the RSPB argue that Lappel Bank should have been included in the SPA. Finally, the RSPB's southeast region are using WeBS data in the development of their Regional Strategy, enabling them to target their conservation work to the most important sites for birds in southeast England.

## Wintering Twite on Estuaries - A Request

Little is known about wintering Twite in England except that they occur almost exclusively on estuarine habitats. Recent counts suggest a large decrease in the numbers wintering on the Wash. From a count of 17,000 in the 1980s, there were fewer than 500 birds wintering on the Wash last winter. This decline seems to be mirrored at other sites in southeast Britain. Flocks of over 1,000 were regularly recorded in the late 1970s, whereas a flock of over 100 is now noteworthy. A project, set up at the University of East Anglia to look at the wintering ecology of Twite, will try to explain this decline and see if it is restricted to southeast Britain. I am therefore seeking information from as many different areas of Britain as possible. If any WeBS counters have records of Twite dating back to the 1970s and 1980s I would be very interested to hear from you. Although a long-term data set would be ideal, a run of a few years would be of great help.

As a 'Red Data Bird' for Britain, Twite is an important species and any information on past or present levels of wintering birds would be very useful to the project.

***Phil Atkinson***
University of East Anglia, Norwich, Norfolk, NR4 7TJ.

## WeBS Counters' Conferences

One spin-off from WeBS will be the opportunity for counters to attend one day regional conferences. These will provide the chance for staff to give greater detail on results of WeBS research and how WeBS data are used in conservation work. You will get the chance to ask specific questions, as well as an opportunity to let us know your opinions on WeBS in general.

The conferences will be aimed at regional audiences. Over a number of years, we aim to provide a programme of conferences at various locations throughout the UK to give everyone a chance to attend. We are pleased to announce the first WeBS conference:

**WeBS Counters' Conference 1994**
**Saturday, 17 September**
**University of Hull**

Speakers from BTO, WWT, RSPB and JNCC will cover conservation issues, survey results, conflict species, Low Tide Counts plus more.

Also workshops and competitions

**Cost: £10.00 (provisional)**

Exact details are still being finalised, but enquiries and applications for booking forms should be addressed to Colin Menendez, WWT, Slimbridge, Glos., GL2 7BT.

## 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 waterfowl and wetlands throughout the UK and abroad.

## WeBS NATIONAL ORGANISERS

**Peter Cranswick (wildfowl)**
**WWT, Slimbridge, Glos., GL2 7BT**

**Ray Waters (waders)**
**BTO, The Nunnery, Thetford, Norfolk, IP24 2PU**

Compiled by Ray Waters with help from Sophie Foulger, Eng-Li Green and John Cayford.
Published by the BTO, The Nunnery, Thetford, Norfolk, IP24 2PU. Registered Charity No. 216652. 