Waterbirds in the UK 2007/08
The Wetland Bird Survey

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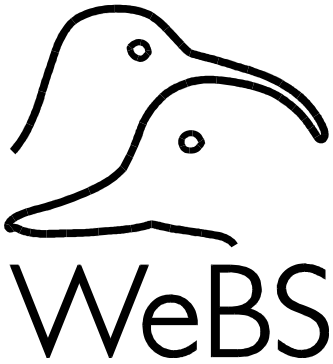

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This report is provided free to all WeBS counters and those who participate in the other national waterbird surveys, none of whom receive financial reward for their invaluable work. Further feedback is provided to counters through the annual WeBS Newsletter. For further information please contact the WeBS Office at the BTO.

ACKNOWLEDGEMENTS

This book represents the twenty-seventh report of the Wetland Bird Survey and comprises information from WeBS and complementary national and local surveys, *e.g.* goose censuses. It is entirely dependent on the many thousands of dedicated volunteer ornithologists who supply the data and to whom we are extremely grateful. The Local Organisers who coordinate these counts deserve special thanks for their contribution.

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Grateful thanks to all and apologies to anyone who has inadvertently been missed.

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The WETLAND BIRD SURVEY

Organised and funded by

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OTHER NATIONAL WATERBIRD SURVEYS

Details of and contacts for many of the other waterbird surveys used in this report, and of forthcoming surveys, can be obtained via the web sites of the four WeBS partner organisations.

ERRATA TO 2006/07 REPORT

Please note the following corrections to data presented in the 2006/07 WeBS annual report:

Page 82, Tufted Duck: peak count at Theale Gravel Pits in 2006/07 was 608 (not 918). This resulted in the site being incorrectly listed as surpassing the threshold for national importance.

Page 100, Great Crested Grebe: peak count at Lade Sands in 2006/07 was 880 (not 0). (Note, for reporting purposes, Lade Sands is now part of 'Dungeness & Rye Bay'; see page 21).

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Summary

THE WETLAND BIRD SURVEY & 'WATERBIRDS IN THE UK'

The Wetland Bird Survey (WeBS) is a joint scheme of the British Trust for Ornithology (BTO), Wildfowl & Wetlands Trust (WWT), Royal Society for the Protection of Birds (RSPB) and Joint Nature Conservation Committee (JNCC) to monitor non-breeding waterbirds in the UK. The principal aims of the scheme are to identify population sizes, determine trends in numbers and distribution, and identify important sites for waterbirds. WeBS Core Counts are made annually at around 2,000 wetland sites of all habitats; estuaries and large still waters predominate. Monthly coordinated counts are made mostly by volunteers, principally from September to March, with fewer observations during summer months. Data from other sources, *e.g.* roost counts of grey geese, are included in this report where relevant.

This report presents total numbers counted for all species in the most recent year in Great Britain and Northern Ireland. Annual indices are provided for the more numerous species, as are monthly indices showing relative abundance during the winter.

Species accounts provide yearly maxima for all sites supporting internationally and nationally important numbers. Sites with changed status are highlighted and significant counts are discussed. Wherever possible, counts are placed in an international context and relevant research is summarised. Waterbird totals are provided for all sites meeting criteria for international importance and species occurring in internationally important numbers on each are identified.

WeBS Low Tide Counts are carried out on selected estuaries to determine the distribution of birds during low tide and to identify important feeding areas that may not be recognised during Core Counts, which are made mostly at high tide. A summary of results for these estuaries, and distribution maps for selected species, are provided.

Waterbird totals recorded by the Irish Wetland Bird Survey, a similar scheme operating in the Republic of Ireland, are also included.

THE 2007/08 YEAR

Coverage

This report summarises counts during 2007/08 and previous years (since 1960 for wildfowl, 1969 for waders and the early 1980s or 1990s for other species). During 2007/08, WeBS counters covered 3,922 count sectors at over 2,100 count sites. During the crucial 'winter' period of September to March, 3,880 sectors were counted at least once and over 2,000 were covered in all months. This, once again, represents a fantastic effort all around and a huge thank-you goes to all those involved.

Climate-related change & other factors

As is the case with all WeBS-years, there are a number of factors which could potentially have impacted upon the recorded numbers and distribution of waterbirds in 2007/08.

These include the subtle responses of waterbirds to the effects of milder winters due to recent climate change, the recruitment of juvenile birds to the population (affected by the level of breeding productivity), to more tangible effects of pressures such as habitat loss, degradation and disturbance.

Many of the most notable changes recorded in recent years are considered to be attributable to the effects of changing climate. The phenomenon known as "short-stopping" has been shown to be a result of milder winters, where a greater proportion of some waterbird populations are now able to winter on wetlands closer to breeding areas (Austin & Rehfisch 2005, Maclean *et al.* 2008). Where applicable in this report, interpretation of the results from WeBS is placed in the context of results from waterbird monitoring from other countries.

Climate change is potentially a very important factor in helping to explain declining trends of some species at the national level (e.g European White-fronted Goose), regional differences in trends (e.g. declines of Wigeon, Coot and Lapwing in Northern Ireland), as well of course as recent marked changes in distribution, even colonisation, by some species (e.g. range expansion of Little Egret in Great Britain).

SPECIES SUMMARY FOR 2007/08

Swans & Geese: Wintering Bewick's Swans remained at a similarly low level to 2006/07; likely to be due to mild conditions on the wintering grounds further east. Whooper Swan numbers rose again and the GB index reached its highest level.

The number of Pink-footed Geese rose compared to 2006/07 but European White-fronted Geese continue to winter in Britain in fewer numbers each year. Greenland White-fronted Geese showed tentative signs of an improvement while Icelandic Greylag Geese wintered in higher numbers than in the past few years. A small decrease in Greenland Barnacle Geese was noted at the principal site, Islay. Numbers of Svalbard Barnacle Geese rose after lower numbers in the previous two years. Numbers of Dark-bellied Brent Geese have stabilised after a slump in the early 2000s. The East Canadian High Arctic population of Light-bellied Brent Geese showed an increase, whilst the trend for Svalbard Light-bellied Brent Goose fell compared to recent years.

Ducks: Shelduck remained stable in both GB and NI, while numbers of Wigeon increased slightly after a sharp fall the previous year. The number of Gadwall wintering in GB rose, thereby returning to the long-term trend of consistent increase. Teal numbers fell in GB but rose slightly in NI. The long-term slow decline in the numbers of Mallard showed no signs of reversal. Pintail numbers in NI continued to rise sharply, while in Britain very little change was detected. Shoveler increased in both GB and NI; the generally improved situation for dabbling ducks in 2007/08 compared to the previous year was partly a result of more favourable water levels at Ouse Washes.

Numbers of Pochard continued to decline in GB but rose slightly in NI. Tufted Duck numbers were stable in GB, but in NI the decline continued with numbers now at their lowest level ever. Scaup numbers increased in NI, continuing the recovery from a recent crash. Eider numbers fell in GB but rose to a record level in NI, while the counted maximum of Long-tailed Duck was one of the lowest recorded. After recent declines, the wintering population of Goldeneye increased on both GB and NI in 2007/08. Red-breasted Merganser numbers continued to fall in GB and remained stable in NI, while Goosander numbers fell slightly.

Divers, Grebes & Rails: Numbers and distribution of Red-throated Diver were very similar to the previous year, and totals for Black-throated and Great Northern Diver were also similar to usual. The GB trend for Little Grebe rose to a record high while that for Great Crested Grebes was similar to recent years. Little Egret again continued to expand its range both north- and westwards. Moorhen remain fairly stable in GB, while Coot numbers increased following a fall the previous year, to near the recent average. However the recent decline in Coot in NI continued.

Waders: Numbers of Oystercatcher in GB remained stable, and rose slightly in NI. Avocets continued their long-term increase, reaching recorded numbers. Numbers of Ringed Plover fell slightly compared to recent years and there were declines in wintering Golden Plover and Lapwing, while Grey Plovers showed a marked increase compared to recent years. Knot numbers rose, including a further increase at the key site, The Wash. The trends for Sanderling rose for both GB and NI, and numbers of Purple Sandpiper, although low due to the relatively poor coverage by WeBS, remained similar to the past few years. Dunlin continued to decline steadily in GB but showed signs of stability in NI. Numbers of Black-tailed Godwit were stable in GB but showed a further rise in NI, while Bar-tailed Godwits wintering in GB rose slightly following three poor years. Curlew remains relatively stable in GB and NI, and numbers of wintering Greenshank in GB were also stable. Redshank numbers were similar to the previous year, thereby halting recent declines. Turnstone now appears relatively stable in GB, whilst in NI a further increase was detected.

Gulls & Terns: With all gulls and terns, numbers recorded are a reflection of the level of coverage as much as the abundance of the species. The counted peak of Black-headed Gull was similar to 2006/07, but that for Common Gull was the highest for four years. Of the larger gulls, numbers of Lesser Black-backed Gull rose but Herring Gull fell. There was a small increase in the GB peak of Little Tern, while Sandwich Tern fell slightly and both Common Tern and Arctic Tern were both well above average.

Introduction

The UK is of outstanding international importance for waterbirds. Lying on some of the major flyways for Arctic-nesting species, large numbers of waterbirds are attracted, especially during winter, by the relatively mild climate and extensive areas of wetland, notably estuaries. The UK thus has both moral and legal obligations to conserve both these waterbirds and the wetlands upon which they depend.

As a signatory to a number of international conservation conventions, and as a member of the EU, the UK is bound by international law. In particular, the 'Ramsar' Convention on Wetlands of International Importance especially as Waterfowl Habitat, the EC Birds Directive and the EU Habitats and Species Directive, between them, require the UK to identify important examples of wetland and other habitats and sites important for birds and designate them for protection. Implicit in these obligations is the need for regular monitoring to identify and monitor such sites. These instruments also lay particular significance on the need to conserve migratory populations, and consequently most of the waterbird populations in the UK.

The UK has ratified the Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA) of the 'Bonn' Convention on the Conservation of Migratory Species of Wild Animals. AEWA entered into force in 1999. It is a specific Agreement requiring nations to take coordinated measures to conserve migratory waterbirds given their particular vulnerability due to their migration over long distances and their dependence on networks that are decreasing in extent and becoming degraded through non-sustainable human activities. Article three of the Agreement requires, among other things, that sites and habitats for migratory waterbirds are identified, protected and managed appropriately, that parties initiate or support research into the ecology of these species, and exchange information and results. Explicit in this Agreement is that adequate monitoring programmes are set in place to fulfil these objectives and the Action Plan to the Agreement specifically requires that nations endeavour to monitor waterbird populations.

AIMS AND OBJECTIVES OF WeBS

The Wetland Bird Survey (WeBS) aims to monitor all non-breeding waterbirds in the UK to provide the principal data on which the conservation of their populations and wetland habitats is based. To this end, WeBS has three main objectives:

- to assess the size of non-breeding waterbird populations in the UK;
- to assess trends in their numbers and distribution; and
- to assess the importance of individual sites for waterbirds.

These results also form the basis for informed decision-making by conservation bodies, planners and developers and contribute to the sustainable and wise use and management of wetlands and their dependent waterbirds. The data and the WeBS report also fulfil some of the objectives of the Conventions and Directives listed above. WeBS also provides UK data to Wetlands International to assist their function to coordinate and report upon waterbird monitoring at an international scale.

Structure and organisation of WeBS

WeBS is a partnership scheme of the British Trust for Ornithology (BTO), Wildfowl & Wetlands Trust (WWT), Royal Society for the Protection of Birds (RSPB) and the Joint Nature Conservation Committee (JNCC), the latter on behalf of Natural England (NE), Scottish Natural Heritage (SNH) and the Countryside Council for Wales (CCW), and the Environment and Heritage Service in Northern Ireland (EHS).

WeBS continues the traditions of two, long-running count schemes which formed the mainstay of UK waterbird monitoring since 1947 (Cranswick *et al*. 1997). WeBS Core Counts are carried out at a wide variety of wetlands throughout the UK. Synchronised counts are conducted once per month, particularly from September to March, to fulfil all three main objectives. In addition, WeBS Low Tide Counts are undertaken on selected estuaries with the

aim of identifying key areas used during the low tide period, principally by feeding birds; areas not otherwise noted for their importance by Core Counts which are normally conducted at high tide.

The success and growth of these count schemes accurately reflects the enthusiasm and dedication of the several thousands of volunteer ornithologists who participate. It is largely due to their efforts that waterbird monitoring in the UK is held in such high regard internationally.

Aim of this report

This report presents syntheses of data collected between July 2007 and June 2008 (see *The WeBS Year*), and in previous years, in line with the WeBS objectives. Data from other national and local waterbird monitoring schemes, notably annual goose censuses, are included where WeBS data alone are insufficient to fulfil this aim, so that the report provides a single, comprehensive source of information on waterbird status and distribution in the UK. All nationally and internationally important sites for which data exist are listed.

WEATHER IN 2007/08

This summary of UK weather is drawn from the Meteorological Office web site at www.metoffice.gov.uk. Bracketed figures following the month refer to the Core Count priority date for the month in question. Arctic breeding conditions for birds that winter within the UK are summarised from information collated by Soloviev & Tomkovich at the web site www.arcticbirds.ru.

United Kingdom

July (15) saw mean temperatures close to average. However the majority of the month was unsettled across much of the UK, with frequent periods of heavy rain. England and Wales recorded over double their average July rainfall; serious flooding was experienced in parts of the Severn Valley and upper Thames areas.

Mean temperatures in **August** (12) were close to the long-term historical average. Rainfall ranged from over 150% of average across NW Scotland to 50% of average across parts of central and northern England.

September (16) proved to be largely unremarkable with temperatures and rainfall across the UK close to average for the time of year. Both southern England and Northern Ireland experienced slightly drier conditions than typical.

High pressure dominated the UK's weather throughout **October** (7). This resulted in below average rainfall and slightly above temperatures, particularly across Scotland and Northern Ireland.

November (11) continued to be settled for the time of year. Mean temperatures were close to average in England and Wales, but well above in Scotland and Northern Ireland. Much of England recorded higher than average levels of sunshine.

The coldest **December** (9) since 2001 was experienced in eastern Scotland, yet other areas were close to average in terms of both temperature and rainfall. In most areas, the month was characterised by unsettled weather at the start and end which sandwiched a drier spell mid-month.

January (13) temperatures and rainfall were well above average throughout the UK, despite a brief colder interlude mid month. It was the fourth warmest January in England, wettest in eastern Scotland, and second wettest in Northern Ireland since records began in 1914.

Conditions in **February** (10) were dry and sunny throughout, with the exception of NW Scotland which received twice normal rainfall. In most areas temperatures were ca. 2°C above average and it proved to be the sunniest February since 1929.

Very high rainfall throughout the UK in **March** (9) led to it being the wettest in England since 1981, in Scotland since 1994, and sixth wettest in Northern Ireland since records began. Temperatures were close to average, yet snow fell across eastern England over Easter.

Most of the UK experienced **April** (6) temperatures close to the long-term, but it was the coldest since 2001. Rainfall was generally higher than average throughout, and around double the norm across parts of northern England and southern Scotland.

May (18) proved to be the warmest across UK, Scotland, Wales and Northern Ireland, and the equal warmest in England since records began in 1914. Temperatures were generally 2°C to 3°C above average in most areas. Rainfall was higher than usual across

southern areas of England and Wales, but below normal across northern areas of UK.

June (22) was very unsettled and changeable for the time of year across most regions. Temperature, rainfall and sunshine levels were all close to or very slightly below average throughout.

Arctic Breeding Conditions 2007

Spring temperatures were above average throughout most of the Arctic, particularly so in central Siberia where temperatures of upto 5°C higher than usual were experienced. By mid-summer much of the remainder of the region, including arctic Canada, Greenland, western Russia and eastern Siberia, was experiencing similarly high temperatures. In contrast, arctic Russia was relatively cold compared to average years.

Rodent abundance was generally either average or low across most arctic regions, although high densities were recorded at several regularly monitored sites in Scandinavia and arctic Russia.

Indications from sites in eastern arctic Canada and Greenland were of poor breeding success, following similar indications in 2006. Results from much of arctic Russia suggested that 2007 was a more successful breeding season for the birds in those areas, with many regularly monitored sites reporting good breeding success.

Table 1. The percentage of inland count units (lakes, reservoirs, gravel pits, rivers and canals) in the UK with any ice and with 75% or more of their surface covered by ice during WeBS counts in winter 2007/08 (England divided by a line drawn roughly between the Humber and the Mersey Estuaries).

Region	Ice	S	O	N	D	J	F	M
Northern Ireland	>0%	0	0	0	0	4	0	0
	>74%	0	0	0	0	0	0	0
Scotland	>0%	0	0	1	9	15	4	1
	>74%	0	0	<1	3	9	1	<1
N England	>0%	0	0	0	5	3	5	0
	>74%	0	0	0	2	0	2	0
S England	>0%	0	0	<1	4	<1	5	<1
	>74%	0	0	<1	2	<1	2	0
Wales	>0%	0	0	0	3	0	4	0
	>74%	0	0	0	1	0	3	0

SURVEY METHODS

The main source of data for this report is the WeBS scheme, providing regular monthly counts for most waterbird species at the majority of the UK's important wetlands. In order to fulfil the WeBS objectives, however, data from a number of additional schemes are included in this report. In particular, a number of species groups necessitate different counting methodologies in order to monitor numbers adequately, notably most geese and seaducks, and the results of other national and local schemes for these species are routinely included.

The methods for these survey types are outlined below and more detail can be found in Gilbert *et al.* (1998). It should be noted that site definition is likely to vary between these surveys (see *Interpretation of Waterbird Counts*).

WeBS Core Counts

WeBS Core Counts are made using so-called 'look-see' methodology (Bibby *et al.* 2000), whereby the observer, familiar with the species involved, surveys the whole of a predefined area. Counts are made at all wetland habitats, including lakes, lochs/loughs, ponds, reservoirs, gravel pits, rivers, freshwater marshes, canals, sections of open coast and estuaries. Numbers of all waterbird species, as defined by Wetlands International (Rose & Scott 1997), are recorded. In the UK, this includes swans, geese, ducks, divers, grebes, cormorants, herons, Spoonbill, rails, cranes, waders and Kingfisher. Counts of gulls and terns are optional.

In line with the recommendations of Vinicombe *et al.* (1993), records of all species recorded by WeBS, including escapes, have been published to contribute to the proper assessment of naturalised populations and escaped birds. Following Holmes & Stroud (1995), non-native species, which have become established are termed 'naturalised'. These species are categorised according to the process by which they became established: naturalised feral (domesticated species gone wild); naturalised introduction (introduced by man); naturalised re-establishment (species re-established in an area of former occurrence); or naturalised establishment (a species which occurs, but does not breed naturally, *e.g.* potentially Barnacle Goose in southern England). With the exception of vagrants, all other non-native species have been classed as 'escapes'. The native range is given in the species account for naturalised species, escapes and vagrants.

Most waterbirds are readily visible. Secretive species, such as snipes, are generally under-recorded. No allowance is made for these habits by the observer and only birds seen or heard are recorded. The species affected by such biases are well known and the problems of interpretation are highlighted individually in the Species accounts. Most species and many subspecies are readily identifiable during the counts. Categories may be used, *e.g.* unidentified scoter species, where it is not possible to be confident of identification, *e.g.* under poor light conditions.

Species present in relatively small numbers or dispersed widely may be counted singly. The number of birds in large flocks is generally estimated by mentally dividing the birds into groups, which may vary from five to 1,000 depending on the size of the flock, and counting the number of groups. Notebooks and tally counters may be used to aid counts.

Counts are made once per month, ideally on predetermined 'priority dates'. This enables counts across the whole country to be synchronised, thus reducing the likelihood of birds being double counted or missed. Such synchronisation is imperative at large sites, which are divided into sectors, each of which can be practicably counted by a single person in a reasonable amount of time. Local Organisers ensure coordination in these cases due to the high possibility of local movements affecting count totals. The priority dates are pre-selected with a view to optimising tidal conditions for counters covering coastal sites at high tide on a Sunday (see *Coverage*). The dates used for individual sites may vary due to differences in the tidal regime around the country. Coordination within a site takes priority over national synchronisation.

Counts suspected to be gross under-estimates of the true number of non-secretive species present are specifically noted, *e.g.* a large flock of roosting waders only partially counted before being flushed by a predator, or a distant flock of seaduck in heavy swell. These counts may then be treated differently when calculating site totals (see *Analysis*).

Data are input by a professional data input company. Data are keyed twice by different people and discrepancies identified by computer for correction. Any particularly unusual counts are checked by the National Organisers and are confirmed with the counters if necessary.

WeBS Low Tide Counts

This survey aims to assess numbers of waterbirds present during low tide on estuaries, primarily to assess the distribution of feeding birds at that time (Musgrove *et al*. 2003; see the section *Low Tide Counts* for a full explanation of methods).

This survey occasionally provides higher counts for individual sites than Core Counts, for example, where birds feed on one estuary but roost on another. These data are validated before being used for site assessment against 1% thresholds.

Supplementary daytime and roost counts

Supplementary counts are made at some sites where WeBS counts are known to under-represent the true value of the site. In particular, some species occur in much larger sites when using the site as a night-time roost, *e.g.* geese, Goosander and gulls, that are not present during WeBS daytime counts. Some sites are also counted more frequently than once per month by some observers.

Supplementary counts are collected by counters familiar with the site for WeBS surveys, thus employing the same site definition and, for daytime counts, the same counting methods. These counts are submitted on standardised recording forms adapted from those used for WeBS Core Counts.

Goose roost censuses

Many geese (*Anser and Branta spp*) spend daylight hours in agricultural landscapes, and are therefore missed during counts at wetlands by WeBS. These species are usually best counted as they fly to or from their roost sites at dawn or dusk, since these are generally discrete wetlands and birds often follow traditional flight lines approaching or leaving the site. Even in half-light, birds can generally be counted with relative ease against the sky, although they may not be specifically identifiable at mixed species roosts.

In order to produce population estimates, counts are synchronised nationally for particular species (see *National totals* below), although normally only one or two such counts are made each year. The priority count dates are determined according to the state of the moon, since large numbers of geese may remain on fields during moonlit nights. Additional counts are made by some observers, particularly during times of high turnover when large numbers may occur for just a few days.

In some areas, where roost sites are poorly known or difficult to access, counts of birds in fields are made during the daytime. As with WeBS Core Counts, the accuracy of the count is noted.

Additional counts

Additional, *ad hoc*, data are also sought for important sites not otherwise regularly monitored; particularly open coast sections in Scotland. The results of periodic, coordinated surveys - such as the non-estuarine coastal waterbird survey (NEWS), International Greenland Barnacle Goose Census and International Whooper & Bewick's Swan Census - are included where the data collected are compatible with the presentation formats used in this report.

The accuracy of counts of waterbirds on the sea is particularly dependent on prevailing weather conditions at the time of or directly preceding the count. Birds are often distant from land, and wind or rain can cause considerable difficulty with identifying and counting birds. Wind not only causes telescope instability, but even a moderate swell at sites without high vantage points can hamper counts considerably. The need to count other waterbirds in 'terrestrial' habitats at the site often precludes the time required for an accurate assessment of seaducks. Many sites may be best covered using aerial surveys, though this technique has been

little used in the UK historically. Consequently, the best counts of most divers, grebes and seaduck at open coast and many estuarine sites are made simply when conditions allow; only rarely will such conditions occur by chance during WeBS counts. Synchronisation between different sites may be difficult or impossible to achieve, and thus coordination of most counts to date has occurred at a regional or site level, *e.g.* within the Moray Firth and within North Cardigan Bay.

The extensive use of aerial survey methods in nearshore marine waters in recent years means that data are available for a number of sites. However, the boundaries of such sites frequently do not correspond to those counted for WeBS Core Counts, and indeed the area surveyed from the air can vary between years. As a result, such aerial surveys are now tabulated separately within the relevant species accounts. These surveys employ a 'distance sampling' methodology (see Buckland *et al*. 2001, 2004), whereby only a proportion of birds are counted, and the missed proportion estimated by statistical means. Some published reports from these surveys provide only the counted number, whilst others also include the calculated estimates (which often have relatively wide confidence intervals).

Some data are provided directly by individuals (for example, reserve wardens), often undertaking counts for site survey purposes but whose data are not formally published in a report.

A significant point is that these additional data are taken from published sources, from surveys with the specific aim of monitoring waterbirds and where methods have been published, or where data have been collected by known individuals usually undertaking site-based surveys, and are provided directly for use in *Waterbirds in the UK*. Casual records and data from, *e.g.* county bird reports, where the methods and/or site boundaries used have not been documented are not included. Reports and data for important sites from surveys that the authors know to have taken place in recent years are actively sought for inclusion in this report, but it is likely that other sources of suitable data are overlooked. The inclusion of such data for some species and sites does not, thus, infer that the tables in the Species accounts include all such suitable data.

Irish Wetland Bird Survey

The Irish Wetland Bird Survey (I-WeBS) monitors non-breeding waterbirds in the Republic of Ireland (Crowe 2005). I-WeBS was launched in 1994 as a joint partnership between BirdWatch Ireland, National Parks and Wildlife Service of Dúchas, The Heritage Service of the Department of Environment and Local Government (Ireland), and WWT, with additional funding and support from the Heritage Council and WWF UK (World Wide Fund for Nature). I-WeBS is complementary to and compatible with the UK scheme. The main methodological difference from UK-WeBS is that counts are made only between September and March, inclusive.

Productivity monitoring

Changes in numbers of waterbirds counted in the UK between years are likely to result from a number of factors, including coverage and weather, particularly for European and Russian breeding species which may winter further east or west within Europe according to the severity of the winter. Genuine changes in population size will, however, result from differences in recruitment and mortality between years.

For several species of swans and geese, young of the year can be readily identified in the field and a measure of productivity can be obtained by recording the number of young birds in sampled flocks, expressed as a percentage of the total number of birds aged. Experienced fieldworkers by observing the behaviour of and relationship between individuals in a flock, can record brood sizes as the number of young birds associating with, usually, two adults.

ANALYSIS AND PRESENTATION

In fulfilment of the WeBS objectives, results are presented in a number of different sections. An outline of the analyses undertaken for each is given here; further details can be provided upon request. A number of limitations of the data or these analytical techniques necessitate caution when interpreting the results presented in this report (see *Interpretation of Waterbird Counts*).

Count accuracy and completeness

Counts at individual sites may be hampered by poor conditions, or parts of the site may not be covered. This may result in counts missing a significant proportion of one or more species. It is important to flag such counts since using them at face-value would under-represent the importance of the site and generate misleading results, *e.g.* when used for trend calculations and assessment of site importance.

Counts at sites - and at individual sectors of large sites that are counted using a series of sub-divisions (known as 'complex sites') - are flagged as 'OK' or 'Low' by the counter. 'Low' indicates that the counter feels a significant proportion of the birds present at the time of the count may have been missed, *e.g.* because all of the site or sector was not visited, or because a large flock of birds flew before counts were complete. Such assessments may be provided for individual species, or for all species present.

Similarly, at complex sites, one or more sectors may be missed in a particular month, again rendering the total count for the site incomplete to a greater or lesser degree for one or more species.

For single sector sites, counts are assessed as incomplete based on the 'OK/Low' information provided by the counter. For complex sites, an algorithm is used to assess whether missed sectors and/or 'Low' counts in some sectors constitute an incomplete count at the site level. The mean count of each sector is calculated based on 'OK' counts from a window extending a month either side of the month of the count in question, and using earlier or subsequent years, such that within this window the 15 nearest counts are used to make the assessment. The total count for the site in any one month is considered incomplete if the sectors for which the count is missing or 'Low' in that month tend to hold, based of their mean values, more than 25% of the sum of all sector means. The assessment is made on a species-by-species basis, recognising the fact that species distribution is not uniform across a site that and a missed sector may be particularly important for some species but not for others.

Completeness assessments are made for all WeBS Core Counts, and for most goose roost counts (which, as single-sector sites, are made on the basis of the 'OK/Low' assessment provided by the counter).

Because the completeness calculation for complex sites is based on a moving window of counts, and the use of different parts of the site by species may change, the addition of new data each year may result in counts flagged as complete in previous *Waterbirds in the UK* (prior to 2004/05 published as *Wildfowl and Wader Counts*) now being considered incomplete, and *vice versa*.

Species counts are not flagged as 'Low' if a large number of the birds present is routinely missed, *e.g.* because they are cryptic, secretive, or hide in reeds - such as Snipe, Teal and Water Rail. 'Low' indicates that a significant proportion of the birds that could reasonably be expected to be counted under normal conditions were considered to have been missed. Similarly, many counts of waterbirds on the sea may be undercounts. Indeed, if the distribution of a flock stretches beyond the limits of visibility, the counter - as with birds hidden in reeds - can never know with confidence whether the count included all birds present. Counts flagged as incomplete are treated differently in trend analyses and site importance assessments.

The WeBS Year

Different waterbird species occur in the UK at different times of year. Most occur in largest numbers during winter, some are residents with numbers boosted during winter, while others occur primarily as passage migrants or even just as summer visitors.

Although WeBS counts focus primarily on winter months, surveys can be carried out year-round. Accordingly, different 12-month periods are used to define a year to report upon different species; in order to define the 'annual' maximum and to identify the peak 'annual' count for assessing site importance.

For most species, the year is defined as July to June, inclusive. Thus for species present in largest numbers during winter, counts during autumn passage and spring passage the following calendar year are logically associated with the intervening winter. For species present as summer visitors - notably terns, Garganey and Little

Ringed Plover - the calendar year is used to derive national and site maxima. The different format used for column headings (*e.g.* 07/08 or 2007) in the 'header' and tables in each species account identify whether a 'winter' or calendar year has been used.

Note that national totals (reported in Tables 3 and 4) present data for the period July 2007 to June 2008.

National totals and annual maxima

Total numbers of waterbirds recorded by WeBS and other schemes are presented (Tables 3 and 4, and within individual species accounts). It is very important to appreciate that these national totals are not population estimates, as WeBS does not cover 100% of the population of any species. The totals are presented separately for Great Britain (including Isle of Man but excluding the Channel Islands) and Northern Ireland in recognition of the different legislation that applies to each. Separate totals for England, Scotland, Wales, and the Channel Islands can be obtained from the BTO upon request. If several accurate counts are available for the same month, the count nearest the monthly priority date or, alternatively, the count coordinated with nearby sites if there is considered to be significant interchange, is chosen for use in this report. A count from any date is used if it is the only one available.

Totals from different count methods are mostly not combined to produce national totals because the lack of synchronisation may result in errors, *e.g.* birds counted at roost by one method may be effectively double-counted during the WeBS count at a different site in that month. Total counts from several national goose surveys are, however, used instead of WeBS Core Counts where the census total provides a better estimate of the total numbers, as follows:

- Pink-footed and Icelandic Greylag Geese in October, November and December;
- Greenland White-fronted Goose in December and March;
- Greenland Barnacle Geese in November and March;
- NW Scotland Greylag Geese in August and February;
- Canadian Light-bellied Brent Geese in October.

Additionally, counts of Svalbard Barnacle Geese from North Cumbria and Dumfries & Galloway are replaced by Solway-wide dedicated counts between October and May. Finally, the maximum British totals for both Bewick's and Whooper Swan do include roost counts from the Ouse and Nene Washes and Martin Mere in place of Core Counts at these locations, given the particular concentration of these species feeding around and roosting at these sites. Counts from other site or regional-based surveys, for example of seaducks, are not included in national totals. Where a census total replaces a standard Core Count these data these are indicated by '*'.

Some of the goose populations are identified according to location (from research into movements of marked birds) as they cannot be separated in the field by appearance alone. In such cases, a standard region of the UK is used each year to assign individual birds to particular populations and thus to derive national totals. For full details please contact BTO, but broadly the breakdown is as follows:

- NW Scotland Greylag Goose - Inner and Outer Hebrides plus Southwest Highland.
- Icelandic Greylag Goose - all other areas of Scotland plus Northumberland and North Cumbria.
- Re-established Greylag Goose - other areas.
- Greenland Barnacle Goose - Scottish west coast plus Shetland and Orkney.
- Svalbard Barnacle Goose - other Scottish regions plus Northumberland and North Cumbria.
- Naturalised Barnacle Goose - other areas.
- Canadian Light-bellied Brent Goose - Northern Ireland, Wales, western and northern Scotland, Cornwall, Devon, west coastal England, Irish Sea and Channel Islands.
- Svalbard Light-bellied Brent Goose - other areas.

(*Note that the separate populations overlap to varying extents, and some birds are likely to be mis-assigned using these areas. This is particularly so for Greylag Goose and future surveys are planned to address this issue*).

Data from counts at all sites are used, irrespective of whether they are considered complete or not. Numbers presented in this report are not rounded. National and site totals calculated as the sum of counts from

several sectors or sites may imply a false sense of accuracy if different methods for recording numbers have been used, *e.g.* 1,000 birds estimated on one sector and a count of seven individuals on another is presented as 1,007. It is safe to assume that any large count includes a proportion of estimated birds. Reproducing the submitted counts in this way is, however, deemed the most appropriate means of presentation and avoids the summation of 'rounding error'.

Annual indices

Because the same sites are not necessarily covered by WeBS on every month in every year, relative changes in waterbird numbers cannot be determined simply by comparing the total number of birds counted each year (Tables 3 and 4). This issue is addressed by using indexing techniques that have been developed to track relative changes in numbers from incomplete data.

In summary, for occasions when a particular site has not been visited, an expected count for each species is calculated (imputed) based on the pattern of counts across months, years and other sites. This effectively means that a complete set of counts are available for all years and all months for a sample of sites. Only sites that have a good overall level of coverage are used (at least 50% of possible visits undertaken) and the underlying assumption is that the pattern of change in numbers across these sites (the index) is representative of the pattern of change in numbers at the country level (see *Interpretation of Waterbird Counts* below). Annual index values are expressed relative to the most recent year, which takes an arbitrary value of 100.

The 'Underhill index' was specifically developed for waterbird populations (see Underhill 1989, Pr□s-Jones *et al*. 1994, Underhill & Pr□s-Jones 1994 and Kirby *et al*. 1995 for a full explanation of this indexing process and its application for WeBS data). This report uses Generalized Additive Models (GAMs; Hastie & Tibshirani 1990) to fit both index values and a smoothed trend to the WeBS count data (see Maclean *et al*. 2005 for a full explanation of this process and its application for WeBS data) whilst retaining elements from the Underhill method that allows the assessment of whether or not counts flagged as incomplete should be treated as missing data. The generated smoothed trends are less influenced by years of abnormally high or low numbers and sampling 'noise' than are the raw index values. This makes them especially useful when assessing changes through time (*e.g.* WeBS Alerts; Maclean *et al*. 2008). Following recent development work undertaken by WeBS, winter indices for waders are for the first time based on data from the months of November to March, inclusive, while those for other species additionally include September and October. Exceptions are made for the indices for Icelandic Greylag Goose, Pink-footed Goose, Greenland White-fronted Goose and Svalbard Barnacle Goose, for which annual census data are preferentially used to generate indices. Previously, the months used for indexing were assigned in a species-specific manner following established recommendations (Underhill & Prys-Jones 1994 and Kirby *et al*. 1995). The new approach, in addition to improving the robustness of the indices to changes in the timing of arrivals and departures with climate change and increasing comparability between species, brings WeBS indexing into line with other WeBS methodologies, specifically reporting of Alerts and computation of five-year mean of peaks.

Not all species are included in the indexing process. Gulls and terns are excluded because counting of these species is optional. Species that occur substantially on habitats poorly monitored by WeBS (*e.g.* Moorhen and Snipe) are excluded as are species that occur at sites sporadically and/or in small numbers (*e.g.* Bean Goose and Smew).

The periods of years for which indices are calculated have been revised slightly in the light of recent analyses. Data for wildfowl continue to be presented for the period 1966/67 to present. Data from 1974/75 onwards have been used for waders as a high proportion of counts before this winter were imputed. For species added later to the scheme, (*i.e.* Great Crested Grebe and Coot in 1982/83, Little Grebe in 1985/86, Cormorant in 1986/87 and gulls, terns, divers, rare grebes and other species from 1993/94), data from the first two years following their

inclusion have been omitted from indices, as initial take-up by counters appears not to have been complete, resulting in apparent sharp increases in numbers during this time. For similar reasons, the first two years of data have been excluded from indices for Northern Ireland.

Index values, where calculated, are graphed within each account. The underlying trend is shown using a broken line and the range of the previous five years as a shaded area. The actual index values used to produce the graphs in this report can be obtained on request from the British Trust for Ornithology (see *Contacts*).

Monthly indices

The abundance of different waterbird species varies during the winter due to a number of factors, most notably the timing of their movements along the flyway, whilst severe weather, particularly on the continent, may also affect numbers in the UK. However, due to differences in site coverage between months, such patterns cannot be reliably detected using count totals. Consequently, an index is calculated for each month to reflect changes in relative abundance during the season.

The imputing process used to derive missing data for generating annual trends also allows monthly indices to be calculated across the same suite of sites. This reveals patterns of seasonality for the species considered. These are presented as graphs in the species accounts, showing the value for the most recent winter, and the average value and range over the five preceding winters. Monthly graphs are not presented for the goose species for which annual indices are based on censuses as data for these are available for a limited number of months only.

Broad differences in the monthly values between species reflect their status in the UK. Resident species, or those with large UK breeding populations, *e.g.* some grebes and Mallard, are present in large numbers early in the winter. Declines through the winter result in part from mortality of first-year birds, but also birds returning to remote or small breeding sites that are not covered by WeBS. The majority of UK waterbirds either occur solely as winter visitors, or have small breeding populations that are swelled by winter immigrants, with peak abundance generally occurring in mid winter.

The vast majority of the wintering populations of many wader species are found on estuaries, and, since coverage of this habitat is relatively complete and more or less constant throughout the winter, meaningful comparisons of total monthly counts can be made for many species.

Site importance

Criteria for assessing the international importance of wetlands have been agreed by the Contracting Parties to the Ramsar Convention on Wetlands of International Importance (Ramsar Convention Bureau 1988). Under criterion 6, a wetland is considered internationally important if it regularly supports 1% of the individuals in a population of one species or subspecies of waterbird, whilst any site regularly supporting 20,000 or more waterbirds qualifies under criterion 5. Similar criteria have been adopted for identification of SPAs under the EC Birds Directive in the UK legislation. A wetland in Britain is considered nationally important if it regularly holds 1% or more of the estimated British numbers of one species or subspecies of waterbird, and in Northern Ireland, important in an all-Ireland context if it holds 1% or more of the all-Ireland estimate. More detailed information about SPAs and Ramsar sites in the UK can be accessed via the JNCC website at http://www.jncc.gov.uk/page-4. There are currently 256 SPAs and 146 Ramsar sites in the UK.

Population estimates are revised once every three years, in keeping with internationally agreed timetables (Rose & Stroud 1994). International estimates used in this report follow recent revisions of international populations (Wetlands International 2006) and of estimates for Great Britain (Kershaw & Cranswick 2003, Rehfisch *et al*. 2003, Crowe *et al*. 2008). The relevant 1% thresholds are given in Appendix 1 and are also listed at the start of each individual species account. (It should be noted that the estimates and thresholds for some species or populations which should be the same at an international and national level because all birds are found in Britain, *e.g.* for Pink-footed Goose, differ slightly because of the

rounding conventions applied. In most species accounts, these differences have been rationalised and only one or other of the estimates used).

For some species (*e.g.* Lapwing) no national thresholds are available and arbitrary levels have been used to compile the table of sites, the chosen level being given in the sub-heading of the table. Passage thresholds, applied to counts of some wader species in Great Britain, are also listed.

'National threshold' is used as a generic term to imply the 1% British threshold for sites in Great Britain, and the all-Ireland threshold for sites in Northern Ireland. Similarly, the term 'national importance' implies sites in Great Britain and in Northern Ireland that meet the respective thresholds.

Tables in the Species accounts rank the principal sites for each species according to the mean of annual maxima for the last five years (the five-year peak mean), in line with recommendations of the Ramsar Convention, and identify those meeting national and international qualifying levels (see also *Interpretation of Waterbird Counts*). For each site, the maximum count in each of the five most recent years, the month of occurrence of the peak in the most recent year, and the five-year peak mean are given. Incomplete counts are bracketed.

For all species except Ringed Plover and Sanderling, annual maxima are derived from any month in the appropriate 12-month period (see *The WeBS Year*). For Ringed Plover and Sanderling, data are presented separately for winter (Nov-Mar) and spring (Apr-Jun) & autumn (Jul-Oct) due to the substantial passage numbers. Data from other sources, often involving different methods, *e.g.* goose roost censuses, are used where these provide more representative, *i.e.* larger, counts for individual sites. The source of all counts, if not derived from WeBS Core Counts, is indicated using a superscripted number after the count (a list of sources is given at the beginning of the accounts).

In the first instance, five-year peak means are calculated using only complete counts; incomplete counts are not used if they depress the mean count. Incomplete counts are, however, included in the calculation of the mean if they raise the value of the mean. Where all annual maxima are incomplete, the five-year peak mean is the highest of these individual counts. Averages enclosed by brackets are based solely on incomplete counts.

Sites are selected for presentation using a strict interpretation of the 1% threshold (for convenience, sites in the Channel Islands and Isle of Man are identified using 1% thresholds for Great Britain and included under the Great Britain section of the tables). For some species with very small national populations, and consequently very low 1% thresholds, an arbitrary, higher level has been chosen for the inclusion of sites. Where no thresholds are given, *e.g.* for introduced species, and where no or very few sites in the UK reach the relevant national qualifying levels, an arbitrary threshold has been chosen to select a list of sites for this report. These adopted thresholds are given in the sub-headings of the table. A blank line has been inserted in the table to separate sites that qualify as nationally important from those with five-year peak mean counts of less than 50 birds.

All sites that held numbers exceeding the relevant national threshold (or adopted qualifying level) in the most recent year, but with five-year peak means below this value, are listed separately. This serves to highlight important sites worthy of continued close attention.

For a number of wader species, where different thresholds exist for passage periods, the peak count during this period and month of occurrence are also listed. This list includes all those sites with counts above the relevant threshold, even if already listed in the main part of the table by virtue of the five-year winter peak mean attaining the national threshold.

Where the importance of a site has changed since the previous *Waterbirds in the UK* (prior to 2004/05 published as *Wildfowl and Wader Counts*) as a result of the data collected since - *i.e.* it has become nationally or internationally important having not been following the previous year, or it has changed from international to national importance or *vice versa* - this is indicated in the table to the right of the five-year peak mean. Sites with elevated status have a black triangle

pointing up (▲) to the right of the average, whilst those with lowered status are indicated using a triangle pointing down (▼). Sites for which the average fell below the threshold for national importance following 2003/04 are listed at the end of the table.

It should be noted that a site may appear to have been flagged erroneously as having elevated status if the most recent count was below the relevant threshold. However, a particularly low count six years previously will have depressed the mean in the previous report. The converse may be true for sites with lowered status and thus, in exceptional circumstances, a site may be listed in the relevant sections of the table as both no longer being of national importance yet also with a peak count in the most recent year exceeding the national threshold.

WeBS Alerts

WeBS Alerts have been developed to provide a standardised method of measuring and reporting on changes in wintering waterbird numbers at different temporal and spatial scales using WeBS data. Generalized Additive Models (GAMs) are used to fit smoothed trends to annual population indices (changes in population size calculated using these smoothed values are less susceptible to the effects of short-term fluctuations in population size or to errors when sampling than are results produced using raw data plots). Alerts are triggered for populations that have undergone major declines, and are intended to help identify where research into causes of decline may be needed and inform conservation management.

Proportional changes in the smoothed index value of a population over short- (5-year), medium- (10-year) and long- (25-year) term time frames are categorised according to their magnitude and direction. Population declines of between 25% and 50% trigger Medium Alerts and declines of greater than 50% trigger High Alerts. Increases of 33% and 100% (values chosen to be those necessary to return a population to its former size following declines of 25% and 50% respectively) are also identified, albeit that these are rarely of conservation concern.

National Alerts are generated for species (or specific populations of a species) using data from across the WeBS site network, for Great Britain and the constituent countries of the UK (Maclean *et al*. 2008). These Alerts provide some context for understanding finer scale changes in numbers. Alerts are calculated only for native species for which WeBS annual indices are calculated. Alerts are not available for some species over long time periods because there were only relatively recently included in WeBS Core Counts. Full results from the latest Alerts report are available to download from www.bto.org/webs/alerts/.

Principal sites

In addition to the assessment of sites against 1% thresholds in Species accounts, sites are identified for their importance in terms of overall waterbird numbers in the section *Principal Sites*. The peak count at each site is calculated by summing the individual species maxima during the season, irrespective of the month in which they occurred, or whether counts were complete or not. Data from all sources used for site assessment within the species accounts are used here, including wader numbers during passage periods. Non-native introduced or escaped species (*i.e.* those not listed in BOURC category A) are not included in these totals.

Counts made using methodologies that employ different site definitions to those used by WeBS (*e.g.* seaducks on the Moray Firth) are not incorporated into the calculations. Such sites are, however, listed at the end of the table.

INTERPRETATION OF WATERBIRD COUNTS

Caution is always necessary in the interpretation and application of waterbird counts given the limitations of these data. This is especially true of the summary form, which by necessity, is used in this report. A primary aim here remains the rapid feedback of key results to the many participants in the WeBS scheme. More detailed information on how to make use of the data for research or site assessment purposes can be obtained from the British Trust for Ornithology (see *Contacts*).

While the manner of presentation is consistent within this report, it should be noted that the information collated by WeBS and other surveys can be held or used in a variety of ways. Data may also be summarised and analysed differently depending on the requirements of the user. Consequently, calculations used to interpret data and their presentation may vary between this and other publications, and indeed between organisations or individual users. The terminology used by different organisations may not always highlight these differences. This particularly applies to summary data. Such variations do not detract from the value of each different method, but offer greater choice to users according to the different questions being addressed. This should always be borne in mind when using data presented in this report.

For ease of reference, the caveats provided below are broadly categorised according to the presentation of results for each of the key objectives of WeBS. Several points, however, are general in nature and apply to a broad range of uses of the data.

National totals

The majority of count data are collected between September and March, when most species of waterbird are present in the UK in highest numbers. Data are collected during other months and have been presented where relevant. Caution is urged, however, regarding their interpretation both due to the relative sparsity of counts from this period and the different count effort for different sites. Data are presented for the months July to June inclusive (see *The WeBS Year*), matching the period for which data are provided *en masse* by counters.

A number of systematic biases of WeBS or other count methodology must be borne in mind when considering the data. Coverage by WeBS of estuarine habitats and large, standing waters is good or excellent. Consequently, counted totals of those species which occur wholly or primarily on these habitats during winter will approach a census. Those species dispersed widely over rivers, non-estuarine coast or small inland waters are, however, likely to be considerably under-represented, as will secretive or cryptic species, such as snipes, or those which occur on non-wetlands, *e.g.* grassland plovers. Species which occur in large numbers during passage are also likely to be under-represented, not only because of poorer coverage at this time, but due to the high turnover of birds in a short period. Furthermore, since counts of gulls and terns are optional, national totals are likely to be considerable underestimates of the number using the network of WeBS sites. Only for a handful of species, primarily geese, can count totals be considered as a census.

One instance of possible over-estimation may occur if using summed site maxima as a guide to the total number of scarcer species. For species with mobile flocks in an area well covered by WeBS, *e.g.* Snow Goose in southeast England, it is likely that a degree of double-counting will occur, particularly if birds move between sites at different times of the year.

The publication of records of vagrants in this report does not imply acceptance by the British Birds Rarities Committee (*e.g.* Fraser *et al*. 2007). All such records should be submitted by the observers to BBRC via the relevant county recorders.

Annual indices

For most species, the long-term trends in index values can be used to assess changes in overall wintering numbers with confidence. However, the above comments concerning the differential coverage of different habitats remain important. For some species, a substantial proportion of wintering birds occur away from those sites monitored by the WeBS Core Count scheme, or use these sites at certain times of day that make them unlikely to be encountered by WeBS counters. Consequently, this incomplete coverage needs to be borne in mind when interpreting the indices for some species. The proportion of some of these species being monitored by the WeBS Core Count scheme can be quantified and biases understood by comparison to other surveys. For example, results from the Non-estuarine Coastal Waterbird Survey (NEWS) indicate that WeBS Core Counts monitor between one quarter and one half of wintering Ringed Plover, Purple Sandpiper, Sanderling and Turnstone, and that the indices and trends reported from WeBS data will be biased towards changes occurring on estuaries. Similarly, trends reported for

seaduck and grassland plovers will be biased towards changes occurring within estuaries, although for these species the proportion of overall numbers monitored by WeBS Core Counts is less well understood. In the case of winter swans, although the sites on which they occur are generally well monitored by WeBS Core Counts, they are mainly used by the birds as roost sites. Therefore variation in the birds' daily routine with changes in weather or local feeding opportunities may have considerable influence on whether they are present during the WeBS count and thus affect the reported indices and trends.

Indices and trends for Pink-footed Goose, Greenland White-fronted Goose, Icelandic Greylag Goose and Svalbard Barnacle Goose can be considered to be especially representative of national patterns. The numbers of these species are not well monitored by monthly WeBS Core Counts but rather are preferentially monitored by the annual coordinated censuses that cover the majority of the British wintering populations. Indices for strictly or principally estuarine species (*e.g.* Wigeon and Knot) can also be considered especially representative as over 90% of British estuaries, including all major sites, are counted each month between September and March. Similarly, species that occur principally on larger inland waterbodies (*e.g.* Pochard) are well monitored by WeBS Core Counts, although the proportion of the numbers not being monitored is largely unquantified. For these species the indices and trends reported can be considered representative of the national pattern. For more widespread species (*e.g.* Mallard, Tufted Duck and Curlew) a large proportion of birds occur at small inland sites and habitats not well monitored by WeBS Core Counts. The selection of such sites follows no formal sampling pattern and therefore it is unclear as to whether these wetlands are a representative sample of the country as a whole.

Because short-term fluctuations provide a less rigorous indication of population changes, care should be taken in their interpretation. The underlying trend, denoted by the smoothed line in the annual index graphs, will give a better overall impression of trends for species with marked inter-annual variation, although it should be noted that unusually high or low index values in the most recent year will have a disproportionate effect on the trend at that point.

Caution should be used in interpreting figures for species that only occur in small numbers. Thus, numbers tend to fluctuate more widely for many species in Northern Ireland, largely as a result of the smaller numbers of birds involved, but also, being at the western most limit of their range, due to variable use made of Ireland by wintering waterbirds.

It should be borne in mind that the imputed values, used in place of missing and incomplete counts, are calculated anew each year. Within the completeness calculation for 'complex sites', this may cause the same count to change from complete to incomplete or *vice versa* with the addition of a new year's data. Because the index formula uses data from all years, the inclusion of a new year's counts will slightly alter the site, month and year factors. In turn, the assessment of missing counts may differ slightly and, as a result, the index values produced each year are likely to differ from those published in the previous *Waterbirds in the UK* (prior to 2004/05 published as *Wildfowl and Wader Counts*). Additionally, data submitted too late for inclusion are added to the dataset subsequently. Hence indices published here represent an improvement on previous figures as any additional years' data allow calculation of the site, month and year factors with greater confidence.

Monthly indices

As for annual indices, the reduced numbers of both sites and birds in Northern Ireland result in a greater degree of fluctuation in numbers used in the analyses of data from the province.

Site definition

To compare count data from year to year requires that the individual sites - in terms of the area surveyed - remain the same. The boundary of many wetlands are readily defined by the extent of habitat (*e.g.* for reservoirs and gravel pits), but are less obvious for other sites (*e.g.* some large estuaries). Here count boundaries have often been defined over time by a number of factors to a greater or lesser degree,

including the distribution of birds at the time of the count, known movements of birds from roost to feeding areas, the extent of habitat, and even ease of access.

Sites are defined for a variety of purposes, and the precise boundary of sites describing ostensibly the same wetland may differ accordingly. For example, the boundaries used to define a large lake may differ for its definition as a wetland (based on habitat), as a waterbird count area (some birds may use adjacent non-wetland habitat), and as a statutorily designated site for nature conservation (which may be constrained by the need to follow boundaries easily demarcated in planning and legal terms). It should be recognised that the boundary of a site for counting may even differ between different waterbird surveys, particularly where different methodologies are employed, *e.g.* the 'Forth Estuary' comprises one large site for WeBS Core Counts, a slightly different area for Low Tide Counts, and two roost sites for Pink-footed Geese.

Data from different waterbird surveys have been used for assessment of site importance in this report if collected for ostensibly the same site, and are unlikely to cause significant discrepancies in the vast majority of cases (though see *Site importance*).

Particular caution is urged, however, in noting that, owing to possible boundary differences, totals given for WeBS or other sites in this report are not necessarily the same as totals for designated statutory sites (ASSIs/SSSIs, SPAs or Ramsar Sites) with the same or similar names.

It should also be borne in mind that whilst discrete wetlands may represent obvious sites for waterbirds, there is no strict definition of a site as an ecological unit for birds. Thus, some wetlands may satisfy all requirements - feeding, loafing and roosting areas - for some species, but a 'site' for other species may comprise a variety of disparate areas, not all of which are counted for WeBS. Similarly, for some habitats, particularly linear areas such as rivers and rocky coasts, and marine areas, the definition of a site as used by waterbirds is not readily discerned without extensive survey or research that is usually beyond the scope of WeBS or other similar surveys. The definitions of such sites may thus evolve, and therefore change between *Waterbirds in the UK* (prior to 2004/05 published as *Wildfowl and Wader Counts*) reports. Further, the number of birds recorded by WeBS at particular sites should not be taken to indicate the total number of birds in that local area.

Since last year, individual sites on Dungeness peninsula (including, for example, Dungeness RSPB Reserve, Scotney Pits and Rye Harbour) have been combined. Data from this recording area are now presented as 'Dungeness and Rye Bay'.

In some cases, for example where feeding geese are recorded by daytime WeBS Core Counts over large sites and again at discrete roosts within or adjacent to that same site, data are presented for both sites in the table of key sites because of the very different nature or extent of the sites and often number of birds - even though the same birds will have been counted at both.

Site importance

Sites are selected for presentation in this report using a strict interpretation of the 1% threshold. It should be noted that where 1% of the national population is less than 50 birds, 50 is normally used as a minimum qualifying threshold for the designation of sites of national importance. It should also be noted that the 'qualifying levels' used for introduced species are used purely as a guide for presentation of sites in this report and do not infer any conservation importance for the species or the sites concerned, since protected sites would not be identified for these non-native birds.

It is necessary to bear in mind the distinction between sites that regularly hold wintering waterbird populations of national or international importance and those which may happen to exceed the appropriate qualifying levels only in occasional winters. This follows the Ramsar Convention, which states that key sites must be identified on the basis of demonstrated regular use (calculated as the mean winter maxima from the last five seasons for most species in this report); otherwise a large number of sites might qualify as a consequence of irregular visitation by one-off large numbers of waterbirds. However, the Convention also indicates that provisional assessments may be made on the basis of a minimum of three

years' data. These rules of thumb are applied to SPAs and national assessments also. Sites with just one or two years' data are also included in the tables if the mean exceeds the relevant threshold for completeness but this does not, as such, imply qualification. This caveat applies also to sites that are counted in more than two years but, because one or more of the peak counts are incomplete, whose means surpass the 1% threshold based on counts from only one or two years.

Nevertheless, sites which irregularly support nationally or internationally important numbers may be extremely important at certain times, *e.g.* when the UK population is high, during the main migratory periods, or during cold weather, when they may act as refuges for birds away from traditionally used sites. For this reason also, the ranking of sites according to the total numbers of birds they support (particularly in *Principal Sites*) should not be taken as a rank order of the conservation importance of these sites. Certain sites, perhaps low down in terms of their total 'average' numbers, may nevertheless be of critical importance to certain species or populations at particular times.

Peak counts derived from a number of visits to a particular site in a given season will reflect more accurately the relative importance of the site for the species than do single visits. It is important to bear this in mind since, despite considerable improvements with respect to coverage, data for a few sites presented in this report derive from single counts in some years. Similarly, in assessing the importance of a site, peak counts from several winters should ideally be used, as the peak count made in any one year may be unreliable due to gaps in coverage and disturbance- or weather-induced effects. The short-term movement of birds between closely adjacent sites may lead to altered assessments of a site's apparent importance for a particular species. More frequent counts than the once-monthly WeBS visits are necessary to assess more accurately the rapid turnover of waterbird populations that occurs during migration or cold weather movements.

It should also be borne in mind that because a count is considered complete for WeBS, it does not imply that it fully represents the importance of the site. A site of importance for a wintering species may have been counted only in autumn or spring, and thus while a valid complete count is available for that year, it under-represents the importance of the site for that species. This problem is overcome to some extent by the selection of counts from a limited winter window for wader species, although this will also tend to an underestimation of the mean if it excludes large counts at other times of year. A similar issue arises for counts derived from different survey methods. For example, many sites important as gull roosts are identified on the basis of evening roost counts. Valid and complete counts may have been made by WeBS Core Counts during daytime over the course of a particular winter but, if no roost counts were made, the mean will be depressed by the much lower Core Count in that year. Thus, when counts appear to fluctuate greatly between years at individual sites on the basis of data from different sources - particularly for geese and gulls in the absence of roost counts, and for seaducks in the absence of dedicated survey - the five-year means and apparent trends over time should be viewed with caution.

Caution is also urged regarding the use of Low Tide Count data in site assessment. Whilst this survey serves to highlight the importance of some estuaries for feeding birds that, because they roost on other sites, are missed by Core Counts, the objectives of Low Tide Counts do not require strict synchronisation across the site. This may result in double counting of birds on some occasions. It should also be noted that count completeness assessments are not made for Low Tide Count totals at complex sites, and any undercounts from this scheme are not flagged in the tables, leading to under-estimation of the site's importance.

This list of potential sources of error in counting wetland birds, though not exhaustive, suggests that the net effect tends towards under- rather than over-estimation of numbers, and provides justification for the use of maximum counts for the assessment of site importance or the size of a population. Factors causing under-estimation are normally constant at a

given site in a given month, so that while under-estimates may occur, comparisons between sites and years remain valid.

It should be recognised that, in presenting sites supporting nationally or internationally important numbers of birds, this report provides just one means of identifying important sites and does not provide a definitive statement on the conservation value of individual sites for waterbirds, let alone other conservation interests. The national thresholds have been chosen in order to provide a reasonable amount of information in the context of this report only. Thus, for example, many sites of regional importance or those of importance because of their species assemblage are not included here. European Directives and conservation Conventions stress the need for a holistic approach to effect successful conservation, and lay great importance on maintaining the distribution and range of species, in addition to the conservation of networks of individual key sites.

For the reasons of poor coverage, either geographical or temporal, outlined above, it should be recognised that lists of sites supporting internationally and nationally important numbers of birds are limited by the availability of WeBS and other survey data. Whilst the counter network is likely to cover the vast majority of important sites, others may be missed and therefore will not be listed in the tables due to lack of appropriate data.

Some counts in this report differ from those presented previously; this results from the submission of late data and corrections, and in some cases, the use of different count seasons or changes to site structures. Additionally, some sites may have been previously omitted from tables due to oversight. It is likely that small changes will continue as definitions of sites are revised in the light of new information from counters. Most changes are minor, but comment is made in the text where they are of a significant nature.

Note that sites listed under 'Sites no longer meeting table qualifying levels' represent those that would have been noted of national importance based on data from the preceding five years (*i.e.* 2002/03 to 2006/07) but which, following the 2007/08 counts, no longer met the relevant threshold. It should not be considered an exhaustive list of additional sites which in the past have been of national or all-Ireland importance.

COVERAGE

WeBS Core Counts

Coordinated, synchronous counts are advocated to prevent double counting or birds being missed. Consequently, priority dates are recommended nationally. Due to differences in tidal regimes around the country, counts at a few estuaries were made on other dates to match the most suitable conditions. Weather and counter availability also result in some counts being made on alternative dates.

Table 2. WeBS Core Count priority dates in 2007/08

15 July	13 January
12 August	10 February
16 September	09 March
07 October	06 April
11 November	18 May
09 December	22 June

Standard Core Counts were received from 2,167 sites of all habitats for the period July 2007 to June 2008 (3 % higher than 2006/07), comprising 3,922 count sectors (the sub-divisions of large sites for which separate counts are provided).

WeBS and I-WeBS coverage in 2007/08 is shown in Figure 1. The location of each count sector is shown using only its central grid reference. The grid references of principal WeBS count sites mentioned in the Principal Sites table (Table 6.) are given in Table A2, Appendix 2 and are shown in Figure A1, Appendix 2.

As ever, areas with few wetlands (*e.g.* inland Essex/Suffolk) or small human populations (*e.g.* much of Scotland) are apparent on the map as areas with little coverage. Northwest Scotland is usually poorly covered compared to most areas, although in 2007/08 this was again covered by surveys by the RAF Ornithological Society. These data are presented in this report. Northern Ireland remains relatively poorly covered away from the major sites and further volunteers from there or indeed anywhere in the UK are always welcome.

Goose censuses

In 2007/08, supplementary counts of Bean Geese were submitted by the Bean Goose Action Group (Slamannan Plateau) (Maciver 2006) and the RSPB (Middle Yare Marshes). National surveys of Pink-footed and Icelandic Greylag Geese (the Icelandic-breeding Goose Census) were undertaken at roosts in October, November and December 2007. A census of the Northwest Scotland Greylag Goose population on the Uists was made in August 2007 and February 2008 (Uist Greylag Goose Management Committee), and counts of this population at other key sites were also undertaken where possible. Censuses of Greenland White-fronted Geese were carried out in autumn 2007 and spring 2008 by the Greenland White-fronted Goose Study. Greenland Barnacle Geese were counted regularly by SNH and others on Islay and other key locations whilst the Svalbard Barnacle Geese on the Solway were counted regularly by WWT staff and volunteers. Data were also provided by the International Light-bellied Brent Goose census.

Seaduck surveys

Monthly aerial and/or land-based counts of Common Scoter in Carmarthen Bay were carried out between January and March 2008 (Maclean *et al.* 2008). Other surveys were carried out in Scottish inshore waters by JNCC between December 2007 and March 2008. The surveys of the Eiders of the wider Firth of Clyde area were carried out in September 2007 (Waltho *pers. comm.*).

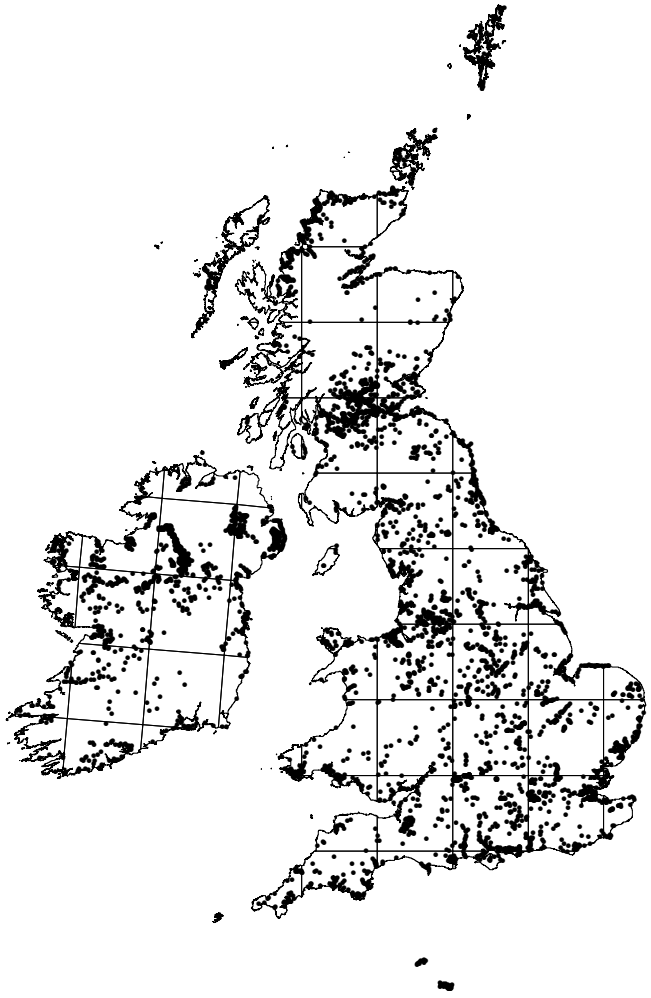


Figure 1. Position of all locations counted for standard WeBS and I-WeBS counts between July 2007 and June 2008.

TOTAL NUMBERS

The total numbers of waterbirds recorded by WeBS in 2007/08 are given in Tables 3 and 4 for Great Britain (including the Isle of Man, but excluding the Channel Islands) and Northern Ireland, respectively. Counts of waterbirds in the Republic of Ireland by I-WeBS are provided in Table 5.

Site coverage for gulls and terns is given separately since recording of these species was optional.

Introduced and escaped waterbirds

Many species of waterbird occur in the UK as a result of introductions, particularly through escapes from collections. Several have become established, such as Canada Goose and Ruddy Duck. The British Ornithologists' Union Records Committee categorises each species occurring in Britain according to its likely origin. The categories are explained more fully at www.bou.org.uk/reccats.html. Species that have been recorded as 'introductions, human-assisted transportees or escapes from captivity, and whose breeding populations (if any) are not thought to be self-sustaining' are included in the BOURC's category E. WeBS records of these species are included in this report both for the sake of completeness and in order to assess their status and monitor any changes in numbers, a key requirement given the need, under the African-Eurasian Waterbird Agreement of the Bonn convention '. . . to prevent the unintentional release of such species . . .' and once introduced, the need '. . . to prevent these species from becoming a threat to indigenous species' (Holmes *et al*. 1998).

Numbers of established populations (*e.g*. Canada Goose and Ruddy Duck, which are placed in category C) are excluded from Figure 2 below since the large numbers involved would swamp numbers of other species. Additionally, species that occur in both categories A and E (*e.g*. Pink-footed Goose) are also excluded since separation of escaped from wild birds is not readily possible using WeBS methods. However, Ruddy Shelduck (categories B/E) is included; the BOURC does not consider any recent records to have been of wild origin. Additionally, a small number of species not yet assigned to category by the BOURC (e.g. Coscoroba Swan) are also included.

A total of 22 category E species were recorded in 2007/08 at 178 sites; a slight increase compared to 2006/07. However perhaps surprisingly, the summed site maximum of 455 birds was very slightly lower than recent years. Typically, over half of this total was attributable to Black Swan and Muscovy Duck, followed in abundance by Bar-headed Goose, Ruddy Shelduck, Emperor Goose, Chinese Goose and Wood Duck; all of which were recorded in at least double-figures. Other species recorded were White-faced Whistling Duck, Black-necked Swan, Ross's Goose, Lesser Canada Goose, Australian Shelduck, Chiloe Wigeon, Falcated Duck, Ringed Teal, Speckled Teal, Silver Teal, White-cheeked Pintail, Yellow-billed Pintail, Ringed Teal, Lake Duck and Sacred Ibis.

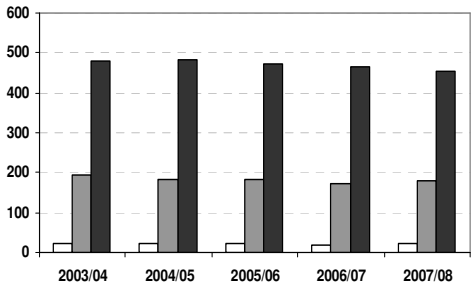


Figure 2. Number of species (white bars), number of sites at which birds were recorded (grey bars) and summed site maxima (black bars) for waterbirds in the BOURC's category E.

Table 3. Total numbers of waterbirds recorded by WeBS Core Counts in Great Britain in 2007/08. Totals incorporating non-standard counts are indicated by '*'.

	Species	Jul	Aug	Sep	Oct	Nov
Number of sites visited		*770*	*839*	*1345*	*1536*	*1641*
YX	White-faced Whistling Duck	0	0	0	0	0
MS	Mute Swan	11023	12897	17335	20715	22255
AS	Black Swan	41	38	48	50	58
AT	Black-necked Swan	0	0	0	0	3
BS	Bewick's Swan	0	0	0	5	189
WS	Whooper Swan	13	19	45	919	5041
HN	Chinese Goose	5	2	5	14	11
BE	Bean Goose	0	0	0	0	2
XF	Taiga Bean Goose	0	0	0	*332	94
XR	Tundra Bean Goose	0	0	0	0	0
PG	Pink-footed Goose	23	14	38768	*282948	*261504
WG	White-fronted Goose	0	0	1	1	2
EW	European White-fronted Goose	0	2	6	4	86
NW	Greenland White-fronted Goose	0	0	2	63	620
LC	Lesser White-fronted Goose	2	1	1	2	3
JI	Icelandic Greylag Goose	1943	3124	4284	16365	*112141
JH	NW Scotland Greylag Goose	618	738	509	1000	1036
JE	Re-established Greylag Goose	12930	18118	29449	29356	25383
ZL	Greylag Goose (domestic)	495	987	396	529	635
HD	Bar-headed Goose	5	12	19	8	2
SJ	Snow Goose	5	13	20	9	22
RJ	Ross's Goose	0	2	2	0	0
EM	Emperor Goose	0	14	0	18	20
CG	Canada Goose	33365	37710	54942	51015	50451
ZE	Canada x Bar-headed Goose	3	1	2	4	2
ZI	Canada x domestic Greylag Goose	71	2	10	15	4
LQ	Lesser Canada Goose	0	0	0	0	0
YN	Nearctic Barnacle Goose	6	6	4	313	1011
YS	Svalbard Barnacle Goose	1	5	10	20502	*29815
YE	Naturalised Barnacle Goose	401	226	1046	635	824
ZH	Barnacle x Canada Goose	3	1	3	2	2
ZG	Barnacle x Greylag Goose	4	0	0	0	0
BG	Brent Goose	0	0	0	1	29
DB	Dark-bellied Brent Goose	67	38	211	43039	66890
QN	Nearctic Light-bellied Brent Goose	0	0	12	75	353
QS	Svalbard Light-bellied Brent Goose	1	1	2010	958	1208
BB	Black Brant	0	0	0	2	3
EB	Red-breasted Goose	0	0	0	1	2
UO	Unidentified goose	0	0	5	0	1
ZM	Hybrid goose	8	29	42	65	42
EG	Egyptian Goose	316	323	654	517	356
UA	Australian Shelduck	0	0	0	0	1
UD	Ruddy Shelduck	2	8	1	2	2
SU	Shelduck	34918	23249	33138	40505	44627
ZT	Hybrid shelduck	0	0	0	0	0
MY	Muscovy Duck	27	28	43	56	43
DC	Wood Duck	2	3	7	9	7
MN	Mandarin	144	209	224	376	393
WN	Wigeon	187	567	25731	207219	288916
AW	American Wigeon	0	0	1	1	1
HL	Chiloe Wigeon	0	0	5	3	0
FT	Falcated Duck	0	0	0	0	0
GA	Gadwall	2362	4649	10225	12998	15507
T.	Teal	1056	6801	38498	82224	92216
TA	Green-winged Teal	0	0	0	2	3
AG	Silver Teal	1	0	0	0	0
KQ	Speckled Teal	0	0	0	0	1
MA	Mallard	40382	56028	90843	116292	116132

Table 3. continued

	Dec	Jan	Feb	Mar	Apr	May	Jun
sites	*1604*	*1655*	*1795*	*1494*	*876*	*739*	*712*
YX	0	0	0	0	0	1	0
MS	19763	19267	17429	16374	9628	8793	9302
AS	45	54	55	45	27	24	21
AT	2	0	2	0	0	0	0
BS	*274	*3917	*1866	23	0	0	0
WS	*4111	*8156	*8907	5354	610	17	11
HN	12	12	12	9	0	4	3
BE	2	0	14	2	1	1	0
XF	0	1	0	7	0	0	0
XR	0	3	7	0	2	0	0
PG	*196658	56065	69070	69725	22023	356	31
WG	22	18	68	8	3	0	1
EW	404	1491	1295	582	128	2	1
NW	*12122	204	446	*13113	200	0	0
LC	2	1	2	2	0	0	4
JI	*101464	19088	26055	11949	3228	606	3142
JH	784	798	1297	1128	787	662	846
JE	24012	26051	22838	14996	6336	7777	13010
ZL	362	601	261	474	665	143	113
HD	7	8	2	7	3	5	2
SJ	10	17	9	13	5	4	9
RJ	0	1	2	1	1	0	0
EM	20	18	17	6	12	9	2
CG	49574	52063	42520	28815	13995	11325	22368
ZE	2	3	3	3	3	4	3
ZI	4	4	6	4	8	5	10
LQ	0	0	0	0	0	0	2
YN	1248	193	2246	*58269	1146	10	4
YS	14883	12647	11481	6611	8794	7003	2
YE	841	866	888	906	480	251	379
ZH	4	2	2	1	0	0	1
ZG	0	0	3	0	0	0	9
BG	63	28	273	223	21	0	0
DB	75021	81412	91604	56709	20320	5330	27
QN	304	306	180	275	355	0	1
QS	2765	531	487	127	35	1	2
BB	2	2	5	1	2	0	0
EB	2	2	3	3	1	0	0
UO	0	15	12	11	0	0	33
ZM	42	87	72	40	8	8	5
EG	261	284	228	204	182	253	394
UA	0	0	0	0	0	1	0
UD	2	0	6	5	0	1	0
SU	45321	48993	51327	40405	23836	13365	18266
ZT	0	0	0	0	0	1	0
MY	55	56	46	53	28	34	19
DC	9	9	8	5	2	2	3
MN	431	456	291	294	157	144	152
WN	290729	353044	269058	142672	11180	370	215
AW	1	1	2	0	1	0	0
HL	1	1	0	0	1	0	1
FT	1	1	2	1	1	0	0
GA	14663	17156	14606	8472	3784	2523	2963
T.	123512	129974	108893	50799	13852	504	886
TA	1	3	4	2	2	0	2
AG	0	0	0	0	0	0	0
KQ	0	0	0	0	0	0	0
MA	111258	113746	83219	55196	26685	24120	33787

	Species	Jul	Aug	Sep	Oct	Nov
Number of sites visited		*770*	*839*	*1345*	*1536*	*1641*
ZF	Feral/hybrid mallard type	336	211	426	455	433
PT	Pintail	17	19	2503	7991	17677
YL	Yellow-billed Pintail	0	0	0	0	0
PN	White-cheeked Pintail	0	2	0	0	0
GY	Garganey	5	23	28	15	1
SV	Shoveler	441	2104	6675	10286	10894
ZR	Hybrid duck	6	10	10	18	31
IE	Ringed Teal	0	0	0	0	0
RQ	Red-crested Pochard	16	21	225	243	134
PO	Pochard	2223	4106	6794	9771	15042
NG	Ring-necked Duck	1	2	1	1	3
FD	Ferruginous Duck	0	1	2	0	1
TU	Tufted Duck	16891	28137	42734	48646	47784
SP	Scaup	8	7	20	1068	610
AY	Lesser Scaup	0	0	0	2	1
ZD	Aythya hybrid	0	1	0	5	7
E.	Eider	15015	16232	16638	13285	17339
KE	King Eider	0	0	0	0	0
LN	Long-tailed Duck	2	0	0	38	337
CX	Common Scoter	700	973	1458	4166	2885
FS	Surf Scoter	0	0	0	2	1
VS	Velvet Scoter	46	102	61	237	206
UX	Unidentified scoter	0	0	0	0	0
GN	Goldeneye	64	191	340	961	5881
SY	Smew	0	0	0	4	9
RM	Red-breasted Merganser	831	617	946	1968	2437
GD	Goosander	610	719	690	804	1853
RY	Ruddy Duck	287	396	873	911	1137
OI	Lake Duck	0	0	0	0	0
WQ	White-headed Duck	0	0	0	1	1
RH	Red-throated Diver	75	130	151	366	257
BV	Black-throated Diver	4	7	2	6	25
ND	Great Northern Diver	0	1	0	21	59
WV	White-billed Diver	0	0	0	0	0
LG	Little Grebe	1255	2434	4604	5311	4985
GG	Great Crested Grebe	3820	5762	7605	7919	7345
RX	Red-necked Grebe	1	0	2	7	4
SZ	Slavonian Grebe	0	2	5	208	89
BN	Black-necked Grebe	25	27	39	30	17
CA	Cormorant	6450	10120	12382	15805	15305
SA	Shag	451	595	1028	3262	1226
XU	Unidentified Cormorant/Shag	0	0	1	3	3
BI	Bittern	3	2	5	3	17
NT	Night-heron	0	1	0	0	0
EC	Cattle Egret	0	0	0	0	0
ET	Little Egret	1581	2582	3917	3807	2632
HW	Great White Egret	0	1	1	4	3
H.	Grey Heron	2045	2504	3633	4318	3483
UR	Purple Heron	0	0	0	2	0
OR	White Stork	1	1	0	1	2
IB	Glossy Ibis	1	0	1	2	2
IS	Sacred Ibis	0	1	0	1	0
NB	Spoonbill	26	5	6	0	22
WA	Water Rail	44	57	179	337	589
CE	Corncrake	1	0	0	0	0
MH	Moorhen	4316	6313	11448	13965	14459
CO	Coot	29472	46125	78648	92903	106046
AN	Crane	0	1	0	3	0
KF	Kingfisher	167	265	437	564	391
	TOTAL WILDFOWL	**227667**	**296684**	**553082**	**1001324**	**1141688**

	Dec	Jan	Feb	Mar	Apr	May	Jun
sites	*1604*	*1655*	*1795*	*1494*	*876*	*739*	*712*
ZF	429	430	430	346	255	181	279
PT	18971	26120	20014	5298	539	18	6
YL	0	0	0	2	0	0	0
PN	0	1	1	1	0	0	2
GY	0	0	1	6	19	52	11
SV	10421	12528	13283	10401	4070	762	546
ZR	38	58	61	55	19	18	20
IE	0	0	0	0	1	0	0
RQ	213	127	103	165	36	39	22
PO	17995	23601	21566	8448	1413	935	1183
NG	1	1	3	3	1	0	0
FD	1	0	1	0	0	1	1
TU	49831	48962	52004	41691	24247	8904	9885
SP	2447	1470	2140	1082	506	5	2
AY	1	2	2	4	1	0	0
ZD	2	0	2	0	2	0	1
E.	9525	16736	12967	8674	12944	12164	11344
KE	0	0	1	1	2	0	0
LN	934	1828	2507	1393	826	16	0
CX	4436	4935	5434	5199	4248	3791	1440
FS	0	1	7	1	1	0	0
VS	159	428	413	447	328	5	0
UX	0	600	0	0	0	0	0
GN	9147	10918	12611	9617	3423	101	188
SY	52	104	109	48	4	0	0
RM	2259	2605	3362	2358	1548	707	510
GD	2320	2553	2390	1801	365	174	374
RY	1091	1093	949	484	374	252	196
OI	0	0	0	0	0	1	0
WQ	2	1	1	0	0	0	0
RH	225	305	667	207	239	99	28
BV	27	23	109	7	6	4	2
ND	50	82	445	25	16	4	0
WV	0	1	0	0	0	0	0
LG	4408	3742	4453	3235	1669	1007	954
GG	6530	5783	7938	6250	3560	2956	2684
RX	7	6	19	3	3	0	1
SZ	98	137	192	53	39	1	2
BN	13	40	51	25	53	19	20
CA	14132	13601	13531	11507	7206	5387	4514
SA	1133	1064	1910	428	328	404	121
XU	6	1	0	0	0	0	0
BI	23	26	23	20	9	7	6
NT	0	0	0	0	0	0	0
EC	4	6	5	9	6	4	0
ET	1755	1305	1779	1806	1309	947	962
HW	1	3	2	2	0	2	0
H.	3028	3052	3860	3262	1894	1758	1622
UR	0	0	0	0	0	0	0
OR	1	2	0	1	0	0	0
IB	0	0	2	2	1	0	1
IS	0	1	1	1	0	0	0
NB	4	17	10	15	6	6	10
WA	471	389	409	319	114	49	44
CE	0	0	0	0	0	0	0
MH	12972	12223	13173	11962	5955	3745	3447
CO	104970	92296	67136	47695	21211	14866	19521
AN	0	0	1	0	0	3	0
KF	304	267	255	237	98	87	87
	1163775	**1230110**	**1088937**	**697753**	**267432**	**143140**	**166109**

Table 3. continued

	Species	Jul	Aug	Sep	Oct	Nov
Number of sites visited		*770*	*839*	*1345*	*1536*	*1641*
OC	Oystercatcher	46297	117681	160638	180222	192874
AV	Avocet	1931	1658	4133	3492	5708
TN	Stone-curlew	12	0	1	0	0
LP	Little Ringed Plover	91	43	16	4	0
RP	Ringed Plover	1567	9448	9814	9263	6839
KL	Killdeer	0	0	0	1	0
KP	Kentish Plover	0	2	0	0	1
DO	Dotterel	0	0	0	0	0
ID	American Golden Plover	0	0	0	1	0
GP	Golden Plover	4318	15541	29717	97155	83803
GV	Grey Plover	1082	5096	27400	20994	30482
L.	Lapwing	23392	40723	40997	108498	118402
KN	Knot	21745	58948	128799	238852	220941
SS	Sanderling	2318	9901	6343	7230	11327
LX	Little Stint	0	19	45	184	10
TK	Temminck's Stint	0	0	0	0	0
WU	White-rumped Sandpiper	0	0	1	0	0
PP	Pectoral Sandpiper	0	1	5	5	0
CV	Curlew Sandpiper	9	23	201	82	4
PS	Purple Sandpiper	39	101	79	366	988
DN	Dunlin	35655	66083	43507	108909	239383
RU	Ruff	85	250	231	367	309
JS	Jack Snipe	0	0	4	73	148
SN	Snipe	141	987	2287	5090	5806
LD	Long-billed Dowitcher	0	0	0	0	0
WK	Woodcock	0	2	2	21	46
BW	Black-tailed Godwit	12683	22379	30347	22327	22024
BA	Bar-tailed Godwit	5981	17216	17115	16581	25678
WM	Whimbrel	579	1284	160	40	30
CU	Curlew	45538	56170	61807	59559	47435
CS	Common Sandpiper	888	794	286	75	57
PQ	Spotted Sandpiper	0	0	1	0	1
GE	Green Sandpiper	227	407	268	214	161
DR	Spotted Redshank	43	89	116	130	77
LZ	Greater Yellowlegs	0	0	0	0	0
GK	Greenshank	515	1338	1305	752	361
LY	Lesser Yellowlegs	0	0	0	1	2
OD	Wood Sandpiper	1	16	2	0	0
RK	Redshank	19798	41826	63001	78595	62252
TT	Turnstone	1130	5439	7640	11960	12738
WF	Wilson's Phalarope	0	1	0	0	0
NK	Red-necked Phalarope	0	1	1	1	0
PL	Grey Phalarope	0	0	0	2	2
U.	Unidentified wader	3	0	0	0	15
JW	Unidentified small wader	0	0	0	0	0
	TOTAL WADERS	**226068**	**473467**	**636269**	**971046**	**1087904**

Table 3. continued

	Dec	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**
sites	*1604*	*1655*	*1795*	*1494*	*876*	*739*	*712*
OC	193443	179762	189680	136253	55118	31258	25302
AV	6678	6591	5223	3878	2087	1845	1558
TN	0	0	0	0	2	0	1
LP	0	0	0	7	115	179	129
RP	5861	6671	7628	3396	3209	7856	1249
KL	0	0	0	0	0	0	0
KP	1	1	0	1	0	0	0
DO	0	0	0	0	0	3	0
ID	0	0	0	0	0	0	0
GP	113032	179119	137790	45338	7605	322	63
GV	32720	34635	35146	37506	19396	18085	1518
L.	238329	401598	286616	25479	6173	4844	8166
KN	213421	162491	210520	115335	78115	35992	19085
SS	9506	7310	9357	10421	7457	7507	1603
LX	7	8	8	6	1	6	0
TK	0	0	0	0	0	2	0
WU	0	0	0	0	0	0	0
PP	0	0	0	0	0	0	0
CV	2	1	1	0	2	3	2
PS	1012	1517	1586	910	600	218	0
DN	282591	318628	247281	119379	36352	86597	2671
RU	194	351	558	392	154	19	5
JS	133	145	170	154	20	0	0
SN	5961	7939	9175	4893	1057	74	65
LD	0	0	1	0	0	0	0
WK	37	44	32	17	0	0	0
BW	19478	20251	21381	20654	11695	1539	1707
BA	24915	28230	28149	27350	7308	966	541
WM	17	15	13	13	123	567	167
CU	53112	64551	79912	51296	22685	3837	9357
CS	40	39	49	43	85	361	257
PQ	1	1	1	1	0	0	0
GE	122	98	134	107	89	11	55
DR	49	39	59	69	43	7	16
LZ	1	0	0	0	0	0	0
GK	261	209	230	223	156	131	39
LY	1	1	1	0	0	0	0
OD	0	0	0	0	0	11	0
RK	58176	57355	64295	58056	37831	2958	2953
TT	11094	11415	12011	10231	7105	1377	759
WF	0	0	0	0	0	0	0
NK	0	0	0	0	0	0	0
PL	1	0	0	0	0	0	0
U.	0	100	0	0	0	0	0
JW	75	0	0	0	0	0	0
	1270271	**1489115**	**1347007**	**671408**	**304583**	**206575**	**77268**

Table 3. continued

	Species	Jul	Aug	Sep	Oct	Nov
Number of sites visited		*668*	*730*	*1089*	*1249*	*1343*
AB	Sabine's Gull	0	0	1	0	0
KI	Kittiwake	1660	996	1351	674	483
BH	Black-headed Gull	71192	112836	152444	124876	195538
LU	Little Gull	109	105	113	42	4
MU	Mediterranean Gull	186	209	115	152	191
CM	Common Gull	4404	11470	13555	28077	45001
IN	Ring-billed Gull	0	0	2	2	2
LB	Lesser Black-backed Gull	37685	49392	14403	13354	11981
HG	Herring Gull	35104	42861	49204	49701	53215
YG	Yellow-legged Gull	77	96	62	57	24
YC	Caspian Gull	1	0	0	0	2
IG	Iceland Gull	0	0	0	0	2
GZ	Glaucous Gull	0	0	1	4	6
GB	Great Black-backed Gull	2491	3526	8970	12500	8898
UU	Unidentified gull	20	73	571	239	29
OU	Unidentified small gull	0	0	0	3	0
VU	Unidentified large gull	0	0	6	2	14
	TOTAL GULLS	**152929**	**221564**	**240798**	**229683**	**315390**

	Species	Jul	Aug	Sep	Oct	Nov
Number of sites visited		*674*	*723*	*1044*	*1184*	*1236*
AF	Little Tern	884	843	15	0	0
WD	Whiskered Tern	0	0	0	0	0
BJ	Black Tern	0	4	2	6	0
TE	Sandwich Tern	7845	7970	3660	325	1
CN	Common Tern	6022	5925	831	96	3
RS	Roseate Tern	5	4	0	0	0
AE	Arctic Tern	4664	1048	104	33	7
UI	Common/Arctic Tern	123	1	156	0	0
UT	Unidentified tern	12	16	6	0	0
	TOTAL TERNS	**19555**	**15811**	**4774**	**460**	**11**

Table 3. continued

	Dec	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**
sites	*1308*	*1348*	*1465*	*1215*	*759*	*642*	*620*
AB	0	0	0	0	0	0	0
KI	183	421	305	117	1125	563	1551
BH	168296	184060	209081	150547	48629	39932	27973
LU	2	0	4	4	15	44	48
MU	141	216	252	365	380	40	63
CM	36511	44193	71276	42089	8276	2946	3164
IN	1	2	1	0	0	0	0
LB	9971	7704	6282	7992	26316	30115	23684
HG	43663	51917	64643	54040	43293	28118	28357
YG	9	34	19	28	8	6	8
YC	1	2	1	6	0	0	0
IG	2	9	34	6	2	0	0
GZ	2	11	23	11	4	0	0
GB	8754	7780	5564	4103	2076	1877	1825
UU	34	156	14	18	0	0	0
OU	0	0	0	0	0	0	0
VU	23	18	37	53	0	0	0
	267593	296523	357536	259379	130124	103641	86673

	Dec	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**
sites	*1200*	*1214*	*1304*	*1095*	*703*	*641*	*603*
AF	0	0	0	0	0	789	809
WD	0	0	0	0	0	1	0
BJ	0	0	0	0	2	31	1
TE	1	1	1	2	854	7360	5743
CN	0	0	0	0	62	2836	3495
RS	0	0	0	0	0	0	0
AE	0	0	0	0	61	527	1134
UI	0	0	0	0	0	5	1
UT	0	0	0	0	0	31	49
	1	**1**	**1**	**2**	**979**	**11580**	**11232**

Table 4. Total numbers of waterbirds recorded by WeBS Core Counts in Northern Ireland in 2007/08. Census totals are indicated by '*'.

	Species	Jul	Aug	Sep	Oct	Nov
Number of sites visited		*3*	*3*	*12*	*21*	*21*
MS	Mute Swan	3	7	1064	1463	1270
AS	Black Swan	0	0	1	1	0
AT	Black-necked Swan	0	0	0	0	1
WS	Whooper Swan	0	0	29	1320	1824
PG	Pink-footed Goose	0	0	0	14	1
NW	Greenland White-fronted Goose	0	0	0	24	7
JE	Re-established Greylag Goose	0	0	259	22	798
CG	Canada Goose	0	0	96	87	201
YE	Naturalised Barnacle Goose	0	0	276	275	276
QN	Nearctic Light-bellied Brent Goose	0	0	5927	33948	12963
SU	Shelduck	60	18	143	1688	2281
DC	Wood Duck	0	0	0	0	0
WN	Wigeon	0	0	1612	5857	4337
GA	Gadwall	0	0	74	106	88
T.	Teal	0	3	2114	3683	3829
TA	Green-winged Teal	0	0	0	0	0
MA	Mallard	90	175	6553	6930	6518
PT	Pintail	0	0	92	298	465
GY	Garganey	0	0	13	4	0
SV	Shoveler	0	0	31	87	80
RQ	Red-crested Pochard	0	0	0	0	0
PO	Pochard	0	0	126	222	7512
NG	Ring-necked Duck	0	0	0	1	0
TU	Tufted Duck	0	0	897	3041	4065
SP	Scaup	0	0	4	496	3185
E.	Eider	0	0	1567	459	1658
LN	Long-tailed Duck	0	0	0	0	7
CX	Common Scoter	0	0	14	0	3
GN	Goldeneye	0	0	29	129	2531
SY	Smew	0	0	0	0	0
RM	Red-breasted Merganser	0	82	389	320	390
GD	Goosander	0	0	0	1	1
RY	Ruddy Duck	0	0	4	22	4
RH	Red-throated Diver	0	1	22	1	107
BV	Black-throated Diver	0	0	0	0	0
ND	Great Northern Diver	0	0	7	0	30
LG	Little Grebe	2	0	224	370	555
GG	Great Crested Grebe	0	3	1150	1517	1848
SZ	Slavonian Grebe	0	0	3	0	12
CA	Cormorant	38	191	1615	2051	2062
SA	Shag	0	0	191	295	661
XU	Unidentified Cormorant/Shag	0	202	152	28	87
ET	Little Egret	5	14	34	30	17
HW	Great White Egret	0	0	0	1	1
H.	Grey Heron	38	84	439	472	467
WA	Water Rail	0	0	3	2	2
MH	Moorhen	1	1	107	147	221
CO	Coot	0	0	2021	2157	1802
KF	Kingfisher	0	0	5	9	6
	TOTAL WILDFOWL	**237**	**781**	**27287**	**67578**	**62173**

Table 4. continued

	Dec	Jan	Feb	Mar	Apr	May	Jun
sites	*24*	*25*	*24*	*23*	*3*	*2*	*2*
MS	1636	1402	1170	898	7	19	13
AS	0	0	0	0	0	0	0
AT	0	1	1	1	0	0	0
WS	2444	1846	2820	1947	0	0	0
PG	0	2	3	0	0	1	0
NW	66	66	67	19	0	0	0
JE	698	1201	2259	2234	0	0	0
CG	654	812	338	122	0	0	0
YE	276	276	1	234	0	0	0
QN	7755	5258	3712	3932	560	4	0
SU	5280	5330	3333	2486	107	121	90
DC	0	0	1	0	0	0	0
WN	4641	3596	3719	2742	2	0	0
GA	37	70	94	138	0	0	0
T.	5155	4893	3264	2350	0	0	0
TA	2	1	1	0	0	0	0
MA	6043	4664	3306	2027	33	32	33
PT	441	306	433	114	0	0	0
GY	0	0	0	0	0	0	0
SV	212	92	95	65	0	0	0
RQ	0	0	1	0	0	0	0
PO	7528	9854	6941	1226	0	0	0
NG	0	0	0	0	0	0	0
TU	8694	8893	6849	5357	0	0	10
SP	5088	7305	8385	5166	0	0	0
E.	2880	1813	2815	489	4	0	4
LN	11	29	12	3	0	0	0
CX	25	102	0	7	0	0	0
GN	3379	3881	4379	5156	5	0	0
SY	1	1	2	0	0	0	0
RM	508	490	696	334	4	1	0
GD	0	1	0	0	0	0	0
RY	12	1	11	6	0	0	0
RH	102	82	44	41	1	0	0
BV	0	0	1	3	0	0	0
ND	6	6	4	32	0	0	0
LG	617	441	388	263	0	0	0
GG	2919	2080	970	1356	2	0	0
SZ	5	1	0	4	0	0	0
CA	1379	1645	1098	936	39	27	37
SA	186	573	222	160	1	0	0
XU	0	100	40	98	0	0	0
ET	21	20	24	28	7	0	2
HW	1	0	0	0	0	0	0
H.	274	250	217	152	12	8	20
WA	5	2	2	4	0	0	0
MH	177	173	197	168	1	2	0
CO	3092	2556	2274	1452	1	1	0
KF	5	1	4	7	0	1	1
	72255	**70116**	**60193**	**41757**	**786**	**217**	**210**

Table 4. continued

	Species	Jul	Aug	Sep	Oct	Nov
Number of sites visited		*3*	*3*	*12*	*21*	*21*
OC	Oystercatcher	662	2448	15733	13556	16742
RP	Ringed Plover	16	136	268	342	638
GP	Golden Plover	0	0	564	7585	8462
GV	Grey Plover	0	0	37	31	91
L.	Lapwing	70	217	1879	3251	8984
KN	Knot	11	2	193	483	296
SS	Sanderling	6	0	5	865	262
LX	Little Stint	0	0	0	3	0
CV	Curlew Sandpiper	0	0	1	5	0
PS	Purple Sandpiper	0	0	11	0	38
DN	Dunlin	43	30	579	1975	3791
RU	Ruff	0	1	2	8	0
JS	Jack Snipe	0	0	0	0	0
SN	Snipe	0	0	50	66	89
BW	Black-tailed Godwit	0	26	338	212	986
BA	Bar-tailed Godwit	1	8	564	547	842
WM	Whimbrel	4	16	2	0	1
CU	Curlew	390	899	4730	4083	4138
CS	Common Sandpiper	3	6	0	0	0
GE	Green Sandpiper	0	0	1	0	0
DR	Spotted Redshank	0	0	0	0	0
GK	Greenshank	22	20	158	173	135
RK	Redshank	529	1822	6340	6876	8251
TT	Turnstone	15	347	619	710	1744
WF	Wilson's Phalarope	0	0	1	0	0
	TOTAL WADERS	**1772**	**5978**	**32075**	**40771**	**55490**

	Species	Jul	Aug	Sep	Oct	Nov
Number of sites visited		*3*	*3*	*9*	*14*	*13*
KI	Kittiwake	1	0	94	0	20
BH	Black-headed Gull	364	514	8875	6029	10134
LU	Little Gull	0	0	2	0	1
MU	Mediterranean Gull	0	0	3	0	0
CM	Common Gull	141	212	5576	4643	3707
IN	Ring-billed Gull	0	0	1	0	1
LB	Lesser Black-backed Gull	23	8	583	372	134
HG	Herring Gull	148	238	2204	609	2006
YG	Yellow-legged Gull	0	0	0	0	0
IG	Iceland Gull	0	0	0	0	0
GZ	Glaucous Gull	0	0	0	0	0
GB	Great Black-backed Gull	69	63	433	215	510
	TOTAL GULLS	**746**	**1035**	**17771**	**11868**	**16513**

	Species	Jul	Aug	Sep	Oct	Nov
Number of sites visited		*3*	*3*	*7*	*10*	*10*
TE	Sandwich Tern	135	179	321	5	0
CN	Common Tern	79	13	3	0	0
AE	Arctic Tern	0	1	0	1	0
UI	Common/Arctic Tern	4	0	0	0	0
	TOTAL TERNS	**218**	**193**	**324**	**6**	**0**

Table 4. continued

	Dec	Jan	Feb	Mar	Apr	May	Jun
sites	*24*	*25*	*24*	*23*	*3*	*2*	*2*
OC	18019	17996	15531	8165	352	455	237
RP	342	458	207	158	0	118	29
GP	10270	7120	21026	5460	75	0	0
GV	112	200	175	217	0	0	0
L.	13202	16215	12427	361	0	0	29
KN	5604	6261	6184	2395	684	1	0
SS	306	214	322	904	72	10	0
LX	0	0	0	0	0	0	0
CV	0	0	0	0	0	0	0
PS	3	71	6	56	0	0	0
DN	7707	10278	7460	2528	8	435	47
RU	39	0	0	4	0	0	0
JS	0	0	1	0	0	0	0
SN	117	160	166	43	0	0	0
BW	1063	1422	608	206	52	1	4
BA	2771	3461	1296	495	0	1	0
WM	0	1	0	0	1	37	0
CU	4669	5792	4251	3036	245	63	254
CS	0	0	0	0	0	0	2
GE	0	0	0	0	0	0	0
DR	1	0	1	1	1	0	0
GK	77	98	114	108	4	0	3
RK	5112	8221	6052	5282	1159	0	74
TT	945	2061	1016	1450	3	0	0
WF	0	0	0	0	0	0	0
	70359	**80029**	**76843**	**30869**	**2656**	**1121**	**679**

	Dec	Jan	Feb	Mar	Apr	May	Jun
sites	*16*	*19*	*17*	*15*	*3*	*2*	*2*
KI	1	0	0	0	0	0	0
BH	5495	14493	10217	11377	99	55	253
LU	0	0	0	0	0	0	1
MU	0	0	2	0	0	0	0
CM	1697	4173	2322	3565	140	12	68
IN	0	0	1	1	0	0	0
LB	222	135	137	182	21	6	13
HG	1171	4175	1952	2066	182	48	141
YG	0	1	0	0	0	0	0
IG	0	0	1	0	0	0	0
GZ	0	1	2	1	0	0	0
GB	304	544	341	280	33	55	134
	8890	**23522**	**14975**	**17472**	**475**	**176**	**610**

	Dec	Jan	Feb	Mar	Apr	May	Jun
sites	*10*	*11*	*10*	*10*	*2*	*2*	*2*
TE	1	1	0	3	39	102	44
CN	0	0	0	0	0	16	0
AE	0	0	0	0	0	10	0
UI	0	0	0	0	0	0	0
	1	**1**	**0**	**3**	**39**	**128**	**44**

Table 5. Total numbers of waterbirds recorded by I-WeBS in the Republic of Ireland in 2007/08.

Species	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**
Number of sites visited	*104*	*139*	*162*	*155*	*221*	*174*	*144*
Mute Swan	1339	2502	2741	2660	3163	2040	1527
Bewick's Swan	0	1	24	54	59	3	0
Whooper Swan	4	806	3955	3394	3648	2523	1266
Pink-footed Goose	1	14	18	1	15	86	11
Greenland White-fronted Goose	0	74	5361	8729	1285	10842	10185
Greylag Goose	245	391	4414	2909	2301	2226	1362
Canada Goose	22	3	6	7	140	2	0
Barnacle Goose	0	1	214	434	4082	811	55
Dark-Bellied Brent Goose	0	0	0	1	1	1	0
Light-bellied Brent Goose	1686	3993	17068	14197	14622	13985	10441
Black Brant	0	0	0	0	2	1	0
Feral/hybrid Goose	90	79	5	78	85	64	48
Hybrid Shelduck	0	0	0	1	0	0	0
Shelduck	219	956	2764	3894	6286	5719	2717
Wigeon	2780	15117	32287	32013	38640	41048	18226
Gadwall	56	67	278	433	321	257	142
Green-winged Teal	0	0	1	0	2	2	0
Teal	4022	7229	14155	15178	22396	15156	8434
Mallard	8387	8210	9614	8217	10262	4824	2241
Pintail	17	130	526	459	1257	1310	748
Blue-winged Teal	0	1	0	0	1	0	0
Shoveler	76	331	1583	1595	1785	2039	1334
Pochard	2	169	1199	5874	3421	5813	427
Ring-necked Duck	0	1	0	0	4	1	0
Tufted Duck	743	2677	4942	5237	8666	4841	2072
Scaup	1	7	298	185	265	232	47
Long-tailed Duck	0	4	5	4	43	23	0
Eider	0	37	0	0	4	17	0
Common Scoter	56	2636	3491	1626	1917	536	559
Velvet Scoter	0	0	3	0	0	0	0
Goldeneye	1	30	650	836	1429	758	259
Smew	0	0	0	0	2	0	0
Red-breasted Merganser	167	449	962	627	1015	445	347
Goosander	0	0	1	0	0	3	0
Ruddy Duck	0	0	2	0	0	0	0
Unidentified Duck	0	0	0	0	750	0	0
Red-throated Diver	20	24	159	114	151	71	67
Black-throated Diver	0	0	7	10	5	2	5
Great Northern Diver	8	81	113	253	494	173	115
Little Grebe	536	574	1269	542	632	564	389
Great Crested Grebe	246	593	745	654	1074	663	419
Slavonian Grebe	0	0	1	1	10	1	0
Black-necked Grebe	0	0	0	1	1	1	0
Cormorant	1822	1593	2696	1385	2048	997	798
Shag	388	199	687	119	769	153	93
Little Egret	590	553	376	193	181	153	188
Cattle Egret	0	0	0	0	3	2	0
Grey Heron	635	690	770	572	685	277	291
Glossy Ibis	0	0	0	0	2	0	0
Spoonbill	0	2	1	1	1	1	1
Water Rail	6	20	35	11	13	10	11
Moorhen	288	463	399	282	372	325	321
Coot	1218	8402	6609	7010	5377	4455	1330
Kingfisher	9	7	17	12	13	2	2
TOTAL WILDFOWL	**25784**	**59255**	**120613**	**119958**	**139921**	**123632**	**66622**

Table 5. continued

Species	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Oystercatcher	24434	23819	24657	25190	30390	22965	12023
Ringed Plover	1307	3302	4177	2401	3408	1892	424
American Golden Plover	1	1	0	0	0	0	0
Golden Plover	1948	54719	77058	64424	109576	83918	15650
Grey Plover	341	356	1309	1666	3149	1747	263
Lapwing	2088	12077	49067	43131	90446	42640	647
Knot	842	2047	8480	12163	17696	14550	11986
Sanderling	536	1842	1342	1089	2396	1336	1742
Little Stint	8	2	1	0	0	0	0
Pectoral Sandpiper	1	0	0	0	0	0	0
Curlew Sandpiper	16	4	0	1	0	0	0
Purple Sandpiper	0	0	17	17	39	19	37
Dunlin	2802	6421	23070	26272	36862	27717	6205
Buff-breasted Sandpiper	1	0	0	0	0	0	0
Ruff	14	21	9	2	10	16	3
Jack Snipe	0	3	12	21	31	18	16
Snipe	140	183	599	419	740	342	213
Woodcock	0	0	0	1	1	0	0
Black-tailed Godwit	8132	9015	9710	12122	17548	16194	17675
Bar-tailed Godwit	2443	3104	8170	5224	10015	6105	1921
Whimbrel	15	2	25	0	4	1	9
Curlew	9684	9193	11209	11206	19225	14993	3794
Common Sandpiper	6	4	3	3	4	1	2
Green Sandpiper	3	2	0	4	15	2	0
Spotted Redshank	3	4	4	0	12	4	1
Greenshank	494	503	473	351	408	292	241
Lesser Yellowlegs	0	1	0	0	0	0	0
Redshank	10304	10916	16560	10738	13790	13446	7484
Turnstone	928	1901	2793	2266	2328	2072	1210
Oystercatcher	24434	23819	24657	25190	30390	22965	12023
Ringed Plover	1307	3302	4177	2401	3408	1892	424
American Golden Plover	1	1	0	0	0	0	0
Golden Plover	1948	54719	77058	64424	109576	83918	15650
TOTAL WADERS	**66491**	**139442**	**238745**	**218711**	**358093**	**250270**	**81546**

Species	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Mediterranean Gull	47	18	15	26	44	82	15
Little Gull	0	0	0	0	1	3	0
Sabine's Gull	0	0	0	0	0	0	1
Black-headed Gull	19100	15824	15892	19983	29772	22329	9708
Ring-billed Gull	1	0	1	1	1	3	0
Common Gull	5931	7559	9293	6572	12846	5414	4125
Lesser Black-backed Gull	1295	2657	3505	10758	8777	4823	446
Herring Gull	1920	2686	3365	2856	4326	2394	2150
Yellow-legged Gull	0	0	1	1	2	1	0
Iceland Gull	0	0	0	3	15	4	14
Glaucous Gull	1	0	0	2	9	7	1
Great Black-backed Gull	1258	2106	1971	1172	1675	1166	698
Unidentified gull	2	0	0	3000	0	250	234
TOTAL GULLS	**29555**	**30850**	**34043**	**44374**	**57468**	**36476**	**17392**

Species	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Sandwich Tern	548	20	4	0	0	0	4
Common Tern	193	3	0	0	0	0	1
Arctic Tern	97	12	0	0	0	0	0
Forster's Tern	0	0	0	0	1	0	0
Unidentified Tern	400	0	0	0	0	0	0
TOTAL TERNS	**1238**	**35**	**4**	**0**	**1**	**0**	**5**

SPECIES ACCOUNTS

Key to symbols commonly used in the species accounts.

In headers and footnotes:

? population size not accurately known

\+ population too small for meaningful threshold

* where 1% of the national population is fewer than 50 birds, 50 is normally used as a minimum threshold for national importance

** a site regularly holding more than 20,000 waterbirds (excluding non-native species) qualifies as internationally important by virtue of absolute numbers

† denotes that a qualifying level different to the national threshold has been used for the purposes of presenting sites in this report

In tables of important sites:

\- no data available

( ) incomplete count

† same meaning as used for thresholds

▲ site was of a higher importance status in the previous five-year period

▼ site was of a lower importance status in the previous five-year period

[1,2] count obtained using different survey methodology from WeBS Core Counts (see table below)

Sources of additional information used in compiling tables of important sites are listed below. Non-WeBS counts are identified in the tables by the relevant number below given in superscript following the count.

1 RSPB/Talisman Energy studies, e.g. Stenning (1998)
2 M. Howe (in litt.)
3 WWT studies, e.g. Rees *et al.* (2000)
4 Bean Goose Working Group, e.g. Smith *et al.* (1994)
5 RSPB *pers comm.*
6 Lancashire Goose Report, e.g. Forshaw (1998)
7 SNH `adopted` counts
8 WWT data
9 Greenland White-fronted Goose Study, e.g. Fox *et al.* (2009)
10 SOTEAG reports, e.g. Heubeck (1998)
11 WeBS Low Tide Counts
12 Roost counts
13 Supplementary daytime counts
14 WWT/JNCC National Grey Goose Census
15 Firth of Clyde Eider counts, e.g. Waltho (2009)
16 R. Godfrey (in litt.)
17 SNH Greenland Goose Census
18 R. MacDonald (in litt.)
19 Little Egret Roost counts
20 C Hartley (in litt.)
21 WWT unpublished data
22 Dorset Bird Report
23 Judith Smith, Gr. Manchester County recorder
24 BTO/ Lucy Smith
25 Paul Daw, County recorder for Argyll
26 Steve Percival`s counts of Lindisfarne - Svalbard
27 JNCC; aerial surveys of seaducks, divers & grebes
28 WWT report to DTI. Aerial survey of Thames strategic area
29 WWT report to DTI. Aerial survey of Greater Wash strategic area
30 All Wales Common Scoter Survey. WWT reports to CCW
31 All-Ireland Light-bellied Brent Goose Census
32 Cormorant Roost Survey 2003
33 Worden et al 2004
34 RSPB data
35 SNH data
36 WWT UK-breeding Greylag Goose Survey
37 Supplementary counts
38 Winter Gull Roost Survey
39 BTO/CCW Carmarthen Bay surveys
40 B McMillan (in litt.)
41 C Langton (in litt.)
42 B Yates (in litt.)
43 Tiree non-estuarine counts, per J Bowler
44 A Stevenson (in litt.)
45 D Tate (in litt.)
46 Uist Greylag Goose Management Committee
47 Uists SPA wader survey (Ecology UK Ltd 2005)
48 P Wilson / Lancs Bird Report
49 W Aspin (in litt.)
50 Winter Swan Census
51 JNCC shore-based count
52 RSPB Bean Goose counts
53 SNH Argyll goose counts
54 WWT Dark-bellied Brent supplementary counts
55 Norfolk Bird Report

White-faced Whistling Duck

Dendrocygna viduata

Escape
Native Range: S America, Africa

GB max: 1 May
NI max: 0

A single White-faced Whistling Duck was recorded at Sherborne Lake in May. The only previous WeBS record is of one at Lee Valley Gravel Pits in March 1997.

Mute Swan

Cygnus olor

International threshold (British population): 320
International threshold (Irish population): 100
Great Britain threshold: 375
All-Ireland threshold: 110

GB max: 22,255 Nov
NI max: 1,636 Dec

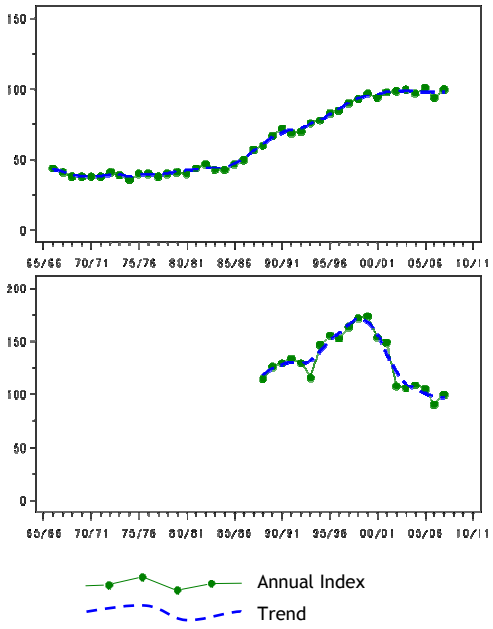


Figure 3.a, Annual indices & trend for Mute Swan for GB (above) & NI (below).

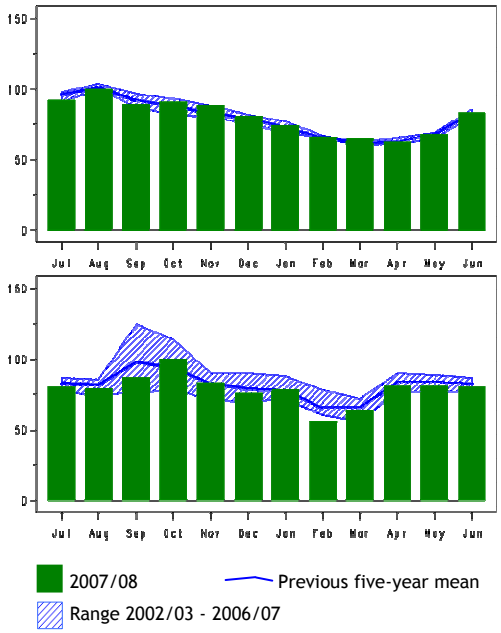


Figure 3.b, Monthly indices for Mute Swan for GB (above) & NI (below).

Mute Swans occurring in Britain and Ireland are generally sedentary except for localised movements to coastal waters (especially in cold weather), freshwater marshes and agricultural fields. Many habitats frequented by Mute Swans are poorly covered by WeBS, and hence a relatively small proportion of the species' population is monitored by the survey from year to year. The most recent complete UK census was carried out in 2002 and estimated the population at 31,700 birds (Ward *et al*. 2007).

In 2007/08, the monthly peak for Britain was 9% higher than that of the previous year. Similarly, after a drop in 2006/07 the national index returned to the level of preceding years which had exhibited a plateauing off of the increase shown by the species since the early 1980s.

The recent pronounced decline in Northern Ireland was halted where the peak count from the key site, Loughs Neagh & Beg, increased by some 300 birds following a marked drop the previous year. Eighteen sites in the UK

qualified as being of international importance, five of which are in Northern Ireland. Notably, the five-year means at Dungeness & Rye Bay and Stour Estuary surpassed the threshold for this qualification for the first time.

The highest count of the year received was a total of 1,151 at Ouse Washes in November, representing the highest ever number for the site. In contrast, the monthly maxima of birds at Fleet & Wey in Dorset fell below 1,000 for the first winter since 1989/90. It is unclear whether this drop was linked to the outbreak of the H5N1 strain of 'avian influenza' identified at Abbotsbury Swannery in January; perhaps not, considering that numbers of swans present during autumn 2007 appear to have already been somewhat below average. Furthermore, detailed studies at the site suggested that overall mortality was no higher there during winter 2007/08 than in previous winters.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean	
Sites of international importance in the UK								
Somerset Levels	883	1,076	1,024	1,164	1,098	Nov	1,049	
Fleet and Wey	1,092	1,118	1,147	1,013	867	Aug	1,047	
Loughs Neagh and Beg	920	949	1,024	770	1,012	Oct	935	
Ouse Washes	606	806[13]	427[13]	508[13]	1,151	Nov	700	
Rutland Water	542	593	510	588	499	Oct	546	
Tweed Estuary	582	614	460	583	364	Jul	521	
Hornsea Mere	527[13]	520[13]	462	375	290	Sep	435	
Loch Leven	526	202	319	542	520	Aug	422	
Loch Bee (South Uist)	407	630	267	401	399	Nov	421	
Severn Estuary	(318)	390	390	421	477	Feb	420	
Dungeness and Rye Bay	297	393	315	410	476	Feb	378	▲
Upper Lough Erne	272	449	300	457	354	Jan	366	
Abberton Reservoir	379	318	373	(399)	311	Aug	356	
Loch of Harray	522	467	251	263	206	Oct	342	
Stour Estuary	252	232	288	347	544	Oct	333	▲
Lower Lough Erne	286	300	309	266	311	Dec	294	
Strangford Lough	193	94	133	(59)	252	Nov	168	
Upper Quoile River	108	108	134	121	144	Dec	123	
Sites no longer meeting table qualifying levels in WeBS-Year 2007/2008								
Tring Reservoirs	322	404	346	294	98	Jul	293	

Black Swan

Cygnus atratus

Escape[†]
Native Range: Australia

GB max: **58** **Nov**
NI max: **1** **Sep**

Black Swans were recorded at 90 sites across Britain and one in Northern Ireland, with a monthly maximum of 58 in November. The majority of records related to singles or pairs, but maxima of seven were noted at Abberton Reservoir, Arnot Park Lake and Ramsbury Lake; all three regular sites for this species in recent years.

Sites with four or more birds in 2007/08[†]

Abberton Reservoir	7	Sep	Whinefell Tarn	5	Jul
Arnot Park Lake	7	Jul	Blatherwyke Lake	4	Oct
Ramsbury Lake	7	Jan	Burghfield Gravel Pits	4	Nov
Eastbourne Park Lakes	5	Jan	Clifford Hill Gravel Pits	4	Jul
Fairburn Ings	5	Feb	Fleet and Wey	4	Jul
Southampton Water	5	Sep	R.Kennet: R'bury-Chilton Foliat	4	Aug
Stour Estuary	5	Apr			

[†] *as no British or All-Ireland thresholds have been set a qualifying level of four has been chosen to select sites for presentation in this report*

Black-necked Swan

Cygnus melanocoryphus

Escape
Native Range: S America

GB max:	**3**	**Nov**
NI max:	**1**	**Nov**

During the 2007/08 winter, up to three Black-necked Swans were present at Auchenreoch Loch with further singles at Lough Foyle and Loughs Neagh & Beg. These represent the first WeBS records for Scotland and Northern Ireland respectively.

Bewick's Swan

Cygnus columbianus

GB max:	**3,917**	**Jan**
NI max:	**0**	
% young	4.7	
Brood size	1.4	

International threshold (bewickii): **200**
Great Britain threshold: **81**
All-Ireland threshold: **20***

**50 is normally used as a minimum threshold*

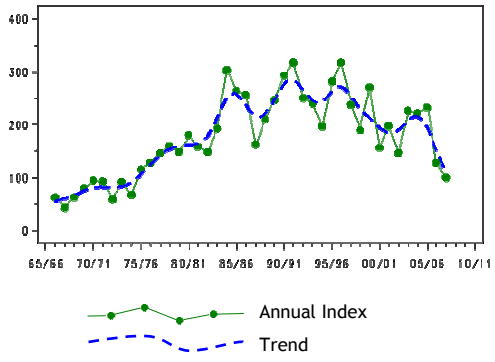


Figure 4.a, Annual indices & trend for Bewick's Swan for GB.

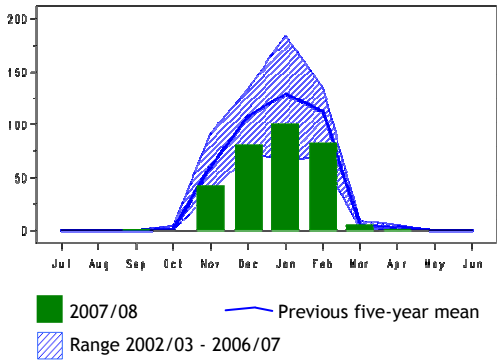


Figure 4.b, Monthly indices for Bewick's Swan for GB.

Bewick's Swans breed in the northern Russian tundra and winter primarily in Britain and the Netherlands. In recent years, there has been a contraction of the wintering range in an easterly direction, with notably fewer birds utilising traditional sites in southwest England in particular. These observations have helped to establish that, probably as a result of climate change and associated warmer winters, more swans are tending to remain closer to breeding grounds. Co-ordinated roost counts were again carried out at Ouse Washes and Nene Washes, the peak count being 3,128 at the former site in early January representing a further reduction compared to numbers recorded there in 2006/07. Declines were again noted at other regularly used smaller sites; for example, the steadily falling peaks noted at Severn Estuary and Martin Mere & Ribble Estuary over the course of the last five years epitomise the trend of sites situated at the edge of the species' range. Similarly, a sad milestone was the fact that 2007/08 was the first year with no WeBS records from Northern Ireland.

Breeding productivity was assessed at three wintering sites in the UK during 2007/08; WWT Slimbridge, WWT Martin Mere/Ribble Estuary, and the Ouse Washes. Across the three sites, 4.7% of birds in the surveyed flocks were young birds, an indication of very poor breeding success in 2007. A similarly poor level was recorded on the continent and it has been suggested that a late spring thaw in the Pechora Delta in 2007 may have affected the breeding success of swans nesting within that part of the breeding range at least.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of international importance in the UK							
Ouse Washes	6,330 [12]	7,491 [12]	5,449 [12]	3,407 [12]	3,128 [12]	Jan	5,161
Nene Washes	790 [12]	262 [12]	1,649 [12]	703 [12]	642 [12]	Feb	810
Hickling Broad		282 [50]					282
St Benet`s Levels	280						280
Severn Estuary	230	223 [8]	225	196	180	Jan	211
Sites of national importance in Great Britain							
Old Romney	184 [13]						184
Breydon Water & Berney Marshes	220	237	231	147 [12]	87 [13]	Feb	184
Martin Mere and Ribble Estuary	221	175	(132)	24	(12)	Nov	140
Dungeness and Rye Bay	148	140	135	130	127	Feb	136
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain							
Dee Estuary (England and Wales)	92	(101)	63	55	82	Feb	79

Whooper Swan

Cygnus cygnus

International threshold: 210
Great Britain threshold: 57
All-Ireland threshold: 130

GB max: 8,907 Feb
NI max: 2,820 Feb

% young 20.7
Brood 2.6

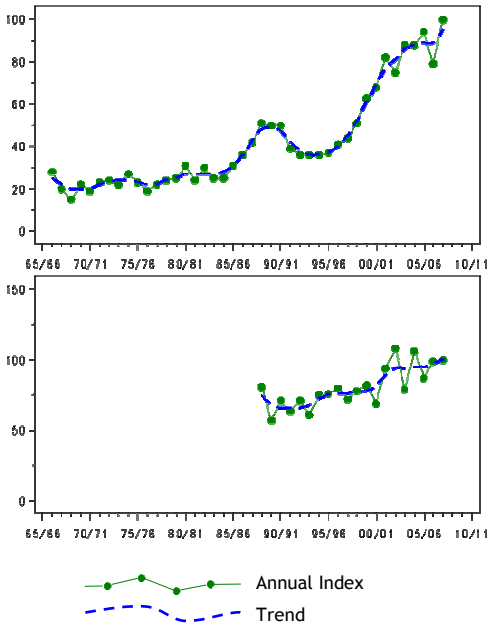


Figure 5.a, Annual indices & trend for Whooper Swan for GB (above) & NI (below).

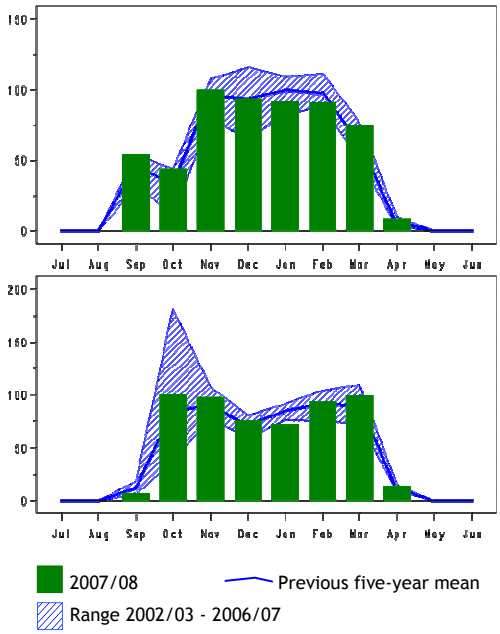


Figure 5.b, Monthly indices for Whooper Swan for GB (above) & NI (below).

The increasing number of Whooper Swans wintering in Britain and Ireland originate mostly from breeding grounds in Iceland. The index for Britain increased to its highest ever level, and maxima recorded either during Core counts or by way of supplementary roost information rose at the four most important sites. Typically the largest aggregations were noted at the Ouse Washes roost where a peak of 3,960 was recorded at the end of February. As a result of the Whooper Swan's restricted global wintering range, Ouse Washes is one of fifteen sites in the UK that are of international importance for the species. In addition, a whole suite of 40 other sites

qualify as being important at the national level. Recent increases have also been noted in Northern Ireland, where three major sites, Loughs Neagh & Beg, Lough Foyle and Strangford Lough, all hosted their highest counts for several years. During the winter, breeding success was assessed at four locations in the UK; WWT Martin Mere/Ribble Estuary, Ouse Washes, WWT Caerlaverock and Highland/Inner Hebrides. The percentage of young at 20.7% was above average; the species was considered to have experienced high breeding productivity as a result of warm, dry conditions across Iceland in May to July 2007.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean	
Sites of international importance in the UK								
Ouse Washes	3,624 [12]	4,397 [12]	3,547 [12]	3,756 [12]	3,960 [12]	Feb	3,857	
Martin Mere and Ribble Estuary	1,597	2,081 [50]	1,666	1,451	1,819	Jan	1,723	
Loughs Neagh and Beg	(867)	1,543	1,268	1,731	1,734	Mar	1,569	
Lough Foyle	680	950 [50]	1,030	1,042	1,167	Oct	974	
Upper Lough Erne	855	1,123	822	956	680	Jan	887	
Loch of Strathbeg	794	355	680	285	92	Nov	441	
Loch Eye and Cromarty Firth	322	275	518	61	399 [50]	Nov	315	
Solway Estuary	250	508 [50]	150	194	(97)	Mar	276	
Dalreoch				264			264	
Strangford Lough	150	244	242	199	432	Nov	253	▲
Loans of Tullich		253 [50]					253	
Wigtown Bay	255	205	(165)	(164)	267	Feb	242	
Dornoch Firth	138	324	213	241	(86)	Dec	229	▲
Bridge of Crathies		(220) [50]					(220)	
Sites of national importance in Great Britain								
Norham West Mains		184 [50]	194 [13]	196			191	
East Fenton Farm Reservoir		89	156	143	340 [13]	Nov	182	
River Nith: Keltonbank to Nunholm	165	(104)		(90)			165	
Loch a` Phuill (Tiree)	118	194	259 [13]	152 [13]	103	Nov	165	
R Clyde: Carstairs to Thankerton	91	110	220	188	173	Feb	156	
Nene Washes	111 [12]	104 [12]	215 [12]	216 [12]	110 [12]	Dec	151	
Loch Heilen	24	60	360	(197)	84	Jan	145	
River Tweed: Kelso to Coldstream	109	75	132	162	230	Dec	142	
Lindisfarne	(139)	71	119 [11]	(170)	(8)	Dec	125	
Leven Cut		125 [50]					125	
Loch Bailfinlay				(0)	115	Mar	115	▲
River Eden: Grinsdale to Sandsfield			98	59	186	Feb	114	
Folly Loch and Fairnington Fields	126	5	138 [13]	156	146	Feb	114	
Black Cart Water (Gryfe-White Cart)	151 [3]	112	112	(78)	76	Feb	113	
Loch Leven	19	66	17	220	242	Oct	113	
Montrose Basin	24	28	181	147	(182)	Mar	112	
Loch Insh and Spey Marshes	110	124	82	96	148	Feb	112	
Morecambe Bay	(20)	63	(100)	(84)	158	Nov	111	
Strathearn South Kinkell		111 [50]					111	
St Benet`s Levels	108						108	
Lawers Pond			204 [13]	101	0		102	
Rossie Bog					99	Feb	99	▲
Loch of Wester		128	56	70	134	Mar	97	
Inner Moray and Inverness Firth	165	27	166	36	73	Feb	93	
Vasa Loch Shapinsay	96	119	12	147	85	Jan	92	
Caistron Quarry	164	96	66	65	59	Dec	90	
Loch Moraig	121	87	37	55	127	Nov	85	
Lower Derwent Ings	52	102	74	104	88	Jan	84	
Loch of Spiggie	89	69	77	94	76	Oct	81	
Tyninghame Estuary	135	31	53	128	51	Mar	80	
River Earn - Lawhill Oxbows	0	113	193	49	7	Feb	72	
Killimster Loch				51	90	Mar	71	▲
Kinnordy Loch	35	96	58	82	(76)	Jan	69	
Loch of Lintrathen	93	69		54	56	Nov	68	
River Earn: Millands Marsh & Floods	(76)	15	63	12	168	Nov	67	▲
Glaslyn Marshes					65	Jan	65	▲
Farmland near Monymusk		65 [50]					65	
Loch Tuamister (Lewis)		63 [50]					63	

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Farmland near Whitekirk		61 [50]					61
Sites no longer meeting table qualifying levels in WeBS-Year 2007/2008							
Warkworth Lane Ponds	47	0	0	125	90	Feb	52
Dee Estuary (England and Wales)	(8)	(17)	16	104	39	Mar	53
Merryton Haughs			62	72	34	Dec	56
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain							
Loch Bee (South Uist)	24	14	4	23	128	Apr	39
Houb of Urafirth	16	9	8	3	111	Oct	29
Threipmuir & Harlaw Reservoirs	3	8	9	35	107	Nov	32
Lower Teviot Valley	30	(58)	13	36	98	Nov	47
Warkworth Lane Ponds	47	0	0	125	90	Feb	52
Mersey Estuary	38	54	21	46	75	Jan	47
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Northern Ireland							
Lower Lough Erne	19	31	42	(56)	190	Dec	71

Chinese Goose

Anser cygnoides

Escape
Native Range: E Asia

GB max: **14** **Oct**
NI max: **0**

Chinese Geese (the domestic strain of Swan Goose) were recorded at eight sites in Britain. In Scotland, up to three at both Airthrey Loch and Auchenreoch Loch were first records for those locations. The remainder of records related to pairs, most of which appeared to be resident at regular sites. In England, Diss Mere (Suffolk), Ellesmere Lakes and Oerley Reservoir (both Shropshire) continued to hold birds from previous years.

Bean Goose

Anser fabalis

International threshold: **800**
Great Britain threshold: **4***
All-Ireland threshold: **+**

GB max: **438** **Nov**
NI max: **0**

% young 25.2
Brood 2.2

**50 is normally used as a minimum threshold*

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of national importance in Great Britain							
Slamannan Area	235 [4]	262 [4]	300 [4]	255 [4]	300 [4]	Nov	270
Middle Yare Marshes	140	156 [34]	169 [52]	111 [34]	136 [52]	Nov	142
Ouse Washes	4	87 [12]	9 [13]	6 [13]	3 [13]	Jan	22
Dungeness and Rye Bay	7	86	0	0	11	Feb	21
North Warren & Thorpeness Mere	3 [13]	38	10 [13]	2	8 [13]	Feb	12
Balnakeil Bay	5 [13]						5
Somerset Levels	0	14	(0)	0	0		4

The contrasting fortunes of Taiga Bean Geese at the two key sites in Britain, Slamannan Plateau and Yare Valley, were further illustrated in 2007/08. A peak of 300 birds at Slamannan Plateau throughout the winter from October onwards represented an increase of 45 on the maximum seen during 2006/07 and equalled the previous maximum recorded in 2005/06. At Yare Valley, the peak of 136 in November despite being an increase of 26 compared to the previous year, is again one of the lowest maxima recorded there since the mid 1970s.

Continued monitoring of the Slamannan Plateau population by the Bean Goose Working Group indicated no major changes in phenology during 2007/08. Timing of arrival was typical with a rapid build-up noted during October, followed by stable numbers until late February upon commencement of the return migration. Breeding productivity was estimated at 2.2

young per successful pair, with 25.2% of the population being first-year birds.

Away from these key areas, Bean Geese were recorded at nine other sites during Core counts. Most of these records are likely to refer to birds of the race *rossicus*, known as Tundra Bean Goose. Those specifically assigned to that race were one at Blackwater Estuary and two at Micklemere in January, seven at North Warren and Thorpeness Mere in February, and singles at Hornsea Mere and Scaling Dam Reservoir in April. Bean Goose records not assigned to race comprised two at Camel Estuary in November and December, three at Ouse Washes and eleven at Dungeness & Rye Bay in February (one of which remained into May) and a single at River Forth in March.

Pink-footed Goose

Anser brachyrhynchus

International threshold: 2,700
Great Britain threshold: 2,400
All-Ireland threshold: +

GB max:	**284,856**	**Oct**
NI max:	**14**	**Oct**
% young	20.0	
Brood	2.3	

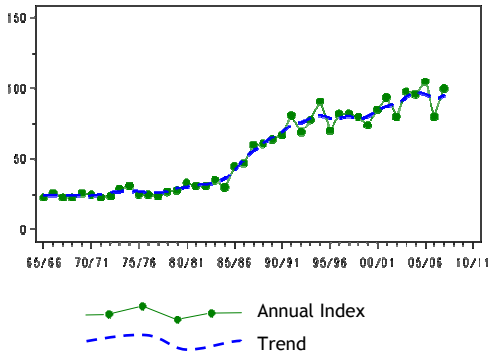


Figure 6.a, Annual indices & trend for Pink-footed Goose for GB.

An annual census of Pink-footed Geese is carried out through the Goose and Swan Monitoring Programme co-ordinated by WWT.

In 2007/08, numbers were higher in all three months in which the census was undertaken (October, November and December) compared to the comparable counts from the previous year. Typically, the distribution of birds changed over the course of the three counts. East Central Scotland held the greatest numbers of birds in October, but by November numbers had decreased there but had increased substantially in East England. By December, over half of the population was present in East England, whilst numbers in Northeast Scotland and East Central Scotland had declined. At the individual site level, the drop in the peak numbers recorded at Scolt Head continued. However Pink-footed Geese wintering in Norfolk utilise a number of sites, therefore the trend for that site should be examined alongside those for Holkham Marshes and Snettisham both of which have been largely stable or increased slightly in recent years.

Breeding success was assessed at several locations throughout Scotland and England. The proportion of birds within flocks aged as first-years was 20.0% and the mean brood size for pairs with young was 2.3, both very similar figures to the previous year.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of international importance in the UK							
Holkham Marshes	47,750[14]	58,000[13]	70,000[14]	69,100[14]	56,000[14]	Dec	60,170
Loch of Strathbeg	66,000[14]	65,000[14]	68,000[14]	37,396	39,370[14]	Oct	55,153
Scolt Head	80,000[12]	66,000[13]	55,000[14]	17,200[14]	7,870[14]	Jan	45,214
West Water Reservoir	34,210[14]		57,382[14]	43,252[14]	27,960[14]	Oct	40,701
Snettisham	27,350[14]	35,360[13]	49,610[14]	33,485[14]	47,530[14]	Dec	38,667
Southwest Lancashire	27,025[14]	43,950 [6]	31,860[14]	39,030[14]	46,025[14]	Oct	37,578
Montrose Basin	10,149[14]	31,896[14]	30,181[14]	25,000[14]	23,945[14]	Oct	24,234
Morecambe Bay	17,050 [6]	26,910 [6]	20,980[14]	(7,145)	(3,376)	Mar	21,647

	03/04	04/05	05/06	06/07	07/08	Mon	Mean	
Loch of Skene	(8,500)[14]	12,000[14]	17,730[14]	(22,930)[14]	19,000[14]	Nov	17,915	
Aberlady Bay	15,040[14]	18,430[14]	14,250[14]		23,415[14]	Sep	17,784	
Loch Leven	15,120 [14]	14,750	22,175[14]	14,600 [14]	16,300[14]	Apr	16,589	
Breydon Water and Berney Marshes	17,100	12,784	11,213	17,800 [12]	22,785[13]	Jan	16,336	
Ythan Estuary and Slains Lochs	19,200 [14]	16,200	(1,800)	10,360[14]	16,300[14]	Oct	15,515	
Findhorn Bay	25,000 [14]	18,000[14]	9,400 [14]	(3,800) [14]	7,800 [14]	Oct	15,050	
Loch Spynie	11,100 [14]	27,000[14]	23,000[14]	9,000 [14]	150 [14]	Oct	14,050	
Carsebreck and Rhynd Lochs	11,450 [14]	8,770 [14]	11,130[14]	12,600[14]	11,200[14]	Oct	11,030	
Solway Estuary	10,243	2,612 [14]	(6,862)	23,313 [14]	5,500 [14]	Mar	10,417	
Easterton - Fort George			10,000[14]				10,000	
Loch of Lintrathen	11,100 [14]	8,921 [14]	9,790 [14]	7,040 [14]	8,410 [14]	Nov	9,052	
Hule Moss	14,200 [13]	7,950 [14]	6,000	2,250 [14]	6,850 [14]	Oct	7,450	
Wigtown Bay	8,662 [14]	(7,219)	802	(6,695)	11,720[14]	Mar	7,101	
Middlemuir (New Pitsligo Moss)				9,662 [14]	4,500 [14]	Oct	7,081	
Horsey Mere	8,200 [14]	7,231 [13]	6,240 [14]	5,430 [14]			6,775	
Winter Loch, St Fergus				6,620 [14]			6,620	
Heigham Holmes			5,670 [14]				5,670	
Norton Marsh			4,500 [14]	6,650 [14]	4,850 [14]	Jan	5,333	
Lindisfarne	1,496	5,300 [14]	5,800 [14]	(6,132)	6,900 [14]	Oct	5,126	
Humber Estuary	6,562	5,638	3,909	3,780 [14]	3,703	Oct	4,719	
Dupplin Lochs	14,100 [14]	2 [14]		1,450 [14]	2,100 [14]	Nov	4,413	
Holme and Thornham			5,000 [14]	4,000 [14]	3,865 [14]	Jan	4,289	
Simonswood Moss			5000[14]	3,000 [14]	4,500 [14]	Oct	4,167	
R Clyde: Carstairs to Thankerton	5,300	(3,050)	4,500	1,540	(4,720)	Mar	4,015	
Loch Tullybelton		6,500 [14]		2,700 [14]	2,800 [14]	Oct	4,000	
River Nith: Keltonbank to Nunholm	(3,710)	(950)		(2,525)			(3,710)	
Holburn Moss	6,500 [14]	2,300 [14]	2,950 [14]	2,400 [14]	2,300 [14]	Dec	3,290	
Floodwater South Of Braco				3,290 [14]			3,290	
Tay and Isla Valley	4,134 [14]	4,000	3,500	3,702	86	Oct	3,084	
Rossie Bog		6,290 [14]	2,250 [14]		655 [14]	Nov	3,065	
Fala Flow	5,450 [14]	741 [14]		2,170 [14]	3,650 [14]	Oct	3,003	
Skinflats	3,250 [14]	2,530 [14]	3,980 [14]	2,950 [14]	2,176 [14]	Oct	2,977	
Lake of Menteith	4,026 [14]	5,357 [14]	11	5,129 [14]	329	Mar	2,970	
River Tay: Haughs of Kercock	2	4,000 [14]	3,500 [14]	3,702 [14]	3,165 [14]	Dec	2,874	▲
East Chevington Pools	3,032 [14]	2,540 [14]	1,953 [14]	2,000	4,000 [14]	Dec	2,705	▲
Sites of national importance in Great Britain								
Folly Loch and Fairnington Fields	5,500	4	4,563 [14]	2,000	850	Jan	2,583	
Cameron Reservoir	8,900 [14]	2,692 [14]	521	399	42	Jan	2,511	▼
Sites no longer meeting table qualifying levels in WeBS-Year 2007/2008								
Loch Eye and Cromarty Firth	546	900	3,226	1,116	2,600 [14]	Feb	1,678	
Strathearn (West)				1,125 [14]	1,200 [14]	Dec	1,163	
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain								
Kilconquhar Loch	2,100 [14]	1,400 [14]	1,250 [14]	90	7,010 [14]	Nov	2,370	
Biggar Moss		1,000	50	0	6,500	Oct	1,888	
Gladhouse Reservoir	4,570 [14]	0	0	2,300 [14]	3,200 [14]	Oct	2,014	
Munlochy Bay	2,800 [14]		1,200 [14]	2,600 [14]	2,500 [14]	Dec	2,275	

Pink-footed Geese (Chas Holt)

European White-fronted Goose

Anser albifrons albifrons

International threshold:	10,000
Great Britain threshold:	58
All-Ireland threshold:	+

GB max:	1,491	Jan
NI max:	0	
% young	24.3	
Brood	1.9	

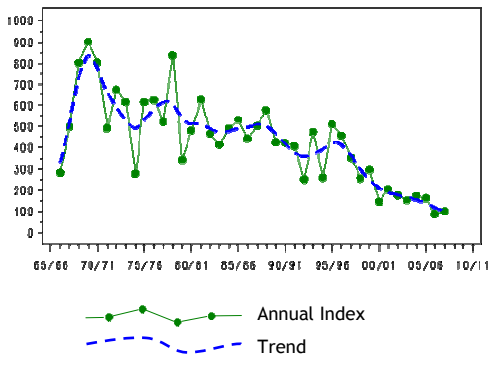


Figure 7.a, Annual indices & trend for European White-fronted Goose for GB.

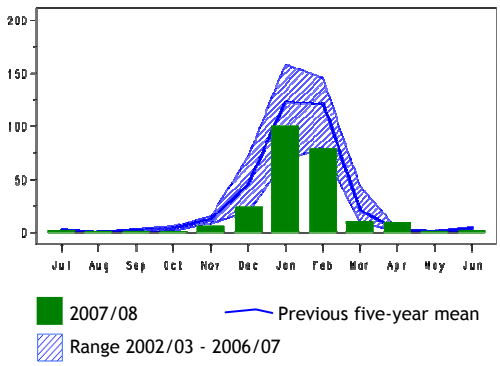


Figure 7.b, Monthly indices for European White-fronted Goose for GB.

The north-west European population of European White-fronted Geese breed on the Taimyr Peninisula and winter exclusively in the Netherlands and southern Britain. UK numbers exhibited the typical pattern of recent winters by peaking in the January/Febuary period, and although the peak monthly total was slightly higher than that in 2006/07 there was little indication that the decline shown by this species at British sites will be reversed in the near future. Recent years have seen a progressive eastward shift of wintering birds, including the presence of increasing numbers in the Netherlands. Furthermore, in 2007/08 the peak count from the Severn Estuary, traditionally the site supporting the largest numbers in the UK, was the lowest ever and beaten by the largest count for several years from Heigham Holmes within the Norfolk Broads and almost surpassed by a count from the Suffolk coast.

The overall proportion of young within the population, assessed at eight localities in December and January, was 24.3%, while a mean brood size of 1.9 young per successful pair was the same as in 2006/07 but considerably lower than average.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of national importance in Great Britain							
Severn Estuary	780 [13]	745 [8]	750	542 [21]	520	Jan	667
Heigham Holmes	505 [55]	450 [55]	512 [55]	570 [55]	800 [55]	Feb	567
Swale Estuary	327	(398)	430	355	315	Jan	365
North Norfolk Coast	540	340	404	200	275	Feb	352
North Warren & Thorpeness Mere	190 [13]	302	330 [13]	180	452 [13]	Jan	291
Dungeness and Rye Bay	205 [13]	238	550	151	194	Feb	268
Breydon Water & Berney Marshes	455	267	290	0	61 [13]	Feb	215
Middle Yare Marshes	120	109	76	66	193	Jan	113
Sites no longer meeting table qualifying levels in WeBS-Year 2007/2008							
Alde Complex	(54)	25	12	0	58	Feb	30
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain							
Pegwell Bay	(0)	0	0	(0)	118	Feb	39
Alde Complex	(54)	25	12	0	58	Feb	30

Greenland White-fronted Goose

Anser albifrons flavirostris

International threshold:	270
Great Britain threshold:	209
All-Ireland threshold:	110

GB max:	13,113	Mar
NI max:	67	Feb
% young	9.7	
Brood	3.3	

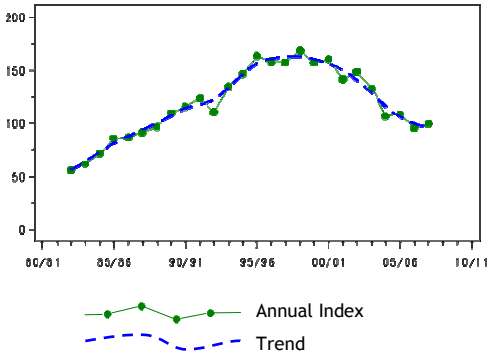


Figure 8.a, Annual indices & trend for Greenland White-fronted Goose for GB.

Greenland White-fronted Geese breed in the low arctic coastal fringe of west Greenland, and migrate southwards through south and west Iceland during September and October to winter exclusively in Britain and Ireland.

An international census organised by the Greenland White-fronted Goose Study and National Parks & Wildlife Service was carried out in December 2007 and March 2008. This derived a global total of 23,208 birds, down by 6.8% on the last world estimate in 2006 (Fox *et al*. 2009).

Since peaking in the late 1990s, the number wintering in Britain has steadily declined, however the peak of 13,113 in spring 2008 does represent an increase of 5% compared to numbers recorded during the previous year. Two-thirds of the Scottish population winter on Islay, the remaining located mostly in western Scotland, with Tiree, Coll, Rhunahaorine and Machrihanish supporting the largest numbers. In 2007/08, numbers were largely consistent with recent years at all the individual locations. In North Wales, Dyfi Estuary again hosted a wintering flock, with 73 birds present in March.

Breeding success has been consistently poor in recent years and it is thought that competition with Canada Geese at breeding sites in Greenland may be a contributory factor. In response to the population decline, in autumn 2006 the Icelandic Government banned the hunting of White-fronted Geese in Iceland. However, in view of the decline noted in the global population between international censuses, further years' data are required in order to be able to assess whether the slight upturn in numbers recorded in Britain in 2007/08 represents a result of this policy.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean	
Sites of international importance in the UK								
Island of Islay	11,272 [7]	8,350 [9]	7,456 [9]	7,902 [9]	7,980 [9]	Nov	8,592	
Machrihanish	1,377 [7]	1,407 [9]	1,433 [9]	1,716 [9]	3,855 [14]	Jan	1,958	
Rhunahaorine	1,156 [7]	894 [9]	955 [9]	940 [9]	1,451 [9]	Mar	1,079	
Tiree	1,093 [17]	1,133 [34]	1,112 [9]	974 [9]	803 [9]	Mar	1,023	
Isle of Coll	495 [9]	814 [9]	778	687 [9]	445 [9]	Mar	644	
Isle of Colonsay	79 [7]	1,718 [7]	111 [53]	76 [35]	109 [9]	Nov	419	
Keills Peninsula & Isle of Danna	377 [7]	338 [9]	344 [9]	350 [9]	202 [9]	Nov	322	
Isle of Lismore	290 [9]	310 [9]	320 [9]	273 [9]	240 [9]	Nov	287	
Stranraer Lochs	281 [9]	257 [9]	282 [9]	360 [9]	247 [9]	Mar	285	
Caithness Lochs	(12)	(83)	(170)	(275)	(152)	Mar	(275)	▲
Sites of national importance in Great Britain								
Loch Lomond	260 [9]	240 [9]	210 [9]	210 [9]	223 [14]	Dec	229	▼
Loch Ken	300 [9]	215 [9]	220 [9]	206 [9]	177 [9]	Feb	224	
Sites no longer meeting table qualifying levels in WeBS-Year 2007/2008								
Clachan and Whitehouse	215 [7]	209 [9]	193 [9]	186 [9]	120 [9]	Nov	185	
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain								
Broadford Bay	59 [9]	62 [9]	35 [9]	48 [9]	300 [9]	Apr	101	
Bute	183 [9]	206 [9]	190 [9]	209 [9]	240 [9]	Nov	206	

Lesser White-fronted Goose

Anser erythropus

Vagrant and escape
Native Range: SE Europe, Asia

GB max: 4 **Jun**
NI max: 0

Lesser White-fronted Geese were seen at six sites during 2007/08. These included four at Conwy Estuary in June and two in Yare Valley, and single birds at Llyn Traffwll, Maxey Pits, Testbourne Estate and North Norfolk Coast, the last which probably represents the only realistic candidate for being a genuine vagrant.

Icelandic Greylag Goose

Anser anser

International threshold: 870
Great Britain threshold: 819
All-Ireland threshold: 50

GB max: 95,359 **Dec**
NI max: **0

% young 21.7
Brood 2.6

***although small numbers occur in Northern Ireland these remain difficult to distinguish from re-established birds*

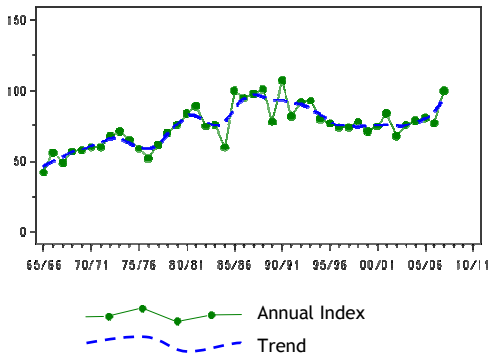


Figure 9.a, Annual indices & trend for Icelandic Greylag Goose for GB.

Counts of Icelandic Greylag Goose were undertaken in October, November and December as part of the 48th consecutive Icelandic-breeding Goose Census (IGC). This census incorporates monitoring of sites in Britain, Ireland, the Faeroes, Norway and Iceland. The December count was carried out for a third trial year, as part of an attempt to ascertain whether it is a more appropriate month in which to carry out a coordinated census. Adjusted totals for the three months were 4,352 in October, 107,137 in November and 95,359 in December. The estimate specifically for Britain of 85,282 represents an increase of 13.1% compared to 2006/07 (Mitchell 2008).

Breeding success was assessed at several sites in Scotland and was slightly higher than average with flocks containing 21.7% young, while a mean brood size of 2.6 goslings per successful pair was close to average for the most recent ten-year period.

Numbers in December on the Orkney archipelago, the most important area, were the highest since monitoring began. The peak there was 22% higher than that recorded in 2006/07. Elsewhere, the majority of other sites held numbers similar to recent years.

In order to be able to effectively monitor the status of migratory Greylag Geese in Britain, it is desirable that increased effort goes in to monitoring both the reproductive success and range expansion of the re-established population (Mitchell 2008).

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of international importance in the UK							
Orkney	43,097 [14]	42,697[14]	40,403[14]	55,521[14]	67,540[14]	Dec	49,852
Loch Eye and Cromarty Firth	6,523 [14]	8,313 [14]	13,269	2,463 [14]	7,112 [14]	Dec	7,536
Caithness Lochs	2,971 [14]	11,755[14]	8,727 [14]	2,734	6,802 [14]	Nov	6,598
Easterton - Fort George			3,500 [14]				3,500
Loch of Skene	(2,600)[14]	4,500 [14]	4,700 [14]	500 [14]	520 [14]	Oct	2,555
Dornoch Firth	2,259	1,720	1,632 [14]	2,858	3,310 [14]	Dec	2,356
Strathearn (West)	1,050 [14]			3,170 [14]	1,400 [14]	Dec	1,874

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Bute	2,000 [14]	1,780 [14]	2,110 [14]	1,051	1,960 [14]	Dec	1,781
Loch Fleet Complex	905 [14]	990 [14]	3,000	1,762	2,100 [14]	Oct	1,752
Tay and Isla Valley	2,425 [14]	1,930	2,155	700	973 [14]	Nov	1,637
Dalreoch				1,580			1,580
Loch Garten	1,000 [14]	2,100 [14]	1,700 [14]	1,150	1,306 [14]	Nov	1,452
Loch Spynie	2,200 [14]	1,000 [14]	2,600 [14]	500 [14]	30 [14]	Nov	1,266
Forth Estuary	792	(802)	2,107	(471)	875	Mar	1,258
Kilconquhar Loch	1,620	1,200 [14]	1,500 [14]	5	138	Nov	893
Sites no longer meeting table qualifying levels in WeBS-Year 2007/2008							
Beauly Firth	280 [14]	600 [14]	1,380 [14]		987 [14]	Oct	812
Gadloch	650	650	1,020 [14]	1,100	600	Sep	804
Lower Teviot Valley	525	(833)	1,250	310	70	Nov	598
Munlochy Bay	110 [14]	20 [14]	1,000 [14]		525 [14]	Dec	414
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain							
Loch Insh and Spey Marshes	566	504 [14]	483 [14]	293	943	Dec	558
River Eden - Little Salkeld			(450)	100	(860)	Nov	470

NW Scotland Greylag Goose

Anser anser

International threshold: 100
Great Britain threshold: 90

GB max:	**10,472 Aug**
NI max:	**0**
% young	30.4
Brood	2.67

The two most important areas for the 'Northwest Scotland' Greylag Goose population, Tiree and the Uists, are monitored annually; in late summer, typically August, and in late winter, typically February. However there are no systematic counts from the remainder of the range.

A total of 6,440 Greylag Geese (including goslings) was counted on the Uists in August, an increase of 55% compared to the equivalent count for the previous year (although counts in late summer of both 2005 and 2006 were considered to be underestimates). On Tiree, an August count of 3,694 birds represents a decrease of 8% on the count in 2006, although the long term trend there is one of increase. Breeding success was assessed on Tiree where both the percentage of young (30.4%) and average brood size (2.7) were slightly above average compared to recent years.

Since the last full national census in 1997, the 'Northwest Scotland' Greylag Goose population is considered to have increased both in number and range. In some parts of Scotland, the 'Re-established' and 'Northwest Scotland' populations now overlap and are therefore indistinguishable. It is therefore likely that it will become increasingly difficult to separate these populations in future, and this will have associated consequences for the effectiveness of national monitoring schemes.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of international importance in the UK							
Tiree	3,563[34]	4,005[34]	3,892 [34]	4,005[34]	3,694 [34]	Aug	3,832
North Uist	2,642[18]	2,970[46]	2,671[36]	2,318[36]	2,294 [34]	Aug	2,579
South Uist	2,102[18]	2,111[46]	2,119[36]	1,719[36]	1,141 [34]	Aug	2,013
Isle of Coll	740	960	980 [53]	856 [53]			893
Benbecula	319 [18]	414 [46]	473 [46]	224			402
Machrihanish			272 [53]				272
Moine Mhor and Add Estuary			254 [53]				254
Tayinloan			141 [53]				141
Kentra Moss and Lower Loch Shiel	102	136	107	90	140	Mar	115
Island of Islay	16	42	509	166 [53]			
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain							
Loch Broom		0	(7)	40	137	Feb	59
Loch Ewe		70	25	110	(90)	Feb	74

Re-established Greylag Goose

Anser anser

Naturalised re-establishment†

GB max: 29,449 Sep
NI max: 2,259 Feb

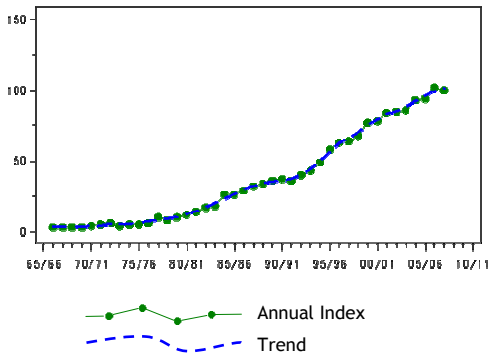


Figure 10.a, Annual indices & trend for Re-established Greylag Goose for GB.

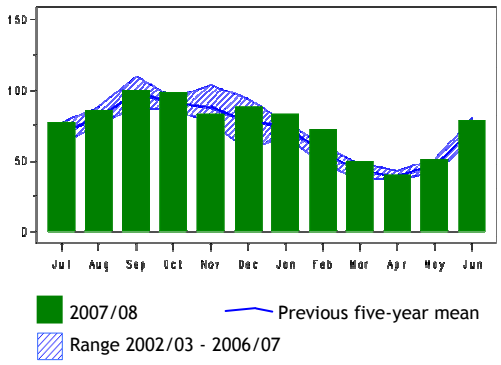


Figure 10.b, Monthly indices for Re-established Greylag Goose for GB.

There are increasing difficulties with monitoring the status of the different Greylag Goose populations in the United Kingdom because of rising levels of range overlap. The primary driver in this complication is the continued rapid expansion of the re-established breeding population (Baillie *et al.* 2009), whose numbers recorded by WeBS grew again in 2007/08.

September saw the largest ever single site count, 2,819 at Nosterfield Gravel Pits, contributing to a highest ever counted monthly maximum of 29,449. Nosterfield Gravel Pits was one of eleven sites where peak counts reached four-figures, several of which passed that particular milestone for the first time. These included especially notable increases, in the order of 50% between years, at Bolton-on-Swale Gravel Pits and Medway Estuary.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites with mean peak counts of 500 or more birds in Great Britain†							
Nosterfield Gravel Pits	(1,338)	2,215	1,663	1,898	2,819	Sep	2,149
North Norfolk Coast	(1,767)	1,371	(1,435)	1,725	1,270	Jan	1,533
Lower Derwent Ings	1,047	927	1,401	1,228	1,056	Jan	1,132
The Wash	1,011	1,038	1,005	1,337	1,159	Jun	1,110
Tophill Low Reservoirs	683	867	1,400	1,190	1,230	Dec	1,074
Livermere and Ampton Water	543	1,176	879		1,285	Nov	971
Bolton-on-Swale Gravel Pits	710	729	774	615	1,585	Oct	883
Hickling Broad	1,106	831	909	529			844
Baston and Langtoft Gravel Pits	803						803
Swale Estuary	718	625	1,062	632	885	Jan	784
Ouse Washes	883 [13]	782	671	810	687 [13]	Dec	767
Morecambe Bay	629	786	881	(617)	(290)	Sep	765
Humber Estuary	(769)	821	525	(778)	906	Aug	760
Alton Water	571	419	612	1,056	1,068	Dec	745
Kirkby-on-Bain Gravel Pits	1,072	925	387	724	600	Nov	742
Point of Ayre Gravel Pit	402	550	530	900	1,165	Sep	709
Hay-a-Park Gravel Pits	560	472	132	825	1,503	Oct	698
Eccup Reservoir	1,084	750	546	825	264	Jan	694
Hornsea Mere	642	785	1,145	615	145	Feb	666
Tattershall Pits	1,015	445	950	400	506	Jun	663
Breydon Water & Berney Marshes	720	1,148	491	279			660
Orwell Estuary	677 [11]	543	(618)	671	674 [11]	Nov	637
Llyn Traffwll	891	341	395	941	589	Jul	631

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
River Cam - Kingfishers Bridge	(193)	(248)	800	580	344	Sep	575
Lackford Lakes Nature Reserve	903	249	583	487	620	Sep	568
Sutton and Lound Gravel Pits	407	950	424	494	563	May	568
Medway Estuary	(146)	589 [11]	122	449	1,076	Jan	559
Scorton Quarry	460	800	196	590	730	Feb	555
Tees Estuary	518	(623)	(360)	430	(590)	Oct	540
Middle Yare Marshes	473	396	444	772	591	Sep	535
WWT Martin Mere	600	620	530	532	390	Nov	534
Welbeck Estate	(196)	(418)	480	549	550	Jan	526
Little Paxton Gravel Pits	652	518	511	672	257	Dec	522
Sites with mean peak counts of 50 or more birds in Northern Ireland†							
Loughs Neagh and Beg	1,270	1,005	(630)	662	1284	Mar	1056
Lough Foyle	518	1,291	1,129	974	716	Feb	926
Strangford Lough	373	307	355	253	431	Feb	344
Belfast Lough	132	125	137	159	134	Nov	137
Lower Lough Erne	(54)	137	140	140	38	Dec	114
Ballysaggart Lough	66						66
Tullyratty Lake	57	29	0	213	5	Mar	61
Upper Lough Erne	15	52	62	73	64	Jan	53
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain†							
Blackwater Estuary	124	(566)	(347)	(3)	790	Sep	493
Windermere	12	32	488	985	767	Jun	457
River Cam - Upware to Dimmocks Cote	242	14		52	655	Oct	241
Hamford Water	258	539	415	329	645	Oct	437
Castle Howard Lake		250		370	638	Jan	419
Scaling Dam Reservoir	377	405	503	500	555	Jun	468
Bough Beech Reservoir	597	500	400	201	540	Sep	448
Grimsthorpe Lake	272	405	535	295	540	Feb	409
Severn Estuary	337	489	450	436	526	Dec	448
Yare Valley - Marlingford to Bawburgh				282	510	Sep	396

† *as no British or All-Ireland thresholds have been set qualifying levels of 500 and 50 have been chosen to select sites, in Great Britain and Northern Ireland respectivley, for presentation in this report*

Bar-headed Goose

Anser indicus

Escape
Native Range: S Asia

GB max: **19** **Sep**
NI max: **0**

Bar-headed Geese were recorded at 33 sites throughout Britain, with a monthly peak of 19 in September. Sites where more than two individuals were seen included Chichester Harbour, Seaton Gravel Pits, and Blenheim Park Lake where twelve were present in September. There were no records from Northern Ireland.

Snow Goose

Anser caerulescens

Vagrant and escape
Native Range: N America

GB max: **22** **Nov**
NI max: **0**

Snow Geese were reported from 27 sites during the year, with a British maximum of 22 birds in November representing another relatively poor total following the lowest ever monthly maximum recorded in 2006/07. The highest site total was twelve at both Lower Windrush Valley in September and Blenheim Park Lake in November. Typically, the majority of birds refer to escapes, but those seen at The Wash and North Norfolk Coast in mid winter may well have had better credentials.

Ross's Goose

Anser rossii

Escape and possible vagrant
Native Range: N America

GB max: 2 **Aug**
NI max: 0

Seven sites hosted Ross's Geese during 2007/08, all single birds apart from two at Norton Marsh on the North Norfolk Coast in August (which have been regularly recorded in the area since 2002/03). Elsewhere, winter records from nearby Holkham, plus Colne and Blackwater Estuaries in Essex, and the Solway Firth, could relate to genuine vagrants.

Emperor Goose

Anser canagicus

Escape
Native Range: Alaska, NE Siberia

GB max: 20 **Nov**
NI max: 0

A resident flock of Emperor Geese was again present at South Walney Island in Morecambe Bay throughout 2007/08, peaking at 19 in November. Elsewhere singles were at Lackford Lakes Nature Reserve in November and Kirkby-on-Bain Gravel Pits in January. This species is classified as globally threatened within its native range of coastal Alaska, USA and north-west Siberia.

Canada Goose

Branta canadensis

Naturalised introduction†
Native Range: N America

GB max: 54,942 **Sep**
NI max: 812 **Jan**

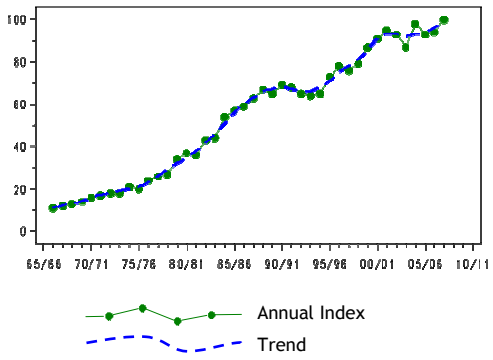


Figure 11.a, Annual indices & trend for Canada Goose for GB.

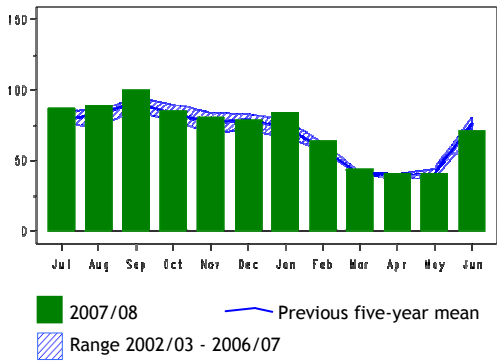


Figure 11.b, Monthly indices for Canada Goose for GB.

It would appear that Britain's population of non-native Canada Geese remains well short of the potential carrying capacity. This is evidenced by the latest jump in the national index to its highest ever level, thereby continuing the steady increase in numbers observed since standardised monitoring began. Compared to previous years, counts undertaken in 2007/08 appear to have been particularly high in late summer and autumn, suggestive of a successful breeding year. For the first time, all three principal sites surpassed the five-year mean threshold of 2,000 birds, with Mersey Estuary showing an especially pronounced increase this year probably as a result of some interchange of birds between there and Dee Estuary. Furthermore, counts in excess of 1,000 birds were noted at several sites for the first time, namely Medway Estuary, Harewood Lake, Doddington Pool and Fal complex, while the

peak at Abberton Reservoir was the highest there for seven years. Conversely, lower than normal numbers were seen at Arun Valley and Ellesmere Pools.

In Northern Ireland, where the general trend has also been of a steady increase albeit more fluctuating in nature, a decline was noted to a level similar to that at the turn of the decade.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites with mean peak counts of 600 or more birds in Great Britain†							
Dyfi Estuary	2,437	2,380	2,947	2,420	2,799	Jan	2,597
Dee Estuary (England and Wales)	1,529	2,316	1,987	2,087	2,536	Sep	2,091
Mersey Estuary	1,177	2,088	2,188	1,923	2,706	Jul	2,016
Colliford Reservoir	1,284	1,477	841	2,439	(1,340)	Jul	1,510
Rutland Water	1,369	1,244	1,070	1,118	1,009	Jul	1,162
Fairburn Ings	893		2,509	609	436	Feb	1,112
Ribble Estuary	(493)	552	626	(1,245)	(1,494)	Aug	979
Alde Complex	(896)	1,246	780	684	1,131	Dec	960
Arun Valley	866	1,236	742	1,076	570	Dec	898
Bewl Water	960	986	900	548	1,039	Jul	887
Medway Estuary	(234)	365 [11]	935 [11]	824	1,413	Jan	884
Taw-Torridge Estuary	526	(912)	(1,109)	986	(565)	Oct	883
Harewood Lake	686	870	888		1,080	Dec	881
Ellesmere Lakes	812	1,348	668	873	491	Sep	838
Doxey Marshes SSSI	881	893	(601)	802	726	Sep	826
Osberton			427	1,212	790	Aug	810
Dolydd Hafren	(500)	(500)	(800)	(500)			(800)
Stour Estuary	1,135	978	622	569	625	Dec	786
Abberton Reservoir	639	(616)	607	(213)	1,036	Aug	761
King`s Bromley Gravel Pits	776	721	586	542	848	Aug	695
Cleddau Estuary	655	622	585 [11]	890	686	Jul	688
College Lake Reserve	773	919	973	260	469	Sep	679
Chew Valley Lake	785	810	650	435	590	Jul	654
Pitsford Reservoir	727	441	682	832	587	Oct	654
Watermead Country Park South	632	723	648	668	597	Jul	654
Sites with mean peak counts of 50 or more birds in Northern Ireland†							
Upper Lough Erne	263	384	484	665	390	Jan	437
Lower Lough Erne	(343)	217	532	365	286	Dec	350
Strangford Lough	307	229	260 [11]	247	316 [11]	Nov	272
Lough McNean Lower		40	147	44	148	Jan	95
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain†							
Doddington Pool	249	829	360	578	1,215	Oct	646
Fal Complex	132	(6) [11]	204	655	1,035	Sep	507
Holme Pierrepont Gravel Pits	(364)	(714)	345	556	965	Sep	645
Bramshill Park Lake	206	(390)	188	(560)	(855)	Sep	440
Dorchester Gravel Pits	610	820	442	503	827	Sep	640
Windermere	(433)	376	505 [13]	747 [13]	796	Jul	606
Middle Tame Valley Gravel Pits	334	(171)	(89)	(322)	(748)	Sep	541
Dee Flood Meadows	(478)	510 [13]	580	515	725	Jan	583
Somerset Levels	555	432	778	367	700	Dec	566
Walthamstow Reservoirs	837	784	278	636	695	Jul	646
Portworthy Mica Dam	200	297	305	385	660	Oct	369
Severn Floodplain: Atcham Br. to Wroxeter				600	650	Jan	625

† *as no British or All-Ireland thresholds have been set qualifying levels of 650 and 50 have been chosen to select sites, in Great Britain and Northern Ireland respectivley, for presentation in this report*

Lesser Canada Goose

Branta hutchinsii

Vagrant and escape
Native Range: N America

GB max: **2** **Jun**
NI max: **0**

Two records of Lesser Canada Geese in June, from Conwy Estuary and Ribble Estuary, are both likely to refer to escapes from captivity.

Barnacle Goose

Branta leucopsis

Greenland Population

International threshold:	560
Great Britain threshold:	450
All-Ireland threshold:	90

GB max:	**58,269**	**Mar**
NI max:	**0**	
% young	9.8	
Brood	2.2	

Greenland Barnacle Geese, i.e those breeding along the east coast of Greenland, winter exclusively at sites in north and west Scotland and Ireland. Generally, only the key sites are surveyed annually by SNH and the Uists Greylag Goose Management Committee, but March 2008 saw a full census undertaken of the islands and mainland sites along the west and north coasts of Scotland and Ireland.

In Scotland, 40 sites held a total of 58,269 Greenland Barnacle Geese. The total wintering population (including 12,232 counted in Ireland) was estimated at 70,501 birds, representing an increase of 25.0% on the 2003 population census total.

Numbers on Islay have increased in recent years. An increase of 23.3% has occurred since the survey of spring 2003, compared to a previous increase of 3.7% from 1999 to 2003. Likewise, numbers of geese throughout the remainder of Scotland have increased by 23.5%, compared with 7.9% in the earlier period. Results from age counts undertaken in 2007/08 show that breeding success in 2007 was average; the proportion of young (9.8%) and mean brood size (2.2) were both slightly higher than their respective ten-year averages.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of international importance in the UK							
Island of Islay	40,018 [7]	44,186 [7]	47,303 [53]	52,709 [53]	44,961 [56]	Mar	45,836
Tiree	2,796 [34]	3,273 [34]	3,474 [34]	4,323 [35]	3,393 [56]	Mar	3,452
North Uist	560	2,836 [46]	4,648 [46]	2,119 [46]	3,630 [56]	Feb	2,759
South Walls (Hoy)		1,920 [35]	2,000 [35]	1,710 [35]	1,874 [56]	Mar	1,876
Isle of Coll	792 [7]	1,297	2,240 [53]	2,456 [53]	800 [56]	Dec	1,517
Colonsay/Oronsay	793 [7]	1,000 [7]	716 [35]	1,332 [35]	1,200 [56]	Mar	1,009
Balnakeil Bay / North Sutherland	826 [13]		970	130	1,037 [56]	Mar	741
Keills Peninsula and Isle of Danna	640 [7]	708 [7]	468 [53]	627 [53]	711 [56]	Mar	631
Sites of national importance in Great Britain							
North Skye					521 [56]	Mar	521

Svalbard Population

International threshold:	270
Great Britain threshold:	220

GB max:	**20,502**	**Oct**
NI max:	**0**	
% young	12.8	
Brood	2.4	

The population of Svalbard-breeding Barnacle Geese continues to increase. Between October 2007 and May 2008, twenty counts undertaken across the Inner Solway Estuary were used to derive a population estimate for 2007/08 of 29,000. This represents an increase of nearly 16% on the comparable estimate for 2006/07.

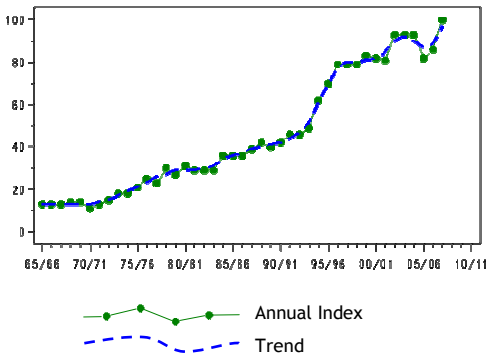


Figure 12.a, Annual indices & trend for Svalbard Barnacle Goose for GB.

Breeding success was assessed throughout the winter at sites around the Solway Firth. The overall percentage of young present in flocks was 12.8%, ranging from 7.0% to 70.7% within individual flocks. As in the 2006/07 season, this value is well above the current ten-year mean thus indicative of a good breeding season. Mean brood size per successful pair was 2.4 goslings (with brood sizes ranging from one to five goslings), higher than both the previous year and the mean for the current ten-year period.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of international importance in the UK							
Solway Firth	27,510 [8]	28,270 [8]	28,450 [8]	29,370 [8]	29,815 [8]	Nov	28,683
Loch of Strathbeg	95	1,100 [34]	2,168	181	121 [14]	Oct	733
Lindisfarne	786	160	300	1,202	(27)	Oct	612
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain							
Forth Estuary	57	(85)	95	42	291	Oct	121

Naturalised Population

GB max: **1,046** **Sep**
NI max: **276** **Sep**

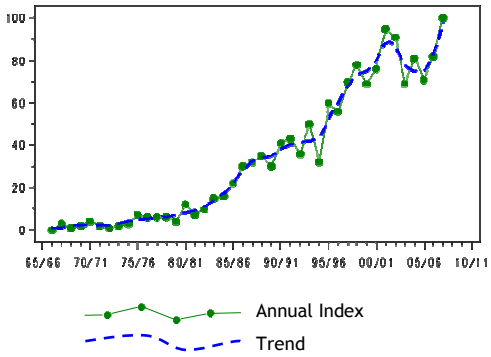


Figure 13.a, Annual indices & trend for Naturalised Barnacle Goose for GB.

Naturalised establishment†

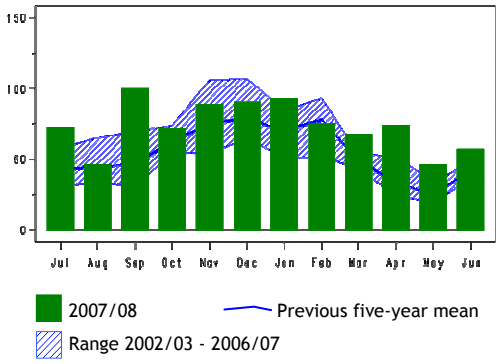


Figure 13.b, Monthly indices for Naturalised Barnacle Goose for GB.

Following an apparent slowing of the rapid increase in the population of naturalised Barnacle Geese during the last four years, the national index increased again in 2007/08 to its highest ever level; more akin to the trend of the previous twenty years. The species therefore returns to the band of naturalised goose species exhibiting marked increases in Britain.

It is standard procedure for counts for Barnacle Geese to be assigned as naturalised birds purely on the basis of geographical location. As a result, it is possible that some extra-limital birds from the Svalbard and Greenland populations are incorrectly assigned. Furthermore, the Netherlands supports a wintering flock of North Russia/East Baltic origin – and it is considered probable that sites on the east coast of Britain receive visits from these birds.

Such movements from the near-Continent, either of birds of migratory or naturalised origin, could be supplementing the increasing number of resident birds present on the Humber Estuary – where a peak of 631 was reached in September 2007.

In Northern Ireland, numbers present at Strangford Lough were consistent with the gradual increase witnessed in recent years.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites with mean peak counts of 50 or more birds in Great Britain[†]							
Humber Estuary	(80)	(200)	88	318	631	Sep	346
Lound Waterworks			393	104	50	Mar	182
Roxton Lake	262	120	195	128	170	Jun	175
Benacre Broad	250	130	52	359	52	Sep	169
Ullswater	135	110	143	186	230	Jan	161
Willington	298				5	May	152
Derwent Water	82	98	105	137	184	Apr	121
Minsmere	73	4	249	17	240	Nov	117
Severn Estuary	(94)	101	111	126	126	Nov	116
Frampton Pools	98	52	113	114	118	Mar	99
Eversley Cross and Yateley Gravel Pits	158	107	62	49	36	Dec	82
Hornsea Mere	96	73	71	72	73	Nov	77
Duddon Estuary	(65)	(0)	(88)	(10)	65	Oct	73
Middle Yare Marshes	72	82	74	70	57	Oct	71
The Hen Reedbeds	(0)	(0)	(68)	(0)	(1)	Oct	(68)
North Warren and Thorpeness Mere	57	5	1	90	147	Mar	60
Barcombe Mills Reservoir	73	52	47	53	56	Mar	56
Sites with mean peak counts of 50 or more birds in Northern Ireland[†]							
Strangford Lough	232	248	251	279	275	Sep	257
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain[†]							
Osberton			4	68	71	Nov	48

[†] *as no British or All-Ireland thresholds have been set a qualifying level of 50 has been chosen to select sites for presentation in this report*

Dark-bellied Brent Goose

Branta bernicla bernicla

International threshold: 2,000
Great Britain threshold: 981
All-Ireland threshold: +[†]

GB max: 91,604 Feb
NI max: 0

% young 11.0
Brood 2.57

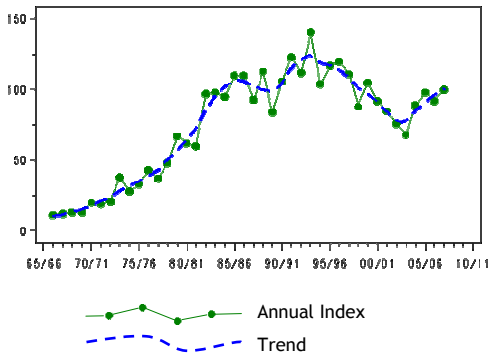


Figure 14.a, Annual indices & trend for Dark-bellied Brent Goose for GB.

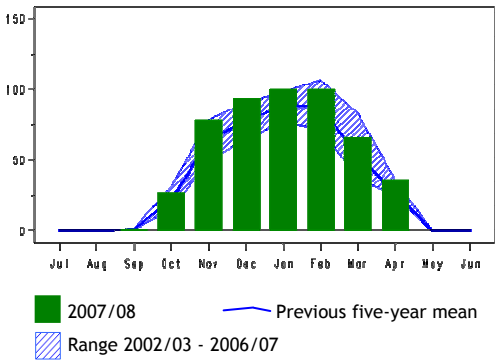


Figure 14.b, Monthly indices for Dark-bellied Brent Goose for GB.

The Dark-bellied Brent Goose winters exclusively along the coasts of western Europe, the majority at sites on the Atlantic west coast of France, the south and east coasts of England, southwest Netherlands and the Wadden Sea.

Following a 24% decline in the British index between 1990/91 and 2003/04, the last four years have seen a recovery to a level similar to the numbers present in the mid 1980s. The most recent British population estimate of 98,100 birds represented some 46% of the estimated total flyway population (Kershaw & Cranswick 2003).

In 2007/08, fourteen sites qualified as being of international importance, all typically located between the Humber

Estuary on the east coast and the Hampshire estuaries on the south coast. Examination of the principal sites table indicates the typical arrival of birds in south-east England in October, illustrated by an exceptional peak at Thames Estuary which proved to be the largest site count of the year. The other major site to experience a particularly notable increase in Dark-bellied Brent Geese was Chichester Harbour, where the five-year mean rose by almost 1,000 following this year's peak of 12,171 in January.

As with a suite of species nesting in the Arctic, breeding success varies greatly from year to year, from as low as 1-2% young in 'poor' years to 20-30% in 'good' years. In the last three years, breeding success has been 'good' (28.4% young) in 2005, 'poor' (2.0% young) in 2006, and 'variable' (11% young) in 2007. This follows a similar pattern to lemming abundance on the breeding grounds, of which exceptionally high numbers were present in 2005, followed by a crash in 2006 and a more variable year in 2007.

Further years of monitoring are required to substantiate this pattern, but these results suggest that breeding success may be returning to a three-yearly cycle.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean	
Sites of international importance in the UK								
The Wash	18,734	21,969	24,490	20,870	21,101	Dec	21,433	
Thames Estuary	(6,741)	9,455	12,567	8,100	22,047	Oct	13,042	
Chichester Harbour	8,290	7,436	9,018	9,605	12,171	Jan	9,304	
North Norfolk Coast	5,722	6,607	8,831	7,091	7,824 [11]	Feb	7,215	
Blackwater Estuary	4,892	7,178	5,946	(2,217)	8,278	Feb	6,574	
Langstone Harbour	5,049	5,069	5,496	4,906	5,263	Feb	5,157	
Hamford Water	3,336	5,890	5,952	4,089	4,157	Mar	4,685	
Crouch-Roach Estuary	(2,914)	4,635 [11]	3,520	(4,471)	4,534	Feb	4,290	
Humber Estuary	2,118 [11]	(2,667)	(2,636)	4,586	(2,430)	Feb	3,352	
Portsmouth Harbour	(2,293)	1,725	2,925	3,162	(2,500)	Dec	2,604	
Dengie Flats	1,507	(1,538)	2,445	2,901	(3,560)	Jan	2,603	
Colne Estuary	(1,959)	(2,538)	(2,123)	(1,296)	(2,536)	Nov	(2,538)	
Pagham Harbour	1,210	2,654	2,819	2,744	2,341	Feb	2,354	
North West Solent	1,790	(2,208)	2,377	1,808	2,101	Jan	2,057	▲
Sites of national importance in Great Britain								
Newtown Estuary	(1,235)	(1,444)	2,033	1,662	2,115	Jan	1,937	
Stour Estuary	1,914	1,782	1,617	2,063	2,038	Nov	1,883	
Swale Estuary	1,210	2,111	1,861	2,310	1,857	Jan	1,870	
Medway Estuary	(836)	1,834 [11]	(1,515)	(1,076)	(1,367)	Jan	1,834	
Fleet and Wey	1,337	2,625	1,436	1,554	1,810	Dec	1,752	
Beaulieu Estuary	835	1,498	2,173	3,439	774	Dec	1,744	
Deben Estuary	2,234	984	(1,449)	1,759	(1,409)	Jan	1,659	
Exe Estuary	1,368	1,645	1,531	1,374	1,820	Nov	1,548	
Orwell Estuary	1,396 [11]	976	1,477	1,500 [11]	1,601 [11]	Feb	1,390	
Southampton Water	1,274	1,386	949	1,151	1,674	Feb	1,287	
Poole Harbour	(868)	(772)	1,160	1,146	(721)	Feb	1,153	
Jersey Shore				733	1,317	Dec	1,025	▲
Sites no longer meeting table qualifying levels in WeBS-Year 2007/2008								
Burry Inlet	(1,255)	811	1,121	937	764	Feb	978	
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain								
Holland Marshes	0	0	28	4	1,250	Jan	256	

Light-bellied Brent Goose

Branta bernicla hrota

East Canadian High Arctic Population

International threshold: **260**
Great Britain threshold: **+**[†]
All-Ireland threshold: **220**

GB max: **355** **Apr**
NI max: **33,948** **Oct**

% young 29.5
Brood 2.71

Light-bellied Brent Geese which breed on the Arctic islands of north-east Canada migrate across Greenland and Iceland to winter mostly in Ireland. Strangford Lough typically hosts over 75% of the population during the late autumn and is now by far

the most important site. Lough Foyle has also become increasingly important in recent years as a landfall site. As the winter progresses, some traditionally move south and utilise sites not only in the Republic of Ireland, but also in western Britain, Channel Islands, and the Atlantic coasts of France and Spain.

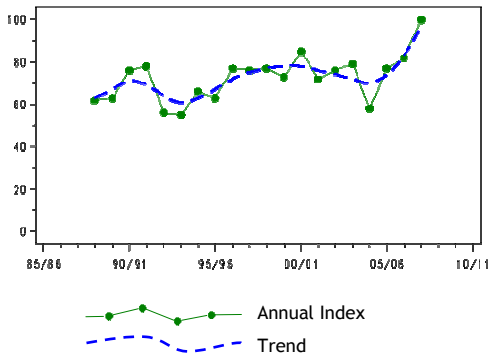


Figure 15.a, Annual indices & trend for Nearctic Light-bellied Brent Goose for NI.

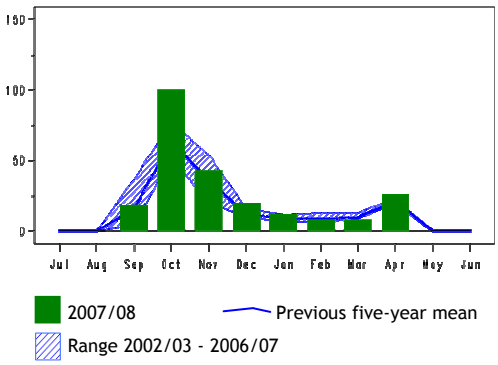


Figure 15.b, Monthly indices for Nearctic Light-bellied Brent Goose for NI.

Provisional results from the 2007 International Census of East Canadian High Arctic Light-bellied Brent Geese indicate numbers have increased by 30% since the previous year and reached their highest level to date. Similarly, the WeBS annual index indicates a continuing increase in numbers with Strangford Lough topping 30,000 birds for the first time. Both Strangford Lough and Lough Foyle supported peak totals in excess of their respective five-year means during the month of October, after which numbers declined from December onwards. In England, site maxima were recorded at both Dee Estuary in January and Morecambe Bay in April, the latter involving birds on return migration. Breeding success was very good in 2007, the proportion of young being the highest recorded since 2000/01.

The presence of small numbers in west Cornwall is a relatively recent occurrence (*per* www.birdguides.com); this year's peak of 50 at Par Sands Pools & St Andrews Road is the most ever recorded by WeBS in the county.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of international importance in the UK							
Strangford Lough	21,500[31]	26,250[31]	21,885[31]	24,658	30,457	Oct	24,950
Lough Foyle	3,277 [31]	1,603 [31]	3,968	2,177	3,251	Oct	2,855
Outer Ards Shoreline	642	762	618	577	946	Mar	709
Dundrum Inner Bay	287	302	640	575	1,108	Feb	582
Carlingford Lough	(570)	538	508	542	483	Dec	528
Killough Harbour	383	434	516	282			404
Larne Lough	235	254	218	256	369	Jan	266
Sites with mean peak counts of 25 or more birds in Great Britain[†]							
Traeth Melynog	117	146	262				175
Dee Estuary (England & Wales)	66	121	138	104	199	Jan	126
Foryd Bay	96	115	54	47	181	Nov	99
Inland Sea & Alaw Estuary	95			79			87
Loch Gruinart	0	284	76	1	0		72
Morecambe Bay	53	31	22	65	129	Apr	60
Loch Ryan	45	67	89	(37)	28	Jan	58
Derbyhaven Bay		39					39
Jersey Shore				23	(36)	Mar	30
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain[†]							
Par Sands Pools and St Andrews Road	0	(0)	0	0	50	Oct	13

[†] *as no British threshold has been set a qualifying level of 25 has been chosen to select sites for presentation in this report*

Svalbard Population

International threshold: **70**
Great Britain threshold: **30***

GB max: **2,765** **Dec**
NI max: **0**

% young 13.6
Brood 2.24

**50 is normally used as a minimum threshold*

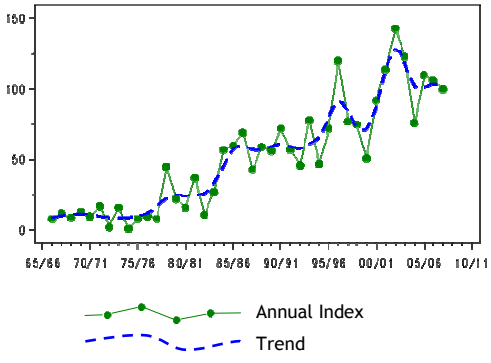


Figure 16.a, Annual indices & trend for Svalbard Light-bellied Brent Goose for GB.

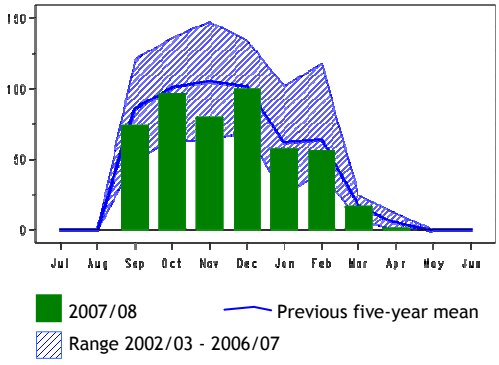


Figure 16.b, Monthly indices for Svalbard Light-bellied Brent Goose for GB.

The population of Light-bellied Brent Geese which breeds in Svalbard, north-east Greenland and Franz Josef Land has shown a trend of fluctuating increase over the last twenty or so years. In 2007/08, the counted monthly maximum fell for the second year in succession, due to lower numbers recorded at Lindisfarne which traditionally supports virtually the entire wintering population. The main wintering sites used to be Mariager & Randers Fjords in Denmark but Lindisfarne has become more and more important, with numbers there increasing from 200 birds in the 1950s to typically over 3,000 in the 2000s. Elsewhere this year, 69 at Eden Estuary in February represented the most ever counted at the site where peak numbers have steadily increased in recent years.

Breeding success was assessed through monitoring of the Lindisfarne birds, and at 13.6% proved to be the highest recorded since 1996/97. The percentage of young in wintering flocks has remained generally low over the past ten years, only exceeding 10% on four occasions since 1992/93; in 1993 (when it was 31.4%), 1996, 2000 and now 2007.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of international importance in the UK							
Lindisfarne	3,716	2,505[11]	3,688	(3,350)	(2,727)	Dec	3,315
Sites of national importance in Great Britain							
Inner Moray and Inverness Firth	55	18	81	43	37	Jan	47
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain							
Eden Estuary	15	9	27	18	69	Feb	28

Black Brant

Branta bernicla nigricans

Vagrant
Native Range: N America and E Asia

GB max: **5** **Feb**
NI max: **0**

Black Brants were recorded in flocks of Dark-bellied Brent Geese at six traditional sites along the English coast between north Norfolk and Portsmouth Harbour. All records related to singles apart from two at Cley Marsh in February.

Red-breasted Goose

Branta ruficollis

Vagrant and escape
Native Range: SE Europe, Asia

GB max: 3 Feb
NI max: 0

Red-breasted Geese were recorded at nine sites in England, including several sites along the Suffolk and Essex coast which probably relate to the same one or two individuals. Most are likely to involve known escapes, the exception being one with Dark-bellied Brent Geese in Chichester Harbour from November to January.

In the core of the range, 90% of the global population winter at just five roost sites within Bulgaria and Romania (Wetlands International 2006).

Egyptian Goose

Alopochen aegyptiaca

Naturalised introduction†
Native Range: Africa

GB max: 654 Sep
NI max: 0

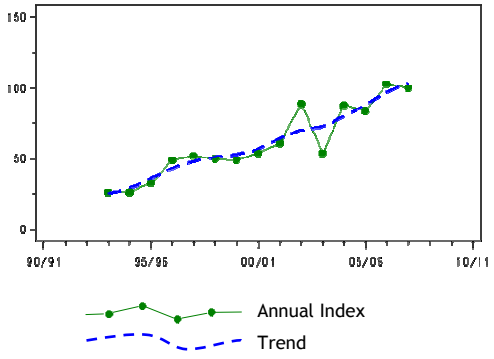


Figure 17.a, Annual indices & trend for Egyptian Goose for GB.

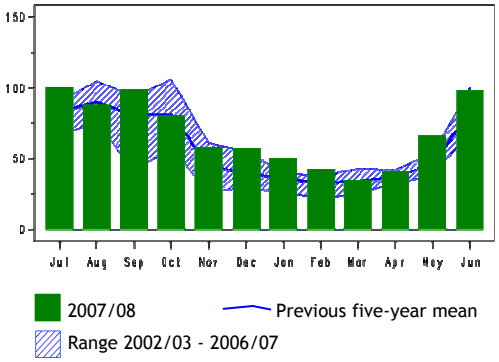


Figure 17.b, Monthly indices for Egyptian Goose for GB.

Egyptian Geese (Dawn Balmer)

The national index for Egyptian Goose in Britain showed a slight dip in 2007/08 but the overall trend continues to be of a steady increase.

The counted maximum of 654 in September represented the highest ever monthly total. In total, the species was recorded at a record 126 sites, including three in Wales, although for the second year running there were no records from Scotland.

However further range expansion away from the traditional stronghold of Norfolk was exemplified by site maxima recorded at a number of sites in English counties to the west and south of the core area. These included particularly notable late-summer counts of 60 at Summerleaze Gravel Pits in September and 47 at Queen Mary Reservoir in August; presumably both are evidence of successful breeding activity in those areas.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites with mean peak counts of 10 or more birds in Great Britain†							
North Norfolk Coast	(126)	(144)	126	211	125	May	154
Sennowe Park Lake Guist	85						85
Breydon Water and Berney Marshes	65	82	85	55	134 [13]	Oct	84
Rutland Water	70	46	53	64	56	Jul	58
Yare Valley - Marlingford to Bawburgh				52 [13]	(61)	Sep	57
Middle Yare Marshes	24	(47)	26	65	(81)	Sep	49
Eversley Cross and Yateley Gravel Pits	9	6	24	69	96	Nov	41
Nunnery Lakes	51	36	31	36	36	Jun	38
Weybread Pits	30	41					36
Whitlingham Country Park	18	59	27	24	24	Jul	30
Spade Oak Gravel Pit (Little Marlow)	6	37	49	11	19	Dec	24
Hickling Broad	(0)	21	42	5			23
St Benet`s Levels	23						23
The Wash	6	21	10	39	32	Dec	22
Barton Mere					19 [13]	Sep	19
Livermere and Ampton Water	29	8	2		38	Oct	19
Summerleaze Gravel Pits		0	8	2	60	Sep	18
Lynford Gravel Pit				(21)	13	Jul	17
Trinity Broads	10	22	(7)	8	26	Jul	17
Barton Broad	14	13	16	8	13	Jul	13
Busbridge Lakes	5			17	17	Dec	13
Felix Lane Gravel Pits				7	17	Sep	12
Lound Waterworks			16	14	5	Jun	12
Redgrave Lake				7	17	Oct	12
Lackford Lakes Nature Reserve	(17)	10	4	17	6	Feb	11
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain†							
Queen Mary Reservoir	0	0	0	0	47	Aug	9
Ouse Washes	1 [13]	2 [13]	4 [13]	2 [13]	17 [13]	Oct	5
East Wretham Meres	2	2	14	6	16	Oct	8
Colne Fen Gravel Pits	0	0	1	0	15	Oct	3
Ditchford Gravel Pits	(0)	0	(0)	(0)	11	Feb	6
Dart Estuary	(4)	6	7	6	(10)	Jul	7

Australian Shelduck

Tadorna tadornoides

Escape
Native Range: Australasia

GB max: **1** **Nov**
NI max: **0**

Escapes were recorded at Blenheim Park Lake in November and Severn Estuary in May. These are the first WeBS records since September 2002.

Ruddy Shelduck

Tadorna ferruginea

Escape and possible vagrant
Native Range: Asia, N Africa, S Europe

GB max: **8** **Aug**
NI max: **0**

2007/08 was an uneventful year for Ruddy Shelduck in the UK. A peak monthly total of just eight in August included a flock of six at Kinsham Pool in Worcestershire – which may relate to Dutch birds that have a tendency to disperse westwards in late summer. Elsewhere, except for three on the River Welland in March, all records were of one or two birds.

Shelduck

Tadorna tadorna

International threshold:	3,000	
Great Britain threshold:	782	
All-Ireland threshold:	150	

GB max:	51,327	Feb
NI max:	5,330	Jan

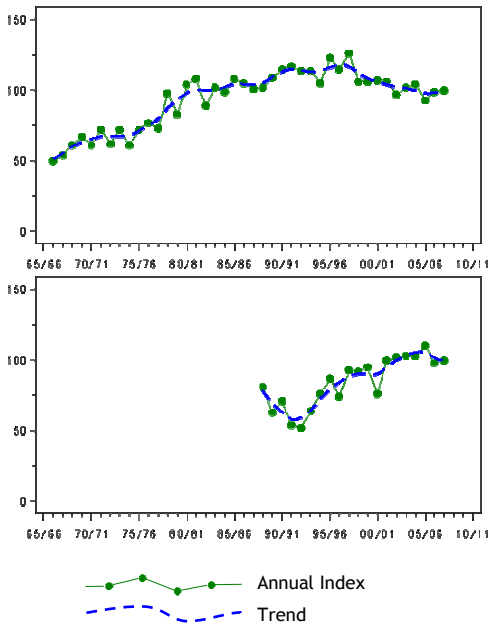


Figure 18.a, Annual indices & trend for Shelduck for GB (above) & NI (below).

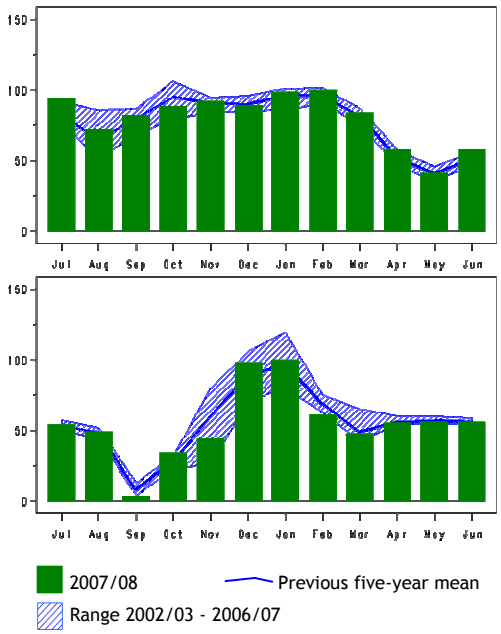


Figure 18.b, Monthly indices for Shelduck for GB (above) & NI (below).

The peak total count of 51,327 Shelduck in February represented a slight improvement on the previous two years; the trend now appears relatively stable after a period of decline that commenced in the mid 1990s. Ten sites remained of international importance and typically the peak count of the year, albeit incomplete, was from Mersey Estuary in July where large concentrations of birds gather to moult in late summer. Traditionally, a large proportion of Shelduck which breed in Britain and Ireland also migrate to the Helgoland Bight of the Wadden Sea to moult from July through to September.

In general, counts from most key sites were similar to recent years. However the data for 2007/08 suggest a possible north-south split with respect to trends for wintering numbers. The reported maxima from several internationally important sites in northern England were notably lower than the respective five-year site averages; e.g. Morecambe Bay (-36%), Solway Estuary (-37%) and Ribble Estuary (-28%), while at most sites in the southern half of the country numbers were more stable.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of international importance in the UK							
Mersey Estuary	17,823	13,420	15,605	(16,721)	(10,644)	Jul	15,892
Dee Estuary (England and Wales)	12,630	13,334	(8,872)	10,869	9,425	Sep	11,565
Morecambe Bay	8,228	7,728	(6,609)	8,880	(4,755)	Nov	8,279
The Wash	7,347	7,451	6,904	6,855	6,656	Dec	7,043
Humber Estuary	6,426 [11]	(4,188)	(5,223)	(4,576)	5,804	Oct	6,115
Strangford Lough	4,475	3,801	4,451 [11]	3,413 [11]	6,084 [11]	Dec	4,445
Severn Estuary	2,579	3,460	4,182	3,711	(5,400)	Nov	3,866
Forth Estuary	3,452	3,164 [12]	3,063	(3,546)	3,283	Sep	3,302
Ribble Estuary	3,829	3,850	2,935	2,577	2,216	Mar	3,081
Solway Estuary	3,131	5,359	1,863	2,888	1,902	Nov	3,029

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of national importance in Great Britain							
Medway Estuary	(2,177)	2,360 [11]	1,949	(1,290)	(1,631)	Jan	2,162
Blackwater Estuary	1,904	2,073	(1,828)	(1,499)	(2,369)	Feb	2,115
Thames Estuary	1,584	2,318	1,968	1,870	2,099	Feb	1,968
Stour Estuary	1,483	(2,149)	(1,421)	1,641	2,402	Feb	1,919
Swale Estuary	1,818	2,207	2,140	1,406	2,003	Jan	1,915
Hamford Water	1,657	1,951	1,493	(1,496)	2,450	Jan	1,888
Poole Harbour	(2,072)	1,547	(1,857)	(1,043)	(788)	Feb	1,825
Colne Estuary	(804)	(701)	(471)	(326)	1,600 [11]	Feb	1,600
Lindisfarne	1,323 [11]	1,773 [11]	1,180 [11]	(1,868)	(1,091)	Dec	1,536
North Norfolk Coast	1,112	1,110	1,283	1,361	1,222 [11]	Jan	1,218
WWT Martin Mere	1,150	1,510 [12]	965	1,075	780	Feb	1,096
Alde Complex	1,124	1,025	925	1,181	1,120	Feb	1,075
Montrose Basin	(1,240)	690	1,239 [11]	(1,106)	(1,098)	Dec	1,075
Crouch-Roach Estuary	(342)	1,661 [11]	(397)	577	823	Feb	1,020
Deben Estuary	802	883	707	837	754	Mar	797
Sites of all-Ireland importance in Northern Ireland							
Larne Lough	633	808	880	832	486	Jan	728
Carlingford Lough	423	452	560	(349)	477	Feb	478
Belfast Lough	494 [11]	544 [13]	347 [11]	(378)	265	Jan	413
Lough Foyle	(315)	250	392	264	322	Dec	309
Dundrum Inner Bay	138	330	96	70	188	Mar	164
Loughs Neagh and Beg	205	260	98	124	95	Mar	156
Sites no longer meeting table qualifying levels in WeBS-Year 2007/2008							
Chichester Harbour	810	825	793	643	449	Jan	704
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain†							
Wigtown Bay	496	705	750	751	880	Feb	716
Blyth Estuary	(67)	(226)	514	677	794	Jan	662

Muscovy Duck

Cairina moschata

Escape†
Native Range: S America

GB max: **56** **Oct, Jan**
NI max: **0**

Muscovy Ducks were recorded at 34 sites in 2007/08, seven more than in the previous year. The monthly maximum of 56, noted in both October and January, was less than that for 2006/07 primarily due to the low numbers recorded at Fort Henry Ponds & Exton Park Lakes, which has been the most important site for the species in recent years.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites with mean peak counts of 5 or more birds in Great Britain†							
Fort Henry Ponds and Exton Park Lakes	0	14	25	43	5	Dec	17
Brayford Pool Lincoln			0	26	17	Aug	14
Hesketh Park Lake					11	May	11
High Batts Recording Area	8	8					8
Dane Valley - Holmes Chapel to Swettenham				0	14	Dec	7
Derwent Water	6	11	7	5	3	Oct	6
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain							
Etherow Country Park	0	0	0		(9)	Nov	2
Sale Water Park and Broad Ees Dole	0		0	9	7	Oct	4
Balgone Ponds	(0)	(0)	0	0	6	Apr	2
Swinsty Reservoir	0	0			6	Mar	2
Gresford Flash	0	0	0	0	5	Jan	1

† *as no British or All-Ireland thresholds have been set a qualifying level of five has been chosen to select sites for presentation in this report*

Wood Duck

Aix sponsa

Escape
Native Range: N America

GB max: 9 Oct
NI max: 1 Feb

Wood Ducks were noted at fourteen sites in 2007/08, an increase on the ten in the previous two years. Stanton Lake remained the most important site for the species with up to four present throughout the year. Most of the remaining records were of singles, with the exception of three at Stanwick Gravel Pits in November, and two at both the River Cam and Union Canal throughout the winter. In Northern Ireland, one was at Lower Lough Erne in February.

Mandarin

Aix galericulata

Naturalised introduction†
Native Range: E Asia

GB max: 456 Jan
NI max: 0

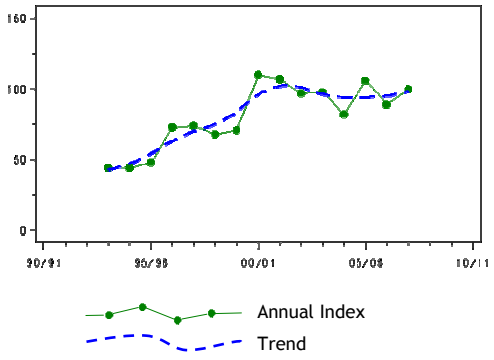


Figure 19.a, Annual indices & trend for Mandarin for GB.

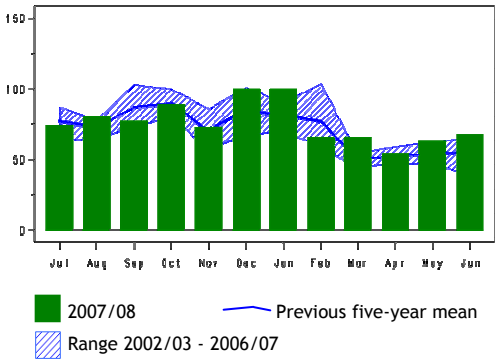


Figure 19.b, Monthly indices for Mandarin for GB.

Records of Mandarins were received from 133 sites in 2007/08. A mid-winter peak of 456 birds was slightly below average compared to recent years, although annual variation in numbers could be merely a result of year-to-year changes in coverage of habitats favoured by this unobtrusive species, namely small wooded lakes and ponds.

For the second year running, no details were received from Forest of Dean Ponds and Bradley Pools, both sites which maintained five-year averages in excess of 100 birds but based on data now at least two years old. Most other sites with five-year averages of over 30 birds held numbers close to normal.

All records were from England with the exception of singles in Wales at Margam Park Ponds and Acton Park Lake, in Scotland at Loch of Lowes and Culzean Pond, and on Channel Islands at Queens Valley Reservoir.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites with mean peak counts of 10 or more birds in Great Britain†							
Forest of Dean Ponds	160 [13]	221 [16]	66 [16]				149
Bradley Pools	188	65	144				132
Headley Mill Pond	76	23	132	15	64	Jan	62
Bough Beech Reservoir	56 [41]	60 [41]	45 [41]	60 [13]	42	Sep	53
Wraysbury Pond	61	51	48	51 [13]	53	Jan	53
Busbridge Lakes	72			41	31	Oct	48
Dee Flood Meadows	32	42	36	83	48	Oct	48
Cuttmill Ponds	59	61	66	27	22	Oct	47

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Darwell Reservoir	56	13	58	74	33	Dec	47
Arun Valley	37	37	47	25	53	Jan	40
Connaught Water (Epping Forest)	44	32	35	44	40	Aug	39
Passfield Pond	73	16	15	30	18	Oct	30
Strawberry Hill Ponds	23	15	32	44	33	Jan	29
Harewood Lake	35	31	15		25	Dec	27
Linacre Reservoirs	17	23	23	25	35	Nov	25
Stockgrove Country Park	43				3	Jun	23
Osterley Park Lakes	19	31	18	14	21	May	21
Fonthill Lake	20	38	22	4	10	May	19
Sutton Place	32	20	4				19
Allestree Park Lakes	5	5	37	16			16
Sevenoaks Wildfowl Reserve				9	23	Nov	16
Pen Ponds				17	11	Aug	14
Eversley Cross and Yateley Gravel Pits	9	25	4	8	21	Sep	13
Kedleston Park Lake	0	14	24				13
Panshanger Estate	12	11	16	8	19	Dec	13
Hampstead and Highgate Ponds	9	8	13	13	19	Nov	12
Bowood Lake	13	4	4	6	26	Oct	11
Longueville Marsh	6	25	13	0			11
Outwood Swan Sanctuary	19	12	2				11
Powdermill Reservoir	1	6	7	18	22	Dec	11
Woburn Park Lakes	8	6	18	11	11	Aug	11
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain[†]							
Hackness Lake	7	1	0	0	38	Nov	9
Blatherwyke Lake		2	0	3	21	Dec	7
Gatton Park	5	4	5	4	18	Mar	7
Weirwood Reservoir	0	0	0	0	18	Jan	4
Etherow Country Park	0	1	2		16	Dec	5
Mesnes Park Wigan	2	6	6	0	16	Nov	6
Tittesworth Reservoir		0	0	2	14 [13]	Sep	4
Stratfield Saye	0	7	5	6	13	Feb	6
River Test - Leckford	0	2	10	5	10	Jun	5
Southill Lake	2	11	2	2	10	Oct	5

[†] *as no British or All-Ireland thresholds have been set a qualifying level of 10 has been chosen to select sites for presentation in this report*

Mandarin (Neil Calbrade)

Wigeon

Anas penelope

International threshold:	15,000	
Great Britain threshold:	4,060	
All-Ireland threshold:	820	

GB max:	353,044	Jan
NI max:	5,857	Oct

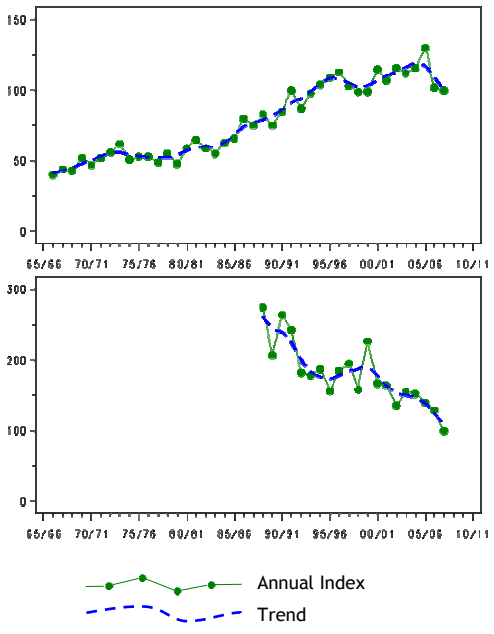


Figure 20.a, Annual indices & trend for Wigeon for GB (above) & NI (below).

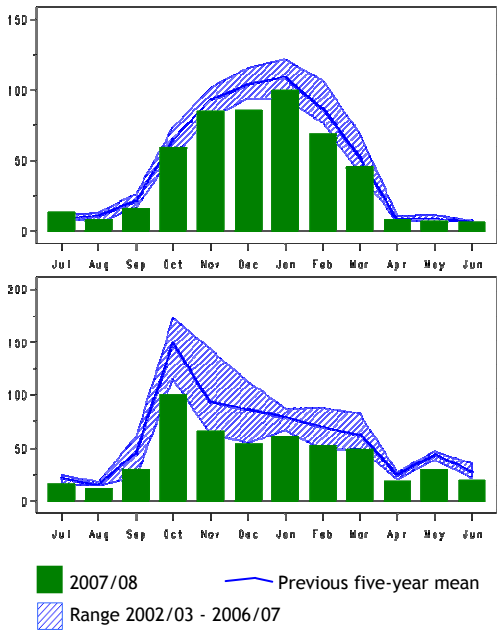


Figure 20.b, Monthly indices for Wigeon for GB (above) & NI (below).

Wigeon wintering in Great Britain largely comprise breeding birds from Scandinavia, northern Europe and eastern Russia. Over the longer term, numbers have doubled over the course of the 42-year indexing period. However there is a tendency for the annual index to show a greater degree of fluctuation compared to many species, probably in association with the response of large flocks to weather conditions on the near continent.

The annual index for Wigeon in 2007/08 was at level similar to last year, thereby representing another disappointing year by the standards of the six years following the the turn of the last decade.

Two sites previously of international importance for Wigeon – Swale Estuary and Lindisfarne – failed to reach the qualifying threshold in 2007/08 after two relatively unproductive years; five sites remain internationally important. The five-year mean for the premier site, Ribble Estuary, increased to a record level following another year when the peak monthly count at the site was in excess of 80,000 birds. Elsewhere, numbers fell at Ouse Washes and North Norfolk Coast for the second year in succession, while Somerset Levels had a productive year for this species in common with other dabbling ducks at the site.

The trend for the number of Wigeon using sites in Northern Ireland shows no signs of recovery. Numbers continued to crash in 2007/08, reaching their lowest ever level. As demonstrated by several wader species (Maclean et al. 2008), this is likely to be an artefact of a shift in distribution, whereby an increased proportion of the European wintering population may now be utilising sites further east and north as a result of climatic amelioration resulting in a gradual north-eastward shift. For example, in Sweden where the species was formally very scarce except in the mildest winters, several thousand birds now regularly winter (Nilsson 2008).

	03/04	04/05	05/06	06/07	07/08	Mon	Mean	
Sites of international importance in the UK								
Ribble Estuary	82,627	86,157	79,659	(57,385)	84,974	Nov	83,354	
Ouse Washes	33,773 [13]	34,853 [13]	55,816	26,984	19,800	Jan	34,245	
Somerset Levels	29,397	15,346	18,142	27,391	28,882	Jan	23,832	
Breydon Water and Berney Marshes	16,811	19,019	22,134	18,184 [13]	21,400 [13]	Jan	19,510	
North Norfolk Coast	20,694	17,444	18,426	16,750	11,998	Dec	17,062	
Sites of national importance in Great Britain								
Swale Estuary	20,772	13,832	16,651	7,041	11,560	Nov	13,971	▼
Lindisfarne	(12,321)	15,960	13,614	10,840	(6,400)	Nov	13,471	▼
Dornoch Firth	12,485	14,861	13,811	9,763	11,115	Oct	12,407	
Lower Derwent Ings	13,171	10,215	14,320	11,710	11,600	Jan	12,203	
Cromarty Firth	12,877	13,487	12,652	8,510	10,510	Oct	11,607	
Severn Estuary	9,110	8,058	6,249	9,343	9,978	Jan	8,548	
Morecambe Bay	7,151	8,095	8,929	(6,201)	(5,654)	Jan	8,058	
Cleddau Estuary	6,045	8,468	9,441	7,643	7,130	Nov	7,745	
Nene Washes	8,190	4,998	5,380	8,180	10,497	Feb	7,449	
Alde Complex	(4,956)	7,274	7,182	8,280	6,337	Dec	7,268	
Blackwater Estuary	7,057	7,385	6,708	(2,474)	5,667	Jan	6,704	
Inner Moray and Inverness Firth	7,587	5,595	6,078	5,863	7,666	Oct	6,558	
The Wash	3,476	(3,444)	5,887	6,612	8,961	Dec	6,234	
Middle Yare Marshes	4,998	7,846	6,291	3,890	6,507	Jan	5,906	
Thames Estuary	5,565	4,343	6,449	3,566	9,293	Oct	5,843	
Dee Estuary (England and Wales)	5,658	2,464	6,695	5,797	(2,461)	Nov	5,154	
Dungeness and Rye Bay	4,564	4,937	6,285	5,193	4,010	Jan	4,998	
Abberton Reservoir	436	573	13,954	654	6,572	Nov	4,438	▲
Montrose Basin	5,488	(4,147)	5,065	3,047	3,608	Jan	4,302	
Fleet and Wey	(5,105)	4,469	6,122	3,087	2,285	Nov	4,214	
Sites of all-Ireland importance in Northern Ireland								
Lough Foyle	3,978	4,589	6,559	5,406	2,835	Oct	4,673	
Strangford Lough	4,299	3,281	2,636	3,476	1,582	Oct	3,055	
Loughs Neagh and Beg	3,060	3,611	2,701	1,878	1,614	Mar	2,573	
Upper Lough Erne	921	1,284	631	1,229	981	Jan	1,009	
Sites no longer meeting table qualifying levels in WeBS-Year 2007/2008								
Arun Valley	5,074	2,956	3,375	3,082	4,006	Feb	3,699	
Humber Estuary	4,734 [11]	(3,570)	3,662	2,805	3,289	Nov	3,623	
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain								
Exe Estuary	4,492	4,318	2,917	2,993	4,131	Oct	3,770	
Other sites surpassing table qualifying levels in WeBS-Year 2007/2008 in Northern Ireland								
Dundrum Inner Bay	658	840	447	482	881	Dec	662	

American Wigeon

Anas americana

Vagrant
Native Range: N & C America

GB max: **2 Feb**
NI max: **0**

Five American Wigeons were recorded in 2007/08, a typical showing for recent years. Long-staying birds were noted at Cleddau Estuary from September to February and Loch Bee on South Uist from February to April. The other records were from Beaulieu Estuary in Hampshire, Dyfi Estuary in Cardigan, and Loch of Spiggie in Shetland.

Chiloe Wigeon

Anas sibilatrix

Escape
Native Range: S America

GB max: **5 Sep**
NI max: **0**

Three Chiloe Wigeon were at Gnoll Ponds in September and October, with two at Severn Estuary in September. Singles were at three other sites later in the year.

Falcated Duck

Anas falcata

Escape and possible vagrant
Native Range: Asia

GB max:	**2**	**Feb**
NI max:	**0**	

Two male Falcated Ducks were recorded in 2007/08, both initially associating with flocks of Eurasian Wigeon. One that resided at Copmere in Staffordshire from December to April was discovered to be an escape, whereas one on the Exe Estuary in February and March was considered a better candidate to be a genuine vagrant. These represent the seventh and eighth WeBS records.

Gadwall

Anas strepera

International threshold:	**600**
Great Britain threshold:	**171**
All-Ireland threshold:	**20***

GB max:	**17,156**	**Jan**
NI max:	**138**	**Sep**

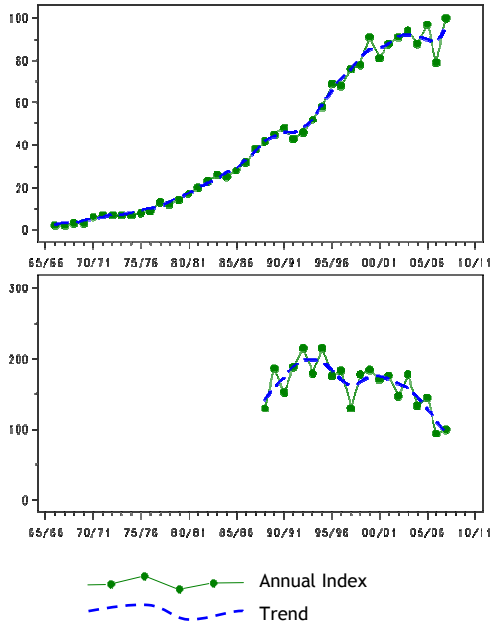


Figure 21.a, Annual indices & trend for Gadwall for GB (above) & NI (below).

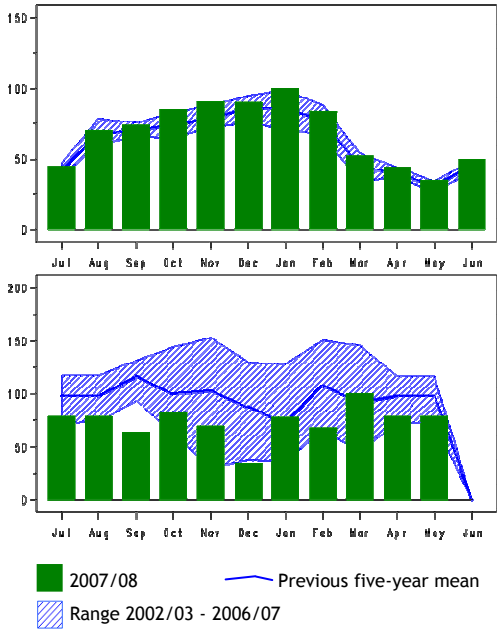


Figure 21.b, Monthly indices for Gadwall for GB (above) & NI (below).

The status of the Gadwall in Britain is a true success story of the last forty years. The wintering population includes birds from north and east Europe, while some of the small British breeding population winter in southern Europe. It would appear that the fall in numbers in 2006/07 reported in the previous 'Waterbirds in the UK' has proved to have been something of an anomaly (probably owing much to the unfavourable water levels at Britain's key site during that winter). In 2007/08, the species increased significantly, with the British index and counted monthly maximum both rising to record levels – thereby continuing the trend of a steady increase exhibited since the mid 1970s. Six sites continued to be of international importance, the top five of which all supported numbers in excess of their five-year averages. A further 40 sites are classified as being nationally important, many of which are also seeing their five-year averages increasing year on year. Exceptions include the remarkable decline at Wraysbury Gravel Pits (where not a

single Gadwall was seen in 2007/08) and sharp falls at Blagdon Lake and Fairburn Ings.

The small wintering population in Northern Ireland has been in decline since the early 1990s and was at a similar level to 2006/07.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean	
Sites of international importance in the UK								
Ouse Washes	889 [13]	1,799 [13]	2,289 [13]	220	970	Feb	1,233	
Rutland Water	1,096	491	670	904	992	Aug	831	
River Avon - Fordingbridge to Ringwood	701	708	678	755	725	Jan	713	
Lee Valley Gravel Pits	560	622	878	518	703	Dec	656	
Somerset Levels	(430)	729	704	424	706	Jan	641	
Abberton Reservoir	519	425	1,024	(535)	483	Nov	613	
Sites of national importance in Great Britain								
Thames Estuary	554	471	377	451	(320)	Mar	463	
Pitsford Reservoir	898	124	482	444	264	Nov	442	
Loch Leven	635	360	392	309	284	Sep	396	
Fen Drayton Gravel Pits	219	400	378	553	387	Dec	387	
Tees Estuary	231	(289)	(332)	433	464	Nov	376	
Cotswold Water Park (West)	375	327	427	330	(217)	Nov	365	
Minsmere	239	309	398	410	468	Dec	365	
Sutton and Lound Gravel Pits	198	307	(304)	425	437	Jan	342	
Woolston Eyes	297	470	196	(84)	397	Sep	340	
Dungeness and Rye Bay	224	340	268	362	485	Nov	336	
Orwell Estuary	446	234 [11]	347 [11]	340 [11]	268	Jan	327	
Hickling Broad	(200)	216	340	356			304	
Little Paxton Gravel Pits	339	225	315	215	324	Feb	284	
Chew Valley Lake	410	315	200	150	245	Aug	264	
Alton Water	360	182	495	166	109	Jan	262	
Middle Tame Valley Gravel Pits	(255)	(69)	(74)	(131)	(108)	Sep	(255)	
Severn Estuary	292	194	297	241	240	Jan	253	
North Norfolk Coast	262	231	262	186	314	May	251	
Eversley Cross and Yateley Gravel Pits	230	256	315	226	216	Jan	249	
Wraysbury Gravel Pits	516	706	21	2	0		249	
Fairburn Ings	367		278	266	63	Jun	244	
Burghfield Gravel Pits	325	255	156	261	206	Dec	241	
Alde Complex	(244)	352	172	171	221	Jan	232	
Hornsea Mere	219	235	315	162	215	Oct	229	
Stodmarsh NNR and Collards Lagoon	264	217	252	136	250	Dec	224	
Meadow Lane Gravel Pits	190	153	354	165			216	
North Warren and Thorpeness Mere	113	353	170 [13]	220	218	Feb	215	
Hoveton Great Broad	667		49	13	117	Jan	212	
Theale Gravel Pits	(222)	(86)	(169)	(207)	205	Jan	211	
Thrapston Gravel Pits	207						207	
Chichester Gravel Pits	319	176	149	148	186	Jan	196	
Tring Reservoirs	217	252	107	238	151	Jan	193	
Lower Derwent Ings	215	147	108	319	171	Feb	192	
Potteric Carr	(114)	(36)	(216)	182	176	Sep	191	
Blagdon Lake	335	204	287	52	73	Jul	190	
Ditchford Gravel Pits	192	180	178	184	176	Feb	182	
Earls Barton Gravel Pits	124	(146)	73	281	226	Jan	176	
Welbeck Estate	103	(98)	186	215	(183)	Sep	172	▲
Colne Valley Gravel Pits	247	144	160	130	176	Feb	171	▲
Lakenheath Fen	263	139	113	189	151	Sep	171	
Sites of all-Ireland importance in Northern Ireland								
Loughs Neagh and Beg	173	130	172	143	132	Sep	150	
Strangford Lough	73	48	113 [11]	68 [11]	86 [11]	Jan	78	
Sites no longer meeting table qualifying levels in WeBS-Year 2007/2008								
Humber Estuary	(104)	(82)	(112)	(179)	143	Jan	161	
Lackford Lakes Nature Reserve	(225)	118	206	122	129	Jan	160	
Whitlingham Country Park	358	72	149	111	114	Jan	161	
Staines Reservoirs	126	455	126	47	91	Feb	169	
Edderthorpe Flash				237	81	Jun	159	
Redgrave Lake				253	75	Nov	164	
Bainton Pits	168	200	206	(71)	65	Dec	160	

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Blunham Gravel Pit	152						152
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain							
Blackwater Estuary	39	126	66	(5)	395	Jan	157
Trinity Broads	(13)	41	2	73	291	Dec	102
Nene Washes	168	58	64	151	277	Feb	144
Leighton Moss	16	22	155	205	246	Nov	129
Old Moor	111	36	168	165	239	Jun	144
Apex Pit - North Hykeham	3	7	13	(0)	219	Jan	61
Ouse Fen and Pits (Hanson/RSPB)	(94)	104	152	49	203	Jan	127
Winchester Sewage Treatment Works	68	72	49	90	201	Nov	96
Tophill Low Reservoirs	152	117	91	106	180	Sep	129
Holme Pierrepont Gravel Pits	(166)	(123)	(179)	90	173	Dec	152
Poole Harbour	35	53	40	38	173	Jan	68

Gadwall (Neil Calbrade)

Teal

Anas crecca

International threshold: 5,000
Great Britain threshold: 1,920
All-Ireland threshold: 450

GB max: 129,974 Jan
NI max: 5,155 Dec

The majority of Teal which spend the winter in Great Britain breed either on the near continent, in Iceland, or in Scandinavia.

The species has exhibited fluctuations in annual indices probably more than any of the other regular and abundant dabbling ducks. This annual variation may be partly as a result of cold weather movements, combined with the species' sensitivity to water levels which may alter the attractiveness of particular sites from year to year.

The current trend in Britain based on the last two years is downward. The peak monthly total was similar to the low total from the previous year and the index remains at a level comparable with that of ten years ago.

As demonstrated for several waders (Maclean *et al*. 2008), this species may be one of several affected by "short stopping", with a greater proportion of the wintering population potentially remaining at sites across the North Sea as a result of milder winters.

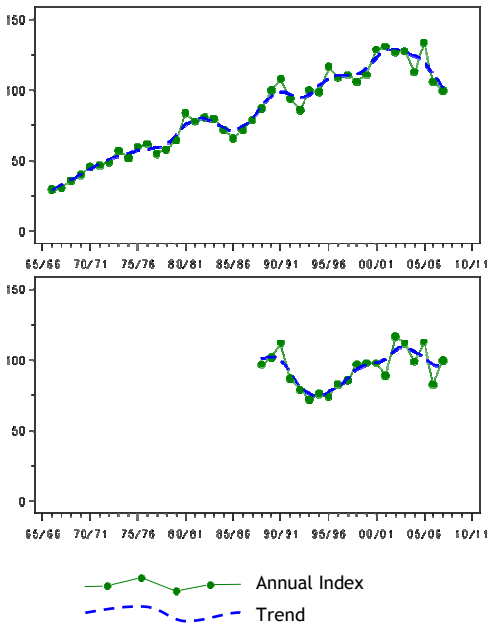


Figure 22.a, Annual indices & trend for Teal for GB (above) & NI (below).

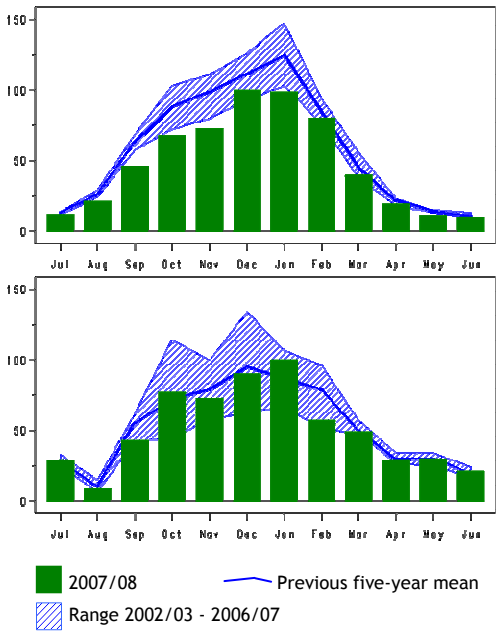


Figure 22.b, Monthly indices for Teal for GB (above) & NI (below).

Following a sharp fall in the previous year, the Northern Ireland index showed a recovery and was close to the average of the last ten years. Five sites in the UK qualified as being of international importance for Teal in 2007/08, one less than the previous year – following a drop in the five-year average for the Swale Estuary to below the 5,000 threshold. The Somerset Levels supported high numbers for the second successive year with a peak monthly count of 17,663 in February representing the highest count from any site in the UK during the year. Compared to recent years, lower numbers were present at Ouse Washes and particularly WWT Martin Mere.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of international importance in the UK							
Somerset Levels	17,225	7,161	8,719	21,581	17,663	Feb	14,470
Ribble Estuary	7,421	8,688	9,571	(6,959)	6,895	Dec	8,144
Mersey Estuary	8,364	6,023	9,200 [11]	2,249	(2,072)	Jan	6,459
Ouse Washes	5,102	7,014 [13]	9,772	4,333 [13]	3,135	Oct	5,871
Thames Estuary	6,691	5,433	5,361	3,940	(3,041)	Feb	5,356
Sites of national importance in Great Britain							
Swale Estuary	5,428	4,187	(5,783)	(3,728)	4,470	Oct	4,967
Loch Leven	4,847	6,060	4,840	2,527	4,920	Oct	4,639
Severn Estuary	3,006	(3,466)	5,293	4,233	5,258	Jan	4,448
Lower Derwent Ings	4,061	3,476	4,479	4,221	3,714	Feb	3,990
WWT Martin Mere	5,100	8,300	3,800	1,430	1,200	Jan	3,966
Hamford Water	6,579	2,164	3,276	(1,969)	3,255	Nov	3,819
North Norfolk Coast	3,436	3,730	4,994	3,638	3,278 [11]	Jan	3,815
Abberton Reservoir	3,863	1,224	7,741	2,662	3,410	Dec	3,780
Breydon Water and Berney Marshes	1,982	4,733	2,372	3,620 [13]	5,612 [13]	Jan	3,664
Dee Estuary (England and Wales)	5,459	2,752	2,854	4,429	2,144	Nov	3,528
Alde Complex	(2,530)	3,028	3,913	3,560	3,334	Nov	3,459
Humber Estuary	(5,111)	2,349	(3,739)	(1,775)	2,137	Jan	3,334
Inner Moray and Inverness Firth	3,439	3,397	2,995	(1,890)	(2,208)	Oct	3,277
Holburn Moss	3,500	3,000					3,250
The Wash	4,251	2,590	4,107	2,138	2,537	Dec	3,125
Morecambe Bay	2,808	(3,699)	2,538	2,338	2,716	Jan	2,820
Hickling Broad	1,814	2,400	4,550	2,000			2,691
Mersehead RSPB Reserve	2,850	2,900		3,900	1,045	Nov	2,674

	03/04	04/05	05/06	06/07	07/08	Mon	Mean	
Blackwater Estuary	(2,873)	(2,064)	2,751	(1,275)	2,207	Feb	2,610	
Solway Estuary	(1,286)	1,941	3,152	(2,265)	(839)	Sep	2,547	
Crouch-Roach Estuary	(1,129)	2,981 [11]	(1,926)	1,455	(1,900)	Dec	2,218	▲
Forth Estuary	(2,511)	1,880	2,130	2,531	1,852	Feb	2,181	
Stodmarsh NNR / Collards Lagoon	1,183	2,500	3,633	831	2,508	Jan	2,131	▲
Minsmere	4,381	1,984	1,796	1,252	1,155	Dec	2,114	
Dornoch Firth	2,655	2,571	2,174	(1,312)	1,055	Oct	2,114	
Cleddau Estuary	2,129	2,269	2,435	1,389	1,991	Dec	2,043	
Arun Valley	1,912	1,229	2,390	2,129	(2,343)	Jan	2,001	
Loch Gruinart Floods	2,476	2,549	2,058	1,467	1,232	Nov	1,956	
Sites of all-Ireland importance in Northern Ireland								
Strangford Lough	2,232	2,015	2,573	1,724	1,752	Jan	2,059	
Loughs Neagh and Beg	2,732	2,019	1,427	1,049	1,297	Oct	1,705	
Lough Foyle	582	1,038	1,405	915	1,562	Dec	1,100	
Belfast Lough	667 [11]	544	573 [11]	488	713 [11]	Nov	597	
Carlingford Lough	498	647	710	440	565	Feb	572	
Sites no longer meeting table qualifying levels in WeBS-Year 2007/2008								
Nene Washes	2,730	726	584	1,677	2,078	Feb	1,559	
Poole Harbour	2,357	1,806	1,402	(874)	(1,923)	Dec	1,872	
Otmoor	(2,561)	(2,138)	519	1,625 [13]	1,291	Dec	1,627	
Upper Lough Erne	407	723	174	416	217	Jan	387	
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain								
Nene Washes	2,730	726	584	1,677	2,078	Feb	1,559	
Poole Harbour	2,357	1,806	1,402	(874)	(1,923)	Dec	1,872	

Green-winged Teal

Anas carolinensis

Vagrant
Native Range: N America

GB max: **4 Feb**
NI max: **2 Dec**

Green-winged Teals were recorded at ten sites in Britain and one in Northern Ireland. Interestingly, the four sites which held long-staying birds also hosted two together for one month; Ribble Estuary in November, Belfast Lough in December, Wigan Flashes in January and Dee Estuary, perhaps most unusually, in June.

Silver Teal

Anas versicolor

Escape
Native Range: S America

GB max: **1 Jul**
NI max: **0**

A Silver Teal was seen at Diss Mere in July; the first record for WeBS since August 2002.

Speckled Teal

Anas flavirostris

Escape
Native Range: S America

GB max: **1 Nov**
NI max: **0**

November saw the first WeBS record of Speckled Teal for Kirkby-on-Bain Gravel Pits. The last year without any sightings was 2003/04.

Mallard

Anas platyrhynchos

International threshold: 20,000**
Great Britain threshold: 3,520†
All-Ireland threshold: 380

GB max: 116,292 Oct
NI max: 6,930 Oct

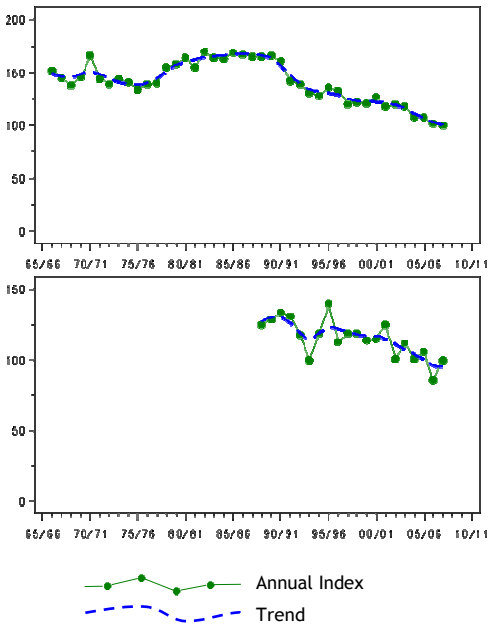


Figure 23.a, Annual indices & trend for Mallard for GB (above) & NI (below).

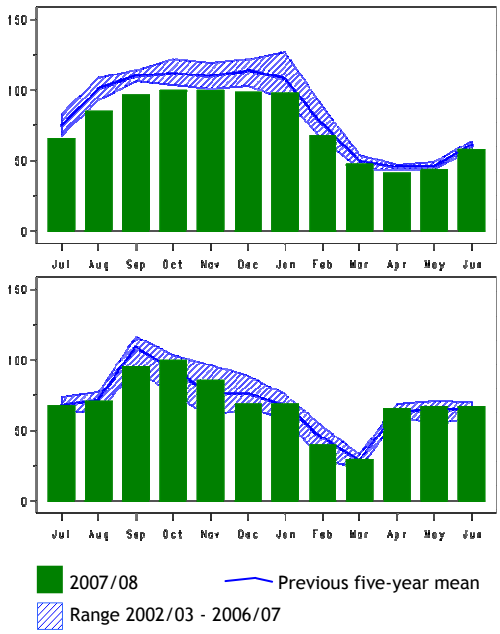


Figure 23.b, Monthly indices for Mallard for GB (above) & NI (below).

The UK's most ubiquitous and familiar duck has a widespread distribution across a range of wetland habitats. Yet in a recurring theme of recent annual reports, the long-term decline continued in 2007/08. The national index for Britain fell to its lowest ever level and that for Northern Ireland recovered compared to last year but remained below average.

It is considered likely that the recent trend of milder winters has enabled an increased proportion of the wintering population to utilise wetland sites further north and east on the continent. Such sites now have a greater tendency to be ice-free during the winter months. For example, the January population in Sweden had increased from 68,000 in 1971 to at least 150,000 in 2004 (Nilsson 2008).

The five-year average declined at most of the principal sites in the UK, including Loughs Neagh & Beg in Northern Ireland, where the peak count was the lowest since 1993/94; the most recent year in which the monthly maxima fell below 4,000.

Mallards (Thelma Sykes)

Continued declines were also apparent at Severn Estuary, Ouse Washes, WWT Martin Mere, The Wash and Humber Estuary – the five sites which hold a large proportion of the British wintering 'non-released' population. Consequently for the second year running no sites in Britain qualified as being of national importance. In contrast, at Somerset Levels the peak count increased for the fifth successive year and the maximum count surpassed the threshold of 2,000 for the first time since 2002/03.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of all-Ireland importance in Northern Ireland							
Loughs Neagh and Beg	4,774	4,027	4,612	4,351	3,767	Oct	4,306
Strangford Lough	1,568	1,621	1,586	(1,010)	1,950	Oct	1,681
Lough Foyle	791	1,025	1,133	1,036	830	Nov	963
Lower Lough Erne	(494)	754	556	551	702	Dec	641
Belfast Lough	359	371 [11]	346	(344)	457	Nov	383 ▲
Sites with mean peak counts of 2,000 or more birds in Great Britain†							
Severn Estuary	2,836	3,353	3,884	3,661	2,954	Sep	3,338
Ouse Washes	3,988 [13]	3,595 [13]	2,454	2,606 [13]	2,918 [13]	Oct	3,112
WWT Martin Mere	3,350	2,930	3,150	2,211	2,000	Nov	2,728
The Wash	2,649	(2,453)	2,534	2,417	2,166	Jan	2,444
Livermere and Ampton Water	3,735	2,517	1,106		2,279	Oct	2,409
Humber Estuary	(2,347)	2,455	2,155	(1,752)	2,166	Jan	2,281
Swale Estuary	1,800	2,010	2,247	(1,301)	2,972	Jan	2,257
Clifford Hill Gravel Pits Consolidated	2,784	2,143	1,686	2,027	1,733	Nov	2,075
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain†							
Somerset Levels	1,335	1,345	1,557	1,646	2,029	Jan	1,582

† *as no sites exceed the British threshold a qualifying level of 2,000 has been chosen to select sites for presentation in this report*

Pintail

Anas acuta

International threshold: 600
Great Britain threshold: 279
All-Ireland threshold: 20*

GB max: 26,120 Jan
NI max: 465 Nov

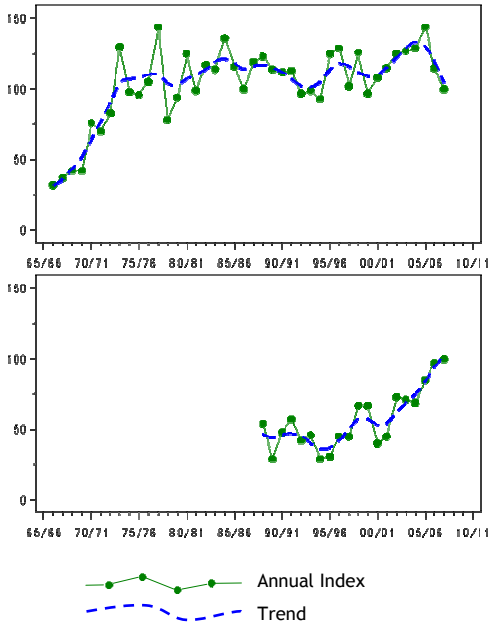


Figure 24.a, Annual indices & trend for Pintail for GB (above) & NI (below).

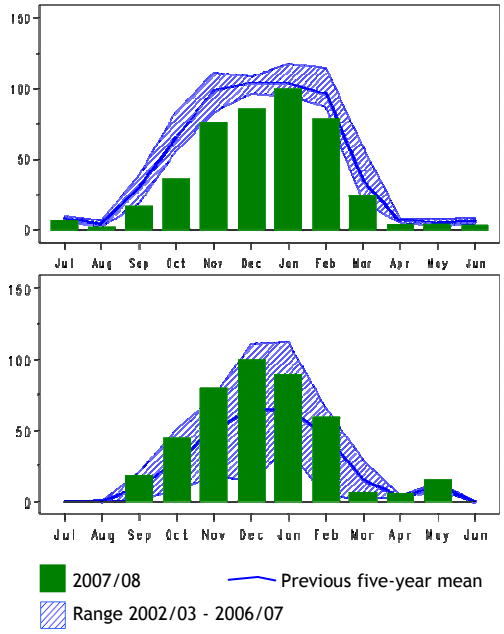


Figure 24.b, Monthly indices for Pintail for GB (above) & NI (below).

The national index for Pintail in Britain fell for the second year in succession and was 30 % lower than the high point reached in 2005/06. Sixteen sites remained of international importance for Pintail following 2007/08, and five tabulated sites now have five-year means in excess of 3,000 birds.

For the first time since 1999/2000, the monthly maximum for Burry Inlet exceeded that received for Dee Estuary. The five-year average for the latter is some 20% greater than that for Burry Inlet, but the general

trend over the last twenty or so years has been for a steady increase at Burry Inlet whereas the Dee Estuary has remained largely stable. Elsewhere, Morecambe Bay experienced a decline for the fourth successive year and this year's count from Solway Estuary was some 75% lower than the five-year average, apparently not as a result of poor coverage. In contrast, the December maximum noted at Ribble Estuary represented the highest monthly count there since January 1999.

In Northern Ireland, the index was at a similarly high level to last year, thereby consolidating the species' recent strong performance in the country.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of international importance in the UK							
Dee Estuary (England and Wales)	6,317	4,312	6,330	6,172	(4,334)	Nov	5,783
Burry Inlet	5,772	2,745	4,837	4,692	6,244	Jan	4,858
Ribble Estuary	(2,562)	(3,058)	3,579	(1,094)	3,609	Dec	3,594
Solway Estuary	4,183	4,352	(1,575)	(2,429)	1,047	Nov	3,194
Morecambe Bay	(3,942)	3,620	3,045	2,609	2,112	Feb	3,066
Ouse Washes	2,277 [13]	3,557 [13]	3,343 [13]	1,823 [13]	1,713 [13]	Feb	2,543
Duddon Estuary	(1,299)	1,626 [11]	2,210 [11]	(2,317)	(1,153)	Oct	2,051
Nene Washes	1,779	327	281	1,931	1,267	Feb	1,117
Mersehead RSPB Reserve	480	970		1,010	1,445	Jan	976
The Wash	1,088	917	(567)	1,215	652	Dec	968
Severn Estuary	(354)	(784)	905	(1,161)	668	Dec	911
Medway Estuary	(95)	812 [11]	(809)	(582)	663	Jan	761
North Norfolk Coast	(768)	712	657	753	697 [11]	Jan	718
Swale Estuary	962	672	579	731	597	Dec	708
Pagham Harbour	477	834	893	566	(464)	Jan	693
Dee Flood Meadows	(580)	300 [13]	(329)	916	750	Jan	655
Sites of national importance in Great Britain							
WWT Martin Mere	463	710 [12]	(535)	580	380	Jan	534
Somerset Levels	494	261	333	530	985	Feb	521
Blackwater Estuary	461	555	(387)	(68)	(201)	Oct	508
Wigtown Bay	(359)	(654)	349	166	834	Jan	501
North West Solent	391	412	670	484	407	Jan	473
Lower Derwent Ings	573	296	167	656	674	Feb	473
Lindisfarne	384	301	536	445	(327)	Feb	417
Stour Estuary	467	289	473	467	303	Nov	400
Arun Valley	403	293	290	574	(322)	Jan	390
Alde Complex	(330)	313	307	441	447	Jan	377
Orwell Estuary	325 [11]	165 [11]	308 [11]	753 [11]	192 [11]	Jan	349
Blyth Estuary	(40)	425 [13]	(209)	394	185	Dec	335
Fleet and Wey	(281)	420	360	188	360	Nov	332
Poole Harbour	316	338	(208)	(140)	(155)	Nov	327
Inner Moray and Inverness Firth	258	518	281	314	232	Feb	321
Malltraeth Cob and Pools	207	421	397	287	146	Jan	292
Sites of all-Ireland importance in Northern Ireland							
Strangford Lough	582	349	643 [11]	496	591 [11]	Dec	533
Lough Foyle	22	52	94	123	157	Feb	90
Sites no longer meeting table qualifying levels in WeBS-Year 2007/2008							
River Avon - Ringwood to Christchurch	25	46	1	(456)	507	Feb	207
Breydon Water and Berney Marshes	271 [11]	248	202	269 [11]	179	Feb	234
Crouch-Roach Estuary	267	(281)	380	221	161	Nov	262
Dungeness and Rye Bay	219	334	266	317	133	Jan	254
Otmoor	(374)	168 [13]	63	(329)	(67)	Feb	234
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain							
River Avon - Ringwood to Christchurch	25	46	1	(456)	507	Feb	207
Fen Drayton Gravel Pits	149	1	16	554	391	Feb	222
Traeth Bach	82	80	65	325	341	Jan	179
Ribble Valley at Long Preston				185	300	Feb	243

Yellow-billed Pintail

Anas georgica

Escape
Native Range: S America

GB max: **2** **Mar**
NI max: **0**

Two at Beddington Sewage Farm in March were the first for WeBS since December 2004.

White-cheeked Pintail

Anas bahamensis

Escape
Native Range: S America

GB max: **2** **Jun**
NI max: **0**

In addition to single White-cheeked Pintails at the favoured sites of Stanton Lake (January to June) and Doddington Pool (June), two at Birnie Loch in August represented a new WeBS species for that site.

Garganey

Anas querquedula

International threshold: **20,000****
Great Britain threshold: **+**†
All-Ireland threshold: **+**†

GB max: **52** **May 2007**
NI max: **13** **Sep 2007**

Being summer visitors, Garganey are reported here for the calendar year of 2007. Records were received from 61 sites, a third fewer than during 2006. These included four locations in Scotland, three in Wales and one in Northern Ireland. In Wales, May birds were noted at Cors Crugyll, Dyfi Estuary (2) and Burry Inlet, while in Scotland singles were seen at Balranald RSPB Reserve, Inner Firth of Clyde and Loch of Strathbeg in May to June, and at Mersehead RSPB Reserve in both May and August.

In Northern Ireland, birds were noted at Loughs Neagh & Beg for the second successive year, with a peak of 13 in September representing the highest single count of the year anywhere in the UK. This is particularly notable considering that the records from there in 2006 were the first ever for WeBS in Northern Ireland.

Numbers were approximately evenly split between spring and autumn, with the monthly peak occurring in May rather than the more typical September. Away from Loughs Neagh & Beg, the highest counts were 11 at North Norfolk Coast in September, nine at Dungeness & Rye Bay in May, five at Tees Estuary in May, and five at Blackwater Estuary in August; the first to be recorded there since five in May 2002.

	2003	2004	2005	2006	2007	Mon	Mean
Sites with mean peak counts of 4 or more birds in Great Britain†							
Wraysbury Gravel Pits	12	14	12	6	2	Aug	9
Dungeness and Rye Bay	3	4	8	9	9	May	7
Middle Yare Marshes	(7)	(0)	(0)	(0)	(0)		(7)
North Norfolk Coast	3	4	5	1	11	Sep	5
Tophill Low Reservoirs	1	7 [13]	2	2	11 [13]	Aug	5
Sites with mean peak counts of 4 or more birds in Northern Ireland†							
Loughs Neagh and Beg	0	0	0	6	13	Sep	4
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain†							
Blackwater Estuary	0	0	0		5	Aug	1
Tees Estuary	2	(4)	(2)	2	5	May	3

† *as no British or All-Ireland thresholds have been set a qualifying level of four has been chosen to select sites for presentation in this report*

Shoveler

Anas clypeata

International threshold:	400
Great Britain threshold:	148
All-Ireland threshold:	20*

GB max:	13,283	Feb
NI max:	212	Dec

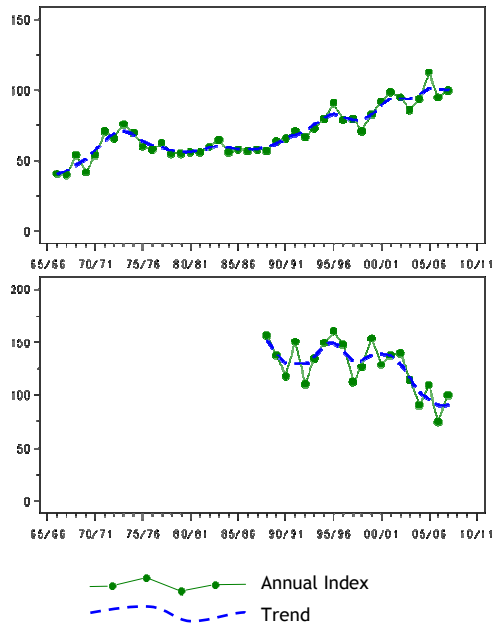


Figure 25.a, Annual indices & trend for Shoveler for GB (above) & NI (below).

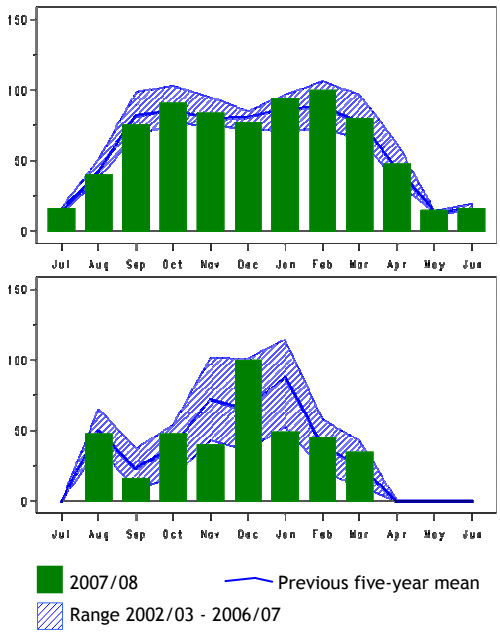


Figure 25.b, Monthly indices for Shoveler for GB (above) & NI (below).

The annual index for Shoveler in Great Britain has shown a gradual increase in numbers over the last fifteen years. Traditionally, numbers peak at most sites during the autumn period. However, examination of the monthly indices for this recent period suggest that the increase may be associated with a greater proportion of birds remaining here for the winter, as opposed to continuing further south to France and Spain.

In contrast, numbers in Northern Ireland have declined since the mid 1990s. Counts at Strangford Lough in 2007/08 were again low, being half those of the five-year mean.

Nine sites held internationally important numbers of Shoveler, the two most important of which were Ouse Washes and Somerset Levels. Numbers at the former returned to normal levels following the dip in 2006/07 as a result of unfavourable water levels. The count from Somerset Levels was the most there since January 2003 when 2,190 were seen, and the third highest single Core count ever received.

Four new sites (plus the newly consolidated Dungeness & Rye Bay complex) qualified as being of national importance, whereas notably lower counts than normal were received from Walthamstow and Staines Reservoirs, and Fairburn Ings.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of international importance in the UK							
Ouse Washes	1,104 [12]	2,725 [12]	1,548 [12]	696 [12]	1071	Mar	1429
Somerset Levels	784	(902)	845	1,520	1806	Jan	1216
Rutland Water	475	663	680	495	620	Oct	587
Dungeness and Rye Bay	453	451	626	553	581	Nov	533
Abberton Reservoir	488	355	(674)	(152)	604	Nov	530
Chew Valley Lake	565	395	660	300	180	Sep	420
Thames Estuary	415	402	357	524	(113)	Sep	425
Severn Estuary	325	266	603	600	796	Jan	518

	03/04	04/05	05/06	06/07	07/08	Mon	Mean	
Breydon Watr & Berney Marshes	322	468	333	540 [10]	754	Feb	476	
Sites of national importance in Great Britain								
Medway Estuary	(26)	19 [10]	248	(509)	(68)	Jan	379	
Burry Inlet	327	344	437	101	309	Jan	304	
Alde Complex	(106)	175	253	441	295	Nov	291	
Ribble Estuary	231	219	286	532	188	Mar	291	
Swale Estuary	330	292	199	(144)	331	Jan	288	
Nene Washes	200	177	213	448	384	Feb	284	
Stodmarsh & Collards Lagoon	202	272	384	400	147	Feb	281	
Lower Derwent Ings	319	314	107	301	341	Mar	276	
Loch Leven	295	386	204	279	205	Oct	274	
North Norfolk Coast	212	234	278	380	258	Feb	272	
Crouch-Roach Estuary	(43)	(51)	(32)	(78)	(259)	Dec	(259)	▲
Pitsford Reservoir	378	70	347	329	148	Oct	254	
Staines Reservoirs	261	308	469	149	65	Feb	250	
Blagdon Lake	146	160	(220)	542	137	Oct	246	
Grafham Water	112	266	357				245	
Lee Valley Gravel Pits	246	275	282	164	184	Jan	230	
Tees Estuary	181	(145)	145	309	170	Sep	201	
R. Avon: Fordingbridge-Ringw'd	188	149	195	153	312	Feb	199	
Fairburn Ings	221		288	226	54	Mar	197	
London Wetland Centre	132	160	176	185	327	Dec	196	
Trinity Broads	137	304	(0)	(27)	338	Mar	195	▲
Arun Valley	195	175	98	278	217	Feb	193	
Minsmere	180	227	183	218	138	Dec	189	
Woolston Eyes	175	157	317	(109)	91	Nov	185	
Llynnau Y Fali	233	232	210	135	59	Feb	174	
Middle Yare Marshes	(96)	(111)	(170)	(84)	(174)	Sep	(174)	
Malltraeth RSPB	124	173	147	250	156	Oct	170	
Walthamstow Reservoirs	212	265	142	155	64	Feb	168	
Chichester Gravel Pits	321	173	165	67	78	Dec	161	
Otmoor	(68)	(150)	95	(224)	(175)	Mar	161	
WWT Martin Mere	162	198	217	35	150	Nov	152	▲
Cotswold Water Park (West)	91	126	163	222	(133)	Mar	151	
Tring Reservoirs	43	99	225	130	256	Oct	151	▲
Sites of all-Ireland importance in Northern Ireland								
Strangford Lough	201	119	147	139 [10]	73	Dec	122	
Loughs Neagh and Beg	42	51	55	34	90	Dec	54	
Sites no longer meeting table qualifying levels in WeBS-Year 2007/2008								
Edderthorpe Flash				210	68	Dec	139	
Chetwynd Pool	156	220	57	150	33	Oct	123	
Morecambe Bay	184	167	159	174	22	Feb	141	
Hickling Broad	81	108	100	163			113	
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain								
Bardney Pits			84	68	267	Oct	140	
Fleet and Wey	54	106	(101)	137	193	Feb	123	
Eversley Cross & Yateley GPs	50	61	110	74	189	Feb	97	
Llyn Traffwll	58	68	178	207	185	Mar	137	
Swillington Ings	72	135	68	62	184	Oct	104	
Cotswold Water Park (East)	21	25	147	65	177	Mar	87	
Humber Estuary	(127)	(99)	(128)	92	171	Dec	132	
North Warren / Thorpeness Mere	54	166	96	151	171	Feb	128	
Aqualate Mere	74	20	44	49	164	Oct	70	
Tophill Low Reservoirs	44	44	119	115	163	Aug	97	
Sutton and Lound Gravel Pits	108	150	(68)	152	148	Sep	140	
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Northern Ireland								
Belfast Lough	21	22	12	15	28	Dec	20	

Ringed Teal

Callonetta leucophrys

Escape

Native Range: S America

GB max: **1 Apr**

NI max: **0**

One was at Clennon Valley in April.

Red-crested Pochard

Netta rufina

GB max: 243 Oct
NI max: 1 Feb

Naturalised introduction
International threshold: 500
Great Britain threshold: ?†
All-Ireland threshold: ?†

Red-crested Pochard is a patchily distributed species throughout central and southern Europe where it is considered to be largely sedentary. Hence the majority of British records, including those pertaining to the ancestors of the core of the UK population at Cotswold Water Park, are generally considered to relate to escapes. Having undergone a doubling during the preceding four years, numbers counted during WeBS Core counts surprisingly took a small dip across most of the principal sites in 2007/08. Cotswold Water Park remained the premier area in the UK maintaining a five-year mean peak of approximately 200 birds across the whole complex of gravel pits. The species was recorded at a further 52 sites elsewhere in England, five of which registered double-figure counts.

A single was recorded at Upper Lough Erne in February; only the second WeBS record for Northern Ireland, following one at the same site in February 2006.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites with mean peak counts of 10 or more birds in Great Britain†							
Cotswold Water Park (West)	114	81	119	207	170 [13]	Nov	138
Cotswold Water Park (East)	33	48	70	106	72	Oct	66
Lower Windrush Valley Gravel Pits	6	19	41	26	(26)	Jan	24
Baston and Langtoft Gravel Pits	(23)						(23)
Arnot Park Lake	12	19	18	16	14	Sep	16
Sutton and Lound Gravel Pits	6	16	12	22	13	May	14
Hanningfield Reservoir	(7)	2	21	17	10	Apr	13
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain†							
Colne Valley Gravel Pits	2	3	8	23	10	Dec	9

† *as no British or All-Ireland thresholds have been set a qualifying level of 10 has been chosen to select sites for presentation in this report*

Red-crested Pochard (Neil Calbrade)

Pochard

Aythya ferina

International threshold:	3,500
Great Britain threshold:	595
All-Ireland threshold:	380

GB max: 23,601 Jan
NI max: 9,854 Jan

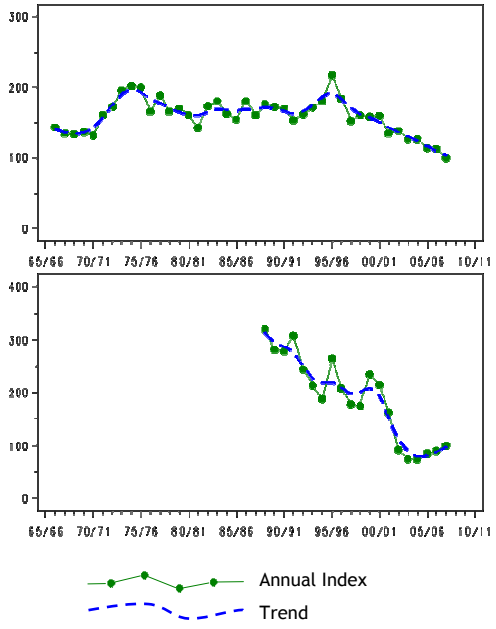


Figure 26.a, Annual indices & trend for Pochard for GB (above) & NI (below).

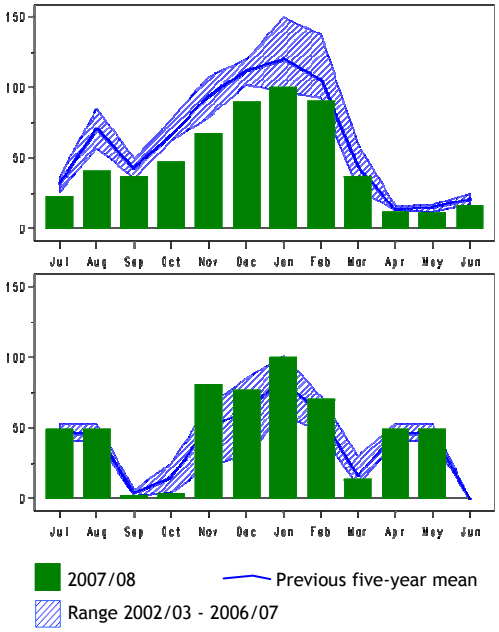


Figure 26.b, Monthly indices for Pochard for GB (above) & NI (below).

The annual index for Pochard in Great Britain fell to its lowest level ever in 2007/08, continuing a downward trend that began in 1996/97.

A feature of the decline in 2007/08 was the failure of any British sites to qualify as being of international importance for the first time since the relevant thresholds were introduced.

The five-year averages for Abberton Reservoir and Ouse Washes both fell by 10%, and of the eight other sites of national importance only Fleet & Wey and Cotswold Water Park (East) experienced what could be described as a relatively good winter for this species.

The decline experienced in Britain is likely to be attributable to recent mild winters which have led to an associated north-east shift in distribution (e.g. Maclean *et al*. 2008). For example, numbers have reached record levels in Sweden, where the species has traditionally been very sensitive to freezing conditions due to its preference for relatively shallow water (Nilsson 2008).

Pochard (Neil Calbrade)

In Northern Ireland, counts from Loughs Neagh & Beg, the sole remaining site of international importance in the UK, again showed signs of a small improvement. The peak monthly count increased slightly for the third year in succession to the highest level since 2002/03.

However numbers are still considerably short of those present in the 1990s when, for example, an exceptional peak of 40,930 was recorded in December 1990.

As well as any climate-induced shift in range, the declines noted at Loughs Neagh & Beg have been partly attributed to the effects of eutrophication which may have reduced the abundance of invertebrates fed upon by this and some other diving species (Maclean *et al*. 2007).

	03/04	04/05	05/06	06/07	07/08	Mon	Mean	
Sites of international importance in the UK								
Loughs Neagh and Beg	7,835	6,764	8,256	8,884	9,023	Jan	8,152	
Sites of national importance in Great Britain								
Abberton Reservoir	5,290	3,188	2,852	3,167	2,355	Sep	3,370	▼
Ouse Washes	3,304 [13]	2,134 [13]	1,227	4,197	2,987	Feb	2,770	
Loch Leven	2,548	2,193	1,715	3,666	1,650	Nov	2,354	
Hornsea Mere	1,325	1,150	1,150	710	650	Feb	997	
Dungeness and Rye Bay	980	789	1,053	1,049	728	Aug	920	
Chew Valley Lake	480	635	1,580	1,220	600	Dec	903	
Fleet and Wey	850	746	682	879	980	Feb	827	
Severn Estuary	905	652	760	786	570	Jan	735	
Cotswold Water Park (East)	629	410	524	993	884	Dec	688	▲
Loch of Boardhouse	705	770	709	623	441	Nov	650	
Sites of all-Ireland importance in Northern Ireland								
Upper Lough Erne	801	473	329	503	422	Jan	506	
Sites no longer meeting table qualifying levels in WeBS-Year 2007/2008								
Nene Washes	66	32	88	57	462	Feb	141	
Lower Derwent Ings	1,236	39	20	321	103	Jan	344	
Brogborough Clay Pit	183						183	
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain								
Middle Tame Valley Gravel Pits	(203)	(56)	(12)	296	773	Feb	535	

Ring-necked Duck

Aythya collaris

Vagrant
Native Range: N America

GB max: **3 Nov**
NI max: **1 Oct**

Single Ring-necked Ducks were seen at six sites in England, four in Scotland and one in Northern Ireland in 2007/08. Long-staying birds, some of which are annual returnees, were at Loch Gelly in July and August, Avonmouth Sewage Works in September and October, Lochs Eaval and Hosta (North Uist) between November and February, and Foxcote Reservoir between November and April.

In Northern Ireland, one was at Lough Foyle in October.

Ferruginous Duck

Aythya nyroca

Vagrant and escape
Native Range: N America, Asia

GB max: **2 Sep**
NI max: **0**

Ferruginous Ducks were reported from four sites. In a remarkably similar pattern of occurrence to the previous year, one was at Chew Valley Lake between August and November to be followed by another individual in the spring.

Others were seen at Somersham GP, Theale GPs and Woodsetts & Owdays Ponds in the period of September to February.

Tufted Duck

Aythya fuligula

International threshold:	12,000
Great Britain threshold:	901
All-Ireland threshold:	370

GB max:	52,004	Feb
NI max:	8,893	Jan

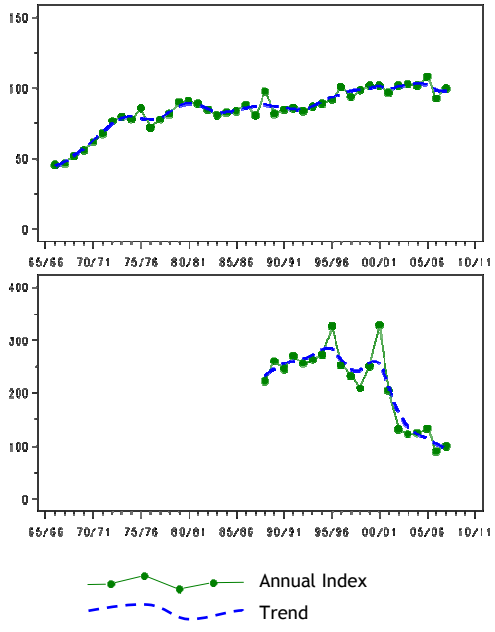


Figure 27.a, Annual indices & trend for Tufted Duck for GB (above) & NI (below).

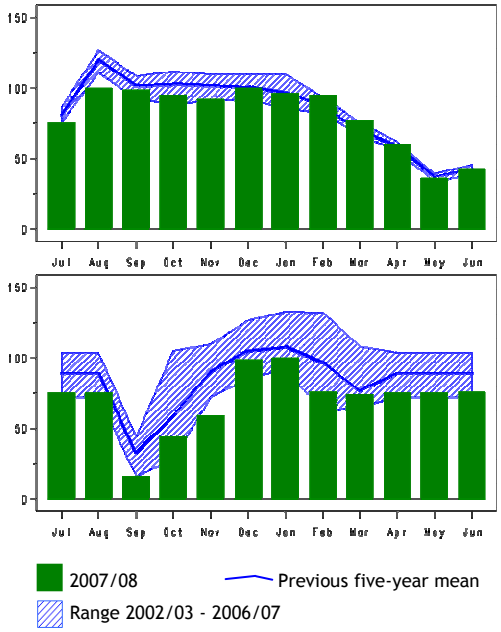


Figure 27.b, Monthly indices for Tufted Duck for GB (above) & NI (below).

Annual maxima and indices for Tufted Duck in Great Britain have exhibited very shallow increases over the course of the WeBS indexing period, and 2007/08 saw a slight bounce back from the drop in the index noted in 2006/07.

Elsewhere in northern Europe numbers have increased more significantly in recent decades, coinciding with the onset of milder winters (e.g. Nilsson 2008).

In Britain, the monthly maximum for Ouse Washes, where duck numbers of all species are highly dependent on the prevailing water levels, was the highest ever. However inland reservoirs fared less well: the peak count from Rutland Water was the lowest since 2001/02 and numbers at both Pitsford Reservoir and Walthamstow Reservoir failed to reach four-figure levels for the first time since 1995/96. A marked drop was also noted at Hanningfield Reservoir, although peak counts do have a greater tendency to fluctuate there from year to year – perhaps as a result of exchange of birds between the site and Abberton Reservoir nearby.

There are no sites of international importance for Tufted Duck in the UK. Historically, Loughs Neagh & Beg qualified as such, but in common with other species of diving duck, the site experienced a crash in numbers from 2001/02 onwards. Although the rate of decline has slowed in recent years, the annual maximum in 2007/08 fell to its lowest ever level since monitoring of the site began in 1985/86.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of national importance in Great Britain							
Rutland Water	6,818	6,488	8,487	9,758	5,134	Sep	7,337
Loch Leven	3,913	3,826	3,802	3,553	4,140	Oct	3,847
Abberton Reservoir	2,067	5,112	(4,857)	1,187	3,796	Oct	3,404
Ouse Washes	973 [13]	2,251 [13]	1,140 [13]	2,057	3,328	Feb	1,950
Pitsford Reservoir	2,226	2,506	2,066	1,374	774	Sep	1,789

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Walthamstow Reservoirs	1,772	1,771	1,828	1,516	900	Jul	1,557
Hanningfield Reservoir	3,109	400	1,573	2,194	486	Mar	1,552
Staines Reservoirs	1,133	792	2,844	1,865	1,074	Aug	1,542
Chew Valley Lake	1,465	1,235	2,115	1,325	1,480	Sep	1,524
Middle Tame Valley Gravel Pits	(325)	(129)	(64)	1,243	1,766	Sep	1,505
Cotswold Water Park (West)	1,199	960	1,199	1,372	1,343	Feb	1,215
Lee Valley Gravel Pits	1,404	1,222	985	1,215	1,231	Dec	1,211
Grafham Water	815	824	1,337				992 ▲
Alton Water	1,440	644	1,063	1,008	664	Dec	964
Sites of all-Ireland importance in Northern Ireland							
Loughs Neagh and Beg	8,999	9,277	7,871	6,441	6,076	Jan	7,733
Upper Lough Erne	1,236	1,295	1,457	1,478	1,772	Dec	1,448
Lower Lough Erne	580	674	575	705	638	Jan	634
Sites no longer meeting table qualifying levels in WeBS-Year 2007/2008							
Hornsea Mere	1,050	900	840	600	565	Oct	791
Wraysbury Gravel Pits	846	1,015	465	429	424	Dec	636
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain							
Cotswold Water Park (East)	468	713	522	731	954	Sep	678
Loch of Strathbeg	353	198	448	403	939	Aug	468
Draycote Water	1,251	122	1,010	680 [13]	928	Nov	798
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Northern Ireland							
Strangford Lough	203	168	216	(141)	416	Dec	251

Scaup

Aythya marila

International threshold: 3,100
Great Britain threshold: 76
All-Ireland threshold: 45*

GB max: 2,447 Dec
NI max: 8,385 Feb

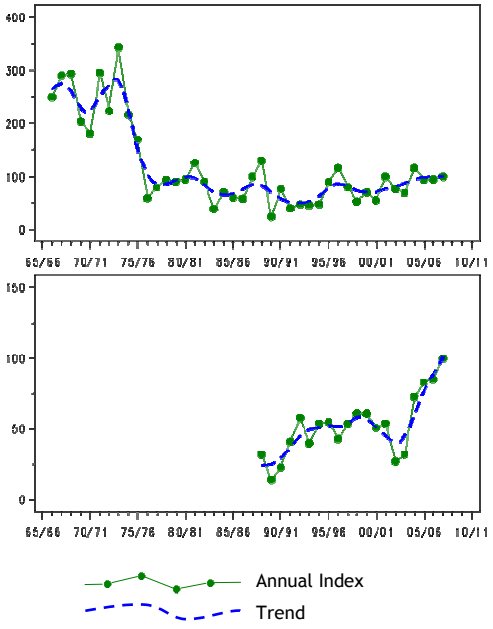


Figure 28.a, Annual indices & trend for Scaup for GB (above) & NI (below).

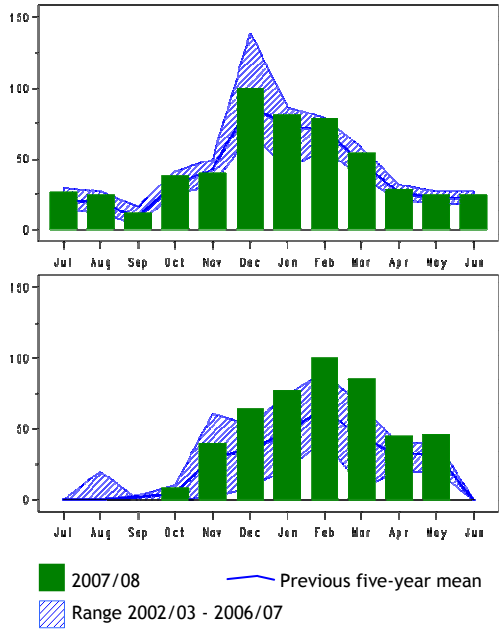


Figure 28.b, Monthly indices for Scaup for GB (above) & NI (below).

In 2007/08, the trend for Scaup in Great Britain remained relatively stable even though the monthly peak was 19% lower than that in 2006/07. Numbers in Northern Ireland however increased again; the national index rising for the fifth year in succession.

The apparent shift in distribution is thought to represent a combination of more birds of Icelandic origin arriving to winter in Ireland.

The latest rise in the index for Northern Ireland was largely attributable to a maximum count from Loughs Neagh & Beg of 5,587 that was above the recent average, combined with the fact that Belfast Lough, as well as Strangford Lough, held more birds than in any previous winter. However it is perfectly feasible that some of the listed sites of national importance in the UK are linked, and large flocks of Scaup may utilise a network of sites (Solway Firth, Loch Ryan, Loch Indaal and Loughs Neagh & Beg, for example) during the course of a given winter.

Scaup (Tommy Holden)

Away from principal sites listed below, the highest counts were peaks of 29 at Alt Estuary in March, 17 at Poole Harbour in October and 10 at Rutland Water in December.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of international importance in the UK							
Loughs Neagh and Beg	2,674	5,144	5,826	4,349	5,587	Feb	4,716
Sites of national importance in Great Britain							
Solway Estuary	(1,782)	(4,610)	(575)	1,060	(499)	Mar	2,484
Loch Ryan	986	1,577	1,020	1,047	1,654	Dec	1,257
Inner Moray and Inverness Firth	518	2,641 [1]	576	690	148	Feb	915
Inner Loch Indaal	1,003	800 [25]	960 [25]	810 [25]	870 [25]	Dec	889
Loch of Harray	420	490	360	306	67	Oct	329
Loch of Stenness	266	315	306	429	259	Nov	315
Cromarty Firth	13	47	400	401	(516)	Jan	275
Firth of Clyde and Loch Ryan offshore			161 [27]				161
Dornoch Firth	70	150 [13]	77	222	280	Jan	160
Auchenharvie Golf Course	145	107	97	98	120	Mar	113
Rough Firth	107	204 [11]			3	Mar	105
Sites of all-Ireland importance in Northern Ireland							
Belfast Lough	669 [11]	1,224 [11]	833	849 [11]	1,895	Jan	1,094
Carlingford Lough	(158)	233	222	225	177	Jan	214
Sites no longer meeting table qualifying levels in WeBS-Year 2007/2008							
Ayr to North Troon	(12)	(14)					(14)
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain							
Loch Fleet Complex	5	0	0	0	190	Feb	39
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Northern Ireland							
Strangford Lough	3	3	0	70	90	Nov	33

Lesser Scaup

Aythya affinis

Vagrant
Native Range: N America

GB max: **4 Mar**
NI max: **0**

Formerly a major rarity in the UK, Lesser Scaup is now a regular feature of this annual report. In 2007/08, the species was recorded at four sites in England and three in Scotland, with birds noted in every month between October and April.

English records were from Blagdon Lake, Rutland Water, Draycote Water and Barrow Gurney Reservoir, those in Scotland from Kirk Loch (Yell), Loch Fada (Benbecula) and Vale of Coustry.

Only one Lesser Scaup has ever been seen during WeBS counts in Northern Ireland (at Upper Lough Erne in 2005), which is somewhat surprising given the Nearctic origin of the species and the large 'carrier' flocks of diving ducks present at Loughs Neagh & Beg.

Eider

Somateria mollissima

GB max:	**17,339**	**Nov**
NI max:	**2,880**	**Dec**

International threshold:	**12,850**
Great Britain threshold:	**730**
All-Ireland threshold:	**30***

**50 is normally used as a minimum threshold*

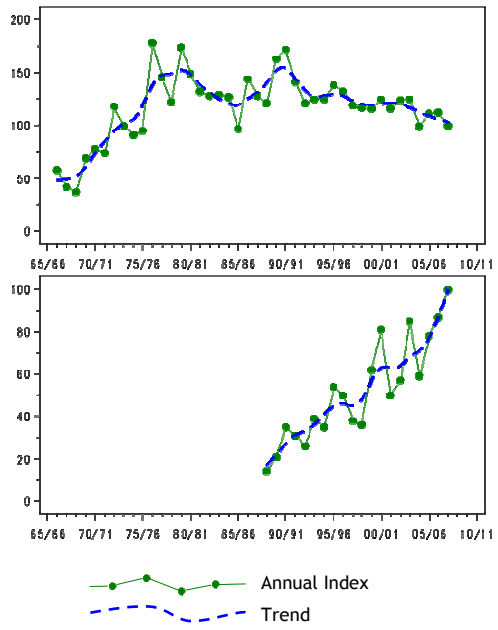


Figure 29.a, Annual indices & trend for Eider for GB (above) & NI (below).

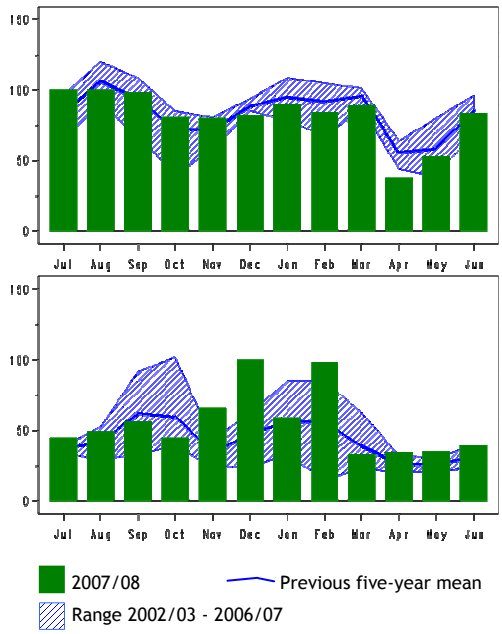


Figure 29.b, Monthly indices for Eider for GB (above) & NI (below).

The taxonomy of the Eider population is complex. On-going studies are being carried out which may indicate genetic association between discrete populations, such as those from the northern Isles and the Faeroes. Depending on results, these could have implications for the future setting of thresholds, and subsequent listing of sites of importance around the British coast.

The stark contrast between the indices for Britain and Northern Ireland continued in 2007/08. In Britain, the index returned to a low point reached three years ago and the counted maximum was the lowest in recent times. However in Northern Ireland the counted monthly maximum was the highest ever recorded, resulting in a further rise in the national index. This was largely attributable to the continued increase in numbers noted at Belfast Lough.

In Scotland, peak numbers using the Firth of Clyde were again made available for publication in this report, and are again tabulated both in terms of the whole and its constituent parts. There was no return to a status of international importance for this location which held a peak of over 17,500 birds as recently as eight years ago. In view of the increases noted in Northern Ireland it would appear there has been a westward redistribution of birds across the Irish Sea, although direct evidence for this is lacking at present.

No offshore surveys of Aberdeen Bay were carried out in 2007/08, which in conjunction with the adjacent Ythan Estuary potentially supports very significant numbers, although there is likely to be overlap in terms of use of the two sites.

Aerial surveys employing distance sampling

Area	Date	Counted	Estimate (confidence intervals)	Ref
Coll and Tiree	Mar	285	1,043 (495-2,201)	Söhle *et al.* 2009a

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of national importance in Great Britain							
FIRTH OF CLYDE	15,276 [15]	13,042 [15]	8,055 [15]	9,590 [15]	9,521 [15]	Sep	11,097
Tay Estuary	4,700	(5,636)	11,500	(9,164)	(7,500)	Nov	8,455
Forth Estuary	7,014	4,750	5,047	5,646	4,571	Aug	5,406
Aberdeen Bay offshore	1,756 [51]	6,003 [51]	5,302 [51]	6,269 [51]			4,833
Inner Firth of Clyde	6,194	4,152	3,837	4,881	3,960	Aug	4,605
Morecambe Bay	3,950	5,300 [15]	3,815	3,374	(2,127)	May	4,110
Killantringan Bay		3,600 [15]					3,600
Ythan Estuary	3,417	(4,212)	3,580	2,315	(3,140)	May	3,333
Gare Loch	3,263 [15]	2,713 [15]	2,582 [15]	2,782 [15]	2,470 [15]	Sep	2,762
Montrose Basin	2,075	1,754	4,322	2,584	2,321	Nov	2,611
Irvine Bay		1,547 [15]					1,547
Moray Firth	1,639	1,673	1,390	1,199	1,206	Oct	1,421
Loch Long and Loch Goil	1,390 [15]	1,614 [15]	1,458 [15]	796 [15]	1,174 [15]	Sep	1,287
Dee Estuary (Scotland)	852	865	1,673	1,229	1,411	Jun	1,206
Holy Loch to Toward Point	1,114 [15]	2,225 [15]	766 [15]	634 [15]	676 [15]	Sep	1,083
Loch Ryan	1,803	1,150 [15]	539	(385)	772	Nov	1,066
Lindisfarne	1,241	1,202 [11]	1,097 [11]	469	(564)	Jul	1,002
Lower Loch Long		914 [15]					914
Hacosay, Bluemull, Colgrave & Sds	790 [10]	855 [10]	992 [10]				879
Gourock to Largs	2,220 [15]	614 [15]	370 [15]	755 [15]	371 [15]	Sep	866
Inner Loch Fyne	956 [15]	868 [15]	759 [15]	817 [15]	533 [15]	Sep	787
Sound of Barra	600 [44]	886 [44]					743 ▲
Sites of all-Ireland importance in Northern Ireland							
Belfast Lough	1,813	1,490 [11]	1,839 [11]	1,482	2,675	Dec	1,860
Outer Ards Shoreline	(256)	271	335	976	1253	Jan	709
Strangford Lough	259	282	480	728	551 [11]	Dec	460
Lough Foyle	645	431	164	528	37	Oct	361
Larne Lough	55	69	67	76	48	Sep	63
Port Stewart - Portrush		34 [15]					34
Sites no longer meeting table qualifying levels in WeBS-Year 2007/2008							
Girvan to Turnberry	330	1,500 [15]	415	370 [15]	233	Jan	570
The Wash	703	91	557	491	102	Feb	389

King Eider

Somateria spectabilis

Vagrant
Native Range: Arctic

GB max: **1 Feb**
NI max: **0**

Single King Eiders were seen at two sites; Murkle Bay in February and Taw-Torridge Estuary in March and April. The latter represents the first WeBS record away from Scotland since December 2004.

Long-tailed Duck

Clangula hyemalis

International threshold: **20,000**
Great Britain threshold: **160**
All-Ireland threshold: **+†**

GB max: **2,507 Feb**
NI max: **29 Jan**

Long-tailed Ducks were recorded at 104 sites around the UK. The British maximum was considerably lower than that of recent years due to the low total counted at Moray Firth. This low count may have arisen as a result of restricted coverage or the influence of sea conditions affecting visibility and the associated distribution of birds on the Core count dates.

The highest counts away from Scotland were 29 at Belfast Lough in January and 31 off Holme on North Norfolk Coast in February. Additionally, in Northumberland, 26 were counted from Spittal to Cocklawburn in February, with the same number at Farne Islands in April.

Inland records of Long-tailed Duck are always noteworthy, and a small number

appeared away from the coast in January. Four at Hanningfield Reservoir were particularly notable, increasing to five from February to May. Other long-stayers inland included singles at Rutland Water (to February), Wimbleball Lake (to March) and Stratton Sugwas Sand Pit (to May).

Aerial surveys employing distance sampling

Area	Date	Counted	Estimate (confidence intervals)	Ref
North Orkney	Mar	159	not available	Söhle *et al.* 2009b

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites with mean peak counts of 50 or more birds in Great Britain†							
Moray Firth	5,446	6,402	11,565	10,878	1,904	Feb	7,239
Sound of Harris	230 [44]	500 [44]					365
South Uist West Coast	440 [44]	185 [44]					313
Broad Bay (Lewis)	300 [44]						300
Scapa Flow, Shapinsay & Deer Sounds			300 [27]				300
Loch Branahuie (Lewis)		272					272
Hacosay, Bluemull, Colgrave Sounds	249 [10]	303 [10]	160 [10]				237
Forth Estuary	249	240	237	220	162	Apr	222
Branahuie Banks (Lewis)		196					196
Scapa Flow	210 [27]	146 [27]					178
South Yell Sound	201 [10]	91 [10]	169 [10]		100 [10]	Nov	140
Quendale to Virkie	103 [10]	100 [10]	57 [10]		201 [10]	Jan	115
Burra and Trondra	97 [10]	117 [10]	99 [10]		126 [10]	Feb	110
Sound of Barra (Barra)	132 [44]	80 [44]					106
Loch of Stenness	105 [13]	89	96	107	130	Dec	105
Island of Papa Westray	184	102	10				99
Outer Tay & St Andrews Bay offshore	159 [27]	32 [27]					96
West Coast, Benbecula	92 [44]						92
Allasdale Bay to Borve (Barra)	112 [44]	68 [44]					90
St Andrews Bay	107	232	17	0	(0)		89
Thurso Bay	43	(40)	30	200	30	Jan	76
Scarp to Vatersay offshore	84 [27]	54 [27]	75 [27]				71
Bressay Sound	66 [10]	90 [10]	44 [10]				67
Kirkabister to Wadbister Ness	73 [10]	(4) [10]	78 [10]		50 [10]	Feb	67
Dee Mouth to Don Mouth		84	37	(2)	(8)	Feb	61
Gulberwick Area			56 [10]				56
Melbost Sands (Lewis)	0	0	11	121	144	Dec	55
Rova Head to Wadbister Ness	34 [10]	21 [10]	87 [10]		69 [10]	Feb	53
Water Sound	80	60	37	51	36	Feb	53
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain							
Dunnet Bay				24	72	Feb	48

†*as few sites the British threshold and no All-Ireland threshold has been set, qualifying levels of 50 and 30 respectively have been chosen to select sites for presentation in this report*

Long-tailed Duck (Ron Marshall)

Common Scoter

Melanitta nigra

International threshold: 16,000
Great Britain threshold: 500
All-Ireland threshold: 230

GB max: 5,434 Feb
NI max: 102 Jan

**50 is normally used as a minimum threshold*

Many larger flocks of Common Scoters tend to occur offshore, and as a result are generally poorly covered by WeBS. Consequently this annual report attempts to collate as much supplementary data as possible, often collected during aerial surveys aimed at monitoring this species.

For example, the annual survey of the Carmarthen Bay, classified as a marine SPA, yielded a total of 6,189 birds in February 2008 thereby maintaining the site's status as one of international importance. However this total represents a marked decline on the numbers counted in previous years, during surveys of Carmarthen Bay undertaken as part of continuing assessment of the site following the Sea Empress oil spill in February 1996.

Numbers recorded specifically during Core counts tend to be highly dependent on weather and the associated viewing conditions at the key sites.

For the second year running the peak count was from North Norfolk Coast, albeit approximately 25% less than the figure for the previous year. Similarly numbers at Moray Firth were again down compared to the five-year average, but at a similar level to 2006/07. Cardigan Bay no longer qualifies as a site of importance almost certainly as a result of lack of coverage, and no offshore counts were carried out of Aberdeen Bay by JNCC this year.

Away from the current nine sites of national importance, more appear to be wintering in the shallow waters of the English Channel off the Sussex and Kent coastline; for the fourth successive year increased numbers wintered at both Dungeness & Rye Bay and Glyne Gap.

Aerial surveys employing distance sampling

Area	Date	Counted	Estimate (confidence intervals)	Ref
Carmarthen Bay	Mar	5,873	13,076 (8,211-20,799)	Maclean *et al.* 2008

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of international importance in the UK							
Carmarthen Bay	20,271[39]	24,460[39]	20,287[39]	14,412[39]	6,189 [55]	Jan	17,124
Sites of national importance in Great Britain							
Moray Firth	7,987	4,265	6,842	1,908	2,494	Feb	4,699
North Norfolk Coast	2,252	4,866	6,830	4,960	3,530	May	4,488
Aberdeen Bay offshore	2,922[27]	3,475[27]	3,514[27]	1,525[27]			2,877
Alt Estuary	2,169	3,000	4,300	3,288	850	Oct	2,721
Towyn to Llanddulas	(1,737)	(252)	(1,680)	1,800	1,600	Dec	1,712
Forth Estuary	1,349	(1,224)	(1,495)	623	929	Apr	1,124
St Andrews Bay	1,170	2,660	447	0	(0)		1,069
Durham Coast	(0)	(40)	685	(181)	(30)	Sep	685
The Wash	15	372	100	1,810	207	Feb	501
Sites no longer meeting table qualifying levels in WeBS-Year 2007/2008							
Cardigan Bay	198	183	339	(69)	(8)	Feb	240
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain							
Dungeness and Rye Bay	150	90	250	446	640	Dec	315
Glyne Gap	0	0	117	(533)	544	Nov	239

Surf Scoter

Melanitta perspicillata

Vagrant
Native Range: N America

GB max: 7 Feb
NI max: 0

Surf Scoters were seen at three sites in Scotland. Four were noted at Forth Estuary and three at Dornoch Firth in February, the former site hosting a single throughout October to April. The other record was a single at Traigh Luskentyre in October.

Velvet Scoter

Melanitta fusca

GB max:	**447**	**Mar**
NI max:	**0**	

International threshold:	**10,000**
Great Britain threshold:	**30***
All-Ireland threshold:	**+[†]**

**50 is normally used as a minimum threshold*

The east coast of Scotland represents the western edge of the European range of Velvet Scoter, a species which is a rare treat for most WeBS counters south of the border. Recent years indicate that the UK wintering population is in decline; however, as is typical of most marine wildfowl, it can be a difficult species to monitor and inevitably suffers from poor coverage around parts of the Scottish coastline, particularly Orkney.

During 2007/08, Velvet Scoters were noted at 25 sites; 14 in England, ten in Scotland and one in Wales. The monthly peak was the lowest ever recorded by WeBS, partly due to incomplete coverage of some key sections of the Moray Firth where over 4,000 were counted as recently as 2002/03. However, numbers at the Forth Estuary declined for the sixth successive year, the January total of 372 representing the lowest winter peak count at the site since 1992/93. The reason for the apparent disappearance of birds at St Andrews Bay in recent years is not known.

Of sites listed in last year's report, Dee Mouth to Don Mouth has now been combined with Aberdeen Bay offshore. The latter offshore area was not monitored in 2007/08.

The peak count away from the Scottish coast was ten at Taw-Torridge Estuary in February, the first time the species has been recorded there.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of national importance in Great Britain							
Moray Firth	2,103	1,169	1,261	743	(74)	Mar	1,319
Forth Estuary	1,008	1,007	775	(928)	372	Jan	818
St Andrews Bay	90	1,050	8	0	0		230
Lunan Bay	(300)	125	120	2	100	Aug	129
Aberdeen Bay offshore	17 [51]	50 [51]	89 [51]	28 [51]	(0)		46

Velvet Scoter (www.grayimages.co.uk)

Goldeneye

Bucephala clangula

GB max:	**12,611**	**Feb**
NI max:	**5,156**	**Mar**

International threshold:	**11,500**
Great Britain threshold:	**249**
All-Ireland threshold:	**110**

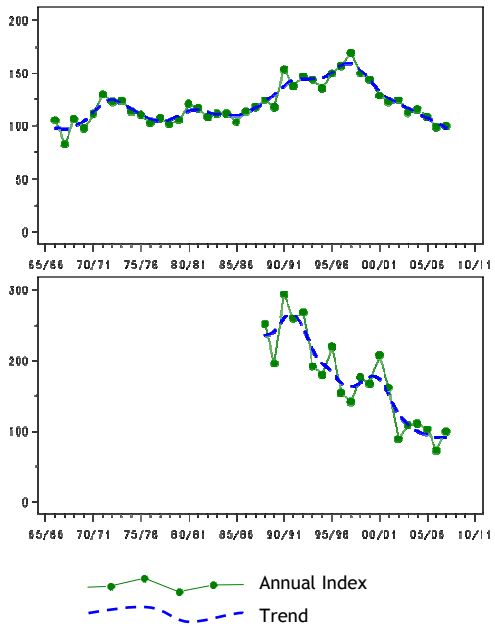


Figure 30.a, Annual indices & trend for Goldeneye for GB (above) & NI (below).

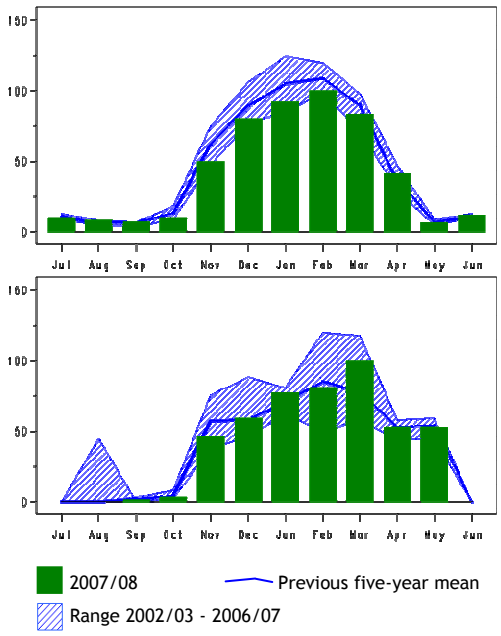


Figure 30.b, Monthly indices for Goldeneye for GB (above) & NI (below).

Goldeneye can be found throughout the UK during the winter months, on the coast as well as inland lakes and reservoirs. Arrival of wintering birds, mostly of Scandinavian origin, is generally later than for most of the species of regular wintering ducks, with relatively few seen before November.

Recent years have seen the indices of Goldeneye wintering in the UK show marked declines, however the index for 2007/08 suggests a possible 'bottoming out' in Northern Ireland. These declines are almost certainly associated with a north-east shift in wintering range resulting from climate change. In Sweden for example, the estimated wintering population increased from 18,800 in 1971 to 75,000 in 2004 (Nilsson 2008).

Within the UK, the outstanding site is Loughs Neagh & Beg in Northern Ireland. This site formerly held internationally important numbers of this species but has experienced a long term decline; annual peaks in excess of 13,500 birds in the early 1990s now compare with a recent five-year mean of less than 5,000. However the latest major drop experienced in 2006/07 was reversed in 2007/08 with the peak count returning to close to the five-year average, accounting for over 30% of the March total across the entire UK.

Furthermore, similar reversals of fortune were noted at other important sites in Northern Ireland, with improved counts at Lower Lough Erne, Strangford Lough and Belfast Lough.

In Britain, counts from most of the principal sites were slightly below the five-year average, with the exception of the Humber Estuary from where the highest count of the year in Britain, 577, was logged in December.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of national importance in Great Britain							
Forth Estuary	(753)	879	(379)	331	533	Feb	624
Inner Firth of Clyde	514	159	636	688	452 [13]	Mar	490
Inner Moray and Inverness Firth	709 [1]	1,165 [1]	186	221	137	Jan	484
Humber Estuary	296	595	449	401	577	Dec	464
Abberton Reservoir	431	394	588	478	332	Mar	445
Rutland Water	511	420	521	356	349	Feb	431
Loch Leven	86	385	289	517	302	Nov	316
Morecambe Bay	204	(297)	(249)	(191)	(121)	Feb	250
Sites of all-Ireland importance in Northern Ireland							
Loughs Neagh and Beg	4,497	5,787	5,688	2,780	4,648	Mar	4,680
Lower Lough Erne	337	319	254	169	267	Dec	269
Strangford Lough	253	161	187	83 [11]	237	Jan	184
Belfast Lough	242 [11]	164 [11]	103	(108)	226	Jan	184
Ballysaggart Lough	118						118 ▲
Larne Lough	95	73	155	97	89	Feb	102
Sites no longer meeting table qualifying levels in WeBS-Year 2007/2008							
Hornsea Mere	235	325	280	91	260	Apr	238
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain							
River Tweed - Kelso to Coldstream	246	129	142	109	266	Jan	178
Hornsea Mere	235	325	280	91	260	Apr	238
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Northern Ireland							
Lough Foyle	93	100	47	39	118	Jan	79

Smew

Mergellus albellus

International threshold: **400**
Great Britain threshold: **4***
All-Ireland threshold: **+**[†]

GB max: **109** **Feb**
NI max: **2** **Feb**

**50 is normally used as a minimum threshold*

Smew were recorded at 49 sites across the UK in 2007/08. The counted maximum of 109 in February was similar to the previous year, and hence considerably lower than the previous five-year average of 243 for the period 2001/02 to 2005/06. Lower numbers in Britain during recent winters are likely to be largely a result of the trend of recent mild winters and an associated shift in distribution towards the north-east of the wintering range. In Sweden for example, the wintering population increased from 400 in 1971 to 3,800 in 2004 (Nilsson 2008).

The three most important sites for this species in Britain are Wraysbury Gravel Pits, Dungeness & Rye Bay, and Cotswold Water Park, all of which maintained their records of having supported double-figure maxima for each of the last ten years. Even so, the last three years have seen numbers decline significantly at Wraysbury; this year's maximum was in the order of 75% lower than a recent peak in 2004/05 which had marked the end of a nine-year period when annual maxima averaged 57 birds. Away from England, Smew occurred at nine sites in Scotland, one in Wales and two in Northern Ireland. All these records were of singles with the exception of three at Harperleas Reservoir in October.

Temporal changes in the use of sites by this species can be somewhat intriguing. The use of the network of gravel pit sites in eastern England is of particular interest; there is some indication that a steady decline in the number using Fen Drayton Gravel Pits may be associated with a gradual redistribution to other sites in the region, such as Little Paxton Gravel Pits and Ouse Fen & Pits.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of national importance in Great Britain							
Wraysbury Gravel Pits	55	68	38	19	16	Dec	39
Dungeness and Rye Bay	37	24	20	18	21	Jan	24
Cotswold Water Park (West)	20	18	33	13	19	Jan	21

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Thorpe Water Park	18	10	20	3	3	Jan	11
Lee Valley Gravel Pits	23	8	9	7	7	Jan	11
Thrapston Gravel Pits	11						11
Seaton Gravel Pits and River	14	8	11	1	6	Feb	8
Colne Valley Gravel Pits	8	7	6	8	4	Jan	7
Ouse Fen and Pits (Hanson/RSPB)	1	10	10	0	12	Feb	7
Little Paxton Gravel Pits	4	12	5	4	12	Feb	7
Rutland Water	8	4	14	5	2	Jan	7
Tophill Low Reservoirs	6	7	9 [13]	5 [13]	6 [13]	Feb	7
Fen Drayton Gravel Pits	16	4	5	3	2	Jan	6
Belhus Woods Country Park	10	6	0				5
Abberton Reservoir	5	9	2	2	5	Jan	5
Pitsford Reservoir	3	3	11	4	(2)	Jan	5
Marsh Lane Gravel Pits		9	5	2	2	Feb	5
Deeping St James	6	2	8	2			5
Eyebrook Reservoir	3	3	7	4	6	Dec	5
Bedfont and Ashford Gravel Pits				1	6	Feb	4
Sonning Eye and Henley Road GPs	0	9		2			4
Blunham Gravel Pit	4						4
Sites no longer meeting table qualifying levels in WeBS-Year 2007/2008							
Fairburn Ings	4		1	(1)	1	Feb	2
Cassington and Yarnton Gravel Pits	10	1	5	0	0		3
Earls Barton Gravel Pits	7	0	6	0	0		3
Grange Waters Complex	0	5	5				3
Meadow Lane Gravel Pits	3	0	0	0			1
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain							
Whitemoor Haye	0	2	0	2	4	Mar	2

Red-breasted Merganser

Mergus serrator

International threshold: 1,700
Great Britain threshold: 98
All-Ireland threshold: 35*

GB max: 3,362 Feb
NI max: 696 Feb

**50 is normally used as a minimum threshold*

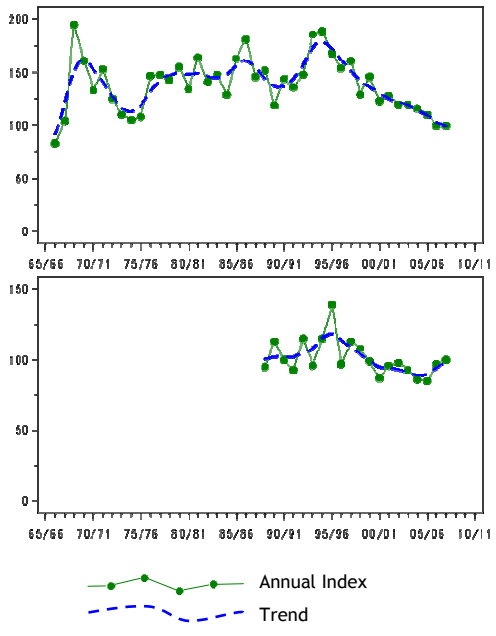


Figure 31.a, Annual indices & trend for Red-breasted Merganser for GB (above) & NI (below).

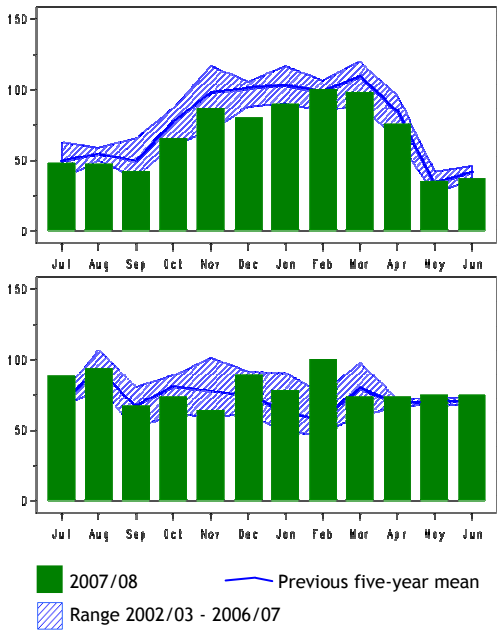


Figure 31.b, Monthly indices for Red-breasted Merganser for GB (above) & NI (below).

The British index for Red-breasted Merganser has shown a consistent decline over the last twelve or so years, probably associated with climatic amelioration enabling a greater proportion of the population to winter at sites further north in Europe. For example, numbers have increased steadily in Sweden over the course of the last forty years (Nilsson 2008). In Britain, results for 2007/08 showed no further decline compared to the previous year but it is unclear whether this merely represents temporary stability.

Undoubtedly the trend of most concern is that for the UK's most important estuary, the Forth, where the monthly maximum of 259 in April was the lowest for over thirty years. As recently as October 1994, 1,000+ birds were logged at the site, where traditionally numbers peak in late autumn and early spring. It is hoped that this site does not replicate other estuaries, most notably The Wash, which have suffered dramatic declines in numbers of this species and consequently no longer qualify as sites of importance.

Typical numbers compared to recent years were recorded at all the principal sites in Northern Ireland where the index rose to its highest point for ten years.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean	
Sites of national importance in Great Britain								
Forth Estuary	791	544	489	347	259	Apr	486	
Fleet and Wey	425	413	438	284	307	Mar	373	
Poole Harbour	(392)	315	(250)	(213)	(117)	Jan	354	
Moray Firth	338	300	254	211	366	Oct	294	
Morecambe Bay	(170)	167	263	(118)	(233)	Jan	221	
Chichester Harbour	191	194	212	217	211	Feb	205	
Inner Firth of Clyde	(164)	107	252	195	168	Aug	181	
Lavan Sands	264	(211)	196	81	110	Mar	172	
Langstone Harbour	127	128	187	159	169	Feb	154	
Inner Loch Indaal	138						138	
Duddon Estuary	167	152	(121)	106	123	Feb	137	
Montrose Basin	139	(39)	163	135	99	Jul	134	
Loch Lomond	(14)	(4)	(129)	(8)	(6)	Dec	(129)	
Loch Ryan	74	179	180	106	100	Oct	128	
Whiteness to Skelda Ness	91 [10]	68 [10]	145 [10]	134 [10]	192 [10]	Feb	126	
North Norfolk Coast	105	126	132	92	131	Feb	117	
Loch of Tankerness		222	1				112	
Jersey Shore				126	90	Mar	108	
Sound of Barra (Barra)		106 [44]					106	
Exe Estuary	(132)	82	78	139	79	Feb	102	
Goring	(35)	(102)					(102)	▲
Arran	103	90	113	(129)	59	Apr	99	
Tay Estuary	98	60	172	57 [11]	103	May	98	▲
Sites of all-Ireland importance in Northern Ireland								
Strangford Lough	188	189	263	390 [11]	(282)	Dec	262	
Larne Lough	135	211	151	196	142	Oct	167	
Belfast Lough	216	91 [13]	104	110	183	Feb	141	
Lough Foyle	122	(52)	169	(35)	99	Nov	130	
Carlingford Lough	40	154	118	171	106	Jul	118	
Outer Ards Shoreline	48	54	31	108	38	Jan	56	

Red-breasted Merganser (Jill Pakenham)

Goosander

Mergus merganser

International threshold: 2,700
Great Britain threshold: 161†
All-Ireland threshold: +

GB max: 2,553 Jan
NI max: 1 Oct

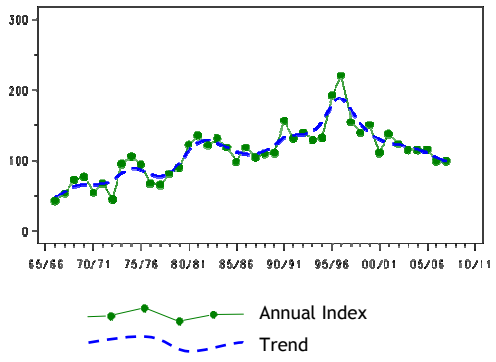


Figure 32.a, Annual indices & trend for Goosander for GB.

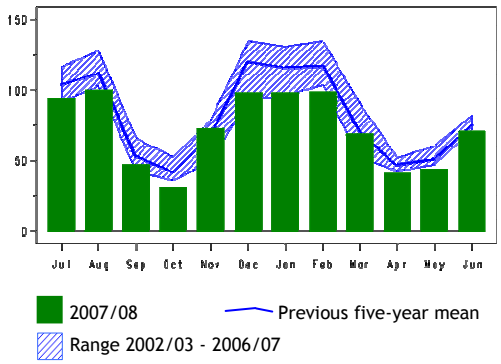


Figure 32.b, Monthly indices for Goosander for GB.

Goosanders that winter in Britain are considered to be mainly from the British breeding population, although some in the southeast may be derived from overseas populations which are frequently involved in influxes during cold weather on the continent. Favoured winter haunts in the UK generally include the Scottish estuaries and river valleys, as well as reservoirs and lakes through the Midlands northwards.

Wintering numbers have declined steadily since 1996/97, likely to represent a distributional shift associated with recent milder winters.

In 2007/08, several of the key sites held lower than their five-year averages, including the Tay Estuary, now the only site of national importance in the UK, where the peak in August was approximately half of the previous year.

Considering how widespread Goosanders are through north and west Britain, they are remarkably scarce in Northern Ireland; one at Inner Larne Lough from October to January represented the only WeBS record of the year.

During the winter Goosanders frequently return to communal roosts late in the afternoon, having been more widely dispersed during the day. Submission of roost counts from key sites, in order to supplement Core counts, is therefore welcomed.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of national importance in Great Britain							
Loch Lomond	(23	(15)	(19)	(261)	(12)	Nov	(261)
Tay Estuary	192 [13]	263	153	313	155	Aug	215
Sites with mean peak counts of 70 or more birds in Great Britain†							
Tyninghame Estuary	177	189	69	157	107	Aug	140
Castle Loch Lochmaben	137	88		85	120	Nov	108
Eccup Reservoir	137	94	115	82	70	Nov	100
Forth Estuary	53	81	119	119	(108)	Jul	96
River Tweed - Kelso to Coldstream	61	112	113	74	90	Oct	90
Spittal to Cocklawburn	92	86	72	116	52	Aug	84
Windermere	(70)	48	127	76 [13]	57	Jan	77
Ashworth Moor Reservoir	35 [12]	110 [12]	90 [12]		59 [12]	Sep	74
Yetholm Loch	(16)	(54)	167	32	24	Jan	74
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain†							
Loch Leven	57	30	20	39	151	Nov	59
Hirsel Lake	6	15	240	4	72	Dec	67

† *as few sites exceed the British and no Northern Ireland thresholds has been set, a qualifying level of 70 has been chosen to select sites for presentation in this report*

Ruddy Duck

Oxyura jamaicensis

Naturalised introduction†
Native Range: N & S America

GB max: **1,137** **Nov**
NI max: **22** **Oct**

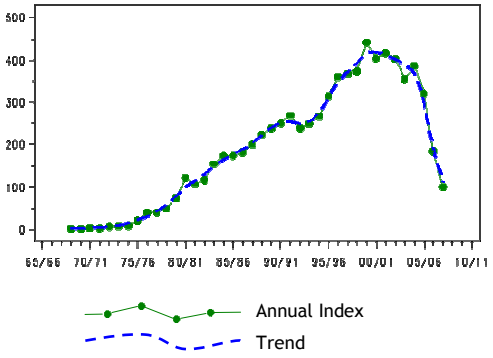


Figure 33.a, Annual indices & trend for Ruddy Duck for GB.

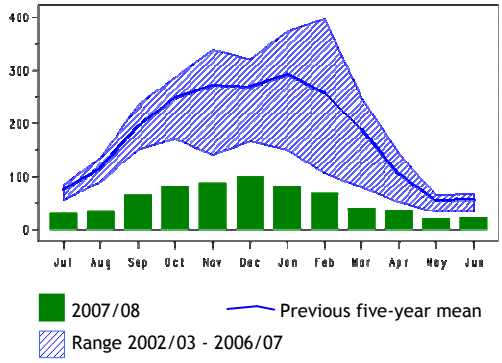


Figure 33.b, Monthly indices for Ruddy Duck for GB.

The decline of Ruddy Ducks in Britain since 2002/03 has been driven by a co-ordinated international programme to contain and eradicate this North American species in Europe, as part of the conservation of the White-headed Duck in Spain and other parts of southern Europe. Despite managing to maintain a widespread distribution, the British index now places the species at the same status as thirty years ago. In 2007/08, two counts of 100+ were reported (compared to nine sites with three-figure counts the previous year) and 30+ were recorded from 27 sites (compared to 34 sites during 2006/07). Interestingly, only two of the listed sites with counts in 2007-08 had no birds. Proportionally, declines appear to have been greatest at Staines Reservoir, Abberton Reservoir and Rutland Water, the latter down to a peak of just five birds.

In Northern Ireland, Loughs Neagh & Beg remains the principal site where a high of 22 constituted the lowest peak since 1989/90.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites with mean peak counts of 30 or more birds in Great Britain†							
Staines Reservoirs	694	695 [37]	521 [37]	277	72	Jan	452
Abberton Reservoir	678	403	455	261 [37]	49	Dec	369
Hanningfield Reservoir	285 [37]	412 [37]	330	276	45	Jan	270
Chew Valley Lake	488 [37]	220 [37]	257 [37]	(130)	17	Oct	246
Dungeness and Rye Bay	230	287	257	193	73	Jan	208
Hilfield Park Reservoir	187	241 [37]	176	263	83	Nov	190
Blagdon Lake	249	151 [37]	172	85	103	Nov	152
Pitsford Reservoir	103	178	311 [37]	102	41	Oct	147
Blithfield Reservoir	180 [37]	401	59 [37]	23 [37]	51	Jan	143
Holme Pierrepont Gravel Pits	115	189	202	106	38	Dec	130
Rutland Water	200	251	57	17	5	Jul	106
Anglers Country Park Lake	78	180 [37]	185	34	37	Jan	103
King George V Reservoirs	268	(23)	83	45	15	Jan	103
Tophill Low Reservoirs	110 [37]	124	131	85 [37]	63	Dec	103
Carsington Water	0	82 [37]	182	101	132	Jan	99
Middle Tame Valley Gravel Pits	96	58 [37]	126 [37]	(16)	(38)	Nov	93
Humber Estuary	116	84	(27)	59 [37]	(31)	Apr	86
Mersey Estuary					85	Feb	85
Thames Estuary	82	85	85	79	(44)	Sep	83
Walthamstow Reservoirs	118	90	86 [37]	74	38	Jan	81
Stanford Reservoir	277 [37]	76	29	6 [37]	0		78

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Cotswold Water Park (West)	127	125	59	34	23	Mar	74
Brent Reservoir	25	133	77	85	46	Sep	73
Colne Valley Gravel Pits	16	33	215 [37]	99 [37]	4	Jun	73
Wigan Flashes	60	86		73 [37]	55	Sep	69
Sutton and Lound Gravel Pits	46	175	13	64	39	Feb	67
Colwick Country Park	88 [37]	100 [37]	51	37 [37]	27	Dec	61
Hollowell Reservoir	191	53	19	21	9	Nov	59
Tees Estuary	70	37	63	111	13	Sep	59
Llyn Traffwll	83	78	52	55	16	Oct	57
Clumber Park Lake	76	16 [37]	41	66	82	Dec	56
Thoresby Lake	69 [37]	46 [37]	42 [37]	52 [37]			52
Llyn Alaw	2	45	95	92	18	Dec	50
Edderthorpe Flash				17	78	Sep	48
Fairburn Ings	115	5 [37]	49	(30)	9	Jun	45
Blackwater Estuary	69	71	39	25 [37]	15	Sep	44
Bolton-on-Swale Gravel Pits	118 [37]	55 [37]	37	6	2	Sep	44
Knight and Bessborough Reservoirs	23	46	45	58	46	Feb	44
London Wetland Centre	43	59	49 [37]	(46)	20	Nov	43
Newsham Park	42 [37]						42
Llynnau Y Fali	57	70	39	16	11	Oct	39
Hornsea Mere	11	98	11	(18)	31	Nov	38
Hurworth Burn Reservoir		9	130	3 [37]	0		36
Swithland Reservoir	61	62	38	18	3	Oct	36
Hampton and Kempton Reservoirs	39	14	76	33	8	Feb	34
Pugneys Country Park Lakes	63	27	50 [37]	25	4	Jan	34
Old Moor	28	24	71	20	24	Jun	33
Skelton Lake	32	14	54	29	29	Feb	32
Attenborough Gravel Pits	4	22	43	40	44	Jan	31
Sites with mean peak counts of 30 or more birds in Northern Ireland†							
Loughs Neagh and Beg	56	33	36	42	22	Oct	38
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain†							
Durkar Sand Quarry	0	9	31	14	36	Aug	18
Lapwing Hall Pool				3	30	Feb	17

† *as no British or All-Ireland thresholds have been set a qualifying level of 30 has been chosen to select sites for presentation in this report*

Lake Duck

Oxyura vittata

Escape
Native Range: S America

GB max: **1 May**
NI max: **0**

A single Lake Duck was seen at Netherfield Gravel Pits; now a regular site for this species.

Red-throated Diver

Gavia stellata

International threshold: 3,000
Great Britain threshold: 170
All-Ireland threshold: 20*

GB max: **667 Feb**
NI max: **107 Nov**

**50 is normally used as a minimum threshold*

The Red-throated Diver is a scarce, localised breeder in northern Scotland. A national survey in 2006 estimated a population of 1,255 breeding pairs; 33% on Shetland and 26% on the Outer Hebrides – a 34% increase on the previous survey in 1984 (Dillon *et al*. 2009). The species is widespread at coastal sites in the winter throughout the UK when numbers are boosted by arrivals from further north in Europe; an estimated 17,000 are present in British waters (O'Brien *et al*. 2008).

The numbers and distribution of Red-throated Divers recorded during WeBS Core

counts in 2007/08 were remarkably similar to those of the previous year. They were noted at 156 sites in Britain and a further seven in Northern Ireland. Following the increase in the 1% threshold for national importance from 49 to 170 birds, no regularly counted WeBS sites currently qualify. No counts of Aberdeen Bay were undertaken by JNCC this year, and just three sites registered counts that reached three-figures; Inner Firth of Clyde, Glyne Gap and Minsmere. Numbers at two other important Scottish sites, Moray Firth and Forth Estuary, remained low and were both some two-thirds below numbers recorded just three years previously. The Northern Ireland peak count of 67 at Belfast Lough represented the highest ever there.

It should be stressed that this is not a species which is well-monitored by WeBS, the majority of individuals occurring well offshore and only seen in large numbers from the shore on rare occasions (exemplified by the count from South Holderness Coast in 2003/04).

	03/04	04/05	05/06	06/07	07/08	Mon	Mean	
Sites of national importance in Great Britain								
S.Holderness coast: Mappleton to Easington	2,575 [13]						2,575	▲
Aberdeen Bay offshore	225 [27]	423 [51]	352 [51]	175 [51]			294	
Sites with mean peak counts of 50 or more birds in Great Britain†								
Inner Firth of Clyde	126	34	202	182	199	Feb	149	
Moray Firth	166	117	81	46	53	Feb	93	
Don Mouth to Ythan Mouth	49	61	163	(77)	70	Aug	86	
Glyne Gap	35	6	103	126	(109)	Feb	76	
Forth Estuary	61	132	87	53	48	Apr	76	
Loch Ryan	89	81	49	83	43	Feb	69	
North Norfolk Coast	11	30	18	226	27	Oct	62	
Minsmere	57	3	2	56	143 [13]	Jan	52	▲
Sites of all-Ireland importance in Northern Ireland								
Lough Foyle	(147)	21	(98)	13	53	Nov	66	
Belfast Lough	13	16 [13]	30	22	67	Dec	30	
Outer Ards Shoreline	6	14	8	64	22	Jan	23	▲
Sites no longer meeting table qualifying levels in WeBS-Year 2007/2008								
Dengie Flats	50	15	(2)	(10)	34	Feb	33	
Thames Estuary	(23)	32	66	32	10	Nov	35	
Lavan Sands	59 [13]	22	8	43	7	Oct	28	

† *as few sites exceed the British threshold, a qualifying level of 50 has been chosen to select sites for presentation in this report*

Black-throated Diver

Gavia arctica

International threshold: 3,750
Great Britain threshold: 7*
All-Ireland threshold: ?†

GB max: 109 Feb
NI max: 3 Mar

**50 is normally used as a minimum threshold*

The monthly maximum of Black-throated Divers again occurred in February, largely due to counts undertaken by the RAF Ornithological Society during their annual expedition to northwest Scotland. In total, the species was recorded at 59 sites across the UK, with eleven sites qualifying as being of national importance as a result of reaching the Great Britain threshold of seven birds (although for many statutory purposes, 50 is used as a minimum threshold; no sites support mean numbers in excess of this figure). All bar one of these sites are in Scotland, where peak counts were 16 at Little Loch Broom, 14 at Loch Gairloch and 13 at Applecross Bay.

In England, a relatively low maximum count was reported for the premier site of Gerrans Bay in Cornwall – but counts were received only for November and December, and traditionally peak numbers occur there during the late winter period. For the second successive year, nine were noted off Glyne Gap in February, representing a noteworthy aggregation for southeast England. Records away from the open sea included singles at Draycote Water in August and September, Abberton Reservoir

in December and January, and two Lade Pit, Dungeness in December.

Just two individuals were noted in Wales and four in Northern Ireland. Three of the latter were at Outer Ards Shoreline in March, the most there since November 2000.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of national importance in Great Britain							
Gerrans Bay	37	47	70	60	17	Dec	46
Sound of Barra	31 [44]		35 [44]				33
Loch Slapin	21 [40]	26 [40]		28 [12]	13 [12]	Mar	22
Moray Firth	48	6	(19)	9	(4)	Jan	21
Broad Bay (Lewis)	21 [44]						21
Loch Gairloch		28	6	14	(14)	Feb	16
Loch Ewe		0	3	40	(11)	Feb	14
Little Loch Broom		3	(10)	13	(16)	Feb	11
Applecross Bay		5	14	2	13	Feb	9
Girvan to Turnberry	19	(9)	5	1	7	Jan	8
Red Point to Port Henderson		0	13 [13]	8	(1)	Feb	7
Sites with mean peak counts of one or more birds in Northern Ireland†							
Belfast Lough	4 [11]	2 [13]	1	1 [11]	1	Feb	2
Outer Ards Shoreline	(0)	1	2	(0)	3	Mar	2
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain							
Glyne Gap	(0)	0	8	(9)	(9)	Feb	5
Gruinard Bay		1 [13]	9	6	8	Feb	6

† *as no All-Ireland thresholds has been set, a qualifying level of 2 has been chosen to select sites for presentation in this report*

Pacific Diver

Gavia pacifica

Vagrant
Native Range: N America

GB max: **1** **Jan**
NI max: **0**

A Pacific Diver (the Nearctic equivalent of Black-throated Diver) was recorded during the January Core count at Llys-y-Fran Reservoir in Wales. This individual was a returnee, first seen at the site the previous year (per www.birdguides.com). This bird, along with others in North Yorkshire and Cornwall in early 2007, were the first records in the UK.

Great Northern Diver

Gavia immer

International threshold: **50**
Great Britain threshold: **30*†**
All-Ireland threshold: **?†**

GB max: **445** **Feb**
NI max: **32** **Mar**

**50 is normally used as a minimum threshold*

Following WeBS year 2007/08, ten sites qualified as being internationally important for Great Northern Divers, largely based on supplementary data greater than two years old. The best areas for this species, namely the coastal waters of west Scotland and the northern isles, are traditionally poorly covered by WeBS as they are remote and often necessitate special voluntary effort. By way of example, the RAF Ornithological Society has carried out several expeditions to northwest Scotland in recent winters, and has contributed a high proportion of the counts for this species from this important area. This work is typically carried out in February which explains the pronounced peak in monthly maxima for that month; indeed, only seven birds (six of them inland) were reported in England during the month of February.

In total, WeBS counters recorded Great Northern Divers at 134 sites throughout the UK including seven in Northern Ireland. The majority were recorded in Scotland, with records from 34 sites in England and nine in Wales. Small numbers were reported from sites around the entire British coast; the peak count in England being four at Gerrans

Bay in November. Typically, sporadic singles were seen inland, generally at frequently favoured sites. However 2007/08 was generally unproductive in that respect with, for example, none seen at Rutland Water and just single records from Draycote Water and Pitsford Reservoir; all traditional haunts.

Aerial surveys employing distance sampling

Area	Date	Counted	Estimate (confidence intervals)	Ref
Luce Bay	Mar	87	not available	Söhle *et al.* 2009b
Sound of Gigha	Feb	85	not available	Söhle *et al.* 2009b
Coll and Tiree	Mar	60	not available	Söhle *et al.* 2009b
East Shetland Mainland	Mar	49	not available	Söhle *et al.* 2009b
North Orkney	Mar	30	not available	Söhle *et al.* 2009b

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of international importance in the UK							
Sound of Barra	96 [44]	94 [44]					95
Outer Loch Indaal		20	108				64
South Uist West Coast	(48) [44]	(63) [44]					(63)
Traigh Luskentyre	70 [44]	22		58	(6)	Nov	50
Sites with mean peak counts of 10 or more birds in Great Britain†							
Gruinard Bay		26	40	37	68	Feb	43
Loch Slapin	44 [40]	59 [40]		39 [12]	24 [12]	Feb	42
Loch Ewe		19	33	53	58	Feb	41
Kirkabister to Wadbister Ness	50 [10]	(2) [10]	37 [10]		33 [10]	Feb	40
Traigh Luskentyre	70 [44]	22		58	6	Nov	39
Moray Firth	(109)	37	14	2	4	Feb	33
Scousburgh to Maywick			32 [10]				32
Sound of Harris	20 [44]	42 [44]					31
Luce Bay offshore			29 [27]				29
Pontllyfni to Aberdesach	28 [13]						28
Loch Na Keal					27 [13]	Feb	27
Loch Eriboll		0	3	36	66	Feb	26
Quendale to Virkie	24 [10]	22 [10]	27 [10]		27 [10]	Feb	25
Broadford Bay	(43)	24	(20)	15	19	Jan	24
Gualan and Balgarva	23 [44]						23
Rova Head to Wadbister Ness	30 [10]	4 [10]	17 [10]		36 [10]	Feb	22
West Mull offshore	16 [27]	27 [27]					22
Whiteness to Skelda Ness	27 [10]	30 [10]	11 [10]	14 [10]	23 [10]	Feb	21
Inner Loch Indaal	18						18
Uyea Sound	5	5	7	62	9	Oct	18
Lochs Beg and Scridain (East End)					17 [13]	Feb	17
Scalloway Islands	19 [10]	13 [10]	19 [10]		17 [10]	Feb	17
Island of Papa Westray	22	(1)	5				14
Red Point to Port Henderson		17	22 [13]	4	(13)	Feb	14
Gerrans Bay	15	14	16	15	7	Dec	13
Island of Egilsay	(0)	10	21	8			13
Little Loch Broom		8	(7)	16	(10)	Feb	12
Firth of Clyde and Loch Ryan offshore			11 [27]				11
Talmine					10	Feb	10
Sites with mean peak counts of 10 or more birds in Northern Ireland†							
Lough Foyle	24	5	60	17	29	Nov	27
Carlingford Lough	25	2	17	4	1 [13]	Nov	10

† *as few sites exceed the British threshold and no All-Ireland threshold has been set, a qualifying level of 10 has been chosen to select sites for presentation in this report*

White-billed Diver

Gavia adamsii

Scarce

Native Range: N America, N Europe, N Siberia

GB max: 1 Jan
NI max: 0

A White-billed Diver was at Uyea Sound on Shetland in January; the sixth WeBS record.

Little Grebe

Tachybaptus ruficollis

International threshold:	4,000
Great Britain threshold:	78
All-Ireland threshold:	25

GB max:	5,311	Oct
NI max:	617	Dec

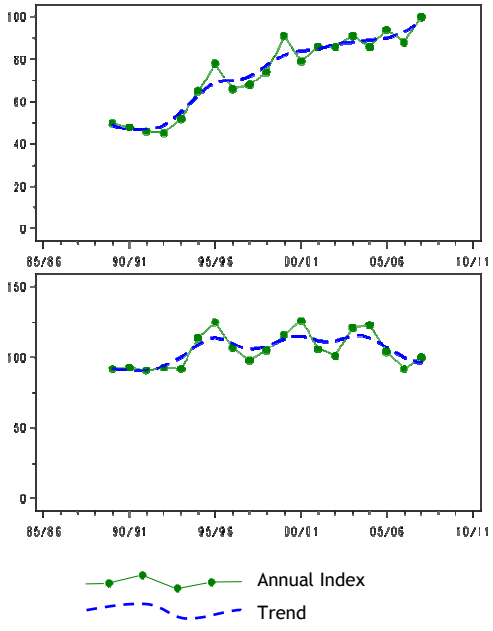


Figure 34.a, Annual indices & trend for Little Grebe for GB (above) & NI (below).

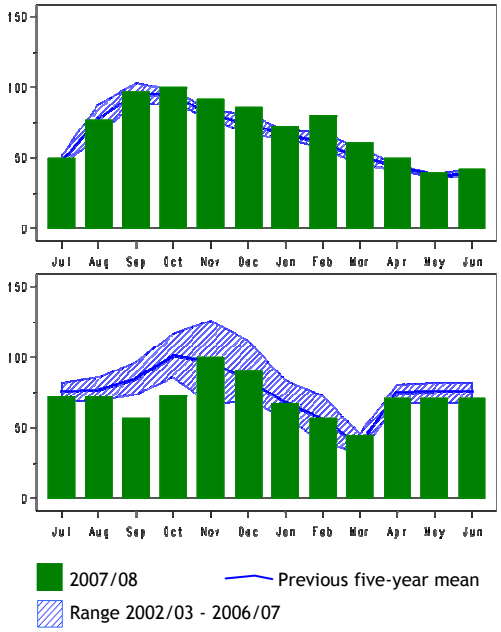


Figure 34.b, Monthly indices for Little Grebe for GB (above) & NI (below).

Little Grebes are widely dispersed on small water bodies, canals and riverine habitats throughout much of the UK. Consequently WeBS monitors a relatively small proportion of the population and care should be taken when interpreting national trends based on WeBS data alone.

Annual monitoring would therefore benefit from improved coverage of smaller, dispersed wetland habitats within the wider countryside. Even at larger established sites, the detectability of this species can vary depending on weather conditions, feeding behaviour and disturbance from other species.

The increasing trend noted during the course of the last twenty years continues; the British counted maximum was again high and the national index reached an all-time peak. This is despite the fact that maxima from several important sites including Dungeness & Rye Bay, Chichester Harbour, Alde Complex, Holme Pierrepont Gravel Pits and Deben Estuary, all decreased by at least 25% compared to just two years ago.

In contrast, Humber Estuary and Rutland Water have now both attained nationally important status following strong performances in November. Cameron Reservoir now also qualifies as a site of national importance; the first site in Scotland to do so for this species since the setting of the most recent thresholds.

In Northern Ireland, a count of 396 at Loughs Neagh & Beg was the largest of the year anywhere in the UK, and represented a 42% increase at the site compared to the previous year.

Elsewhere in the province, numbers were similar to recent years with the notable exception of Upper Lough Erne where the peak count was the lowest since 1992/93.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean	
Sites of national importance in Great Britain								
Thames Estuary	(198)	444	377	499	(286)	Sep	440	
Dungeness and Rye Bay	131	113	125	97	90	Oct	111	
Chichester Harbour	125	135	95 [11]	66	63	Jan	97	
Chew Valley Lake	110	110	95	80	80	Sep	95	
Hamford Water	(92)	89	114	87	84	Jan	94	
Lee Valley Gravel Pits	83	102	77	126	82	Sep	94	
Alde Complex	(47)	109	112	76	75	Dec	93	
Humber Estuary	(58)	60	64	94	(150)	Nov	92	▲
Holme Pierrepont Gravel Pits	55	120	114	105	56	Oct	90	
Rutland Water	87	70	96	67	93	Nov	83	▲
Cameron Reservoir	47	47	60	133	122	Sep	82	▲
Sites of all-Ireland importance in Northern Ireland								
Loughs Neagh and Beg	433	466	330	278	396	Nov	381	
Upper Lough Erne	131	104	78	106	53	Jan	94	
Strangford Lough	83	76	75	80	79	Jan	79	
Lower Lough Erne	57	53	54	78	50	Dec	58	
Larne Lough	65	77	52	20	27	Nov	48	
Lough Money	39	51	48	40	51	Oct	46	
Lough Foyle	31	31	32	28	28	Sep	30	
Upper Quoile River	28	35	33	20	15	Oct	27	
Sites no longer meeting table qualifying levels in WeBS-Year 2007/2008								
Tees Estuary	70	54	88	83	72	Sep	73	
Deben Estuary	76	74	90	82	50	Dec	74	
River Avon - Fordingbridge to Ringwood	83	(58)	(73)	77	43	Oct	69	
Hillsborough Main Lake	27	28	21	28	17	Jan	24	
Belfast Lough	30	28	23	12	13	Dec	21	
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain								
The Wash	53	48	70	88	113	Dec	74	
Carsington Water	43	45	89	73	96	Nov	69	
Severn Estuary	54	52	87	86	91	Sep	74	
Crouch-Roach Estuary	60	72 [11]	(33)	44	81	Feb	64	

Little Grebe (Jill Pakenham)

Great Crested Grebe

Podiceps cristatus

GB max:	7,938	Feb
NI max:	2,919	Dec

International threshold:	3,600
Great Britain threshold:	159
All-Ireland threshold:	55

**50 is normally used as a minimum threshold*

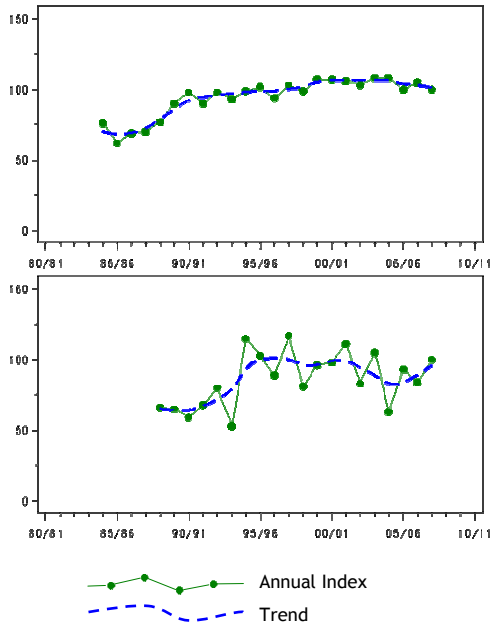


Figure 35.a, Annual indices & trend for Great Crested Grebe for GB (above) & NI (below).

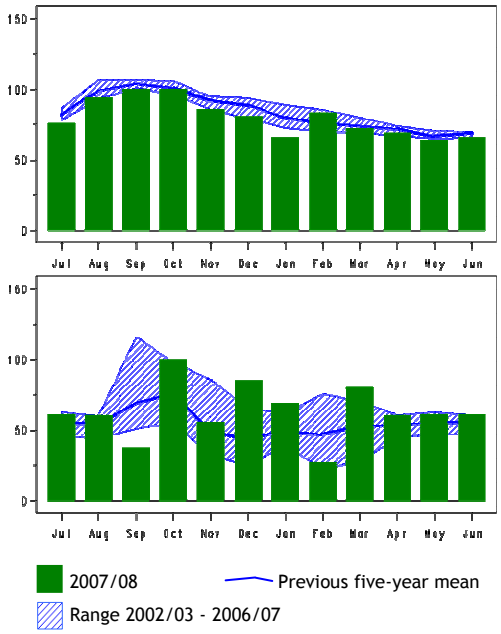


Figure 35.b, Monthly indices for Great Crested Grebe for GB (above) & NI (below).

The two most important wetland sites for Great Crested Grebe in the UK are both in Northern Ireland: Belfast Lough and Loughs Neagh & Beg. No sites have ever surpassed the current threshold for international importance of 3,600 birds; the count of 2,150 at Belfast Lough in December is the highest since an all-time record WeBS Core count of 2,403 there in November 1997. Similarly the October count from Loughs Neagh & Beg represents a welcome return to four-figure counts there, the first since September 2003.

The British counted maximum fell slightly compared to the last two years, and the trend appears to have stabilised following a prolonged period of very shallow increase in the national index.

In England, the Dungeness & Rye Bay area again supported high numbers during the winter, the majority of which were offshore. Whereas counts decreased again at Rutland Water, for the second year running numbers of Great Crested Grebes increased markedly at Chew Valley Lake where the monthly peak of 665 in September was twice the previous five-year average for the site. Disappointingly, counts were not submitted for the third of the most important inland sites, Grafham Water.

The propensity for large flocks of this species to winter off the English south and east coasts is illustrated by both the established importance of Dungeness & Rye Bay as well as the periodic exceptional counts on the Suffolk coast. The latter are presumably associated with the same foraging conditions that can attract large numbers of Red-throated Divers to the area.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean	
Sites of national importance in Great Britain								
Dungeness and Rye Bay	1,080 [13]	1,037	848	880 [13]	653	Jan	900	
Rutland Water	619	815	771	655	441	Oct	660	
Grafham Water	463	526	463				484	
Chew Valley Lake	330	330	275	430	665	Sep	406	
Minsmere	463	30	18	57	1,210 [13]	Jan	356	▲
Cotswold Water Park (West)	(245)	283	354	284	309	Oct	308	
Pitsford Reservoir	341	309	308	267	312	Aug	307	
Lavan Sands	176 [13]	(446)	57	329	260	Feb	254	
Queen Mary Reservoir	495	262	126	130	208	Mar	244	
Bewl Water	190	330	204	188	183	Jul	219	
Morecambe Bay	218	(91)	(138)	(62)	(80)	Jan	218	
Forth Estuary	295	313	123	95	139	Oct	193	
Blithfield Reservoir	202	151			(168)	Dec	177	▲
Lee Valley Gravel Pits	204	147	175	(124)	(136)	Sep	175	
Loch Ryan	210	299	193	77	80	Oct	172	
Solway Firth	88	(333)	233	100	84	Oct	168	
Loch Leven	204	127	150	198	141	Sep	164	
Sites of all-Ireland importance in Northern Ireland								
Belfast Lough	1,832	1,577	2,095	1,482	2,150	Dec	1,827	
Loughs Neagh and Beg	1,695	518	449	959	1,191	Oct	962	
Lough Foyle	1,030	50	169	116	116	Nov	296	
Carlingford Lough	184	232	246	116	93	Jan	174	
Upper Lough Erne	112	191	147	206	171	Feb	165	
Strangford Lough	140	(64)	(82)	(65)	(137)	Oct	140	
Larne Lough	115	50	56	84	105	Sep	82	
Lower Lough Erne	66	117	48	123	55	Feb	82	
Sites no longer meeting table qualifying levels in WeBS-Year 2007/2008								
Pegwell Bay	20	233	38	48	110	Feb	90	
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain								
Stour Estuary	106	92	157	124	232	Feb	142	
Draycote Water	151	98	122	57	222	Feb	130	
Southampton Water	68	42	58	(47)	(215)	Jan	96	
Glyne Gap	0	42	(116)	213	(206)	Feb	115	

Red-necked Grebe

Podiceps grisegena

International threshold: **510**
Great Britain threshold: **2*†**
All-Ireland threshold: **?**

GB max: **19 Feb**
NI max: **0**

**50 is normally used as a minimum threshold*

Red-necked Grebes were recorded at 21 sites, with records in all months apart from August and May. As was the case in 2006/07, numbers nationally were generally disappointing and it was one of the lowest annual totals ever to be recorded by WeBS. The five-year average for the Forth Estuary fell to just 18, albeit a figure still considerably higher than that for any other sites in the UK.

All other records in 2007/08 referred to one or two birds, with the exception of three at Glyne Gap in February. Counts of two at Carmarthen Bay and Jersey Shore in November and December respectively represented the first WeBS records of Red-necked Grebe for those sites; hinting at the likelihood of small numbers almost certainly wintering around the entire UK coastline.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean	
Sites of national importance in Great Britain								
Forth Estuary	16	24	32	4	12	Feb	18	
North Norfolk Coast	2	1	6	4	2	Dec	3	
Gerrans Bay	1	1	4	1	2	Oct	2	
Lindisfarne	0	2	3 [11]	2	2	Jan	2	
Hunterston Sands					(2) [13]	Sep	(2)	▲
Moray Firth	1	2	2	1	(1)	Dec	2	▲

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites no longer meeting table qualifying levels in WeBS-Year 2007/2008							
Loch Ryan	3	0	2	1	0		1
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain							
Glyne Gap	0	0	(1)	(2)	(3)	Feb	1
Carmarthen Bay	(0)	0	0	0	2	Nov	1
Jersey Shore				0	2	Dec	1
Par Sands Pools and St Andrews Road	0	0	2	0	2	Dec	1

Slavonian Grebe

Podiceps auritus

GB max:	**208**	**Oct**
NI max:	**12**	**Nov**

International threshold:	**55**
Great Britain threshold:	**7***
All-Ireland threshold:	**?†**

**50 is normally used as a minimum threshold*

2007/08 was an unremarkable year for counts of Slavonian Grebes. Records were received from a respectable 91 sites around Britain and a further three in Northern Ireland.

Numbers at the Forth Estuary were again low compared to the longer-term average for the site, and the Moray Firth dropped below the qualifying level for recognition as a site of international importance for the first time. Away from the coast, notable records from sites in England included two at Anglers Country Park Lake in October, two at Bassenthwaite Lake in November and three at Abberton Reservoir in April.

In Northern Ireland, Slavonian Grebes were noted at three sites, including the most traditional location in the country; Lough Foyle, where a peak of 11 in November was more than the previous year but still low compared to the longer-term site average.

Slavonian Grebe (Tommy Holden)

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of international importance in the UK							
Forth Estuary	110	73	55	25 [13]	18	Apr	56
Whiteness to Skelda Ness	55 [10]	59 [10]	52 [10]				55
Sites of national importance in Great Britain							
Moray Firth	62	55	42	50	41	Feb	50
Inner Firth of Clyde	(20)	16	35	41	73 [13]	Mar	41
Loch of Harray	23	49	24	16	52	Oct	33
Loch Ryan	32	42	23	39	19	Oct	31
Inner Loch Indaal	30						30
Loch Na Keal	18 [12]				40 [13]	Feb	29
Sound of Gigha		20 [12]	30 [12]				25
Traigh Luskentyre	44 [44]	31		11	4	Oct	23
Lindisfarne	(2)	30 [11]	22 [11]	18	4	Feb	19
Kirkabister to Wadbister Ness	17 [10]	(16) [10]	20 [10]				19
Blackwater Estuary	41	11	2 [11]	(2)	4	Dec	15
Rova Head to Wadbister Ness	6 [10]	18 [10]	22 [10]				15
Loch of Swannay	11	19	10	15	14	Dec	14
Pagham Harbour	28	8	8	3	13	Feb	12
Broadford Bay	6	10	(7)	13	17	Jan	12
Gualan and Balgarva		11 [44]					11
Loch Ewe		0	13	18	(7)	Feb	10
Hornish	10 [44]						10
Gerrans Bay	4	5	26	5	4	Oct	9
South Yell Sound	9 [10]						9
Sullom Voe	6 [10]	13 [10]	7 [10]				9

	03/04	04/05	05/06	06/07	07/08	Mon	Mean	
Sound of Harris	5 [44]	10 [44]					8	
Jersey Shore				4	10	Jan	7	▲
Goring	(0)	(7)					(7)	
Lavan Sands	6	14 [13]	2	6	5	Feb	7	
Upper Loch Torridon		0	17	0	9	Feb	7	▲
Sites with mean peak counts of 4 or more birds in Northern Ireland†								
Lough Foyle	61	10	42	4	11	Nov	26	
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain								
Loch Eriboll		0	0	4	21	Feb	6	
Loch Watten	1	3	2	10	12	Oct	6	
Loch of Stenness	2	1	2	11	12	Nov	6	
Seahouses to Budle Point	2	3	(0)	1	11	Oct	4	
Water Sound	0	3	1	2	9	Jan	3	
Glyne Gap	0	0	4	(8)	(7)	Feb	4	
Loch of Boardhouse	5	3	3	3	7	Nov	4	

Black-necked Grebe

Podiceps nigricollis

International threshold: **2,200**
Great Britain threshold: **1*†**
All-Ireland threshold: **?†**

GB max: **53** **Apr**
NI max: **0**

**50 is normally used as a minimum threshold*

In 2007/08, Black-necked Grebes were recorded at 40 sites in England, four in Wales and three in Scotland. Two of the locations featured in the key sites table have been kept confidential following the advice of the Rare Breeding Birds Panel and/or local counters.

Black-necked Grebe (Ron Marshall)

William Girling Reservoir now qualifies as the most important site for this species in the UK; a count of 32 in February being the largest ever there. Conversely, following a peak of 56 birds at the Fal Complex as recently as 2005/06, none were reported there for the first time since 1999/2000.

Away from the major sites, winter counts of four to five birds were received from Abberton Reservoir in October, Kingsbridge Estuary in November, Gerrans Bay in December, and Stour Estuary in February.

In England, Black-necked Grebe has the potential to appear at virtually any site, whereas in the rest of Britain it is much scarcer; there have only ever been two WeBS records from Northern Ireland.

It is a relatively unusual diving species in that both freshwater and saline habitats have in the past tended to support equally important numbers of wintering individuals in Britain. It remains to be seen whether the changes recorded in 2007/08 relate to a genuine shift to inland wetland habitats.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites with mean peak counts of 5 or more birds in Great Britain†							
William Girling Reservoir	21	27	21	26	32	Feb	25
Woolston Eyes	23	35	13	(35)	17	Apr	25
Fal Complex	7	19	56	4	0		17
Langstone Harbour	11	16 [11]	20	24 [13]	5	Feb	15
Confidential Hertfordshire Site	17	12	10	9	12	Mar	12
Confidential Northumberland Site	10	11	16	10	8	Apr	11
Teignmouth to Berry Head	4	18					11
Lower Derwent Ings	1	47	0	2	0		10
Staines Reservoirs	1	6	11	9	9	Mar	7

† *as the British threshold is so low and no All-Ireland threshold has been set, a qualifying level of five has been chosen to select sites for presentation in this report*

Cormorant

Phalacrocorax carbo

International threshold: 1,200
Great Britain threshold: 230
All-Ireland threshold: 140

GB max: 15,805 Oct
NI max: 2,062 Nov

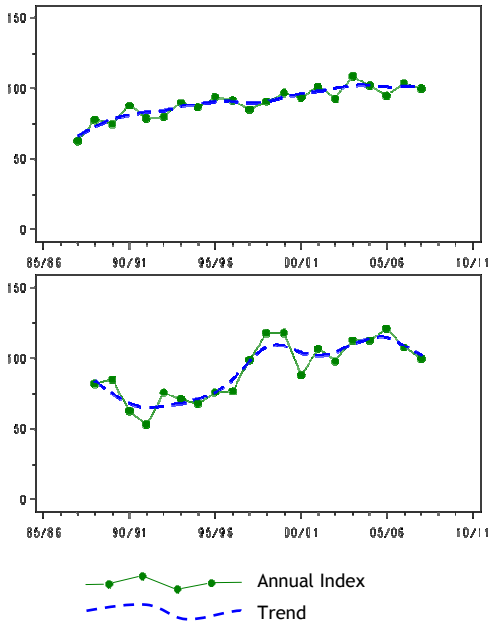


Figure 36.a, Annual indices & trend for Cormorant for GB (above) & NI (below).

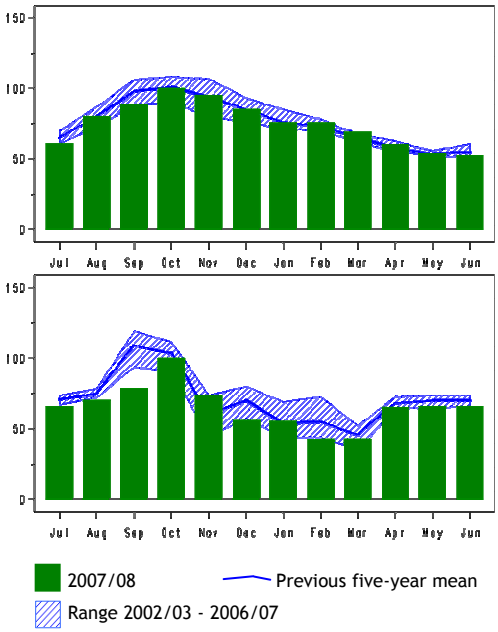


Figure 36.b, Monthly indices for Cormorant for GB (above) & NI (below).

Cormorants have increased steadily in Britain and Northern Ireland over the past twenty years. This has been in part due to the expansion of the more typically freshwater race *sinensis* from the continent, both as a breeder and non-breeder, which have supplemented the UK population of the native *carbo* race.

The most recent years however have indicated an apparent levelling off in Cormorant numbers in Britain and a slight decline in Northern Ireland, perhaps in response to increased culling effort nationally.

Forty sites qualified as being of national importance for Cormorants in 2007/08. One of the largest of these is the Dee Estuary where the peak monthly count exceeded 1,000 for the second year in succession.

Conversely, in Northern Ireland, numbers at the UK's only site of international importance, Loughs Neagh & Beg, declined by 16% compared to the previous year, dropping to the level of five years ago having reached an all-time peak in 2006/07.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of international importance in the UK							
Loughs Neagh and Beg	1,468	1,591	1,490	1,665	1,396	Oct	1,522
Sites of national importance in Great Britain							
Alt Estuary	739	984	1,079	1,168	937	Jan	981
Dee Estuary (England and Wales)	718	780	623	1,003	1,133	Nov	851
Dungeness and Rye Bay	513	1,111	929	717	684	Aug	791
Morecambe Bay	(539)	681	655	(641)	(907)	Sep	748
Rutland Water	788	697	825	918	396	Oct	725
Forth Estuary	(631)	669	713	653	477	Sep	629
Inner Firth of Clyde	425	452	(740) [12]	875 [12]	389	Sep	576
Thames Estuary	596	654	526	434	(211)	Sep	553

	03/04	04/05	05/06	06/07	07/08	Mon	Mean	
Solway Estuary	(594)	(454)	(357)	530	497	Oct	540	
Tees Estuary	773	471	511	329	378	Sep	492	
Wraysbury Reservoir	899	83					491	
Walthamstow Reservoirs	505	453	306	640	433	Jul	467	
The Wash	449	538	371	467	453	Dec	456	
Abberton Reservoir	480	450	324	342	639	Nov	447	
Ribble Estuary	(456)	543	293	316	504	Feb	422	
Poole Harbour	(412)	431	408	374	254	Sep	376	
Wraysbury Gravel Pits	607	119	306	533	311	Dec	375	
Grafham Water	193	344	531				356	
Staines Reservoirs	773	21	436	49	432	Aug	342	
Besthorpe and Girton Gravel Pits and Fleet	372	336	363	274	(253)	Feb	336	
Hanningfield Reservoir	411	109	318	500	215	Mar	311	
Ouse Washes	252 [12]	294	254 [13]	454 [13]	294	Mar	310	
Medway Estuary	305	(68)	(93)	(30)	(60)	Oct	305	
Queen Mother Reservoir	850	25	252	120	230	Feb	295	
Blackwater Estuary	473	191	224	(46)	279	Oct	292	
Ayr to North Troon	(110)	292	(97)	(51)			292	
Queen Elizabeth II Reservoir	340	295	360	295	160	Nov	290	
Rostherne Mere	306	256	273	273	328	Jan	287	
King George VI Reservoir	8	104	93	872	309	Aug	277	▲
North Norfolk Coast	276	242	272	265	300 [12]	Jul	271	
Alde Complex	(106)	549	99	206	226	Feb	270	
Ranworth and Cockshoot Broads	324 [12]	257 [12]	310 [12]	348 [12]	95	Oct	267	
Drakelow Gravel Pit	253 [12]	230 [12]	303	212 [13]	310	Jun	262	
Queen Mary Reservoir	768	44	85	88	295	Mar	256	
Middle Tame Valley Gravel Pits	(168)	(256)	(93)	(48)	(32)	Aug	(256)	
Fairburn Ings	187		265	241	313	May	252	▲
Pagham Harbour	303	225	308	258	162	Sep	251	
Tay Estuary	236	(243)	198	310	211	Oct	240	
Durham Coast	(2)	(52)	236	(63)	(8)	Oct	236	
Sites of all-Ireland importance in Northern Ireland								
Strangford Lough	400	405	455	422	286	Oct	394	
Outer Ards Shoreline	563	350	455	397	177	Jan	388	
Belfast Lough	348	350 [13]	378	350	312	Dec	348	
Carlingford Lough	154	221	238	230	142	Aug	197	
Sites no longer meeting table qualifying levels in WeBS-Year 2007/2008								
Lough Foyle	(210)	87	(47)	(93)	78	Nov	117	
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain								
South Yell Sound	201 [10]	108 [10]	136 [10]		464 [10]	Nov	227	
Colne Estuary	423	297	81	47	248 [11]	Feb	220	

Shag

Phalacrocorax aristotelis

International threshold: **2,000**
Great Britain threshold: **?†**
All-Ireland threshold: **?†**

GB max: **3,262** **Oct**
NI max: **661** **Nov**

WeBS only monitors a small proportion of Shags occurring around the British coast, hence caution is needed when inferring changes to populations based on WeBS data.

The species was recorded at 217 sites in Britain and eight in Northern Ireland. Typically the majority of records and largest aggregations were seen around the coastline of Scotland, with a peak WeBS Core Count during the year of 800 at Widewall Bay in October, the most ever counted there. Once again the table for this species was largely populated with counts carried out by SOTEAG (Shetland Oil Terminal Environmental Advisory Group).

South of the border, above average numbers were noted in south-west England, exemplified by notable counts from Gerrans Bay and Kingsbridge Estuary in November.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites with mean peak counts of 100 or more birds in Great Britain†							
Forth Estuary	(1,664)	(760)	420	719	(384)	Oct	891
South Yell Sound	893 [10]	558 [10]	790 [10]		1,065 [10]	Nov	827
Moray Firth	413 [1]	995 [1]	308 [1]				572
Hacosay, Bluemull & Colgrave Sounds	709 [10]	232 [10]	625 [10]				522
North Bressay		728 [10]	128 [10]				428
Widewall Bay	580	140	150	390	800	Oct	412
Kirkabister to Wadbister Ness	778 [10]	(97) [10]	198 [10]		183 [10]	Feb	386
Burra and Trondra	476 [10]	441 [10]	287 [10]		332 [10]	Feb	384
Scalloway Islands	424 [10]	255 [10]	448 [10]		221 [10]	Feb	337
Scousburgh to Maywick			245 [10]				245
Inner Firth of Clyde	(159)	190	(115)	197	297	Feb	228
Quendale to Virkie	176 [10]	97 [10]	503 [10]		102 [10]	Feb	220
Rova Head to Wadbister Ness	132 [10]	126 [10]	299 [10]		253 [10]	Feb	203
Moray Coast (Consolidated)	180	251	33	193	347	Oct	201
Gulberwick Area			189 [10]				189
Arran	(151)	131	304	123	(104)	Sep	186
Inner Moray and Inverness Firth	108 [1]	663 [1]	31	22	45	Oct	174
South Unst	206 [10]	63 [10]	246 [10]				172
Easter Ross Coast	214 [1]	122 [1]					168
Loch Ewe		197	115	261	98	Feb	168
Bressay Sound	100 [10]	272 [10]	97 [10]				156
Red Point to Port Henderson		92	246	105	(68)	Feb	148
Island of Papa Westray	210	50	150				137
Broadford Bay	(100)	150	152	150	88	Jan	135
Sullom Voe	104 [10]	133 [10]	68 [10]		219 [10]	Nov	131
Loch Ryan	79	144	127	179	110	Oct	128
Whiteness to Skelda Ness	169 [10]	138 [10]	115 [10]	73 [10]	127 [10]	Feb	124
Gerrans Bay	18	25	101	86	328	Oct	112
Winterfield to Catcraig				120	98	Sep	109
Sites with mean peak counts of 100 or more birds in Northern Ireland†							
Outer Ards Shoreline	187	280	236	284	317	Nov	261
Strangford Lough	226	218	295	291	164 [11]	Dec	239
Belfast Lough	194 [11]	133 [13]	49	191 [11]	107	Nov	135
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain†							
Vasa Loch Shapinsay	13	1	1	16	130	Oct	32

† *as no British or All-Ireland thresholds have been set a qualifying level of 105 has been chosen to select sites for presentation in this report*

Bittern

Botaurus stellaris

International threshold: 65
Great Britain threshold: ?
All-Ireland threshold: ?

GB max: 26 Jan
NI max: 0

During 2007/08, Bitterns were recorded at 39 WeBS sites across England and a further two in Wales, while none were noted in Scotland or Northern Ireland.

Birds were recorded in all months of the year with a peak of 26 in January. Several sites hosted two to three birds, while four were present at Titchfield Haven in December and Stodmarsh NNR in January.

Night Heron

Nycticorax nycticorax

Vagrant and Escape
Native Range: Worldwide

GB max: 1 Aug
NI max: 0

Three Night Herons were recorded in 2007/08. Singles were seen at Longis Bay on Jersey in July and December, and at Alexandra Park, Hastings in August.

Cattle Egret

Bubulcus ibis

Vagrant and Escape
Native Range: Worldwide

GB max:	**9**	**Mar**
NI max:	**0**	

An influx of Cattle Egrets into southern Britain during the latter part of 2007 resulted in 2007/08 being a record WeBS year for the species.

The species was seen at twelve sites, all for the first time ever during Core counts. Four at Siblyback Reservoir in December was the biggest group of the year, and represented the vanguard ahead of further winter records from Severn Estuary and Ouse Valley in January, and Tamar Complex in February. The Avon Valley held up to three birds from January to April, and two remained at Chichester Gravel Pits from January to March. During spring, two were at Avon Estuary from March to May, three at Exe Estuary in March, singles at Fleet & Wey and Otter Estuary in April, and finally two at Kingsbridge Estuary in May. Following this influx breeding occurred in south-west England; the signs are there that this species will become an increasingly regular visitor to WeBS sites, particularly in the south, during the years ahead.

Little Egret

Egretta garzetta

International threshold:	**1,300**
Great Britain threshold:	**?†**
All-Ireland threshold:	**?†**

GB max:	**3,917**	**Sep**
NI max:	**34**	**Sep**

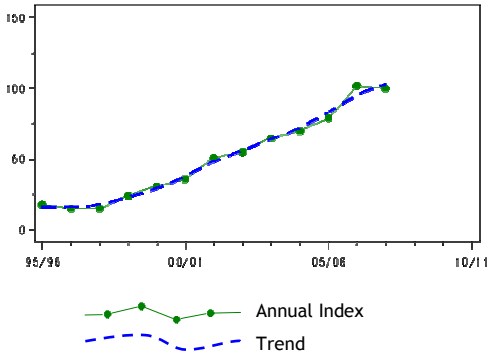


Figure 37.a, Annual indices & trend for Little Egret for GB.

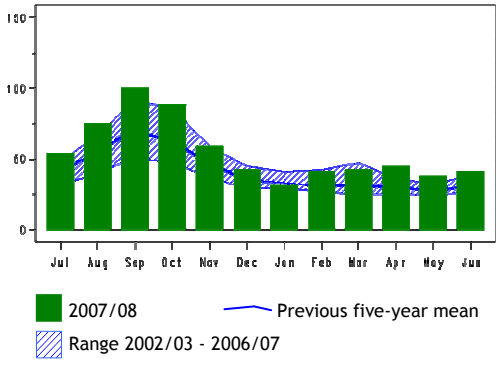


Figure 37.b, Monthly indices for Little Egret for GB.

The familiar increase in the number of Little Egrets in Britain shows no sign of abating, and the monthly maximum rose to record levels. There are some indications that the rate of increase may be slowing; 2007/08 saw no rise in the national index compared to the previous year, and a large proportion of the principal sites recorded their peaks during the period of August to October. Greater numbers during late summer and the autumn were presumably a result of the expanding breeding population which continues to go from strength to strength, but it should be remembered that counts at that time of year are more likely to be affected by a greater variation in coverage.

The gradual expansion away from the English south coast continues, exemplified by all-time peaks noted at sites both in the west (e.g. Severn Estuary, Carmarthen Bay and Dyfi Estuary), in the east (e.g. Blackwater Estuary and Humber Estuary), and the north (e.g. Ribble Estuary and Morecambe Bay). In total, the species was recorded at a record 285 WeBS sites, nineteen of which held monthly maxima in excess of 100 birds. Several sites reached

that particular WeBS milestone for the first time, including perhaps most notably Cleddau Estuary and Carmarthen Bay in Wales. Little Egrets occurred at a record eleven sites in Scotland during 2007/08, including four birds at Auchenreoch Loch in January. The Northern Ireland maximum again increased to an all-time high and included a peak count of 23 at Carlingford Lough in September.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites with mean peak counts of 50 or more birds in Great Britain†							
Medway Estuary	413 [11]	(76)	(62)	(32)	(71)	Oct	413
Thames Estuary	(262)	295	260	316	277	Sep	287
The Wash	72	92	139	323	(319)	Oct	260
Chichester Harbour	228	129	(206)	192	264	Sep	204
North Norfolk Coast	149 [11]	228 [11]	170 [11]	193	272 [11]	Nov	203
Blackwater Estuary	(66)	(159)	133	(58)	245	Sep	189
Poole Harbour	(179)	(116)	(112)	(84)	(79)	Nov	(179)
Jersey Shore				98	156	Dec	127
Tamar Complex	143	120	(129)	97	(126)	Oct	123
Exe Estuary	131	93	107	116	135	Aug	116
Swale Estuary	131	95	(100)	(72)	(100)	Oct	113
Burry Inlet	(141)	103	108	86	87	Aug	105
Lavan Sands	67	71	107	133	131	Aug	102
Dee Estuary (England & Wales)	32 [11]	59 [11]	112 [11]	132 [11]	163	Dec	100
Stour Estuary	57	87	102	143	102	Oct	98
Taw-Torridge Estuary	(74)	(56)	93	78	(121)	Sep	97
Hamford Water	53	81	72	135	95	Sep	87
Kingsbridge Estuary	(99)	86	85	89	67	Mar	85
Langstone Harbour	90	87	91	77	76	Sep	84
Crouch-Roach Estuary	43	73 [10]	(35)	102	100	Oct	80
Southampton Water	(51)	(39)	(44)	(80)	(24)	Oct	(80)
Severn Estuary	47	66	104	74	105	Sep	79
Cleddau Estuary	36	71	83	(68)	120	Sep	78
Fal Complex	(52)	89	60	82	79	Sep	78
Pagham Harbour	63	(60)	94	90	63	Sep	78
Camel Estuary	65	71	96	80	74	Jul	77
Portsmouth Harbour	(34)	51	45	96	111	Oct	76
Longueville Marsh	105	102	60	12			70
Somerset Levels	(12)	24	(35)	64	73	Mar	57
Grouville Marsh	2	2	50	165			55
North West Solent	42	(51)	56	53	56	Sep	54
Alde Complex	(23)	45	44	56	66	Nov	53
Carmarthen Bay	23	35	41	57	106	Sep	53
Fleet and Wey	25	46	56	59	67	Aug	51
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain†							
Colne Estuary	35	46	47	34	64 [11]	Nov	46
Dengie Flats	(27)	31	45	51	58	Nov	46
Teign Estuary	15	25	59	49	69	Oct	43
Deben Estuary	15	24	30	42	56	Sep	33

† *as no British or All-Ireland thresholds have been set a qualifying level of 50 has been chosen to select sites for presentation in this report*

Great White Egret

Ardea alba

Vagrant
Native Range: Worldwide

GB max: **4 Oct**
NI max: **1 Oct**

Single Great White Egrets were reported from 17 sites in 2007/08; the most ever in a WeBS year and further evidence of the species' slow but steady expansion. All were in England with the exception of birds at Loch Mor (Benbecula) in Scotland in November and at Loughs Neagh & Beg in Northern Ireland in October.

Grey Heron

Ardea cinerea

International threshold: 2,700
Great Britain threshold: ?†
All-Ireland threshold: 30*

GB max: 4,318 Oct
NI max: 472 Oct

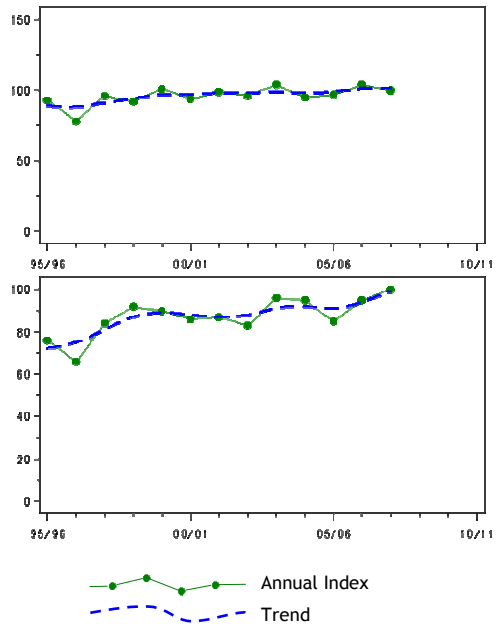


Figure 38.a, Annual indices & trend for Grey Heron for GB (above) & NI (below).

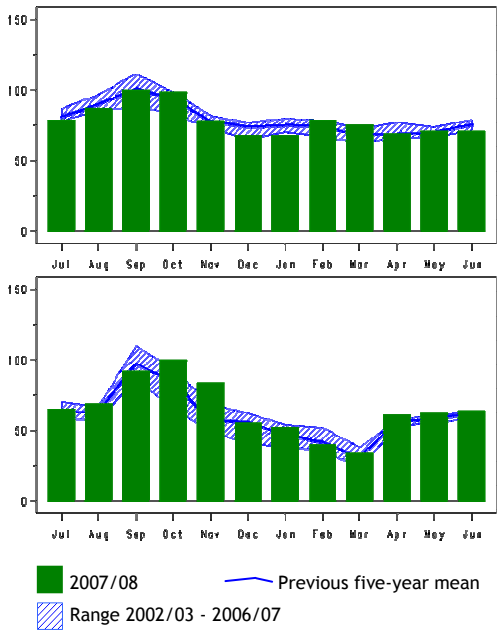


Figure 38.b, Monthly indices for Grey Heron for GB (above) & NI (below).

The national index for Grey Heron in Britain remained stable compared to recent years – a typical situation, this probably the species which has shown least in the way of fluctuations since WeBS trends were first produced. Typically for recent years the monthly peak occurred in October, when the resident British population tends to be supplemented by immigrants from other parts of Europe.

Six sites held monthly maxima in excess of 100 birds, two of which were in Northern Ireland where the national index rose to its highest ever level. These included Loughs Neagh & Beg where 173 in October represented the peak WeBS Core count of the year. This is only the third year that the peak has dropped below 200 at this site since 1996/1997. Historically, the largest counts from Loughs Neagh & Beg were when Core counts were carried out in August, presumably therefore including a large proportion of locally-bred juveniles. Such counts include the highest ever monthly total for a single site; 359 in 1998.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of all-Ireland importance in Northern Ireland							
Loughs Neagh and Beg	208	172	202	225	173	Oct	196
Strangford Lough	102	90	121 [11]	95 [11]	138 [11]	Oct	110
Lough Foyle	45	54	34	42	44	Sep	44
Carlingford Lough	23	30	41	51	62	Sep	41
Belfast Lough	29 [11]	36	36	(32)	43	Nov	36
Outer Ards Shoreline	22	52	16	35	24	Nov	30
Larne Lough	34	47	19	30	20	Nov	30
Sites with mean peak counts of 50 or more birds in Great Britain†							
Somerset Levels	(130)	151	119	143	135	Feb	137
Avon Valley - Salisbury to Fordingbridge	150	80	106	114	144	Mar	119
Coombe Country Park	159	105	120	107	70	Mar	112

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Forth Estuary	78 [11]	104	108	111	125	Oct	105
Thames Estuary	(94)	100	117	89	(91)	Aug	102
Besthorpe and Girton Gravel Pits and Fleet	(23)	(16)	(19)	(96)	(14)	Nov	(96)
Ouse Washes	78	163 [13]	36	55 [13]	143	Oct	95
Morecambe Bay	91	68	88	105	(38)	Aug	88
Inner Firth of Clyde	81	90	93	(100)	62	Oct	85
Humber Estuary	(39)	(37)	(29)	(33)	74	Oct	74
Dee Estuary (England and Wales)	87	67	(48)	66	73	Aug	73
Inner Moray and Inverness Firth	67	55	68	68	61	Oct	64
River Avon - Fordingbridge to Ringwood	28	56	73	83	82	Sep	64
Tees Estuary	64	56	62	83	56	Sep	64
Colne Valley Gravel Pits	76	56	62	36	78	Mar	62
Cromarty Firth	73	47	58	64	58	Oct	60
Severn Estuary	81	69	55	43	45	Sep	59
Wraysbury Gravel Pits	22	58	96	64	55	Feb	59
Walthamstow Reservoirs	64	60	16	75	76	Apr	58
Southampton Water	(57)	(23)	(30)	(40)	(17)	Jan	(57)
Solway Estuary	70	72	(28)	32	51	Oct	56
Taw-Torridge Estuary	77	30	29	72	(70)	Oct	56
The Wash	76	50	52	59	39	Oct	55
Tamar Complex	52	49	67	48	44	Dec	52
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain†							
Loch Leven	60	17	16	46	66	Aug	41
Dee Flood Meadows	8	(1)	21	3	57	Feb	22
North Norfolk Coast	38	33	37	38	56	Aug	40
Montrose Basin	54	(40)	32	55	54	Jul	49
Alde Complex	(27)	29	27	30	(51)	Oct	34
Tophill Low Reservoirs	4	3	8	4	51 [13]	Aug	14
Southill Lake	(52)	45	31	41	50	Mar	44
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Northern Ireland							
Dundrum Inner Bay	14	12	37	36	41	Oct	28

† *as no British or All-Ireland thresholds have been set a qualifying level of 50 has been chosen to select sites for presentation in this report*

Purple Heron

Ardea purpurea

Vagrant
Native Range: Europe, Africa, Asia

GB max: **2 Oct**
NI max: **0**

A juvenile Purple Heron was present at Nene Washes in October; the twelfth WeBS record and the first for both the site and month.

White Stork

Ciconia ciconia

Vagrant and escape
Native Range: Europe, Africa, Asia

GB max: **2 Nov**
NI max: **0**

Up to two White Storks recorded throughout the year at Harewood Lake in Yorkshire were of captive origin, and have been reported from there in previous years.

Glossy Ibis

Plegadis falcinellus

Vagrant
Native Range: Worldwide

GB max: **2 Oct**
NI max: **0**

Two Glossy Ibises were recorded in 2007/08. The individual first seen at Freckleton Marsh in June 2007 (Austin *et al*. 2008a) remained on the Ribble Estuary until June 2008 at least, and another was at Donna Nook on the Humber in July-August.

Sacred Ibis

Threskiornis aethiopicus

Escape
Native Range: Europe, Africa, Asia

GB max: **1** **Aug**
NI max: **0**

A Sacred Ibis present at Holkham and Burnham Overy Fresh Marshes on the North Norfolk Coast from between August and March is the first WeBS record of this species there.

Spoonbill

Platalea leucorodia

International threshold: **110**
Great Britain threshold: **?**
All-Ireland threshold: **?**

GB max: **26** **Jul**
NI max: **0**

Spoonbills were recorded in every month in 2007/08 with the exception of October. All were in England apart from two birds in Wales, at Severn Estuary in January and Malltraeth RSPB in March and May. Recorded from a total of 25 sites, most counts were of one or two birds, notable exceptions being 13 at Holkham Fresh Marsh on the North Norfolk Coast in July, 12 at Poole Harbour in September, seven on Taw-Torridge Estuary in January-February, and six at Tamar Estuary in November.

Water Rail

Rallus aquaticus

International threshold: **10,000**
Great Britain threshold: **?†**
All-Ireland threshold: **?†**

GB max: **589** **Nov**
NI max: **5** **Dec**

A British maximum of 589 Water Rails in November was higher than the total for recent years and included the peak count of the year – 62 at Somerset Levels, the site in the UK where consistently most are recorded annually. This total has only been surpassed on one previous occasion, from the same locality in 2004/05. At such sites with areas of reedbed and extensive networks of ditches, the species is inevitably under-recorded due to its secretive, often unobtrusive, behaviour. Other notable counts, both in November, included 40 at Heaton Park and 22 at Chew Valley Lake.

Typically, the monthly peak in Northern Ireland remained in single figures with the highest single counts being three; at Loughs Neagh & Beg in September and Upper Lough Erne in December.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites with mean peak counts of 10 or more birds in Great Britain†							
Somerset Levels	45	63	50	58	62	Nov	56
Grouville Marsh	20	20	30	(10)			23
Longueville Marsh	15	20	20	(10)			18
Middle Yare Marshes	18	(4)	(5)	(5)	(3)	Sep	18
Burry Inlet	18	16	(0)	(0)	(0)		17
Dee Estuary (England and Wales)	(5)	16	10	8	(24)	Mar	15
Kenfig Pool	27	17	12	14	7	Nov	15
Southampton Water	(7)	11	20	10	(20)	Dec	15
Severn Estuary	5	6	25	13	23	Nov	14
Stodmarsh NNR and Collards Lagoon	20	15	9	14	8	Dec	13
Thames Estuary	(8)	11	(10)	19	8	Aug	13
Chichester Harbour	6	13	14	15	10	Nov	12
London Wetland Centre	7	6	13	17	16	Mar	12
Poole Harbour	(10)	(12)	(6)	(6)	(4)	Nov	(12)

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
River Cam - Kingfishers Bridge	7	8	22	15	7	Apr	12
Dungeness and Rye Bay	19	12	8	10	7	Dec	11
North Norfolk Coast	10	7	15	7	16 [11]	Nov	11
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain[†]							
Heaton Park	0	0	0	0	40	Nov	8
Chew Valley Lake	0	3	5	5	22	Nov	7
Cotswold Water Park (West)	1	10	15 [12]	4	17 [13]	Dec	9
Llynnau Y Fali	4	12	4	4	15	Apr	8
Doxey Marshes SSSI	7	12	8	2	14	Oct	9
Upton Warren Local Nature Reserve	4	8	8	8	12	Aug	8
Tongue End Nature Reserve (Baston Fen)	4	1	1	2	11	Feb	4
Humber Estuary	(4)	(5)	(5)	3	(10)	Dec	5
Rutland Water	8	8	9	10	10	Jan	9

[†] *as no British or All-Ireland thresholds have been set a qualifying level of 10 has been chosen to select sites for presentation in this report*

Corncrake

Scarce

Crex crex

GB max: 1 Jul
NI max: 0

Only one Corncrake was noted during WeBS counts in 2007/08; on the Western Isles in July.

Moorhen

International threshold: 20,000**
Great Britain threshold: 7,500[†]
All-Ireland threshold: ?[†]

Gallinula chloropus

GB max: 14,459 Nov
NI max: 221 Nov

Moorhens have a widespread distribution throughout the UK and occur in a wide variety of wetland habitats; consequently they tend to be relatively poorly monitored by WeBS.

The counted British maximum for Moorhen was close to average when compared to the past five years. Severn Estuary and WWT Martin Mere both maintained their status as the sites with the highest counts in Britain, retaining five-year averages in excess of 450 birds. In general, counts at individual sites in 2007/08 were unexceptional and in keeping with site averages – exceptions included all-time peaks noted at Rutland Water, Cotswold Water Park (West), Medway Estuary and Carsington Water, and in particular Ouse Washes where counts during the winter were almost four times greater than the previous five-year average for the site.

The Northern Ireland maximum was below that of recent years, the highest count being 118 at Loughs Neagh & Beg in March.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites with mean peak counts of 100 or more birds in Great Britain[†]							
Severn Estuary	465	409	465	546	435	Sep	464
WWT Martin Mere	440	420	490	438	485	Sep	455
Somerset Levels	276	327	410	430	392	Oct	367
Thames Estuary	324	371	383	367	(234)	Mar	361
Lower Derwent Ings	444	321	366	296	268	Nov	339
Lee Valley Gravel Pits	340	301	292	(300)	296	Oct	307
Pitsford Reservoir	326	133	266	389	241	Nov	271
North Norfolk Coast	280	192	281	223	230	Dec	241
Ouse Washes	95	102 [13]	111	201	557 [13]	Dec	213
Rutland Water	191	192	188	157	219	Oct	189
Arun Valley	176	146	175	246	(195)	Oct	188

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
London Wetland Centre	137	135	239	218	203	Sep	186
Dungeness and Rye Bay	195	165	213	166	181	Dec	184
Old Moor	116	45	(80)	(171)	(366)	Nov	175
Chichester Gravel Pits	161	167	228	139	174	Jan	174
Humber Estuary	224	170	142	136	166	Jan	168
Grand Western Canal	103	132	137	178	134	Dec	137
Bewl Water	215	165	61	100	100	Sep	128
Avon Valley - Salisbury to Fordingbridge	143	112	178	(92)	68	Sep	125
Grantham Canal - Cotgrave to Gamston			97	122	151	Jan	123
Dee Estuary (England and Wales)	(121)	(86)	(97)	(78)	(105)	Nov	(121)
Fairburn Ings	154		134	116	81	Mar	121
Sutton and Lound Gravel Pits	112	94	108	158	128	Sep	120
Chew Valley Lake	245	125	80	90	55	Aug	119
Tring Reservoirs	115	135	110	138	93	Sep	118
Cotswold Water Park (West)	(89)	73	132	117	144	Oct	117
Tees Estuary	110	(103)	(102)	126	108	Dec	115
Micklemere					108 [13]	Aug	108
River Cam: Owlstone Rd to Baits Bite Lock	76	117	126	105	111	Jan	107
River Wye: Bakewell to Haddon	126	109	104	90			107
Orwell Estuary	164 [11]	109 [11]	90 [11]	55 [11]	(35)	Apr	105
Medway Estuary	(10)	19 [11]	84	131	180	Jan	104
Chichester Harbour	85	98	127	95	108	Mar	103
Southampton Water	125	83	114	81	(101)	Dec	101
Sites with mean peak counts of 30 or more birds in Northern Ireland†							
Loughs Neagh and Beg	177	124	143	98	118	Mar	132
Upper Lough Erne	32	46	60	75	40	Jan	51
Belfast Lough	27	65 [13]	54	43	42	Nov	46
Ballysaggart Lough	39						39
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain†							
Carsington Water	30	43	93	101	122	Oct	78
Welbeck Estate	(74)	52	86	126	108	Dec	93
Ribble Estuary	73	(88)	70	53	106	Dec	78
Langstone Harbour	73	45	104	83	104	Sep	82
Ditchford Gravel Pits	38	52	50	62	103	Sep	61

† *as no sites exceed the British threshold and no All-Ireland threshold has been set, qualifying levels of 100 and 30 have been chosen to select sites, in Great Britain and Northern Ireland respectivley, for presentation in this report*

Moorhen (John Harding)

Coot

Fulica atra

International threshold:	17,500
Great Britain threshold:	1730
All-Ireland threshold:	330

GB max:	106,046	Nov
NI max:	3,092	Dec

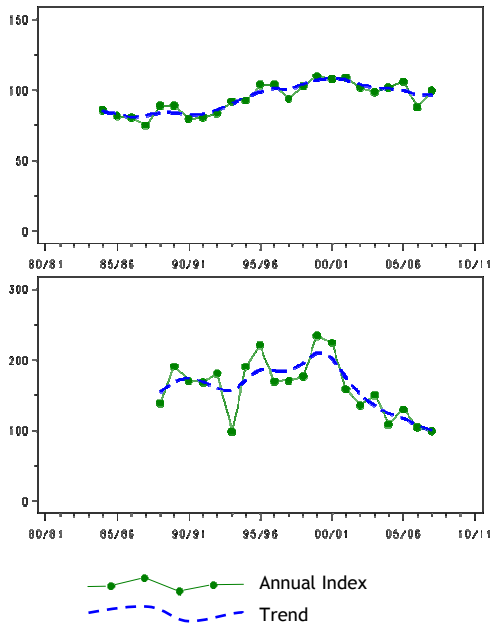


Figure 39.a, Annual indices & trend for Coot for GB (above) & NI (below).

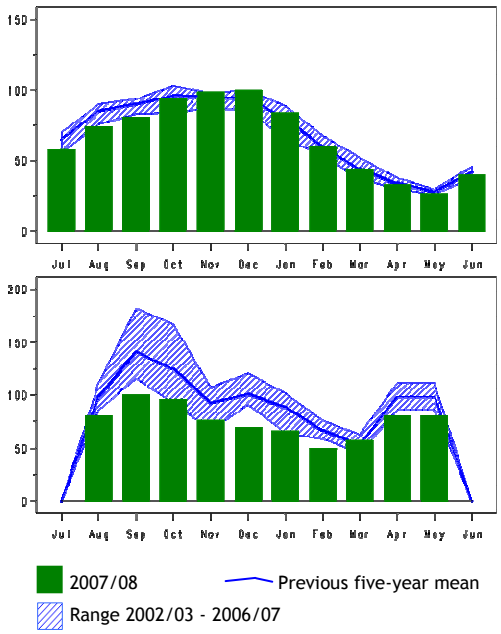


Figure 39.b, Monthly indices for Coot for GB (above) & NI (below).

The UK's resident population of Coots is augmented by birds from elsewhere in northwest Europe during the winter. The species is particularly sensitive to cold, icy weather which can lead to heavy mortality among wintering birds in Scandinavia (Nilsson 2008). Therefore, recent milder winters are likely to have somewhat reduced the magnitude of movements by such birds into Britain. Following the drop in the British index during the previous year, numbers in 2007/08 were back near levels similar to the five-year mean with notably high numbers nationally in November and December.

A return to full coverage of Abberton Reservoir yielded a peak count there of over 10,000 in November, thereby reaffirming the site's importance for the species. Fourteen other sites qualified as being of national importance in Great Britain, the majority of which recorded Coot numbers close to their respective five-year means. A notable exception was Ouse Washes where a peak of 6,229 in January represented the second highest WeBS Core count ever to be recorded away from Abberton Reservoir (just four birds less than the 2006/07 peak from Rutland Water). Such high numbers at Ouse Washes were presumably in response to favourable water levels at the site, and it will be interesting to see how numbers of this species vary in future winters.

In Northern Ireland, there appears to be no halt to decline of the species that began in 2000/01, although the rate of the fall may be slowing. In 2007/08, numbers at the two most important sites, Loughs Neagh & Beg and Upper Lough Erne, were both some 30% below the most recent five-year site averages. Indeed the monthly maximum from Loughs Neagh & Beg was the lowest ever for the site; over the course of ten years, the five-year site average has declined by 62%, from 6,659 in 1997/98 to 2,541 in 2007/08.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean	
Sites of national importance in Great Britain								
Abberton Reservoir	6,166	9,697	10,965	(2,088)	10,046	Nov	9,219	
Rutland Water	4,021	4,733	3,490	6,233	4,284	Nov	4,552	
Cotswold Water Park (West)	4,042	4,077	4,548	4,001	4,013	Dec	4,136	
Ouse Washes	2,039	4,229	4,354	1,834	6,229	Jan	3,737	
Cheddar Reservoir	3,100	3,873	3,140	3,380	3,324	Jan	3,363	
Lee Valley Gravel Pits	3,213	3,435	3,459	(2,417)	2,979	Dec	3,272	
Fleet and Wey	(2,923)	3,275	2,699	2,650	2,337	Jan	2,777	
Chew Valley Lake	3,285	3,335	2,205	2,360	2,095	Aug	2,656	
Dungeness and Rye Bay	2,621	2,486	1,768	2,421	2,280	Oct	2,315	
Pitsford Reservoir	1,823	2,354	2,212	2,287	2,828	Oct	2,301	
Blagdon Lake	1,993	2,080	3,151	1,400	2,323	Aug	2,189	
Loch Leven	2,650 [13]	2,375	1,610	2,820	1,317	Sep	2,154	
Cotswold Water Park (East)	2,296	1,850	2,045	1,835	2,134	Dec	2,032	
Lower Windrush Valley Gravel Pits	2,341	2,075	(1,338)	1,566	(1,327)	Sep	1,994	
River Avon - Fordingbridge to Ringwood	1,494	1,841	1,861	2,012	1,607	Nov	1,763	▲
Sites of all-Ireland importance in Northern Ireland								
Loughs Neagh and Beg	4,124	1,890	2,506	2,371	1,813	Oct	2,541	
Upper Lough Erne	2,062	1,462	2,023	1,696	1,072	Dec	1,663	
Lower Lough Erne	197	308	411	326	406	Jan	330	▲
Sites no longer meeting table qualifying levels in WeBS-Year 2007/2008								
Hanningfield Reservoir	3,791	463	2,000	1,692	226	Jun	1,634	
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain								
Carsington Water	526	1,731	1,614	2,136	1,880	Jan	1,577	
Aqualate Mere	125	161	506	1,065	1,823	Dec	736	

Coots (Jill Pakenham)

Crane

Scarce

Grus grus

GB max: **3 Oct**
NI max: **0**

After several years with relatively few WeBS records, Cranes were recorded at four sites in 2007/08. Three were present at Widney Brooks in the Arun Valley in May, two at Ouse Washes in October and February, and singles seen at Montrose Basin in August and Swale Estuary in October.

Oystercatcher

Haematopus ostralegus

International threshold:	10,200
Great Britain threshold:	3,200
All-Ireland threshold:	680

GB max: 193,443 Dec
NI max: 18,019 Dec

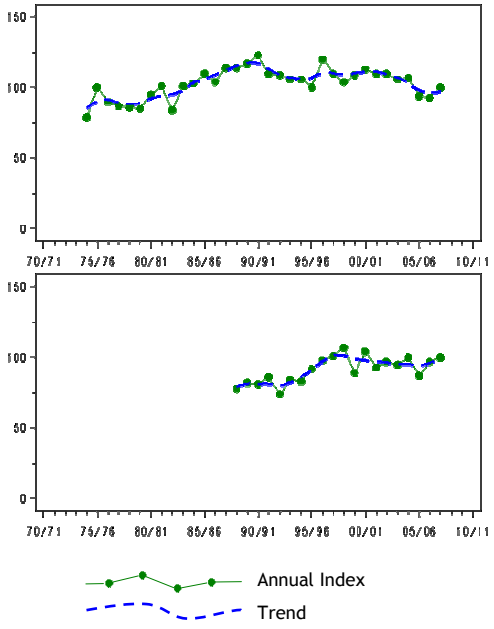


Figure 40.a, Annual indices & trend for Oystercatcher for GB (above) & NI (below).

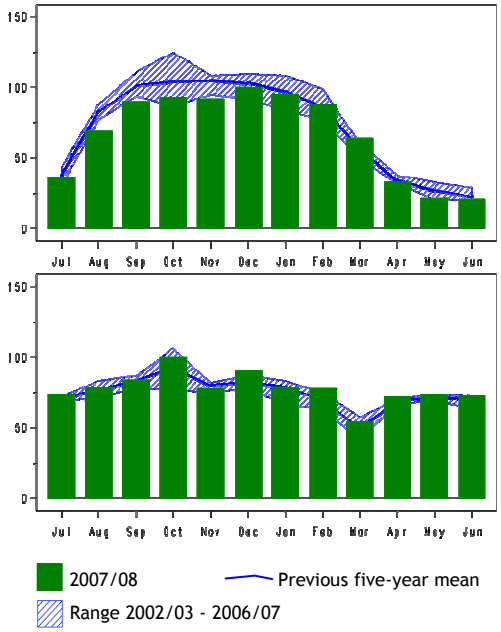


Figure 40.b, Monthly indices for Oystercatcher for GB (above) & NI (below).

Oystercatchers occurring outside the breeding season at coastal sites in the UK may have been either local breeders or birds arrived from Scandinavia or Iceland.

Following a decline in the British index for Oystercatcher in the last two years, 2007/08 witnessed a slight recovery but only returning to a level formerly exhibited by the index in the early 1980s.

The monthly indices show relatively low numbers in the period from August to November before average numbers present from December onwards. This might indicate that a greater proportion of birds utilised sites in the Netherlands in the early winter period prior to the onset of colder weather (e.g. Austin & Rehfisch 2005). Recent studies have suggested that numbers in the Netherlands have been in steady decline (Hustings *et al.* 2007, in Delany *et al.* 2009), perhaps due to the disappaearance of intertidal mussel beds in the Wadden Sea (Ens 2006, in Delany *et al.* 2009).

Incomplete counts from Britain's two most important sites, Morecambe Bay and Solway Estuary, contributed to a low counted monthly maximum of less than 200,000 birds. However numbers at the other five internationally important sites for Oystercatchers, as well as the additional ten sites of national importance, were close to the respective five-year site averages.

Oystercatchers (Tommy Holden)

In Northern Ireland, the index rose for the second year in succession, to a level consistent with the ten-year average. At the site level, no notable changes occurred.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of international importance in the UK							
Morecambe Bay	56,745	55,072	46,760	55,874	(34,492)	Nov	53,613
Solway Estuary	37,907	(30,961)	(34,542)	(35,571)	(31,091)	Sep	37,907
Thames Estuary	23,858	20,393	22,956	27,836	26,905	Nov	24,390
Dee Estuary (England & Wales)	23,906	25,956	22,847	15,808	20,922	Dec	21,888
The Wash	28,795	16,395	18,677	22,963	19,626	Dec	21,291
Ribble Estuary	19,915	14,095	(6,378)	10,872	13,148	Mar	14,508
Burry Inlet	13,831[11]	16,219	11,728	15,110[13]	13,257	Jan	14,029
Sites of national importance in Great Britain							
Carmarthen Bay	(5,747)	6,736	7,754	10,154[11]	10,911[11]	Jan	8,889
Forth Estuary	8,930	(8,213)	6,598	8,235	7,230	Sep	7,841
Lavan Sands	6,796	5,718	5,926	9,587	5,783	Dec	6,762
Inner Moray and Inverness Firth	9,644	5,376	4,930	5,099	8,003	Oct	6,610
Duddon Estuary	8,683	6,241	5,577	5,758	(4,251)	Nov	6,565
Inner Firth of Clyde	4,982	4,759	5,880	5,308	5,836	Feb	5,353
Swale Estuary	5,858	5,225	5,011	3,762	4,106	Jan	4,792
Swansea Bay	3,177	4,605	3,511	4,430 [13]	3,150	Feb	3,775
North Norfolk Coast	3,858	3,778	3,707	3,238	3,954	Feb	3,707
Humber Estuary	3,305 [11]	(4,582)	(3,468)	2,942	(3,121)	Jan	3,574
Sites of all-Ireland importance in Northern Ireland							
Strangford Lough	7,459	9,018	6,861	(6,842)	8,689	Oct	8,007
Belfast Lough	4,321	5,299	4,756	(4,411)	3,580	Feb	4,489
Lough Foyle	(3,219)	(3,095)	(1,805)	(2,347)	2,837	Oct	3,050
Outer Ards Shoreline	1,822	1,740	1,747	1,825	1,515	Nov	1,730
Carlingford Lough	1,525	1,419	1,442	1,552	(1,446)	Jan	1,485
Dundrum Inner Bay	1,425	(1,252)	1,389	1,027	1,700	Jan	1,385
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain							
Cromarty Firth	3,195	1,998	2,400	2,919	3,321	Feb	2,767

Avocet

Recurvirostra avosetta

International threshold: 730
Great Britain threshold: 35*

GB max: 6,678 Dec
NI max: 0

**50 is normally used as a minimum threshold*

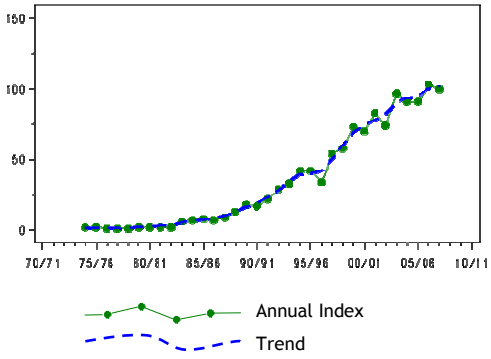


Figure 41.a, Annual indices & trend for Avocet for GB.

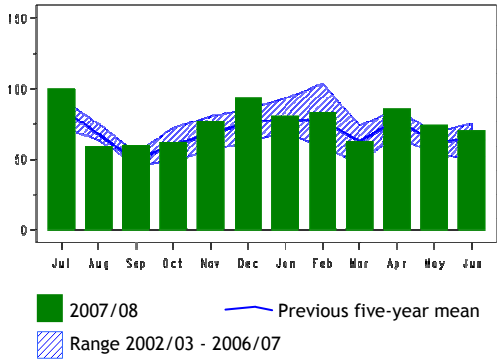


Figure 41.b, Monthly indices for Avocet for GB.

Although no increase was noted compared to the previous year the rise in the number of wintering Avocets in Britain shows no obvious signs of slowing. The wintering population is comprised of breeders remaining in Britain supplemented by additional continental birds, from the Netherlands in particular.

Avocets were recorded at 56 sites in 2007/08, typically the majority on the south and east coasts of England, with above average numbers recorded in

virtually all months of the year. The five principal sites continue to be of international importance, and if the current trend continues, further sites such as Blyth Estuary and The Wash, may also surpass the qualifying threshold in the future. The two most 'peripheral' estuaries which regularly hold wintering birds, the Ribble Estuary and Severn Estuary, again showed increases in monthly maxima compared to the previous year and in doing so also registered record numbers.

Away from the Severn Estuary, the only record from Wales was one at Cemlyn Bay in May, while in Scotland one resided at Montrose Basin from January to March – both records constituted 'site firsts'.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of international importance in the UK							
Poole Harbour	(1,493)	1,480 [11]	1,387	(1,303)	(1,068)	Sep	1,453
Thames Estuary	658	1,153	1,663	1,578	1,633	Sep	1,337
Alde Complex	1,073	1,058	1,392	1,383	1,465	Jan	1,274
Medway Estuary	(757)	(490)	(557)	(1,027)	(450)	Dec	(1,027)
Breydon Water & Berney Marshes	1,069	1,012	1,044	706	896 [13]	Aug	945
Sites of national importance in Great Britain							
Swale Estuary	731	1,290	320	(363)	447	Feb	697
North Norfolk Coast	591	712	617	645	556	May	624
Blyth Estuary (Suffolk)	(2)	(409)	208	660	889	Dec	586
The Wash	417	532	760	322	850	Jul	576
Hamford Water	461	663	488	(629)	537	Oct	556
Blackwater Estuary	295	428	622	(125)	585	Dec	483
Tamar Complex	394	438	494	465	620	Dec	482
Humber Estuary	334	425	(374)	652	509	Oct	480
Exe Estuary	353	297	(500)	380	358	Feb	378
Deben Estuary	353	323	236	315	224	Jan	290
Colne Estuary	205 [13]	150 [13]	(285)	41	586 [11]	Jan	246
Crouch-Roach Estuary	(17)	288 [11]	(26)	(22)	135 [13]	Oct	212
Minsmere	139	203	171	190	205	May	182
Stour Estuary	0	26	(89)	428	159	Nov	153
Orwell Estuary	(63)	68	162	105 [11]	134 [11]	Dec	119
Ouse Washes	124	96 [13]	11 [13]	4 [13]	32	Mar	53
Ribble Estuary	19	24	38	76	110	Jul	53
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain							
Severn Estuary	14	(26)	26	26	(76)	Nov	34
WWT Martin Mere	6	12	19	43	38	Jun	24

Avocets (Jill Pakenham)

Stone Curlew

Burhinus oedicnemus

Scarce

GB max: 12 Jul
NI max: 0

Stone Curlews were recorded at one site in eastern England, close to a known breeding location. Birds were present at both ends of the WeBS year, with a peak of twelve in July.

Little Ringed Plover

Charadrius dubius

International threshold: 2,500
Great Britain threshold: ?†
All-Ireland threshold: ?†

GB max: 179 May 2007
NI max: 0

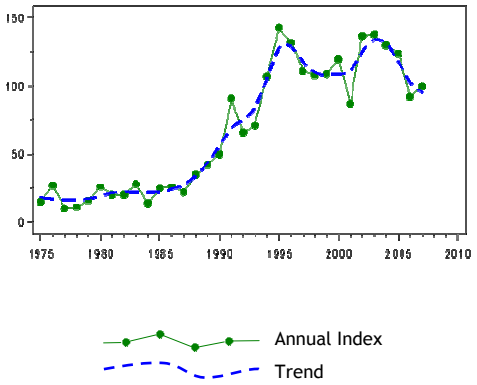


Figure 42. Annual indices & trend for Little Ringed Plover for GB.

During WeBS Core counts, Little Ringed Plovers were recorded at 126 sites in 2007. These included just one in Wales, however five sites in Scotland is the most ever in a year there. Typically, all records occurred during the period of March to October.

Traditionally one of the harbingers of the British spring, Little Ringed Plovers were recorded at sixteen sites in March, while in the autumn three sites still held birds in October.

For the second successive year the largest count was from Nosterfield Gravel Pits; however in 2007 this peak occurred in July (as opposed to May in 2006) which is perhaps indicative of a productive breeding season. On the coast, 17 at St Brides on the Severn Estuary in May followed by 11 at Tees Estuary in July represent the highest ever counts for those two estuary complexes.

A UK census of Little Ringed Plover in 2007 recorded a total of 746 pairs: 585 (78%) in England, 141 (19%) in Wales and 20 (3%) in Scotland – from which an estimate of 1,115 breeding pairs was derived (Conway & Burton 2009).

	2003	2004	2005	2006	2007	Mon	Mean
Sites with mean peak counts of 10 or more birds in Great Britain†							
Mersey Estuary	27	(3)	(2)	(0)	(2)	Apr	27
Nosterfield Gravel Pits	(6)	(18)	11	23	24	May	19
Old Moor	20	7	14	10	(18)	May	13
Rutland Water	18	10	14	8	9	Jun	12
Upton Warren Local Nature Reserve	11	12	6	11	16	May	11
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain†							
Severn Estuary	8	6	(6)	3	17	May	9
Tees Estuary	7	5	4	6	11	Jul	7
Barton Pits	6	10	5	4	10	Jun	7

† *as no British or All-Ireland thresholds have been set a qualifying level of 10 has been chosen to select sites for presentation in this report*

Ringed Plover

Charadrius hiaticula

GB max:	9,814	Sep
NI max:	638	Nov

International threshold:	730
Great Britain threshold:	330
All-Ireland threshold:	150

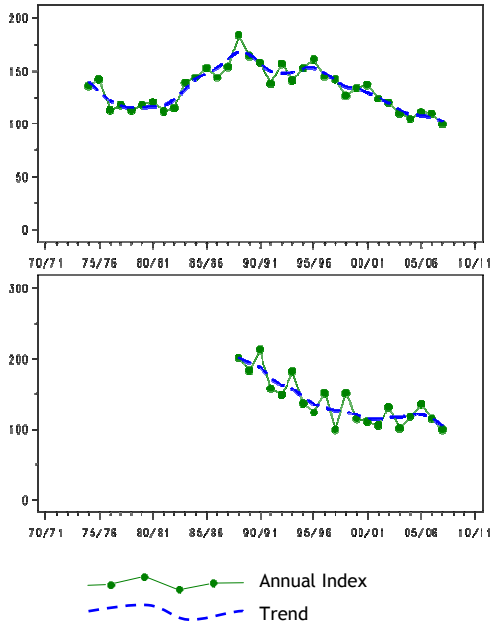


Figure 43.a, Annual indices & trend for Ringed Plover for GB (above) & NI (below).

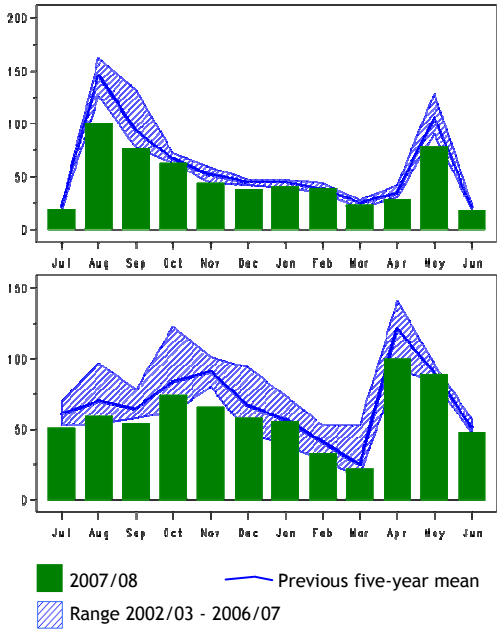


Figure 43.b, Monthly indices for Ringed Plover for GB (above) & NI (below).

Because the numbers of passage Ringed Plovers using UK sites in spring and autumn are much greater than those which remain to overwinter, the main table of site counts presented is limited to data covering the period of November to March. Key counts from the other months, likely to relate to passage birds, are tabulated separately.

Ringed Plovers in the UK have been in long-term decline since the mid 1980s and the national indices for wintering birds in 2007/08 indicate further falls to their lowest ever levels in both Britain and Northern Ireland. This is considered most likely to be a climate related impact involving an eastward shift in wintering distribution. Even though numbers in north-west Europe as a whole are estimated to have decreased by 1.2 % per annum (Delany *et al*. 2007), a steady increase has been observed in the Wadden Sea in the Netherlands (Hustings *et al*. 2007).

In Britain in 2007/08, despite continued declines at a number of the traditionally most important sites, some more encouraging increases were noted, particularly at Crouch-Roach Estuary and Forth Estuary. Wintering numbers in the UK and Ireland along non-estuarine coastlines are known to have shown particularly marked declines (Coulhoun & Newton 2001, in Delany *et al*. 2009; Rehfisch *et al*. 2003).

During autumn 2007 and spring 2008, a total of 16 sites supported counts in excess of at least the national importance threshold. These included the Ribble Estuary where 1,734 in May represented the highest count of the year in the UK. However this total compares poorly with an all-time maximum from there of 5,432, as recently as May 2000.

A UK census of breeding Ringed Plovers in 2007 recorded a total of 4,232 pairs: 2,656 (63%) in Scotland, 1,184 (28%) in England, 214 (5%) in Wales, 62 (2%) in Northern Ireland and 116 (3%) in the Isle of Man – from which an estimate of 5,585 breeding pairs was derived (Conway & Burton 2009). Changes on individual sites surveyed in 2007 and during the previous census in 1984 indicated declines of 47%, 6%, 41%, 66% and 9% in England, Wales,

Scotland, Northern Ireland and the Isle of Man respectively, and that the largest decreases have occurred at inland sites.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of international importance in the UK in winter 2007/08 (Nov-Mar)							
Thames Estuary	(654)	872	846	952	649	Feb	833
Sites of national importance in Great Britain in winter 2007/08 (Nov-Mar)							
Tiree			648 [43]				648
Hamford Water	(576)	(333)	(361)	(328)	(177)	Nov	576
Duddon Estuary	222	350 [11]	757 [11]	(495)	(200)	Feb	456
North Norfolk Coast	464	411	231	322	355 [11]	Feb	355
Morecambe Bay	303	357	587	212	204	Jan	333
Medway Estuary	(136)	332 [11]	(94)	(115)	(181)	Jan	332
Sites of all-Ireland importance in Northern Ireland in winter 2007/08 (Nov-Mar)							
Strangford Lough	277 [11]	342	449	278 [11]	227 [11]	Jan	315
Outer Ards Shoreline	(198)	142	308	338	(125)	Nov	263
Carlingford Lough	(161)	223	247	183	120	Nov	193
Belfast Lough	234 [11]	109 [11]	168 [11]	180	253	Nov	189
Sites no longer meeting table qualifying levels in winter 2007/2008 (Nov-Mar)							
Solway Estuary	(286)	(305)	(162)	(180)	(328)	Nov	(328)
Other sites surpassing table qualifying levels in winter 2007/2008 in Great Britain (Nov-Mar)							
Crouch-Roach Estuary	138	(52)	175	333	594	Jan	310
Forth Estuary	237	172	329	286	484	Nov	302
South Ford	250	400	250	340	400	Nov	328

Sites of international importance in Great Britain during autumn 2007 (Jul-Oct) and spring 2008 (Apr-Jun)					
Ribble Estuary	1,734	May	Dengie Flats	1,013	Sep
Lindisfarne	1,195	May	Humber Estuary	860	May
North Norfolk Coast	1,023	Sep	Thames Estuary	748	Oct
Sites of national importance in Great Britain during autumn 2007 (Jul-Oct) and spring 2008 (Apr-Jun)					
Stour Estuary	582	Aug	Morecambe Bay	416	May
Dee Estuary (England and Wales)	551	Aug	Solway Estuary	402	Apr
Blackwater Estuary	531	Oct	Severn Estuary	361	May
Alt Estuary	515	May	Forth Estuary	359	Aug
North West Solent	438	Oct	Hamford Water	349	Oct
Sites of national importance in Northern Ireland during autumn 2007 (Jul-Oct) and spring 2008 (Apr-Jun)					
Strangford Lough	177	Oct			
Carlingford Lough	154	Oct			

Killdeer

Vagrant

Charadrius vociferus

Native Range: America

GB max: **1 Oct**
NI max: **0**

One was recorded at Pool of Virkie in October. In 2007, this particular long-staying individual was noted there and at other sites on south mainland Shetland between April and November (per www.birdguides.com). This represents the second record for WeBS, following the first at Upper Lough Erne in February 2005.

Kentish Plover

Scarce

Charadrius alexandrinus

GB max: **2 Aug**
NI max: **0**

Kentish Plovers were recorded at two sites, a typical showing. Two at Pegwell Bay in August represented the first multiple WeBS record for this traditional site since four present there in May-June 1971. A more unusual record in terms of location and date was provided by one which lingered at South Ford on South Uist from November through to March.

Dotterel

Charadrius morinellus

Scarce

GB max: 3 May
NI max: 0

Three Dotterels were recorded at Wainfleet in May; the second WeBS record for The Wash area following a very large 'trip' of 46 birds in May 2004. Dotterels are a rare find for WeBS counters, the species having graced the pages of just four annual reports.

American Golden Plover

Pluvialis dominica

Vagrant
Native Range: America

GB max: 1 Oct
NI max: 0

A juvenile American Golden Plover was recorded at Loch Mor on Benbecula in October; the eleventh record for WeBS and the first from Scotland. This species is a potential exciting discovery within flocks of Golden Plovers everywhere…

Golden Plover

Pluvialis apricaria

International threshold: 9,300
Great Britain threshold: 4,000
All-Ireland threshold: 1,700

GB max: 179,119 Jan
NI max: 21,026 Feb

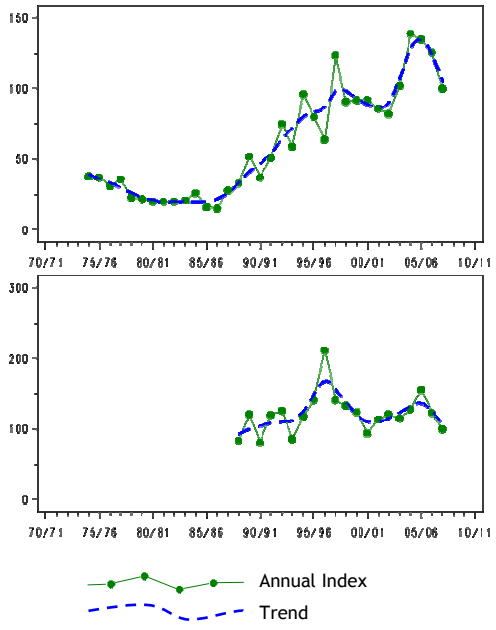


Figure 44.a, Annual indices & trend for Golden Plover for GB (above) & NI (below).

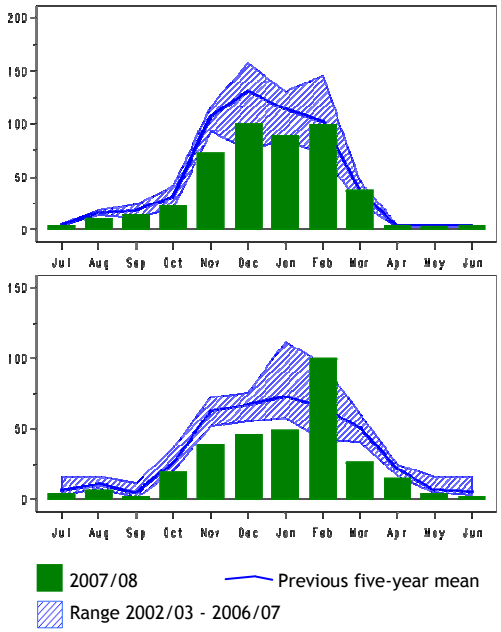


Figure 44.b, Monthly indices for Golden Plover for GB (above) & NI (below).

Golden Plovers wintering in west Europe comprise a mix of three breeding populations: *altifrons* which breeds in Iceland and the Faeroes, *altifrons* from Norway eastwards, and the more southerly *apricaria* from Britain, Ireland, southern

Scandinavia, Denmark, Germany and the Baltic States. It is a popular quarry species in parts of the wintering range, particularly France. Wintering numbers frequently fluctuate markedly from year to year.

In 2007/08 the counted British maximum of Golden Plover recorded by WeBS (179,119 in January) was similar to that of the previous year, though the national index having reached a peak in 2004/05-2005/06 fell to the level of four years ago.

Eighty percent of this maximum was at coastal sites, a typical proportion for the last decade. This still provides an indication of the potential for inland sites such as grazing marshes and agricultural fields to harbour important numbers during the winter, and as such the likelihood that a significant proportion of the wintering Golden Plover population is not monitored by WeBS.

This is illustrated in no better way than the results of a large-scale survey carried out in 2006/07 that incorporated counts from important wetlands (inland and coastal), other key terrestrial sites and a random sample of further locations. From the results, Gillings & Fuller (2009) estimated the wintering population of Golden Plover to be 400,000 of which sites classified as "wetlands" held only 44%. Following this survey, the threshold for sites of national importance in Great Britain has been amended accordingly (to 4,000 birds).

The UK has five sites of international importance for this species, following the return of Swale Estuary above the qualifying threshold in 2007/08, but peak counts from several of the other top sites were below average compared to recent years. Of sites lying just below the threshold, both Somerset Levels and Hamford Water held record wintering numbers, whilst other notably high numbers were seen in East Anglia at Alde Complex, Colne Estuary and Middle Yare Marshes.

In Northern Ireland, a pronounced influx of Golden Plovers was noted at monitored sites in February. This resulted in a monthly maximum of 21,026, some 38% higher than for the previous year; during all other months there were at least 50% fewer birds present.

Maxima at the most important sites in the province were close to average, with the exception of Strangford Lough where the peak count was the lowest for over thirty years. This is particularly noteworthy considering that Strangford Lough qualified as a site of international importance for the species as recently as 2005/06.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of international importance in the UK							
Humber Estuary	(50,662)	43,473	47,118	47,088	23,526	Oct	42,373
The Wash	25,817	34,900	26,996	31,350	19,643	Jan	29,766
Breydon Water and Berney Marshes	10,464	30,940	28,220	24,930 [11]	15,790 [13]	Jan	22,069
Swale Estuary	10,935	(6,560)	12,014	(10,520)	17,327	Jan	13,425
Blackwater Estuary	6,986	12,747	11,949	(5,020)	5,703	Dec	9,346
Sites of national importance in Great Britain							
Somerset Levels	8,609	8,136	5,018	12,054	12,422	Feb	9,248
Carmarthen Bay	9,832	7,661	4,047	12,700	10,420	Feb	8,932
Hamford Water	3,204	5,606	8,859	(5,362)	10,228	Jan	6,974
Nene Washes	650	13,000	4,500	8,500	5,650	Mar	6,460
Pegwell Bay	8,000	5,330	7,000	4,170	(5,500)	Dec	6,125
Morecambe Bay	(7,304)	4,431	5,768	(3,429)	(3,382)	Dec	5,834
Lower Derwent Ings	2,005	4,130	6,776	10,600	5,433	Jan	5,789
Crouch-Roach Estuary	(1,354)	4,771 [11]	(3,718)	(2,387)	(6,696)	Dec	5,734
Dengie Flats	2,275	3,660	12,678	5,520	4,520	Dec	5,731
Thames Estuary	(1,823)	6,440	7,401	4,817	4,267	Jan	5,731
Lynemouth Ash Lagoons	5,700						5,700
Old Moor	7,000	2,100	(6,200)	6,500	(3,800)	Oct	5,450
Dungeness and Rye Bay	3,200	6,600	3,600	5,000	7,210	Feb	5,122
Lindisfarne	3,822 [11]	3,920	7,081	(3,236)	(2,004)	Dec	4,941
Solway Estuary	5,063	6,145 [11]	3,991	5,746	3,761	Oct	4,941
Ouse Washes	2,844	5,450 [13]	10,069	3,312 [13]	2,427 [13]	Feb	4,820
North Norfolk Coast	5,039	5,975	5,315	4,552	3,154	Dec	4,807
Forth Estuary	6,940 [11]	3,844	3,326	(1,497)	3,436	Oct	4,387
Camel Estuary	515	4,750 [11]	9,000	(3,000)	2,501	Dec	4,192
Ribble Estuary	(3,300)	1,998	3,829	(3,950)	6,610	Jan	4,146

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Middle Yare Marshes	(96)	4,400	2,597	3,500	6,000	Mar	4,124
Taw-Torridge Estuary	3,300	(6,000)	2,550	(4,360)	(1,765)	Feb	4,053
Sites of all-Ireland importance in Northern Ireland							
Strangford Lough	15,988 [11]	4,578	7,970	8,513 [11]	8,817 [11]	Nov	9,174
Lough Foyle	(7,647)	7,372	7,640	(9,534)	9,211	Feb	8,439
Loughs Neagh and Beg	7,091	3,447	6,537	6,475	7,712	Feb	6,252
Bann Estuary	2,265	2,100	2,610	2,100	1,350	Dec	2,085
Sites no longer meeting table qualifying levels in WeBS-Year 2007/2008							
Durham Coast	(0)	(2,000)	(3,704)	(2,800)	(3)	Aug	(3,704)
Alde Complex	(696)	3,346	2,765	1,660	6,873	Jan	3,661
Cleddau Estuary	(2,664)	4,273	8,630	200	1,340	Jan	3,611
Wigtown Bay	(3,604)	(2,500)	3,175	(3,200)	4,000	Dec	3,593
Loch of Strathbeg	(2,200)	3,623	1,176	3,500	4,500	Oct	3,200
Colne Estuary	1,480	1,450	2,840	1,563	(8,053)	Jan	3,077
Severn Estuary	2,060	3,100	4,370	2,642	2,301	Jan	2,895
Maer Lake	1,984	2,193	2,100	3,750	2,600	Dec	2,525
Chichester Harbour	(2,822)	3,048	(3,586)	824	1,572	Nov	2,370
Otmoor	(18)	1,120 [13]	(1,200)	4,670 [13]	1,080	Feb	2,290
Clifford Hill Gravel Pits	2,740	1,600	3,000	4,500	450	Jan	2,458
Bennerley Marsh				2,500	200	Jan	1,350

Grey Plover

Pluvialis squatarola

GB max: 37,506 Mar
NI max: 217 Mar

International threshold: 2,500
Great Britain threshold: 530
All-Ireland threshold: 65

**50 is normally used as a minimum threshold*

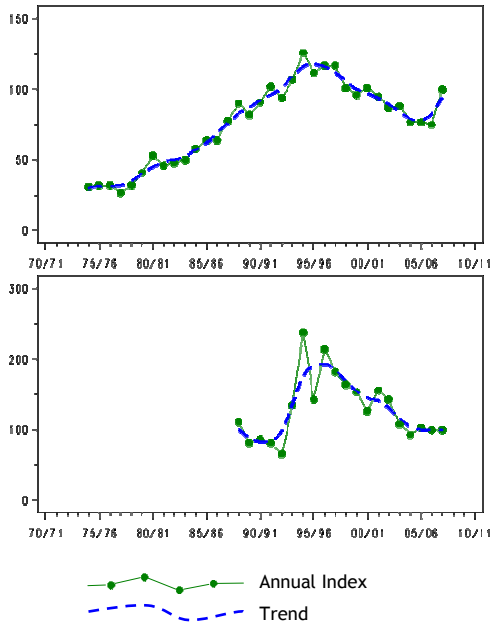


Figure 45.a, Annual indices & trend for Grey Plover for GB (above) & NI (below).

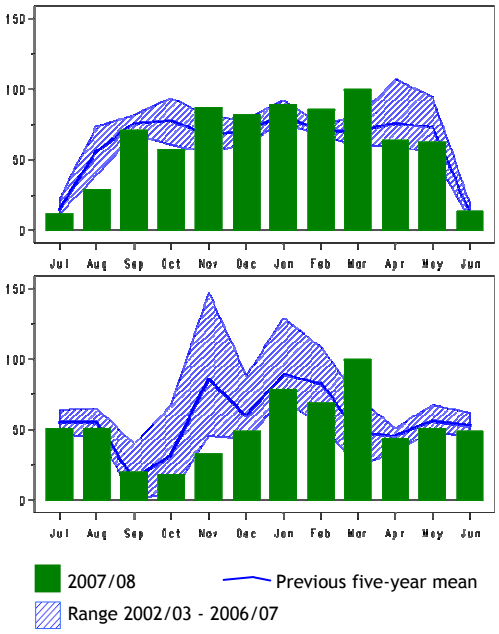


Figure 45.b, Monthly indices for Grey Plover for GB (above) & NI (below).

Following a steady increase in the index until reaching a maximum in 1994/95, the number of Grey Plovers using British coastal sites had shown a consistent decline since, slowing in the last three years suggesting a degree of stability. In 2007/08 however, an unexpectedly large increase in the index occurred (similar in magnitude to a rise experienced in 1994/95 when the species reached its historic peak).

The monthly indices indicate above-average numbers present throughout the winter, from November to March. Could this be evidence of a sudden marked redistribution of birds from further south in the wintering range, in response to climate change (e.g. Austin & Rehfisch 2005, Maclean *et al*. 2008)?

The UK has eight sites that are internationally important for the species, one less than the previous year following the relegation of Alt Estuary after the lowest monthly maximum there since 1994/95. At The Wash, where there had been a marked rise in Grey Plovers in 2003/04 and 2004/05, peak numbers have since returned to their previous levels.

Numbers using the other two most important sites contrast with each other strongly: the peak number counted at Dengie Flats has almost tripled in two years, while those using Thames Estuary have declined by over 75% in the same period. However it is probable that these neighbouring locations may support the same population of birds, effectively using the 'outer' Thames Estuary, and as such there may be considerable interchange between the two sites both within years and from one year to the next.

Grey Plover (Jill Pakenham)

Elsewhere, counts from most of the other important sites were largely unexceptional, perhaps the most notable of other declines occurring at Dee Estuary where the peak monthly count for the year fell below four-figures for the first time since 2002/03.

In Northern Ireland, counts were close to average at Strangford Lough but higher than normal at Outer Ards Shoreline.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of international importance in the UK							
The Wash	12,442	13,480	8,604	9,750	7,455	May	10,346
Dengie Flats	2,943	2,912	4,909	7,239	11,940	Mar	5,989
Thames Estuary	3,812	3,975	13,028	5,700	2,877	Jan	5,878
Ribble Estuary	5,568	3,529	(3,813)	3,518	3,902	May	4,129
Blackwater Estuary	2,415	4,043	2,650	(2,248)	(5,766)	Jan	3,719
Hamford Water	(1,746)	(2,915)	(2,198)	(2,685)	(2,658)	Dec	(2,915)
Humber Estuary	2,285 [11]	(1,901)	(2,792)	(1,923)	(3,417)	May	2,831
Stour Estuary	2,975	2,507	3,263	2,355	2,329 [11]	Feb	2,686
Sites of national importance in Great Britain							
Alt Estuary	3,098	2,234	2,837	1,244	1,206	May	2,124
Swale Estuary	1,953	(1,451)	(1,244)	(1,415)	1,631	Feb	1,792
Chichester Harbour	1,515	2,140	2,017	1,592	1,604	Mar	1,774
Lindisfarne	(1,786)	(962)	1,361	2,171	(894)	Nov	1,773
North Norfolk Coast	1,421	1,386	1,483	1,626	1,339 [11]	Dec	1,451
Medway Estuary	1,544	(762)	989	(467)	(1,586)	Jan	1,373
Dee Estuary (England and Wales)	1,851	1,214	1,091	1,214	762	Jan	1,226
Pagham Harbour	1,348	873	1,067	902	1,269	Feb	1,092
Morecambe Bay	778	1,001	1,074	1,065	747	Feb	933
Langstone Harbour	1,119	782	(879)	702	848	Nov	866
Colne Estuary	(705)	(623)	(800)	(840)	(720)	Oct	(840)
Deben Estuary	656	1,037	(719)	342	(574)	Jan	689
Jersey Shore				939	373	Feb	656
Sites of all-Ireland importance in Northern Ireland							
Strangford Lough	137	114	249 [11]	141	118	Jan	152
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain							
Eden Estuary	410	450	(356)	400	590	Mar	463
Beaulieu Estuary	46	560	381	640	545	Jan	434
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Northern Ireland							
Outer Ards Shoreline	17	39	38	25	81	Mar	40

Lapwing

Vanellus vanellus

International threshold:	20,000**	
Great Britain threshold:	6,200	
All-Ireland threshold:	2100	

GB max:	401,598	Jan
NI max:	16,215	Jan

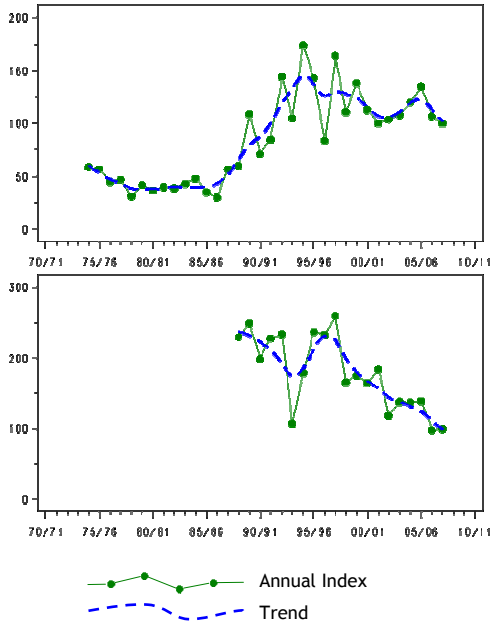


Figure 46.a, Annual indices & trend for Lapwing for GB (above) & NI (below).

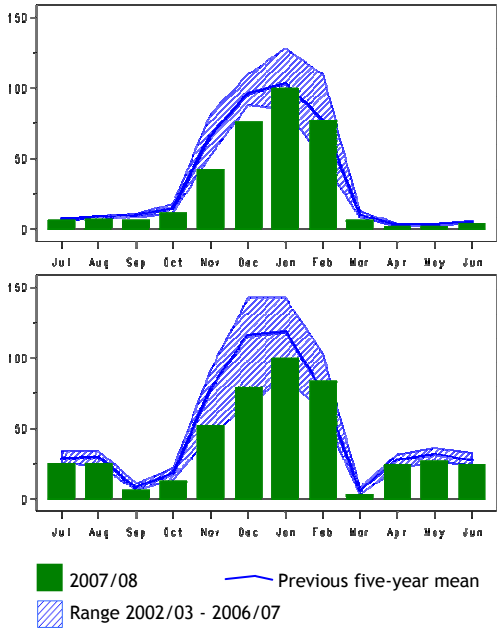


Figure 46.b, Monthly indices for Lapwing for GB (above) & NI (below).

The Lapwing population wintering in the UK is comprised of that part of the breeding population that does not move south to continental Europe, supplemented by birds from Scandinavia, eastern Europe and Russia. Prolonged periods of cold weather tend to result in additional movements, as well as forcing British birds south and west and at the local scale towards the coast.

The counted British maximum of Lapwing was 401,598 in January; 23% higher than that of the previous year and as such returned to a level similar to the average of the last five years. The national index remained at the low level exhibited last year thereby continuing the slightly downward, albeit fluctuating, trend shown since the mid 1990s.

It is always important to note that owing to the regular use of agricultural fields by this species a large proportion of its wintering population is inevitably not monitored by WeBS. However, that said, the proportion overlooked by WeBS is perhaps not as great as traditionally considered: results from a large-scale survey of wintering Lapwing carried out in 2006/07, incorporating counts from important wetlands (both coastal and inland), key terrestrial sites and a random sample of other locations, derived an estimate of 620,000 wintering in Great Britain, of which sites classified as "wetlands" held 54% (Gillings & Fuller 2009). Following this survey, the threshold for sites of national importance in Great Britain has been amended accordingly (to 6,200 birds).

Following 2007/08, there are five sites of international importance in the UK after the return of Breydon Water & Berney Marshes above the qualifying threshold. Somerset Levels overtook The Wash as the site with the highest five-year site average following the lowest peak count at the latter site since 1996/97. The second-highest count of the year was received from Swale Estuary where the five-year average is now verging on surpassing the threshold for international importance.

In Northern Ireland, there was little recovery in the index following the all-time low of the previous year. Low numbers were present at Strangford Lough and Lough Foyle, but the peak at Dundrum Inner Bay was the highest there since 2001/02.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of international importance in the UK							
Somerset Levels	23,641	60,834	48,116	38,388	44,457	Jan	43,087
The Wash	29,350	43,822	36,327	36,998	19,186	Feb	33,137
Humber Estuary	(39,865)	(16,856)	27,421	(17,481)	16,500	Jan	27,929
Breydon Water and Berney Marshes	15,890	29,136	25,140	17,620 [13]	19,700 [13]	Dec	21,497
Ribble Estuary	(15,374)	25,991	24,265	13,821	18,066	Feb	20,536
Sites of national importance in Great Britain							
Swale Estuary	16,523	(13,270)	14,913	(10,840)	23,479	Jan	18,305
Ouse Washes	13,577	26,072 [13]	25,835	13,026	11,222	Dec	17,946
Morecambe Bay	(20,750)	16,701	19,192	13,484	(6,191)	Dec	17,532
Thames Estuary	10,229	14,657	18,662	17,270	(7,781)	Jan	15,205
Severn Estuary	(6,889)	11,312	19,434	9,895	11,035	Jan	12,919
Dungeness and Rye Bay	11,024	14,726	9,320	9,936	12,758	Jan	11,553
Pegwell Bay	10,000	5,420	(8,100)	17,000	12,000	Jan	11,105
North Norfolk Coast	7,358	7,833	13,305	11,560	11,185	Jan	10,248
Crouch-Roach Estuary	(5,386)	11,288 [11]	(8,464)	8,438	(9,255)	Dec	9,863
Solway Estuary	8,218	(5,989)	(9,381)	(7,622)	(5,128)	Oct	8,800
Dee Estuary (England and Wales)	7,853	(7,512)	8,800	6,775	9,526	Jan	8,239
Mersey Estuary	12,150	9,370	10,098 [11]	2,280	7,154	Feb	8,210
Blackwater Estuary	7,472	6,785	6,766	(2,800)	8,503	Dec	7,382
Lower Derwent Ings	5,119	7,920	7,520	4,610	7,406	Feb	6,515
Alde Complex	(3,841)	5,472	7,843	5,406	7,322	Jan	6,511
Nene Washes	3,870	7,050	6,070	4,720	10,575	Feb	6,457
Sites of all-Ireland importance in Northern Ireland							
Loughs Neagh and Beg	6,282	7,584	6,684	5,421	(7,720)	Jan	6,738
Strangford Lough	8,884 [11]	5,792	6,635	5,154 [11]	3,906 [11]	Nov	6,075
Lough Foyle	4,240	3,606	4,745	2,543	1,816	Jan	3,390
Sites no longer meeting table qualifying levels in WeBS-Year 2007/08							
Fiddlers Ferry Power Stn. Lagoons	3,500	6,000	4,000	4,000	10,000	Jan	5,500
Medway Estuary	(661)	3,442 [11]	(3,019)	5,184	6,805	Jan	5,144
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Northern Ireland							
Dundrum Inner Bay	789	1,204	1,749	905	2,250	Jan	1,379

Lapwing (Neil Calbrade)

Knot

Calidris canutus

International threshold:	4,500	
Great Britain threshold:	2,800	
All-Ireland threshold:	190	

GB max:	238,852	Oct
NI max:	6,261	Jan

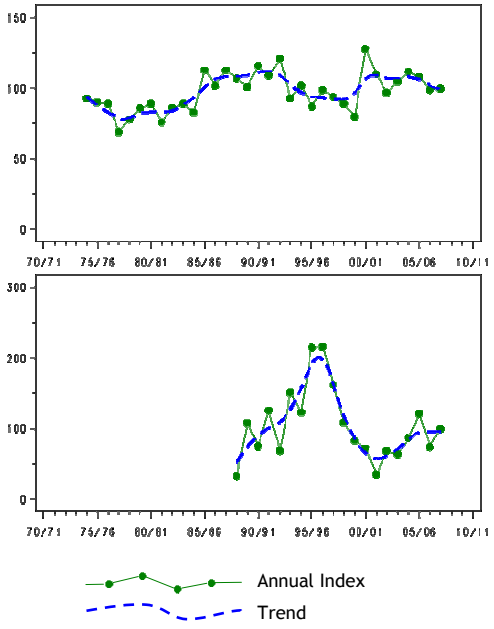


Figure 47.a, Annual indices & trend for Knot for GB (above) & NI (below).

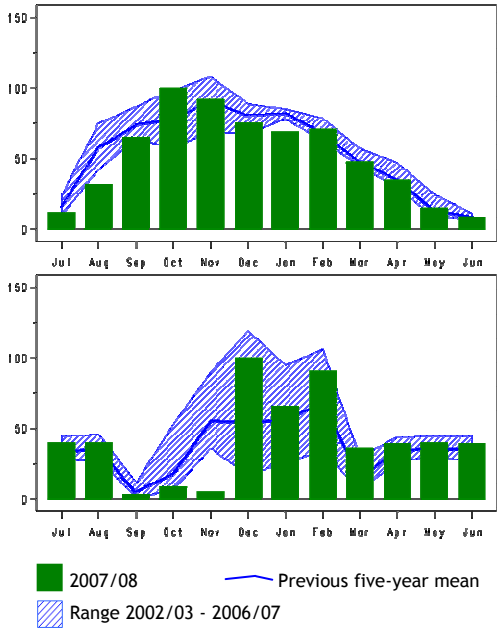


Figure 47.b, Monthly indices for Knot for GB (above) & NI (below).

The vast flocks of Knot that typify many British estuaries in winter are comprised of birds of the *islandica* race, which breeds in northeast Canada and Greenland and moults in autumn on the Wadden Sea in the Netherlands and the large British estuaries. Numbers in the Wadden Sea have declined in recent years (e.g. Hustings *et al*. 2007), attributed to decreased survival resulting from prey depletion caused by industrial shellfisheries (van Gils *et al*. 2006, in Delany et al. 2009).

After the promotion within the table of the Severn Estuary, the UK has 16 sites of international importance for the species – following a year when the overall national index was very similar to the average of the past decade. Although a high count was noted at the Severn Estuary in February, it is possible that part of this aggregation may have been recorded independently in adjacent count sectors thereby inflating the overall site total.

Numbers of Knot at The Wash rose again to a peak of 162,724 birds in October, a level not recorded at the site since October and November 1990. Over the course of the last five years, the peak monthly count there has risen by 160%, although sizeable year-to-year fluctuations often occur for this mobile species.

Numbers at other principal sites were generally close to the respective five-year site averages, the exception being the North Norfolk Coast where the monthly peak was the lowest since 1995/96. The declining numbers noted there in recent years may be linked to the concurrent increases recorded nearby at The Wash, perhaps representing a redistribution of birds.

In Northern Ireland, where the index typically fluctuates markedly between years, the January count of 2,560 at Dundrum Inner Bay was the highest Core count ever away from Strangford Lough.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of international importance in the UK							
The Wash	76,346	105,912	139,270	135,889	162,724	Oct	124,028
Thames Estuary	43,873	33,024	24,254	83,716	45,162	Feb	46,006
Humber Estuary	50,557 [11]	(37,015)	35,004	(33,529)	(41,772)	Sep	42,781
Ribble Estuary	44,947	(36,200)	(26,106)	(41,681)	30,136	Apr	38,921
Morecambe Bay	67,959	29,596	31,245	19,635	(21,421)	Dec	37,109
North Norfolk Coast	37,124	38,714	25,551	22,928	11,239	Nov	27,111
Dee Estuary (England and Wales)	38,070	10,243	24,505	12,937	11,212	Jan	19,393
Dengie Flats	8,000	22,700	15,650	30,500	17,375	Oct	18,845
Alt Estuary	30,000	19,006	12,454	15,011	12,900	Feb	17,874
Solway Estuary	8,725	(13,142)	(7,662)	8,910	(14,385)	Dec	11,291
Blackwater Estuary	(5,982)	6,273	(5,326)	(2,055)	(3,492)	Nov	6,273
Stour Estuary	(4,964)	8,454	6,701	3,028	6,660	Nov	6,211
Strangford Lough	4,058	5,730	8,014 [11]	5,380 [11]	7,360 [11]	Dec	6,109
Severn Estuary	(1,273)	(1,061)	(2,642)	(966)	5,510	Feb	5,510 ▲
Burry Inlet	3,500	8,259	4,301	4,300	7,100	Jan	5,492
Forth Estuary	6,907 [11]	5,077	4,685	(3,542)	3,278	Feb	4,987
Sites of national importance in Great Britain							
Lindisfarne	(6,751)	4,197	(4,172)	1,475	(3,990)	Jan	4,117
Swale Estuary	4,050	2,538	4,060	4,506	5,002	Nov	4,031
Inner Moray and Inverness Firth	3,663	3,446	5,146	2,762	2,485	Jan	3,500
Cromarty Firth	4,932	5,000	3,132	1,104	2,290	Feb	3,292
Hamford Water	4,160	2,481	3,185	3,550	2,200	Jan	3,115
Orwell Estuary	4,021	2,115 [11]	3,569 [11]	1,825	3,552 [11]	Feb	3,017
Medway Estuary	1,817	3,024 [11]	3,574	(550)	2,940	Jan	2,839
Sites of all-Ireland importance in Northern Ireland							
Dundrum Inner Bay	320	(475)	270	100	2,560	Jan	813
Lough Foyle	942	470	470	225	501	Jan	522
Sites no longer meeting table qualifying levels in WeBS-Year 2007/2008							
Montrose Basin	(2,562)	1,990	3,360	505	3,182	Jan	2,320
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain							
Carmarthen Bay	135	5,475	680	550	6,486 [11]	Jan	2,666
Montrose Basin	(2,562)	1,990	3,360	505	3,182	Jan	2,320

Sanderling

Calidris alba

International threshold: 1,200
Great Britain winter threshold: 210
All-Ireland threshold: 65

GB max: 11,327 Nov
NI max: 904 Mar

Sanderling breed in the high Arctic, and birds from both the Siberian and Greenland populations migrate southwards through northwest Europe. The numbers of passage birds using UK sites in spring and autumn are much greater than those which remain to over-winter, hence the main table of site counts presented is limited to data covering the period of November to March. Key counts from the other months, likely to relate to passage birds, are tabulated separately.

Since the early 1990s, numbers of wintering Sanderling have increased in Britain and neighbouring North Sea countries (e.g. van Roomen *et al*. 2007), presumably representing a redistribution of birds from the wintering range further south in Europe.

The indices for both Britain and Northern Ireland show that the number reached record levels in 2007/08. In Britain, above average numbers were present throughout the winter and included a record peak of 4,116 at Ribble Estuary in December. Most of the other major sites held numbers close to or slightly above average. Two new sites surpassed the five-year threshold to qualify as of national importance; Scuthvie Bay and Dungeness & Rye Bay. Many of the same principal sites supported large numbers during the passage months; the peak May count of 4,700 on the Ribble Estuary was slightly higher than the equivalent for recent years.

In Northern Ireland, the rather staggering appearance of the trend is

largely an artefact of the relatively small sample of monitored sites, where nevertheless numbers have increased markedly. This is especially the case at Lough Foyle and to a lesser extent Dundrum Inner Bay, both sites where large increases have been reported in recent years. In 2007/08, Lough Foyle hosted 100+ birds throughout October to March, with in excess of 800 present at both ends of that period.

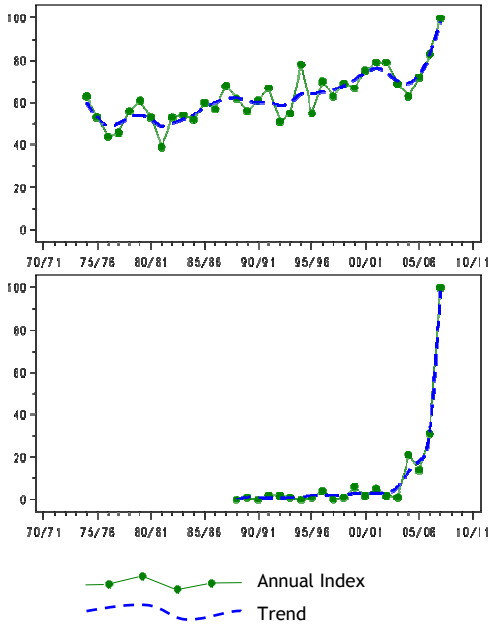


Figure 48.a, Annual indices & trend for Sanderling for GB (above) & NI (below).

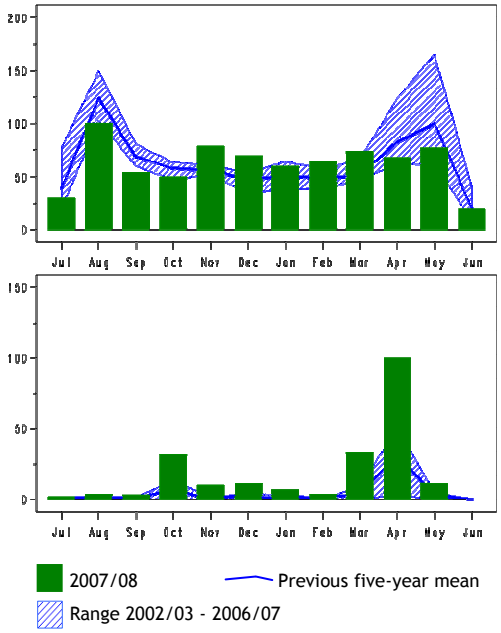


Figure 48.b, Monthly indices for Sanderling for GB (above) & NI (below).

	03/04	04/05	05/06	06/07	07/08	Mon	Mean	
Sites of international importance in the UK in winter 2007/08 (Nov-Mar)								
Ribble Estuary	2,400	(1,453)	(2,155)	3,250	4,116	Dec	3,256	
Carmarthen Bay	(833)	769	(800)	2,370 [10]	1,955 [11]	Jan	1,698	
Sites of national importance in Great Britain in winter 2007/08 (Nov-Mar)								
Alt Estuary	913	815	624	1,007	1,243	Mar	921	
North Norfolk Coast	601	889	506	873	1,200 [11]	Nov	814	
Jersey Shore				831	739	Mar	786	
Dee Estuary (England & Wales)	(379)	274	1,020	370	762	Feb	607	
Thames Estuary	385	562	457	870	689	Nov	593	
The Wash	317	395	1,091	490	285	Dec	516	
Tiree			468 [44]				468	
Scuthvie Bay				(110)	390	Jan	390	▲
Duddon Estuary	(585)	361	192	623 [13]	371	Feb	387	
Morecambe Bay	306	225	652	332	(204)	Jan	379	
Lindisfarne	221	388 [10]	294	446	410	Jan	352	
Humber Estuary	370 [10]	(96)	(159)	(362)	(225)	Nov	370	
North Bay (South Uist)	235	340	300	318	650	Feb	369	
Thanet Coast	342	418	307	322	431	Feb	364	
Ardivachar Point (South Uist)	460	400	350	320	267	Nov	360	
Howmore Estuary SSSI Coast	312 [48]						312	
Swansea Bay	200	234	467	440 [10]	210	Jan	311	
Solway Estuary	(370)	(302)	165	(167)	400	Feb	283	
South Ford	250	430	150	200	300	Dec	266	
Forth Estuary	269 [10]	181	256	152	387	Jan	249	
Dungeness and Rye Bay	131	389	190	183 [13]	300 [13]	Feb	239	▲
Tees Estuary	240	199	253	191	(193)	Mar	221	
Sites no longer meeting table qualifying standards in winter 2007/08								
Tay Estuary	65	88	635	115	103	Nov	202	

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of all-Ireland importance in Northern Ireland							
Lough Foyle	(0)	(0)	(0)	(4)	879	Mar	879 ▲
Dundrum Inner Bay	0	(48)	5	180	200	Feb	97 ▲
Other sites surpassing table qualifying levels in winter 2007/2008 (Nov-Mar) in Great Britain							
Ryde Pier to Puckpool Point	133	143	240	200	310	Nov	206
Chichester Harbour	74	77	109	324	245	Jan	166

Sites of international importance in the UK during autumn 2007 (Jul-Oct) and spring 2008 (Apr-Jun)						
Ribble Estuary	4,700	May	The Wash		1,430	May
Alt Estuary	2,171	Aug				
Sites of national importance in Great Britain during autumn 2007 (Jul-Oct) and spring 2008 (Apr-Jun)						
North Norfolk Coast	892	Aug	Carmarthen Bay		340	Oct
Humber Estuary	706	May	North Bay (South Uist)		340	Apr
Thames Estuary	688	Oct	Duddon Estuary		305	Apr
Morecambe Bay	477	Oct	Inner Moray and Inverness Firth		243	Oct
Solway Estuary	462	May				
Sites of national importance in Northern Ireland during autumn 2007 (Jul-Oct) and spring 2008 (Apr-Jun)						
Lough Foyle	865	Oct	Bann Estuary		69	Apr

Little Stint

Calidris minuta

International threshold: 2,000
Great Britain threshold: ?†
All-Ireland threshold: ?†

GB max: 184 Oct
NI max: 3 Oct

Little Stints breed through Siberia and west into the northern extremes of Scandinavia, typically wintering around the Mediterranean and throughout Africa. They were recorded at 60 WeBS sites in 2007/08, including five sites in Scotland, five in Wales and two in Northern Ireland.

A pronounced period of passage in October resulted in the peak autumn numbers being a month later than typical. The reason for this is not obvious, especially considering the September peak shown by Curlew Sandpipers in 2007/08, a species with an essentially similar migration pattern. It may indicate a relatively high proportion of juveniles (which tend to migrate later than post-breeding adults) and hence imply good breeding productivity in 2007/08. Alternatively of course it may merely represent an artefact of the timing of the WeBS Core count priority dates.

Wintering birds were noted at ten sites, mostly one and twos on the major estuaries with the notable exception of three at Rutland Water in December and January. In spring, up to two were recorded at Minsmere, The Wash and the Humber Estuary.

Sites with ten or more birds in 2007/08†					
Dungeness and Rye Bay	15	Oct	Rutland Water	11	Oct
Swale Estuary	12	Oct	Humber Estuary	10	Oct
Minsmere	13	Oct			

† *as no British or All-Ireland thresholds have been set a qualifying level of ten has been chosen to select sites for presentation in this report*

Temminck's Stint

Calidris temminckii

Scarce

GB max: 2 May
NI max: 0

Two spring Temminck's Stints were recorded, typically both in May, at Frodsham Marsh and Pegwell Bay. A grand total of 82 WeBS records are now split evenly between spring and autumn, although recent years has seen a slight shift with 18 of the 24 records since 2000 occurring in spring.

White-rumped Sandpiper

Calidris fuscicollis

Vagrant
Native Range: America

GB max:	**1**	**Sep**
NI max:	**0**	

A White-rumped Sandpiper was recorded at Lunda Wick on Shetland in September. This species has now been recorded by WeBS in seven of the last ten autumns.

Pectoral Sandpiper

Calidris melanotos

Vagrant
Native Range: America, N Siberia, Australia

GB max:	**5**	**Sep**
NI max:	**0**	

Pectoral Sandpipers were recorded at seven sites in England and two in Scotland, typically all in autumn. After one at Boddam in August, birds were seen in September at Pulborough Brooks, Balgray Reservoir, Castle Lake, Clifford Hill Gravel Pits and Cliffe Pools. October records comprised singles at Pagham Harbour and Shapwick Heath NNR, and two together at Port Meadow in Oxfordshire.

Curlew Sandpiper

Calidris ferruginea

International threshold:	**10,000**
Great Britain threshold:	**?**[†]
All-Ireland threshold:	**?**[†]

GB max:	**201**	**Sep**
NI max:	**5**	**Oct**

Curlew Sandpipers are passage migrants to the UK, breeding in central Siberia with the bulk wintering in central and southern Africa. They are scarce here in spring, and numbers in autumn are largely dependent on the summer's breeding productivity.

Autumn passage spanned July to October, with the majority in September when a respectable total of 202 was noted and five sites recorded double-figure counts, the peak of which was a total of 24 across four locations on the North Norfolk Coast.

For inland WeBS counters this species represents an exciting find, and five at Nosterfield Gravel Pits and two at Upton Warren NR were notable, representing the first at those sites since 2001 and 1999 respectively. September also featured the only record from Northern Ireland during the year, at Belfast Lough.

Curlew Sandpiper (Tommy Holden)

Single wintering birds were noted at Farlington Marshes and Thanet Coast prior to the change of calendar year, and at Thames Estuary in January and February. Two were at North West Solent in April, followed by typical spring birds on the east coast at Minsmere, Titchwell and Spurn Head in May.

Sites with ten or more birds in 2007/08[†]

North Norfolk Coast	24	Sep	Thames Estuary	12	Sep
Severn Estuary	17	Sep	Blackwater Estuary	11	Sep
Dungeness and Rye Bay	13	Sep	Humber Estuary	10	Oct

[†] *as no British or All-Ireland thresholds have been set a qualifying level of ten has been chosen to select sites for presentation in this report*

Purple Sandpiper

Calidris maritima

GB max:	**1,586**	**Feb**
NI max:	**71**	**Jan**

International threshold:	**750**
Great Britain threshold:	**180†**
All-Ireland threshold:	**35***

**50 is normally used as a minimum threshold*

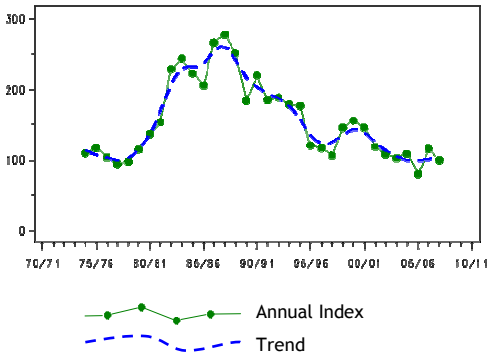


Figure 49.a, Annual indices & trend for Purple Sandpiper for GB.

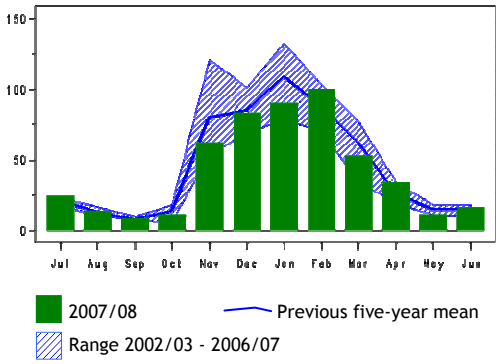


Figure 49.b, Monthly indices for Purple Sandpiper for GB.

The wintering population of Purple Sandpipers in the UK comprises birds which breed in Iceland, Greenland, eastern Canada, Scandinavia and Svalbard. In the UK, the majority are found on the relatively poorly-monitored rocky shores along the coastline of Scotland, covered more effectively by NEWS (Non-Estuarine Waterbird Survey) last undertaken in 2006/07 (Austin *et al*. 2008b). The species has exhibited a decline in recent years, which may be attributable to a greater proportion of birds wintering further to the east and north (Delany *et al*. 2009).

The largest WeBS count in 2007/08 was 229 on Moray Coast in February which contributed to that month registering the highest counted maximum of the year; an above average 1,586. Typically, concentrations gather during passage periods at either end of the species' migration to and from the breeding areas. In southern Britain, small winter aggregations tend to be centred on anthropogenic sites such as harbour entrances and sea defence structures.

In Northern Ireland, records were received from just three sites, with Outer Ards Shoreline again the principal site for the species. Eleven at Belfast Lough in September was the first double-figure count from there since January 2004; a site that formerly held up to 50 wintering birds throughout the 1990s.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of national importance in Great Britain							
Tiree			368 [43]				368
Island of Papa Westray	216	385	431				344
Farne Islands	307	375	116	(184)	(171)	May	266
Sites of all-Ireland importance in Northern Ireland							
Outer Ards Shoreline	(83)	84	60	122	66	Jan	83
Sites with mean peak counts of 100 or more birds in Great Britain							
Scuthvie Bay				(35)	164	Mar	164
Ardivachar Point (South Uist)	110	144	200	139	108	Nov	140
Island of Egilsay	195	81	130	(90)			135
Moray Coast	127	134	118	67	229	Feb	135
Dee Estuary (Scotland)	81	185	157	140	88	Jan	130
Howmore Estuary SSSI Coast	120 [47]						120
Bornish & Ormiclate Machairs SSSI	112 [47]						112
Forth Estuary	92	(93)	112	98	(83)	Oct	101
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain							
Thurso Bay	97	120	28	50 [13]	160	Jan	91
Dornoch Firth	27	19	32	20	123	Feb	44

† *as few sites exceed the British threshold a qualifying level of 100 has been chosen to select sites for presentation*

Dunlin

Calidris alpina

International threshold:	13,300
Great Britain threshold:	5,600
All-Ireland threshold:	880

GB max:	318,628	Jan
NI max:	10,278	Jan

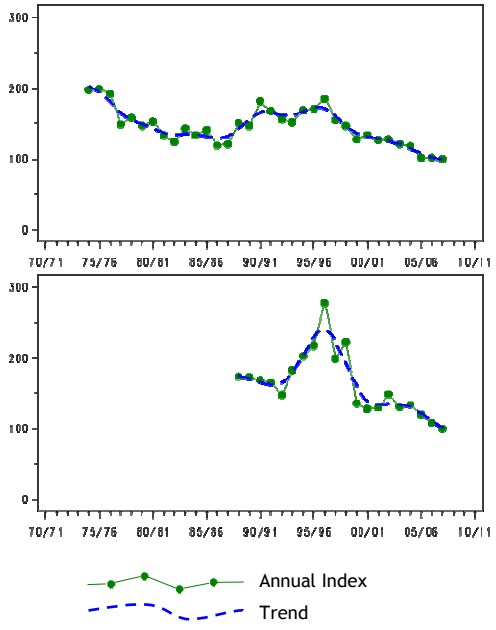


Figure 50.a, Annual indices & trend for Dunlin for GB (above) & NI (below).

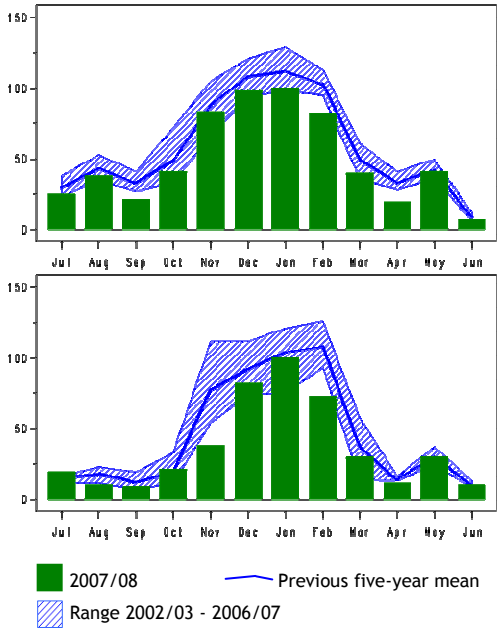


Figure 50.b, Monthly indices for Dunlin for GB (above) & NI (below).

Three races of Dunlin regularly occur in the UK. The nominate race, breeding from Scandinavia northwards and westwards, comprises the bulk of the wintering population, whilst during passage periods, birds of the *arctica* and *schinzii* races, also frequent UK sites.

The trends for both Britain and Northern Ireland illustrate the steady decline of the species since the mid 1990s. Latterly this fall has been mirrored by increasing numbers in the Netherlands (e.g. Hustings *et al*. 2008), suggesting that, probably as a result of milder winters, a greater proportion of birds migrating from northern breeding populations are utilising sites such as the Wadden Sea as opposed to continuing to sites in the UK. Declines in wintering numbers of other wader species, including Bar-tailed Godwit, have also been attributed to similar shifts in wintering distribution.

Having reached its lowest ever point in 2005/06, the British index for Dunlin has remained at the same level since. It remains to be seen whether future years will show any improvement in the index, continued stability, or whether the overall trend will continue to be one of general decline in Britain. The only change to the sites of international and national importance in 2007/08 concerns the Solway Estuary which dropped between the two lists following three relatively poor years.

In Northern Ireland, the trend over the last four years has been a steady decline following a period of relative stability during the six years previously. In 2007/08, counts at individual sites, seven of which are classified as being of national importance, were generally low with several sites supporting numbers below their respective five-year averages.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of international importance in the UK							
Mersey Estuary	40,170	43,020	34,731 [11]	34,600	41,270	Nov	38,758
Thames Estuary	(27,318)	40,838	39,889	33,335	34,939	Dec	37,250
Ribble Estuary	24,445	(27,847)	29,305	(33,506)	52,551	May	35,434
The Wash	39,731	42,361	(35,468)	25,913	24,523	Dec	33,599
Morecambe Bay	(18,847)	17,848	(27,110)	38,248	21,743	Dec	26,237
Dee Estuary (England and Wales)	41,679	16,878	19,867	35,834	12,094	Feb	25,270
Humber Estuary	19,182 [11]	(14,733)	(26,305)	(14,856)	16,730	Jan	20,739
Langstone Harbour	24,286	28,239	22,356	12,950	15,007	Feb	20,568
Severn Estuary	23,801	(16,069)	(19,561)	16,625	(16,072)	Nov	20,213
Blackwater Estuary	13,958	(16,007)	15,178	(5,472)	15,015	Dec	15,040
Chichester Harbour	12,552	12,651	12,989	14,152	(18,759)	Dec	14,221
Sites of national importance in Great Britain							
Solway Estuary	17,576	(14,628)	9,396	6,512	(7,194)	Jan	12,028
Duddon Estuary	7,680 [11]	6,970 [11]	8,741 [11]	6,542	14,523	Jan	8,891
Medway Estuary	(8,086)	9,373 [11]	7,367	(5,222)	(9,132)	Jan	8,624
Alt Estuary	12,743	8,540	5,184	7,630	7,652	May	8,350
Stour Estuary	9,268	(8,456)	7,019	7,231	8,150	Nov	7,965
Dengie Flats	2,700	8,254	13,018	(7,340)	6,116	Nov	7,522
Lindisfarne	(9,503)	5,885	(5,540)	6,951	(4,925)	Sep	7,446
Swale Estuary	6,346	9,181	7,830	5,706	(7,692)	Dec	7,351
Portsmouth Harbour	9,641	3,933	9,228	6,592	(7,002)	Dec	7,349
Burry Inlet	10,150	6,318	6,965	6,218 [11]	6,903	Jan	7,311
Poole Harbour	(5,463)	(7,026)	(2,182)	(2,196)	(2,350)	Feb	(7,026)
Forth Estuary	7,840 [11]	9,132	6,422	5,488	4,936	Jan	6,764
Sites of all-Ireland importance in Northern Ireland							
Strangford Lough	4,967 [11]	4,934	7,669 [11]	3,151 [11]	4,115 [11]	Feb	4,968
Lough Foyle	4,212	1,688	3,334	1,592	2,028	Dec	2,571
Carlingford Lough	(2,339)	2,238	1,573	(2,185)	2,621	Dec	2,191
Outer Ards Shoreline	993	742	1,119	2,810	739	Jan	1,281
Belfast Lough	1,461 [11]	1,136 [11]	920	(1,712)	742	Jan	1,194
Dundrum Inner Bay	886	(497)	1,202	1,047	1,186	Feb	1,080
Bann Estuary	1,060	1,100	1,090	1,030	900	Feb	1,036
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain							
Blyth Estuary	(280)	(432)	(1,228)	4,895	6,130	Jan	5,513
Breydon Water & Berney Marshes	4,100	4,387	5,510	2,970	6,650 [11]	Dec	4,724
Colne Estuary	4,411	3,359	5,323	3,756	6,716 [11]	Nov	4,713

Ruff

Philomachus pugnax

International threshold: 12,500
Great Britain threshold: 7*
All-Ireland threshold: +†

GB max: 558 Feb
NI max: 39 Dec

**50 is normally used as a minimum threshold*

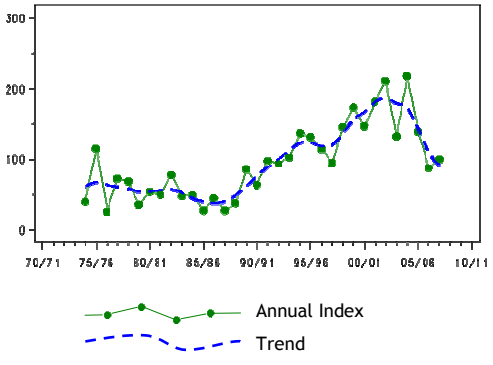


Figure 51.a, Annual indices & trend for Ruff for GB (above) & NI (below).

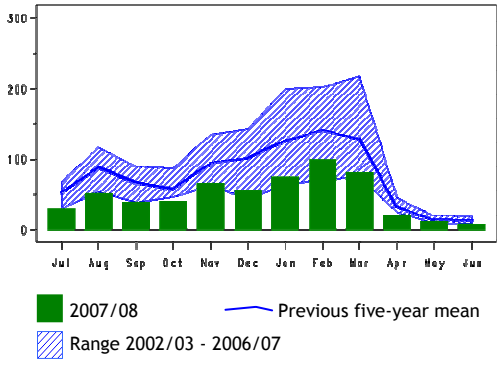


Figure 51.b, Monthly indices for Ruff for GB (above) & NI (below).

The recent dip in the trend for Ruff was not reversed in 2007/08, with the British index similar to that for the previous year. Three sites maintained five-year monthly maxima averages of 100+, and a further 22 achieved double-figure counts during the course of the year, including Somerset Levels and Fen Drayton Gravel Pits from where all-time maxima were recorded.

The species was noted at four sites in Northern Ireland, including Belfast Lough from where a count of 39 in December represented the most ever in the province, surpassing 34 at Loughs Neagh & Beg in 2006/07.

Ruffs are recorded throughout the year in Britain. It both supports passage birds most of which are recorded on the coast particularly in the autumn, as well as a wintering population that occurs largely at traditional inland wetlands and grazing marshes. The two most important sites in UK have tended to exemplify this seasonal contrast in recent years, with maxima at Ouse Washes consistently occurring in late winter whereas peaks on the North Norfolk Coast have been in the mid to late autumn period. However in 2007/08 both sites recorded their peak numbers in October. The degree of exchange between passage and wintering sites is unclear, but there are indications in Britain of a high degree of site fidelity to wintering sites between years (Smart *et al*. 2002).

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of national importance in Great Britain							
Ouse Washes	232 [13]	(431)	357 [13]	82 [13]	135 [13]	Oct	247
North Norfolk Coast	243	270	193	121	90	Oct	183
Lower Derwent Ings	99	73	50	148	129	Feb	100
Breydon Water & Berney Marshes	100	86	72	55 [12]	89 [13]	Jan	80
WWT Martin Mere	86	83	(50)	76	67	Jan	78
Humber Estuary	(110)	35	84	61	62	Aug	70
Swale Estuary	(54)	128	37	49	40	Feb	64
Morecambe Bay	(20)	(3)	4	92	(1)	Aug	48
Somerset Levels	33	10	(12)	29	96	Feb	42
Nene Washes	128	16	2	4	38	Mar	38
Middle Yare Marshes	17	53	40	27	21	Feb	32
Dungeness and Rye Bay	15	30	56	34	16	Mar	30
Rutland Water	52	20	32	29	15	Oct	30
Abberton Reservoir	51	6	36	(9)	21	Nov	29
Ribble Estuary	21	29	17	32	37	Mar	27
Tees Estuary	44	8	(29)	33	15	Aug	26
Arun Valley	52	24	6	10	(10)	Jan	23
Thames Estuary	43	28	38	3	4	Jan	23
The Wash	71	5	14	11	2	Sep	21
Fen Drayton Gravel Pits	7	0	1	33	60	Feb	20
Severn Estuary	18	13	16	33	14	Jan	19
Blackwater Estuary	19	24	18	(0)	15	Feb	19
Tophill Low Reservoirs	23	4	4	0	62 [13]	Aug	19
Dee Estuary (England and Wales)	13	29	(10)	9	11	Oct	16
Hamford Water	20	17	18	5	14	Jan	15
Minsmere	18	9	12	20	10	Apr	14
Sandbach Flashes	16	13	13	14	12	Oct	14
Holland Marshes	12	14	10	17	7	Mar	12
Stour Estuary	1	3	55	1	1	Aug	12
Crouch-Roach Estuary	5	42 [11]	4	2	6	Oct	12
East Chevington Pools	13	12	28	6	1	Dec	12
Orwell Estuary	30	3	5	9	6	Aug	11
Nosterfield Gravel Pits	7	11	3	23	9	Sep	11
Loch of Strathbeg	8	7	21	8	6	Aug	10
Solway Estuary	29	2	8	3	1	May	9
Stodmarsh NNR & Collards Lagoon	10	2	14	5	8	Jan	8
Otmoor	0	4	0	31 [13]	3 [13]	Jan	8
Cresswell Pond	17	6	6	10	2	Oct	8
Micklemere					7 [13]	Sep	7
Hardley Flood	18	0	0	0	16	Feb	7
Forth Estuary	2	5	(9)	14	4	Sep	7

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites no longer meeting table qualifying levels in WeBS-Year 2007/2008							
R. Cam: Upware to Dimmocks Cote	13	8		0	1	Aug	6
Ouse Fen & Pits (Hanson/RSPB)	(21)	2	2	4	0		6
Pegwell Bay	2	3	11	7	0		5
Blithfield Reservoir	6	0			0		2
Ythan Estuary	0	(0)	7	0	0		2
Hagnaby Lock Fen	9	11	1	0			5
Sites with mean peak counts of 7 or more birds in Northern Ireland†							
Belfast Lough	2 [11]	3 [11]	4 [11]	1 [11]	39	Dec	10
Loughs Neagh and Beg	0	5	7	34	6	Oct	10
Lough Foyle	(7)	16	11	6	2	Oct	9
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain							
Montrose Basin	3	(1)	2	1	9	Aug	4
Camel Estuary	2	1	(2)	1	8	Oct	3

† *as no All-Ireland threshold has been set a qualifying level of seven has been chosen to select sites for presentation in this report*

Jack Snipe

Lymnocryptes minimus

International threshold: **?**
Great Britain threshold: **?**†
All-Ireland threshold: **250**†

GB max: **170** **Feb**
NI max: **1** **Feb**

Jack Snipe is notoriously difficult to census using WeBS methods and hence limited inferences can be drawn from analysis of the national dataset. However, deliberate standardised searches carried out at favoured sites are of huge value in assessing changes in status at the local level at least.

For WeBS counters, 2007/08 was a productive year for encounters with Jack Snipe. Nationally, double-figure counts were received from twelve sites, the highest of these being 35 at Craigmarloch in November and 21 at Chichester Harbour in December. Only single figures were again reported from Doxey Marshes SSSI where 60+ were present in 2001/02 and 2004/05. For the second year running just one was noted in Northern Ireland; at Belfast Lough in February, the first recorded there for six years.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites with mean peak counts of 5 or more birds in Great Britain†							
Doxey Marshes SSSI	16	61	18	9	6	Mar	22
Rumworth Lodge Reservoir				21 [23]			21
Bickershaw Colliery Area	11 [23]	14 [23]	18 [23]	32 [23]			19
Chat Moss	28 [23]	34 [23]	14 [23]	7 [23]	6 [23]	Nov	18
Chichester Harbour	7	6	18	37	21	Dec	18
Windlaw Marsh	15	18	22	25	12	Mar	18
Craigmarloch		2 [13]		15	35	Nov	17
Lower Derwent Ings	22	27	24	5	4	Jan	16
Severn Estuary	5	10	19	6	12	Feb	10
Dee Estuary (England and Wales)	23	3	1	2	18	Mar	9
Kemerton Lake	9						9
Inner Moray and Inverness Firth	8	5	2	7	11	Oct	7
Langstone Harbour	0	12	9	0	13	Mar	7
Waulkmill Glen & Littleton Reservoirs	12	10	6	4	2	Mar	7
Boat of Garten Pools		6					6
Kinsham Pool	0	1	8	7	16	Jan	6
Ribble Estuary	(2)	4	(3)	8	(1)	Dec	6
Somerset Levels	(1)	2	3	9	9	Jan	6
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain†							
Loch Doilet and Polloch Bay	3	0	0	0	12	Jan	3
Malltraeth RSPB	(0)	0	1	0	10	Nov	3
Black Cart Water (Gryfe-White Cart)	0	2	0	0	8	Feb	2
Lacock GP	5	1	1	2	7	Mar	3
Furber`s Flood				0	6	Nov	3
Upton Warren Local Nature Reserve	3	5	3	2	6	Feb	4

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Baddiley Mere and Reservoir				2	5	Jan	4
Gwen Finch Wetland Reserve	0	1	0	0	5	Nov	1
Harelaw Reservoir (Barrhead)		0	0	0	5 [13]	Oct	1
Orchard Farm Pool	0	0	0	0	5	Feb	1
Ouse Washes	0	(1)	0	1 [13]	5	Oct	2
Pegwell Bay	0	(0)	0	5	5	Nov	3
St David`s Airfield Heath SSSI	1	1	2		5	Jan	2
Welbeck Estate	1	1	1	1	5	Oct	2

† *as few sites exceed the All-Ireland threshold and no British threshold has been set, a qualifying level of five has been chosen to select sites for presentation in this report*

Snipe

Gallinago gallinago

International threshold: 20,000?
Great Britain threshold: ?†
All-Ireland threshold: ?†

GB max: 9,175 Feb
NI max: 166 Feb

**50 is normally used as a minimum threshold*

Numbers of Snipe breeding in Britain have crashed in recent years primarily due to habitat loss. The wintering population is found in a range of habitats, both inland and coastal, and is supplemented largely by birds from northwest Europe.

Despite being widespread and present at many sites monitored via WeBS in winter, owing to the difficulty in counting them accurately due to their secretive habits caution must be applied when interpreting figures for the species. Moreover, there are also many potential wintering areas such as grazing marshes and bogs that are not covered comprehensively by WeBS.

The largest Core count by a considerable margin during 2007/08 was 1,794 at Somerset Levels in February, representing the highest number recorded there since January 2001.

Elsewhere, over a thousand were also counted on the saltmarshes of the North Norfolk Coast during Low Tide survey operations. In general, numbers throughout Britain were favourable compared to a relatively poor year in 2006/07, with increased numbers registered at virtually all of the principal sites.

In Northern Ireland, the maximum of 110 at Loughs Neagh & Beg was the most there since November 2003.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites with mean peak counts of 200 or more birds in Great Britain†							
Somerset Levels	(308)	1,513	713	1,012	1,794	Feb	1,258
Lower Derwent Ings	269	3,125	1,182	193	302	Jan	1,014
Doxey Marshes SSSI	390	716	455	224	278	Mar	413
Severn Estuary	519	349	337	113	402	Feb	344
Malltraeth RSPB	54	570	251	261	573	Oct	342
North Norfolk Coast	121	81	155	96	1,225 [11]	Dec	336
Maer Lake	403	378	280	105	180	Dec	269
Morecambe Bay	(147)	(265)	304	(140)	107	Jan	225
Ouse Washes	233	306 [13]	247 [13]	60	170	Nov	203
Southampton Water	212	184	210	(66)	(34)	Dec	202
Sites with mean peak counts of 50 or more birds in Northern Ireland†							
Belfast Lough	86 [11]	45 [11]	170	33	57	Dec	78
Loughs Neagh and Beg	151	22	31	33	110	Feb	69
Ballysaggart Lough	53						53
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain†							
Dee Estuary (England and Wales)	161	168	126	95	401	Jan	190
Duddon Estuary	20	96	226	20	283	Dec	129
Brading Harbour	155	66	68	134	236	Feb	132

† *as no British or All-Ireland thresholds have been set qualifying levels of 200 and 50 have been chosen to select sites, in Great Britain and Northern Ireland respectivley, for presentation in this report*

Long-billed Dowitcher

Limnodromus scolopaceus

Vagrant
Native Range: America

GB max:	**1**	**Feb**
NI max:	**0**	

A single Long-billed Dowitcher was reported in 2007/08; it was seen on The Fleet in Dorset in February and represents the first WeBS record for the site. This species has only failed to be recorded in two of the last fifteen WeBS-years.

Woodcock

Scolopax rusticola

International threshold:	**20,000?**
Great Britain threshold:	**?†**
All-Ireland threshold:	**?†**

**50 is normally used as a minimum threshold*

GB max:	**46**	**Nov**
NI max:	**0**	

Due to its secretive habits and preference for non-wetland habitats, Woodcocks remain poorly monitored by WeBS Core counts. Records from 84 sites spanned all months from August to March, with a maximum of 46 birds noted in November. The majority of records were of single birds, the highest counts being 13 at Loch of Strathbeg in October and nine at Arcot Pond in February, with a further five sites holding four or more birds. There were no reports from Northern Ireland.

Black-tailed Godwit

Limosa limosa

International threshold:	**470**
Great Britain threshold:	**150**
All-Ireland threshold:	**140**

GB max:	**30,347**	**Sep**
NI max:	**1,422**	**Jan**

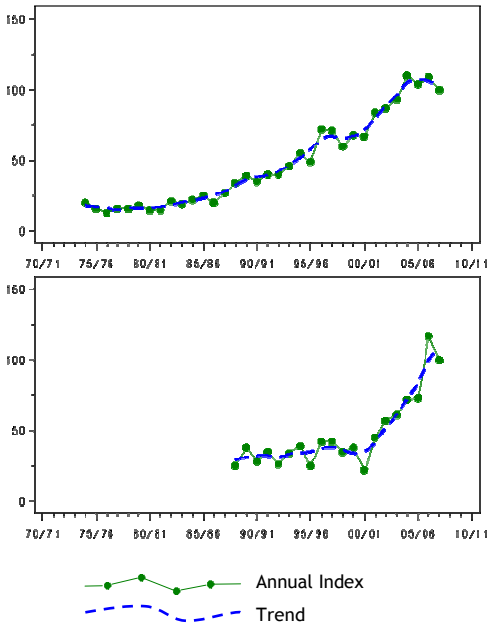


Figure 52.a, Annual indices & trend for Black-tailed Godwit for GB (above) & NI (below).

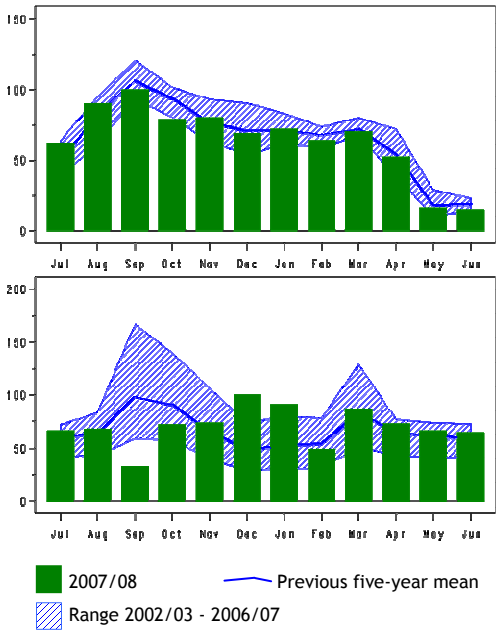


Figure 52.b, Monthly indices for Black-tailed Godwit for GB (above) & NI (below).

Most of the non-breeding Black-tailed Godwits that occur in Britain and Northern Ireland are of Icelandic origin. In addition, a small proportion of passage birds are of the nominate race which are mainly to be found in the south and east of England where a very small number also breed.

Stroud *et al*. (2004) estimated a 30% increase in the Icelandic population of this species between the 1980s and 1990s, during which period the British index of wintering birds rose significantly. In 2007/08 however, the index showed a small drop compared to the previous year, indicating that the trend of annual increases may have come to an end and the wintering population may now have stabilised. Further years data are required in order to ascertain whether this is genuinely the case.

The UK is of significant importance for this species, with twenty-nine sites qualifying to be of international importance in 2007/08. This represents an increase of three on the previous year, following the inclusion of Nene Washes, Warton Floods and Deben Estuary. A further 17 sites surpassed the threshold of national importance. Of the most important sites, the peak count of the year was recorded at Thames Estuary where 8,081 in September resulted in the five-year average for the site rising by over 1,000 birds. Although WeBS has frequently shown marked annual variation in utilisation of some sites by this species, numbers at the major sites in 2007/08 were otherwise largely consistent with previous years. Lower numbers recorded at Ouse Washes may be associated with a redistribution of birds to nearby Nene Washes where numbers have increased considerably.

In Northern Ireland, the index fell slightly compared to the previous year but remained high in a historical context. Counts from Strangford Lough were similar to the previous two years, whereas low numbers were seen at Lough Foyle for the second year running.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean	
Sites of international importance in the UK								
The Wash	7,635	5,546	8,205	8,090	(6,961)	Aug	7,369	
Thames Estuary	(2,254)	3,757	5,221	4,893	8,081	Sep	5,488	
Dee Estuary (England and Wales)	4,493	6,452	5,379	3,713	5,278	Nov	5,063	
Ribble Estuary	(2,175)	2,936	(2,921)	5,095	3,913	Feb	3,981	
Humber Estuary	2,108	2,435	3,296	5,323	4,554	Oct	3,543	
Ouse Washes	3,137 [13]	3,424	4,154 [13]	1,790 [13]	761	Apr	2,653	
Blackwater Estuary	(1,804)	2,356	(1,243)	(751)	2,387	Mar	2,372	
Mersey Estuary	2,407	2,950	2,510	418	(339)	Jul	2,071	
Poole Harbour	(2,133)	1,732	(1,431)	1,907	(1,413)	Nov	1,924	
Breydon Water & Berney Marshes	1,630	1,612	1,675	1,421 [11]	2,469 [13]	Nov	1,761	
Stour Estuary	1,717	1,972	1,507	1,215	2,148	Sep	1,712	
Swale Estuary	1,511	1,782	(1,389)	1,396	(1,186)	Feb	1,563	
Nene Washes	185	770	156	1,120	3,800	Mar	1,206	▲
Medway Estuary	(398)	(518)	(190)	(1,120)	(490)	Mar	(1,120)	
R. Avon: Ringwood to Christchurch	170	26	1	(3,000)	2,000	Feb	1,039	
Exe Estuary	(1,079)	1,054	1,090	999	913	Nov	1,027	
North Norfolk Coast	774	1,577	940	645	1,139	Aug	1,015	
Alde Complex	600	298	1,181	1,385	774	Nov	848	
Chichester Harbour	1,050	545	(995)	685	775	Nov	810	
Orwell Estuary	768	(277)	975	523	845 [11]	Dec	778	
Crouch-Roach Estuary	(261)	729 [11]	(265)	(554)	754	Feb	742	
Belfast Lough	706	857	642	(586)	708	Jan	728	
Pagham Harbour	541	664	340	(764)	1,100	Dec	682	
R. Avon: Ford'bridge to Ringwood	0	(1)	0	(1,750)	888	Mar	660	
Langstone Harbour	457	758	665	562	674	Nov	623	
Morecambe Bay	403	722	747	928	290	Jun	618	
Warton Floods					600	Jan	600	▲
Deben Estuary	(466)	305	575	622	707	Apr	552	▲
Burry Inlet	(410)	845	994	300 [11]	24	Oct	541	
Sites of national importance in Great Britain								
Hamford Water	414	314	625	372	441	Nov	433	
Portsmouth Harbour	(211)	360	(494)	(398)	371	Dec	406	
Colne Estuary	253	472	171	(477)	617 [11]	Feb	398	

	03/04	04/05	05/06	06/07	07/08	Mon	Mean	
North West Solent	373	311	474	353	469	Jan	396	
Severn Estuary	540	(450)	(435)	297	221	Sep	389	
Southampton Water	(434)	291	489	295	(374)	Mar	377	
Forth Estuary	478	348	380	348	280	Sep	367	
Eden Estuary	403	374	181	294	318	Feb	314	
Carmarthen Bay	331	307	237	101 [11]	(28)	Nov	244	
Beaulieu Estuary	116	326	190	317	238	Jan	237	
Newtown Estuary	(173)	(113)	374	(223)	89	Oct	232	
Blyth Estuary	(25)	(76)	194	121	319	Feb	211	▲
Leighton Moss	125	290	25	280	260	Jun	196	
Sandbach Flashes	360	151	254	92	35	Apr	178	
Solway Estuary	200	(275)	94	81	(43)	Apr	163	▲
Ouse Fen and Pits (Hanson/RSPB)	135	1	0	187	450	Feb	155	▲
Christchurch Harbour	174	169	93	32	300	Feb	154	▲
Sites of all-Ireland importance in Northern Ireland								
Strangford Lough	267	176	717 [11]	535 [11]	645	Dec	468	
Lough Foyle	161	983	397	60	52	Dec	331	
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain								
Minsmere	62	53	43	177	217	Nov	110	
Yar Estuary	73	83	171	94	204	Dec	125	
Alt Estuary	134	52	116	241	194	Aug	147	
Arun Valley	(8)	4	2	31	162	Feb	50	

Bar-tailed Godwit

Limosa lapponica

International threshold: 1,200
Great Britain threshold: 620
All-Ireland threshold: 160

GB max: 28,230 Jan
NI max: 3,461 Jan

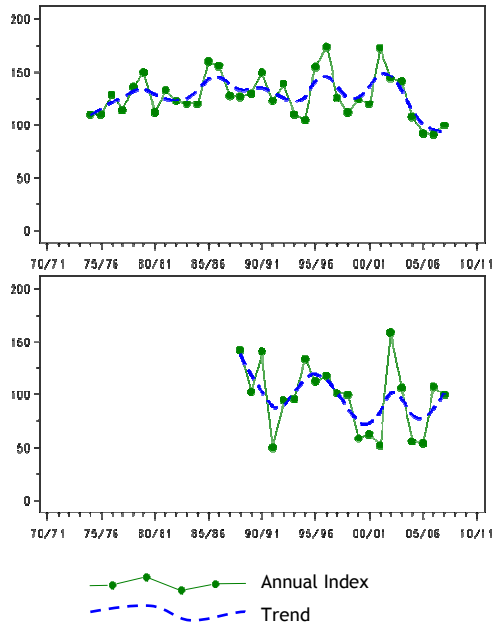


Figure 53.a, Annual indices & trend for Bar-tailed Godwit for GB (above) & NI (below).

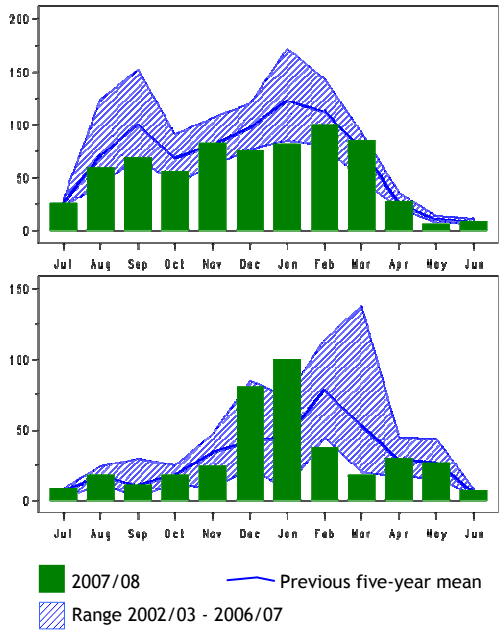


Figure 53.b, Monthly indices for Bar-tailed Godwit for GB (above) & NI (below).

The migratory feats of the Bar-tailed Godwit have been demonstrated by satellite-tracking of birds from New Zealand to Alaska (www.prbo.org/cms/425).

Those wintering in Britain are of the nominate race *lapponica* whose breeding range extends from northeast Europe to western Siberia. Britain formerly supported

almost half of the *lapponica* population however the national index has fallen notably over the course of the last six years. In addition, many passage birds to Britain are of the *taymyrensis* race, which migrate from central Siberia to winter on the west coast of Africa.

The 2007/08 British index once again illustrates the low point reached by Bar-tailed Godwit as a wintering species in Great Britain. Despite the fact that the index shows a small improvement compared to the previous two years, the counted British maximum of 28,230 individuals in January was the lowest ever, 12% less than the previous low recorded in 2005/06.

In Britain, below average numbers were recorded throughout the year up until late winter when the monthly indices were close to normal. Wintering numbers in the UK are influenced by the weather conditions in, and the associated use of, the Wadden Sea and southern delta of the Netherlands. Despite a high degree of site fidelity to both staging and wintering areas in successive years (Scheiffarth *et al*. 2001) this has traditionally led to large annual variation in numbers using UK estuaries, but recent mild winters are likely to have had a consistently negative effect on the number of Bar-tailed Godwits selecting sites on the British side of the North Sea. This is likely to have resulted in a gradual eastward shift of the wintering population as a consequence of "short stopping" (Maclean *et al*. 2008).

Numbers at virtually all of the 14 sites of international importance in the UK were below the respective five-year site averages, most notably at Thames Estuary and Alt Estuary where the peak counts were the lowest ever recorded.

In Northern Ireland, the particularly high level of annual variation shown by the index is typical. Numbers at the two key sites, Lough Foyle and Strangford Lough, fared relatively well compared to the important sites in Britain. In addition, Belfast Lough qualified to be a site of national importance for the first time. However, in contrast to the monthly indices for Britain, notably high numbers were present in Northern Ireland during the months of December and January.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean	
Sites of international importance in the UK								
The Wash	21,086	11,268	(9,849)	11,900	10,755	Feb	13,752	
Thames Estuary	8,989	6,595	6,613	8,629	3,711	Mar	6,907	
Ribble Estuary	11,301	4,657	(3,510)	4,628	5,162	Nov	6,437	
Alt Estuary	8,120	4,138	4,221	4,100	2,939	Mar	4,704	
Humber Estuary	4,291 [11]	(2,460)	(2,227)	(1,865)	(1,490)	Jan	4,291	
North Norfolk Coast	7,429	1,360	3,273	2,990	1,783	Jan	3,367	
Lindisfarne	(4,078)	2,900	1,787 [11]	2,535	(2,170)	Sep	2,825	
Morecambe Bay	4,424	1,752	2,158	(2,157)	(407)	Mar	2,778	
Cromarty Firth	3,439	2,311	651	803	(707)	Dec	1,801	
Lough Foyle	1,019	(630)	1,133	(2,672)	2,300	Jan	1,781	
Tay Estuary	2,664	(1,680)	1,050	1,002 [11]	(1,000)	Mar	1,599	
Forth Estuary	1,750 [11]	1,599	1,188	1,502	(921)	Aug	1,510	
Dengie Flats	1,550	1,250	1,550	1,062	(1,500)	Jan	1,382	
Strangford Lough	2,019	1,422	1,378	529	1,305	Dec	1,331	
Sites of national importance in Great Britain								
Hamford Water	803	(647)	(657)	(1,239)	1,255	Jan	1,099	
Dornoch Firth	1,068	1,495	1,681	541	301	Oct	1,017	▼
Chichester Harbour	(910)	863	(1,200)	630	(1,228)	Feb	966	
Solway Estuary	1,572	1,050	958	529	473	Sep	916	
Inner Moray and Inverness Firth	830	901	770	785	390	Oct	735	
South Ford	950	1,040	422	782	454	Feb	730	
Loch Bee SSSI Coast	713 [47]						713	
Swale Estuary	462	922	481	585	750	Feb	640	▲
Sites of all-Ireland importance in Northern Ireland								
Belfast Lough	154	180 [13]	139	(159)	212	Sep	171	▲

Whimbrel

Numenius phaeopus

GB max:	**1,284**	**Aug**
NI max:	**37**	**May**

International threshold:	**6,800**
Great Britain threshold:	**+†**
All-Ireland threshold:	**+†**

A small number of Whimbrel breed in the far north of Scotland, but most birds recorded in Britain are those which breed in Iceland, Scandinavia and western Siberia migrating to the principal wintering areas in west Africa.

Owing to the fact that many sites are not counted during the April/May and July/August migration periods, the species is relatively poorly-monitored by WeBS. Furthermore, spring passage of the species tends to peak specifically in late April and early May whereas Core count dates tend to be nearer mid-month. A small number of individuals winter on favoured British estuaries annually.

Whimbrels were recorded at 102 sites throughout Britain and a further five in Northern Ireland. For the first time since 2001 the monthly peak occurred in August. This was due to a relatively poor spring passage and owed much to the maxima for The Wash (324), North Norfolk Coast (257) and Chichester Harbour (209), the three largest counts of the year, all occurring in August. The latter two counts represented the largest ever for the respective sites, but all were some way short of the highest ever WeBS count of 1,812 from the Severn Estuary in May 1977.

Whimbrel (Ron Marshall)

Nineteen sites, the majority of which are estuaries on the south coast of England, held birds during the core winter period of December to February. Most records were of one or two birds, the exceptions being peaks of four at Fal Complex and three at Southampton Water in December, and four at Chichester Hbr in January.

One was at Outer Ards Shoreline in January, the sixth year out of the last eight that the species has been recorded wintering in Northern Ireland.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites with mean peak counts of 50 or more birds in Great Britain†							
Barnacre Reservoir & Grizedale Lea	575 [48]	553 [48]	270 [49]				466
The Wash	86	(414)	292	233	324	Aug	270
Dungeness and Rye Bay	214 [42]	373 [42]	222 [49]	246 [12]	(8)	May	264
Brockholes Quarry	329 [49]	289 [49]	154 [49]				257
Severn Estuary	(240)	(197)	101	186	85	May	162
North Norfolk Coast	141	166	129	70	257	Aug	153
Burry Inlet	110	175	111	223	40	Jul	132
Exe Estuary	298	42	(48)	109	60	Jul	127
Chichester Harbour	142	143	78	31	209	Aug	121
Langstone Harbour	(62)	78	96	58	84	Aug	79
Swale Estuary	(77)	(13)	(17)	(20)	(11)	Jul	(77)
Morecambe Bay	(54)	(182)	60	(53)	16	May	73
Humber Estuary	(53)	(82)	(107)	(78)	36	Aug	71
Lower Derwent Ings	35 [45]	139 [45]	95 [49]		1	Apr	68
Southampton Water	(33)	(29)	63	(27)	(7)	May	63

† *as no British or All-Ireland thresholds have been set a qualifying level of 50 has been chosen to select sites for presentation in this report*

Curlew

Numenius arquata

GB max:	79,912	Feb
NI max:	5,792	Jan

International threshold:	8,500
Great Britain threshold:	1,500
All-Ireland threshold:	550

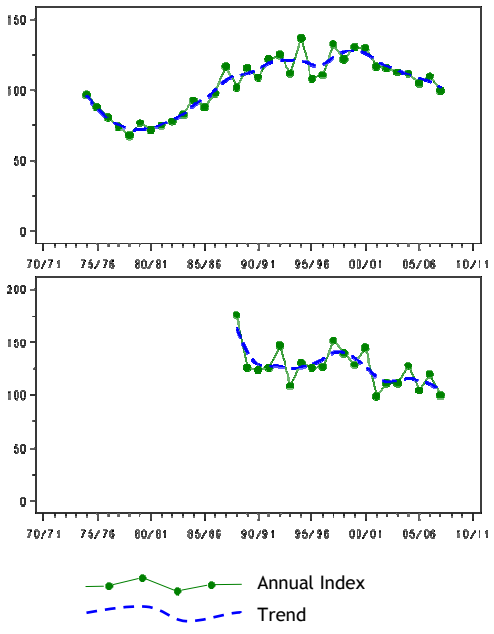


Figure 54.a, Annual indices & trend for Curlew for GB (above) & NI (below).

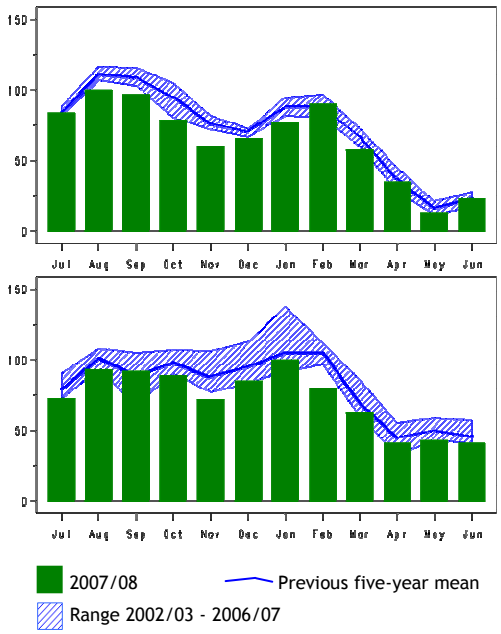


Figure 54.b, Monthly indices for Curlew for GB (above) & NI (below).

The characteristic sight and sound of the Curlew is a distinctive feature of many coastal wetlands in winter throughout the UK, the wintering population being comprised of both British and Scandinavian breeding birds. Numbers of Curlew increased from the mid 1970s until the start of the 2000s, since when the trend has been one of a slow but steady decline – continuing in 2007/08 to a point where the index is now at a level similar to that when standardised monitoring commenced in 1974/75.

This decline may be associated with a climate-induced north-easterly shift in distribution estimated to be 119 km between 1981-2000 (Maclean *et al.* 2008), which has coincided with stable or increasing wintering numbers in the Wadden Sea (e.g. Hustings *et al.* 2008). An increase in the number wintering in the Danish part of the Wadden Sea may also be related to protection from hunting in Denmark since 1994 (Laursen 2005, in Delany *et al.* 2009). Furthermore, it has been suggested that wintering decreases in Africa are indicative of a distributional shift (Delany *et al.* 2009).

The counted British monthly maximum was similar to that of the last five years. However compared to the previous year, 2007/08 saw notably lower maxima counted at the two UK sites of international importance, Morecambe Bay and The Wash. Peak counts from both were approximately 10% below the respective five-year site averages, but were within the expected variation based on counts in recent years. Of the other main sites, numbers were most notably down at Thames Estuary, Lavan Sands and Mersey Estuary – where for the first WeBS-year since 1982/83 no count of Curlews reached four figures. In contrast, the increasing importance of both Stour Estuary and Montrose Basin for the species was maintained. This species can winter in significant numbers away from coasts, and it has been suggested that habitat changes may have caused an increase in coastal

wintering in some parts of Europe (Delany *et al*. 2009).

The index for Northern Ireland shows a slight decline despite numbers at the four principal sites being similar to the respective five-year averages for each site. However, Outer Ards Shoreline no longer qualifies as a site of national importance following the lowest ever peak monthly count from there.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean	
Sites of international importance in the UK								
Morecambe Bay	(11,196)	8,328	9,515	14,027	9,402	Feb	10,494	
The Wash	15,336	6,978	5,140	9,710	7,664	Aug	8,966	
Sites of national importance in Great Britain								
Dee Estuary (England and Wales)	5,727	6,933	4,666	5,565	5,346	Sep	5,647	
Thames Estuary	(2,651)	3,352	(3,611)	6,993	3,722	Feb	4,689	
Solway Estuary	(4,561)	(3,328)	(3,456)	4,007	(3,185)	Jan	4,284	
Humber Estuary	3,530 [11]	3,768	(4,818)	5,067	3,993	Jan	4,235	
Forth Estuary	3,941	(2,827)	3,599	4,567	3,568	Sep	3,919	
Severn Estuary	2,898	2,613	2,514	3,230	(2,560)	Sep	2,814	
North Norfolk Coast	2,350	1,835	2,284	2,190	2,884	Aug	2,309	
Lavan Sands	2,118	2,413	1,955	3,243	1,091	Sep	2,164	
Duddon Estuary	2,756	1,883	1,816	2,113	2,145	Sep	2,143	
Poole Harbour	1,427	(2,472)	(1,013)	(1,135)	(908)	Feb	1,950	
Burry Inlet	(2,283)	1,831	2,587	1,413	1,370	Sep	1,897	
Inner Moray and Inverness Firth	1,809	2,137	1,838	(1,939)	1,687	Feb	1,882	
Chichester Harbour	1,680	1,628	1,889	2,052	1,760	Aug	1,802	
Blackwater Estuary	1,366	1,848	1,914	(790)	(1,267)	Oct	1,709	
Mersey Estuary	2,480	1,830	1,792	1,379	982	Feb	1,693	
Inner Firth of Clyde	1,739	1,301	1,417	2,017	1,673	Feb	1,629	
Cleddau Estuary	1,437	(789)	1,246	(1,869)	1,832	Jul	1,596	▲
Sites of all-Ireland importance in Northern Ireland								
Lough Foyle	2,127	3,115	2,038	2,681	2,510	Jan	2,494	
Strangford Lough	1,788	1,594	1,523	1,918 [11]	1,552	Oct	1,675	
Belfast Lough	743	730 [13]	494 [11]	779 [11]	821	Sep	713	
Carlingford Lough	684	732	576	754	(759)	Jan	701	
Sites no longer meeting table qualifying levels in WeBS-Year 2007/2008								
Ribble Estuary	(1,857)	1,460	1,189	1,497	1,419	Feb	1,484	
Langstone Harbour	1,255	1,525	1,811	1,343	1,279	Aug	1,443	
Outer Ards Shoreline	475	838	632	519	238	Mar	540	
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain								
Montrose Basin	860	604	1,536	1,115	1,734	Jan	1,170	
Stour Estuary	914	1,511	1,171	1,424	1,669	Mar	1,338	

Common Sandpiper

Actitis hypoleucos

International threshold: 17,500
Great Britain threshold: ?†
All-Ireland threshold: ?†

GB max: 888 Jul
NI max: 6 Aug

Some 12,000 pairs of Common Sandpiper are estimated to breed in Britain (Baillie *et al*. 2009), predominantly in the north and west along upland streams and reservoirs. The species generally winters in western Africa and is seen in a variety of wetland habitats throughout Britain during the passage periods. A small, but increasing, number of birds over-winter in the UK.

In 2007/08, for only the second time in WeBS history a single Core count of passage Common Sandpipers topped three figures. This came from Pegwell Bay, the most prolific site for the species in Great Britain, and involved 106 birds in July. It is preceded by the record Core count of 126 birds from the same site in August 1971 (plus a very large non-Core count of 163 birds there in 2006).

During the winter period of November through to March, approximately 50 birds were recorded at WeBS sites. Typically the majority related to singles on the south coast, but notable exceptions were January and February records of two at Cotswold Water Park and Ormesby Broad respectively. Mid-winter maxima on the coast were four at Avon Estuary in January

and five at Severn Estuary in February. None were recorded during the winter in Northern Ireland.

Sites with 30 or more birds in 2007/08†

Pegwell Bay	106	Jul	Ribble Estuary	37	Jul
Humber Estuary	46	Sep	Cleddau Estuary	33	Jul
Thames Estuary	41	Aug	Abberton Reservoir	31	Aug
Morecambe Bay	38	Jul	Dungeness and Rye Bay	30	Aug

† *as no British or All-Ireland thresholds have been set a qualifying level of 30 has been chosen to select sites for presentation in this report*

Spotted Sandpiper

Actitis macularius

Vagrant
Native Range: America

GB max: **1 Sep**
NI max: **0**

Two wintering Spotted Sandpipers were recorded in 2007/08. In Wales, one frequented Llanishen and Lisvane Reservoirs from November through to March, and in Scotland one present on the Forth Estuary was seen between Grangepans and Grangemouth in January. These represent the third and first WeBS records for the two nations respectively. The previous Welsh records date back to December 2001 (Cleddau Estuary) and October 1975 (Dyfi Estuary).

Green Sandpiper

Tringa ochropus

International threshold: **17,000**
Great Britain threshold: **?†**
All-Ireland threshold: **?†**

GB max: **407 Aug**
NI max: **1 Sep**

Green Sandpipers were recorded during WeBS Core counts at over 230 sites in 2007/08. Typically numbers were greatest during the autumn passage period. Following 26 at Pegwell Bay in July, August typically proved to be the peak month featuring counts of 27 on the North Norfolk Coast and 26 at Thames Estuary. One at Loughs Neagh & Beg in September was the only one of the year in Northern Ireland.

The highest counts during November to March were from River Avon (Salisbury to Fordingbridge) and Beddington Sewage Farm, which held up to 15 and 12 respectively during the course of the winter. Away from England, counts of two or more wintering birds were noted at five sites in Scotland and three in Wales.

Owing to their relatively generalist nature, monitoring of this species would undoubtedly benefit from improved coverage of smaller water bodies throughout the wider countryside. Together, lower profile wetland sites such as grazing marshes and farmstead reservoirs, may support relatively important numbers at the national level, particularly during the winter.

Green Sandpiper (Mike Weston)

Sites with 15 or more birds in 2007/08†

North Norfolk Coast	27	Aug	Dungeness and Rye Bay	19	Aug
Pegwell Bay	26	Jul	Ouse Fen and Pits	19	Aug
Thames Estuary	26	Aug	Tophill Low Reservoirs	16	Aug

† *as no British or All-Ireland thresholds have been set a qualifying level of 15 has been chosen to select sites for presentation in this report*

Spotted Redshank

Tringa erythropus

International threshold: 900
Great Britain threshold: +†
All-Ireland threshold: +†

GB max: 130 Oct
NI max: 1 Dec

Spotted Redshank breed from Scandinavia through sub-arctic Russia, most wintering in equatorial Africa and a small proportion remaining in western Europe.

In the UK in 2007/08 they were recorded in all months of the year, typically the majority in autumn and winter with a small number in spring. A relatively small autumn passage featured a maximum site count of 40 at The Wash in August and culminated in a late British peak monthly count of 130 in October. This peak count was some 34% lower than the monthly maximum for the previous year. During subsequent winter months the largest single site count was 32 at Old Hall Marshes in November. In Northern Ireland, a single wintered at Dundrum Inner Bay, the only record from the province during the year.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites with mean peak counts of 10 or more birds in Great Britain†							
The Wash	36	39	39	86	40	Aug	48
North Norfolk Coast	35	34	35	42	29	Oct	35
Blackwater Estuary	4	42	24	(1)	32	Nov	26
Humber Estuary	(27)	21	10	25	13	Aug	19
Minsmere	58	3	14	3	6	Nov	17
Abberton Reservoir	20	0	26	(0)	14	Oct	15
Breydon Water and Berney Marshes	31	8	8	8 [13]	11	Apr	13
Medway Estuary			0	25	(1)	Oct	13

† *as no British or All-Ireland thresholds have been set a qualifying level of 10 has been chosen to select sites for presentation in this report*

Spotted Redshank (Mike Weston)

Greater Yellowlegs

Tringa melanoleuca

Vagrant
Native Range: America

GB max: 1 Dec
NI max: 0

A Greater Yellowlegs was seen on the Lincolnshire side of The Wash in December; presumably the same bird that had been reported from other sites in the area during the preceding May and September (per www.birdguides.com). It would constitute the second record for WeBS, following one at Medway Estuary in November 1972.

Greenshank

Tringa nebularia

GB max:	**1,338**	**Aug**
NI max:	**173**	**Oct**

International threshold:	**2,300**
Great Britain threshold:	**6***
All-Ireland threshold:	**20***

**50 is normally used as a minimum threshold*

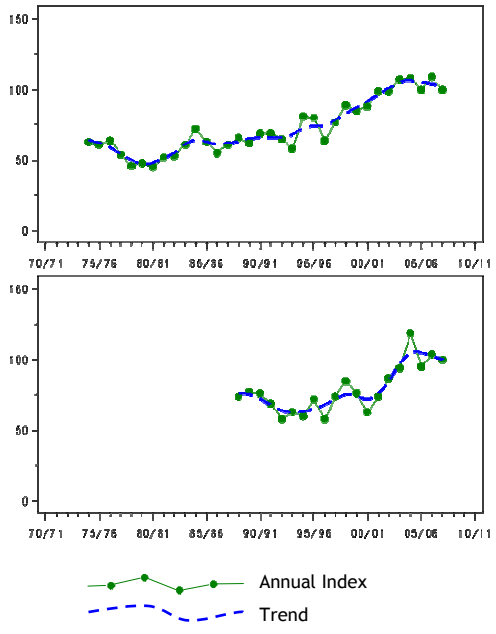


Figure 55.a, Annual indices & trend for Greenshank for GB (above) & NI (below).

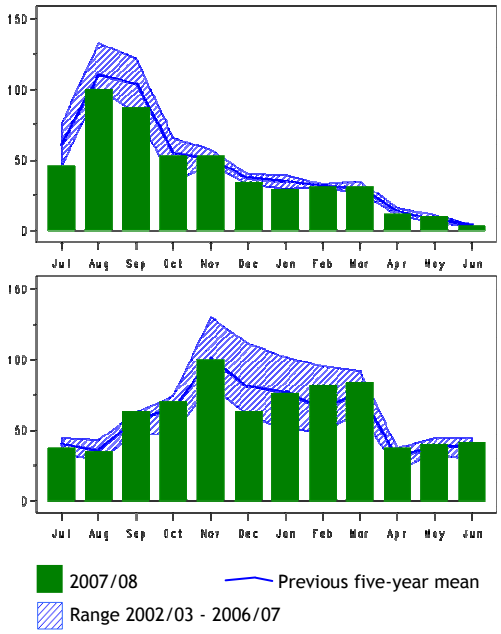


Figure 55.b, Monthly indices for Greenshank for GB (above) & NI (below).

Outside the breeding season, Greenshanks can occur in a variety of wetland habitats, but largest numbers are traditionally found on estuaries and coastal lagoons. The number over-wintering in Britain has steadily increased over the last decade; in the past these winterers have been considered to mainly comprise British breeders (restricted to northwest Scotland and the northern Isles), but now may include an increasing number of birds of Scandinavian or Siberian origin.

The number of Greenshanks using sites in Britain is small compared to that which utilise four staging areas in the Wadden Sea during autumn passage; all of which have supported impressive maxima of between 5,200 and 11,200 birds (Delany *et al*. 2009).

The principal sites throughout the year are in the south and east of England, where peak counts in 2007/08 were largely comparable with recent years. Typically the numbers of returning passage birds peaked in August and September, including a maximum count for the year of 252 at The Wash.

In Northern Ireland, where a similar trend based on the annual indices is evident, the bulk of birds were distributed evenly between Strangford Lough, Carlingford Lough and Lough Foyle.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites with mean peak counts of 20 or more birds in Great Britain†							
The Wash	336	204	258	201	252	Aug	250
Thames Estuary	(88)	259	144	196	132	Aug	183
Blackwater Estuary	169	147	(84)	(73)	(119)	Sep	158
North Norfolk Coast	131	118	147	118	87	Aug	120
Chichester Harbour	179	80	91	132	77	Sep	112
Stour Estuary	68	88	78	106	103	Sep	89
Hamford Water	49	69	104	79	86	Sep	77

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Fal Complex	(37)	52	58	59	66	Sep	59
Exe Estuary	72	56	38	71	41	Jul	56
Swale Estuary	56	(24)	(55)	(15)	(7)	Oct	56
Morecambe Bay	34	94	33	59	(28)	Aug	55
Dee Estuary (England & Wales)	(76)	36	(16)	32	50	Sep	49
Langstone Harbour	45	44	38	51	37	Aug	43
Tamar Complex	57	42	36	29	32	Sep	39
Kingsbridge Estuary	(36)	50	35	27	45	Mar	39
Humber Estuary	(48)	(34)	33	21	(47)	Aug	37
Medway Estuary	(36)	(35)	(4)	(10)	(9)	Aug	(36)
Pegwell Bay	26	(6)	36	42 [12]	40	Jul	36
Southampton Water	(26)	(33)	(21)	(18)	(12)	Feb	(33)
Burry Inlet	78	24	34	4	0		28
Jersey Shore				26	28	Nov	27
North West Solent	21	(16)	(17)	29	31	Sep	27
Cleddau Estuary	27	26	42 [10]	25	25	Nov	27
Taw-Torridge Estuary	31	11	29	22	34	Sep	25
Crouch-Roach Estuary	28	4	2	15	32	Oct	25
Camel Estuary	22	32	(21)	(20)	16	Oct	23
Montrose Basin	45	(6)	5	19	(19)	Sep	23
Poole Harbour	(9)	17	(9)	(19)	(24)	Sep	20
Sites of all-Ireland importance in Northern Ireland							
Strangford Lough	82	117	84	85	65	Oct	87
Lough Foyle	35	37	74	34	65	Sep	49
Carlingford Lough	34	26	39	40	66	Oct	41
Dundrum Inner Bay	58	18	22	24	20	Sep	28
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain†							
Abberton Reservoir	7	19	18	(13)	24	Aug	17
Orwell Estuary	31	1	4	23	20	Oct	16
Tophill Low Reservoirs	3	10	(2)	4	27	Aug	11
Dyfi Estuary	16	14	2	1	24	Sep	11

† *as the British threshold is low a qualifying level of 20 has been used to select sites for presentation in this report*

Lesser Yellowlegs

Tringa flavipes

Vagrant
Native Range: N & S America

GB max: **2** **Nov**
NI max: **0**

Lesser Yellowlegs were seen at three sites, two of them in Scotland. Following birds at Milldam & Balfour Mains Pools and Hen Reedbeds (Suffolk) in October and November respectively, one was noted throughout the winter at Montrose Basin. The latter recalls records of recent wintering individuals in Norfolk in 2004/05 and Cornwall in 2003/04.

Wood Sandpiper

Tringa glareola

International threshold: **10,500**
Great Britain threshold: **+**
All-Ireland threshold: **+**

GB max: **16** **Aug**
NI max: **0**

WeBS counts of Wood Sandpipers are strongly dependent on priority count dates coinciding with fluxes of autumn passage, the historic peaks of which have all been in August; such as 19 at Breydon Water and Berney Marshes in 2004, 12 at Dungeness and Rye Bay in 1999, and 12 at The Wash in 1970. 2007/08 however was unremarkable; the species was recorded by counters at 20 sites in England, as well as at Aberlady and Gullane Bays in Scotland and Dyfi Estuary in Wales. Autumn passage spanned July to September with a monthly peak of 16 in August, while during the following spring seven sites hosted the species in May. All records referred to singles apart from two at Lodmoor and Pett Level in August, and two at Nosterfield GPs in May.

Redshank

Tringa totanus

International threshold: 2,800
Great Britain threshold: 1,200
All-Ireland threshold: 310

GB max: 78,595 Oct
NI max: 8,251 Nov

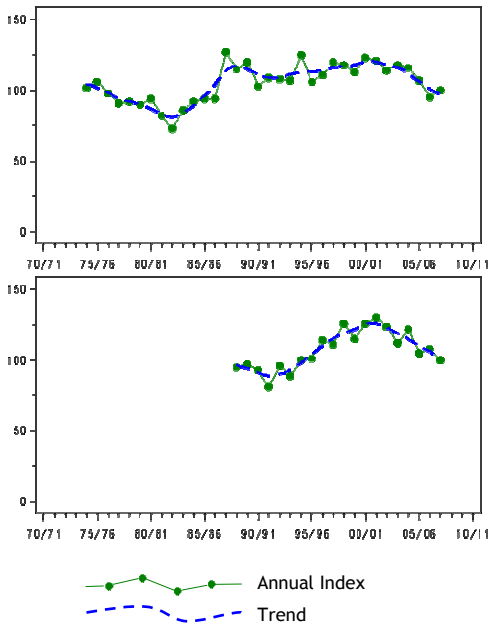


Figure 56.a, Annual indices & trend for Redshank for GB (above) & NI (below).

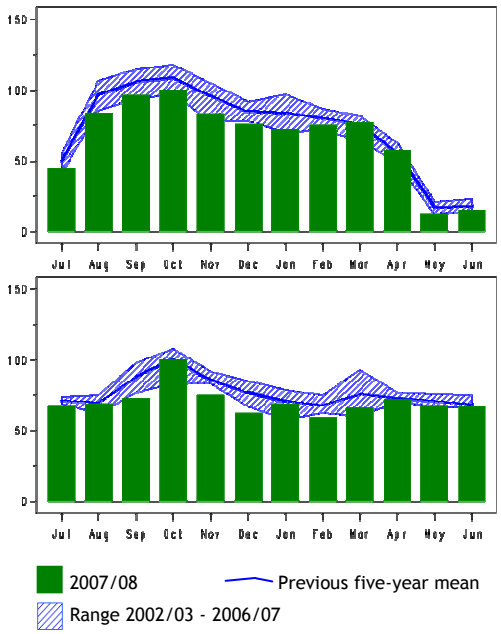


Figure 56.b, Monthly indices for Redshank for GB (above) & NI (below).

The UK is of significant international importance for Redshank. Predominantly found on the coast, the wintering population comprises both local breeders (*britannica*) and birds from Iceland (*robusta*) and other nearby European populations (*totanus*).

In 2007/08, the WeBS five-year averages for eleven sites surpassed the international threshold, and 21 sites have been identified as being important within a wider network of key sites in Europe (Delany *et al.* 2009). The recent fall in the national indices is therefore of potential concern. Although in Britain a steep decline experienced since 2004/05 appears to have slowed this year, numbers at several important sites including The Wash, Thames Estuary and Forth Estuary showed further evidence of a consistent fall in numbers. In contrast, numbers at the Dee Estuary recovered following the decline in 2006/07; the September count of 12,994 is the highest ever peak count recorded by WeBS.

This year's maxima at all of the UK's sites of international importance were recorded between August and October. Numbers in this autumn period have remained reasonably consistent from year to year, and it is specifically wintering totals that appear to have declined. Reasons for this are unclear, but the pattern is suggestive of either a climate-induced shift in wintering distribution (although Maclean *et al.* (2008) found no significant evidence of this), perhaps combined with low first-winter survival.

In Northern Ireland, the downward trend continues as a result of further gradual declines at Belfast Lough, Carlingford Lough and Lough Foyle. These were partly balanced by a 69% increase compared to the previous year at Dundrum Inner Bay, which recorded a monthly peak of over 1,000 birds for the first time since 2000.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean	
Sites of international importance in the UK								
Dee Estuary (England and Wales)	11,014	10,208	12,367	9,384	12,994	Sep	11,193	
Morecambe Bay	6,715	7,106	7,283	(8,254)	4,805	Feb	6,833	
The Wash	9,339	6,760	6,052	5,605	4,407	Aug	6,433	
Humber Estuary	(8,362)	(8,494)	4,682	3,830	(4,059)	Sep	6,342	
Forth Estuary	5,462	5,501	6,039	4,689	4,374	Oct	5,213	
Thames Estuary	4,383	5,081	4,811	4,134	3,512	Oct	4,384	
Strangford Lough	5,244	4,505	4,099	3,632	4,028	Oct	4,302	
Mersey Estuary	6,050	3,618	3,622	1,535	(2,069)	Oct	3,706	
Solway Estuary	(3,421)	3,617	(1,595)	(1,822)	(3,213)	Oct	3,617	
Blackwater Estuary	(1,931)	3,034	(2,472)	(1,965)	(3,586)	Oct	3,310	
Ribble Estuary	2,752	2,211	4,078	1,491	3,469	Oct	2,800	
Sites of national importance in Great Britain								
Duddon Estuary	2,508	1,956	3,698	3,122	2,562	Feb	2,769	
Crouch-Roach Estuary	(496)	3,299 [11]	(556)	(1,202)	1,361	Feb	2,330	▼
Inner Moray and Inverness Firth	2,317	2,846	1,910	(1,658)	2,040	Oct	2,278	
Severn Estuary	(1,913)	(2,516)	1,930	2,362	(1,960)	Nov	2,269	
Ythan Estuary	1,030	(1,797)	(5,274)	1,481	1,497	Aug	2,216	
Chichester Harbour	2,450	1,695	1,754	(2,535)	2,403	Oct	2,167	
Deben Estuary	1,869	1,707	2,037	2,710	2,080	Feb	2,081	
Montrose Basin	2,649	1,641	2,237	1,794	(1,860)	Sep	2,080	
North Norfolk Coast	1,983	1,845	1,608	1,786	2,899 [11]	Aug	2,025	
Cromarty Firth	2,569	2,094	2,266	1,491	1,514	Feb	1,987	
Inner Firth of Clyde	1,974	1,977	1,984	1,915	1,901	Dec	1,950	
Stour Estuary	1,984	1,431	1,814	1,988	1,948	Mar	1,833	
Tees Estuary	2,455	1,723	1,731	1,865	1,383	Oct	1,831	
Orwell Estuary	1,939 [11]	1,799	1,813 [11]	2,075 [11]	1,375 [11]	Nov	1,801	
Hamford Water	1,892	1,699	1,695	1,266	1,538	Jan	1,618	
Alde Complex	(1,430)	1,957	1,608	1,204	1,673	Feb	1,611	
Lindisfarne	(1,789)	1,737	1,104	(1,267)	(1,746)	Sep	1,594	
Lavan Sands	1,248	(1,947)	1,644	1,016	1,794	Nov	1,530	
Swale Estuary	(1,352)	1,715	(1,727)	1,139	(1,384)	Oct	1,527	
Breydon Water & Berney Marshes	1,630 [11]	1,406	1,663 [11]	1,310	1,405	Dec	1,483	
Tay Estuary	1,979	(1,347)	(1,950) [13]	849	979	Oct	1,421	
Blyth Estuary	(132)	(483)	1,134	1,031	2,002	Oct	1,389	▲
Medway Estuary	(1,221)	1,068 [11]	(1,405)	(307)	(639)	Jan	1,231	
Sites of all-Ireland importance in Northern Ireland								
Belfast Lough	1,493	1,667	1,754	(1,698)	1,303	Nov	1,583	
Carlingford Lough	1,027	1,471	1,554	1,128	1,174	Oct	1,271	
Lough Foyle	1,198	1,404	1,314	1,177	905	Oct	1,200	
Outer Ards Shoreline	1,228	1,121	1,307	1,160	1,124	Mar	1,188	
Dundrum Inner Bay	942	(594)	723	759	1,284	Jan	927	
Larne Lough	356	462	737	379	383	Nov	463	
Bann Estuary	240	290	400	261	392	Apr	317	
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain								
Eden Estuary	986	1,238	600	415	1,500	Mar	948	
Colne Estuary	868	797	1013	742	1,442 [11]	Feb	973	

Redshanks (John Harding)

Turnstone

Arenaria interpres

International threshold:	1,500
Great Britain threshold:	500
All-Ireland threshold:	120

GB max: 12,738 Nov
NI max: 2,061 Jan

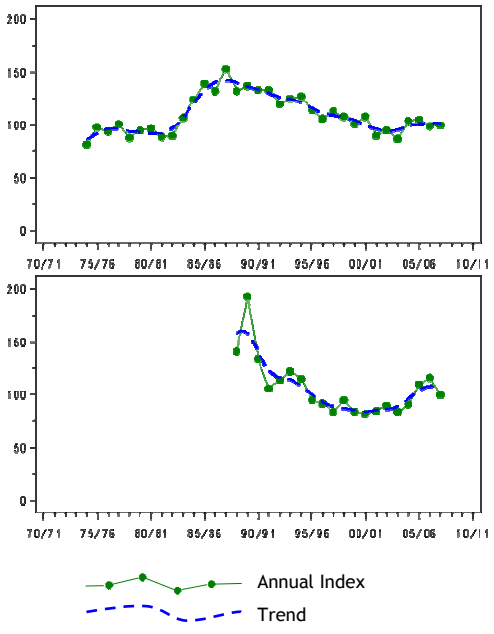


Figure 57.a, Annual indices & trend for Turnstone for GB (above) & NI (below).

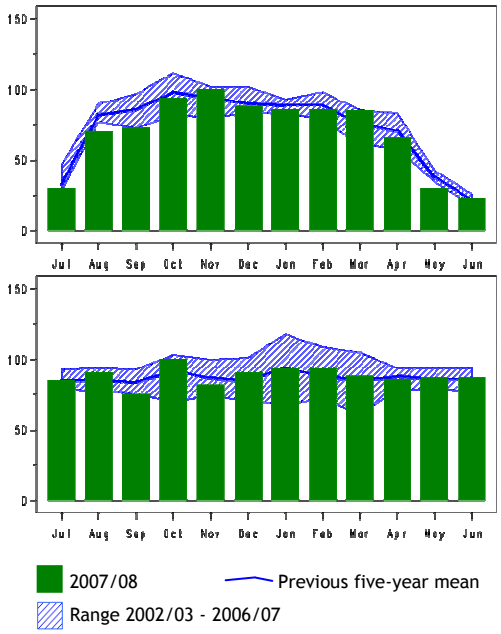


Figure 57.b, Monthly indices for Turnstone for GB (above) & NI (below).

Turnstones from two distinct breeding populations occur in the UK. The majority of winterers originate from Greenland and east Canada, while Siberian and Scandinavian birds pass through in spring and autumn en route to and from sites in western Africa.

The dispersed nature of the species around our coastline, with highest densities along rocky shores and shorelines with washed-up kelp, means that WeBS counts account for approximately only 20% of the current population estimate for the UK (Austin *et al*. 2008b).

The peak monthly total of 12,738 in November was fairly typical for recent years – which have seen an apparent levelling-off of the downward trend exhibited from the mid 1980s through to the early 2000s. A notable feature of the year was the contrasting fortunes of The Wash and the Thames Estuary. The recent decline continued at The Wash where the peak count has decreased by 60% in just two years. In contrast, the Thames Estuary experienced an increase of 60% compared to 2006/07, representing the highest monthly count for the site since 1992.

In Northern Ireland the peak monthly count at Outer Ards Shoreline, the most important site in the province, showed a decline of 28% compared to 2006/07. This is the first time the figure has dipped below 1,000 birds there since 2001/02.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of national importance in Great Britain							
Tiree			1,191 [43]				1,191
Thanet Coast	1,192	1,130	949	1,477	(783)	Jan	1,187
Morecambe Bay	766	(1,054)	1,269	1,163	(683)	Apr	1,066
The Wash	1,044	1,244	1,169	657	478	Oct	918
North Norfolk Coast	727	1,028	928	678	913	Aug	855
Thames Estuary	(569)	711	680	680	1,088	Nov	790
Forth Estuary	716	778	847	(778)	694	Nov	763
Humber Estuary	723 [11]	(570)	(183)	(542)	(344)	Feb	723
Stour Estuary	537	705	655	569	617	Nov	617

	03/04	04/05	05/06	06/07	07/08	Mon	Mean	
Swale Estuary	(244)	(515)	(480)	(456)	(432)	Oct	(515)	▲
Sites of all-Ireland importance in Northern Ireland								
Outer Ards Shoreline	1,081	1,035	1,203	1,292	930	Mar	1,108	
Belfast Lough	485	508	418	436	419	Nov	453	
Carlingford Lough	230	624	356	480	315	Oct	401	
Strangford Lough	225	235	435	382	344	Dec	324	
Sites no longer meeting table qualifying levels in WeBS-Year 2007/2008								
Farne Islands	282	438	606	(445)	556	Aug	471	
Langstone Harbour	342	459	742	450	488	Oct	496	
Jersey Shore				526	383	Jan	455	
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain								
Blackwater Estuary	351	380	498	(173)	676	Oct	476	
Farne Islands	282	438	606	(445)	556	Aug	471	
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Northern Ireland								
Dundrum Inner Bay	45	19	27	30	126	Jan	49	

Wilson's Phalarope

Vagrant

Phalaropus tricolor

Native Range: America

GB max: **1 Aug**
NI max: **1 Sep**

Two Wilson's Phalaropes were recorded in 2007/08; the 19th and 20th WeBS records. Following an adult at Castle Lake in County Durham in August, the fourth for Northern Ireland, a juvenile, was at Belfast Lough the following month.

Red-necked Phalarope

Scarce

Phalaropus lobatus

GB max: **1 Aug**
NI max: **0**

Three passage Red-necked Phalaropes were recorded in the autumn; at Medway Estuary in August, Pennington Flash in September and Salthouse in October.

Grey Phalarope

Scarce

Phalaropus fulicarius

GB max: **2 Oct**
NI max: **0**

Grey Phalaropes were seen at five sites at the end of 2007. Singles were at Portworthy Mica Dam and Earlswood Lakes in October, Hamford Water and South Uist in November, and Abberton Reservoir in December. These were all site firsts with the exception of the former, which had previously hosted an October bird in 2001.

Sabine's Gull

Scarce

Larus sabini

GB max: **1 Sep**
NI max: **0**

One was recorded in Morecambe Bay in September, the 17th WeBS record and first for this site.

Kittiwake

Rissa tridactyla

International threshold: 20,000**
Great Britain threshold: ?†
All-Ireland threshold: ?†

GB max: 1,660 Jul
NI max: 94 Sep

2007/08 was an unexceptional year for Kittiwakes recorded during WeBS Core counts, with a relatively low peak monthly total of 1,660 in July. The peak count at the site with the highest five-year average, Loch of Strathbeg, was the lowest for three years. It is important to note that because a few key sites tend to be near breeding colonies, it is likely that breeding productivity on given stretches of coastline may affect WeBS counts at sites nearby. Apart from a single at Dundrum Inner Bay, all records in Northern Ireland were from Belfast Lough.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites with mean peak counts of 200 or more birds in Great Britain†							
Loch of Strathbeg	6,300	152	1,130	3,282	785	Jun	2,330
Lunan Bay	3,400	100	250	133	67	Jun	790
Tay Estuary	(133)	(690)	(740)	(190)	300	Aug	577
Arran	290	340	701	400	1,000	Sep	546
Beadnell to Seahouses	350	140	512	850	(460)	May	463
Tees Estuary	1,492	(56)	61	112	133	Aug	450
Tweed Estuary	860	114	340	410	132	Jun	371
Durham Coast	(0)	(279)	(250)	(363)	(71)	Aug	(363)
Winterfield to Catcraig				285	430	Apr	358
Forth Estuary	(426)	170	(276)	(379)	(127)	Sep	313
Nigg Bay to Cove Bay		846	0	0	(0)		282
Otter Estuary to Kingsbridge Estuary					250	Jan	250
Dee Estuary (Scotland)	248	161	191	175	458	Jun	247
Glyne Gap			19	457	(233)	Feb	238
Don Mouth to Ythan Mouth	153	534	(165)	3	119	Jul	202

† *as no British or All-Ireland thresholds have been set a qualifying level of 200 has been chosen to select sites for presentation in this report*

Black-headed Gull

Chroicocephalus ridibundus

International threshold: 20,000**
Great Britain threshold: 19,000†
All-Ireland threshold: ?†

GB max: 209,081 Feb
NI max: 14,493 Jan

Numbers of Black-headed Gulls recorded by WeBS in 2007/08 were similar to those in the previous year, with February again proving to be the peak month. Given that this species uses many non-wetland habitats and that counting of gulls remains optional, WeBS totals represent a small proportion of the British population estimate (Banks *et al*. 2009).

Four sites qualified as being of international importance, although this species has not been counted at several other important sites since the most recent Winter Gull Roost Survey in 2003/04 and hence are likely to not feature in the five-year table of future reports unless further counts are received. Such counts, particularly from the roost sites listed below, are therefore welcomed.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean	
Sites of international importance in the UK								
Bewl Water	31,000 [38]	69,000 [38]	55,600 [12]	67,840 [12]	48,400 [12]	Dec	54,368	
Chew Valley Lake	29,800 [38]						29,800	
Thames Estuary	43,601 [38]	40,048	13,848	10,712	(12,345)	Dec	27,052	
Humber Estuary	21,450 [38]	(1,028)	(2,298)	(819)	(6,689)	Aug	21,450	
Sites of national importance in Great Britain								
The Wash	17,582 [38]	11,093	(15,595)	30,097	(18,679)	Sep	19,591	▲
Sites with mean peak counts of 10,000 or more birds in Great Britain†								
Queen Mary Reservoir	16,836 [38]						16,836	

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Fletton Brick Pits	15,770 [38]	(680)	(631)	(166)	(40)	Jan	15,770
Morecambe Bay	12,574	16,757	16,695	(15,232)	(9,435)	Aug	15,342
Church Wilne Reservoir	15,000 [38]						15,000
Grafham Water	14,470 [38]						14,470
Lower Derwent Ings	28,000		11,000	5,321	11,600	Jan	13,980
Hamilton Low & Strathclyde Parks	12,600 [38]						12,600
Wintersett & Cold Hiendley Resrs				5,000	20,000	Jan	12,500
Southfield Reservoir	12,000 [38]						12,000
Breydon Water & Berney Marshes	17,700 [38]		5,745 [38]				11,723
Derwent Reservoir	(2,572)	30,000 [12]	10,000 [12]	3,700 [12]	3,000	Feb	11,675
Eyebrook Reservoir	11,300 [38]						11,300
Exe Estuary	17,950 [12]	11,577 [12]	10,734 [12]	8,224 [12]	7,040 [12]	Jan	11,105
Poole Harbour	17,707 [38]	(11,811)	(5,720)	(3,830)	3,581	Nov	11,033
Stewartby Lake	7,600 [38]	14,000 [38]					10,800
Cotswold Water Park (West)	6,467 [38]	(920)	(632)	15,000 [12]	10,500 [12]	Feb	10,656
Ribble Estuary	7,419 [38]	9,750 [38]	10,228	15,261	10,055	May	10,543
Severn Estuary	13,139 [38]	9,656 [38]	8,278 [38]	(3,589)	(4,851)	Aug	10,358
Sites with mean peak counts of 1,000 or more birds in Northern Ireland†							
Belfast Lough	7,095 [11]	7,515 [11]	9,936 [11]	(6,823)	4,971	Jan	7,379
Loughs Neagh and Beg	(1,593)	(2,267)	(3,472)	(3,978)	(2,610)	Mar	(3,978)
Outer Ards Shoreline	5,113	2,419	4,566	3,800	2,893	Mar	3,758
Strangford Lough	3,388	3,111	4,011 [11]	3,889 [11]	4,109 [11]	Feb	3,702
Lough Foyle	1,300 [38]	1,057	2,565	2,091	3,237	Nov	2,050
Larne Lough	831	1,396	591	2,245	1,989	Feb	1,410
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain†							
Eccup Reservoir	1,072 [38]	6,000			20,000	Dec	9,024
Pegwell Bay	5,600	2,500	2,700	4,800	16,000	Feb	6,320
Tophill Low Reservoirs	8,900	8,385	15,000 [12]	3,835 [12]	12,000 [12]	Feb	9,624
Doddington Pool	150	11,000 [38]	12,000	11,000	11,000	Nov	9,030
Inner Firth of Clyde	4,969	3,688	8,766	5,248	10,692 [11]	Jan	6,673
Lee Valley Gravel Pits	(664)	(933)	551	(509)	10,124 [13]	Oct	5,338
Rutland Water	21,000 [38]	300	5,500	12,000	10,000	Oct	9,760

† *as no British or All-Ireland thresholds have been set qualifying levels of 10,000 and 1,000 have been chosen to select sites, in Great Britain and Northern Ireland respectively, for presentation in this report*

Little Gull

Hydrocoloeus minutus

International threshold: 1,230
Great Britain threshold: ?†
All-Ireland threshold: ?†

GB max: 113 Sep
NI max: 2 Sep

The coincidence of passage movements with the WeBS priority count dates has always been the major determinant of peak counts of Little Gulls. In 2007/08, the species was noted at 43 sites across Britain and at a further two in Northern Ireland, a very similar outcome as the previous year. The highest totals during WeBS Core counts were both in September; 55 at Anstruther Bay, the most ever noted at this site, and 36 at Hornsea Mere. The latter is the only site in the UK classified as of international importance for this species. It traditionally supports large numbers of passage birds in autumn, exemplified by an exceptional supplementary count of 21,500 birds there in August.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of international importance in the UK							
Hornsea Mere	(940) [13]	7,000	160	(16,000) [12]	21,500 [12]	Aug	11,165
Sites with mean peak counts of 5 or more birds in Great Britain†							
Alt Estuary	432	201 [12]	530 [12]	141	8	Jun	262
Tophill Low Reservoirs	110 [13]	90 [13]	375 [12]	26 [12]	250 [12]	Jul	170
Forth Estuary	75 [27]	321	(0)	25	(9)	Oct	140
Tay Estuary	36	28	26	206	(3)	Jul	74
North Norfolk Coast	38	8	32	176	30	Jul	57
Humber Estuary	(12)	(0)	(3)	(0)	(33)	Aug	(33)

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Lindisfarne	26	(0)	(0)	(0)	(0)		26
Minsmere	73	1	8	0	15	Jul	19
Monikie Reservoirs	0	38	(0)				19
Morecambe Bay	36	7	3	14	(0)		15
Alde Complex	0	(0)	49	0	0		12
Anstruther Bay	0	0	0	0	55	Sep	11
East Chevington Pools	12	18	3	14	7	May	11
Yetholm Pond				20	0		10
Moray Firth		8 [1]	9 [1]				9
Tring Reservoirs	40	0	0	0	0		8
St Andrews Bay		7					7
Dengie Flats	8	0	22	0	0		6
King George VI Reservoir	20	1	1		0		6
Tees Estuary	7	3	4	6	11	Jun	6
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain†							
Glyne Gap			1	0	(12)	Aug	4
Radwell Lakes	0			0	5	Apr	2

† *as no British or All-Ireland thresholds have been set a qualifying level of five has been chosen to select sites for presentation in this report*

Mediterranean Gull

Larus melanocephalus

International threshold: 6,600
Great Britain threshold: ?†
All-Ireland threshold: ?†

GB max: 380 Apr
NI max: 3 Sep

Mediterranean Gulls were recorded at 106 sites in Britain and five in Northern Ireland in 2007/08, a very similar distribution to the previous year. The peak monthly British total of 380 in April represents the highest ever recorded by WeBS, surpassing the previous maximum in August 2005.

Southampton Water and Pagham Harbour both held peak counts of 100+ birds, the former holding a record WeBS site count of 309 in April. Twenty-nine other sites held at least five birds. The most notable concentrations away from the stronghold of the southern counties were 11 at Minsmere and 10 at the North Norfolk Coast in June.

In Northern Ireland, all were singles with the exception of two at Larne Lough in October.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites with mean peak counts of 5 or more birds in Great Britain†							
Folkestone: Copt Pt & East Wear Bay		157 [38]					157
Southampton Water	1 [38]	(0)	(2)	(112)	(309)	Apr	106
Brading Harbour	57	92	148	91	64	Oct	90
Breydon Water & Berney Marshes			27 [38]		131 [13]	Aug	79
Pagham Harbour		2	60	71	(124)	Jan	64
Newtown Estuary	(15)	(42)	57	56	19	Mar	44
Thames Estuary	27	27	30	71	34	Sep	38
Ryde Pier to Puckpool Point	9	47	45	22	45	Aug	34
Tamar Complex	0	(26)	39	34	37	Aug	28
Fleet and Wey	4	8	23	39	61	Dec	27
Wootton Creek	1	3	12	102	16	Jul	27
Foreland	4	4	50	20	50	Nov	26
Swansea Bay	19	12 [38]	28	33	12	Jul	21
Chichester Harbour	(14)	(8)	(22)	12	(31)	Mar	20
Camel Estuary	25	26	18	11	6	Jan	17
Blyth Estuary	(0)	18	5	13	6	Mar	11
Poole Harbour	(7)	12	8	(4)	14	Feb	11
The Wash	8	15	7	16	10	May	11
North West Solent	0	1 [11]	(0)	8	29	Apr	10
Portsmouth Harbour	(1) [38]	(6)	7	11	(12)	Mar	10
Glyne Gap			5	(15)	8	Nov	9
Medway Estuary	(2)	2	(1)	(18)	(13)	Aug	9
Minsmere	2	12	10	10	11	Jun	9

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
North Norfolk Coast	8	5	6	18	10	Jun	9
Morecambe Bay	(4)	4	12	(8)	(3)	Aug	8
Taw-Torridge Estuary	(3)	(5)	12	11	2	Aug	8
Aberarth	0	6	22		0		7
Swale Estuary	1	0	2	(3)	22	Aug	6
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain†							
Chichester Gravel Pits	0	0	0	1	17	Mar	4
Bewl Water	2 [38]	1 [38]	2 [12]	2 [12]	6 [12]	Mar	3
Exe Estuary	4 [12]	3 [12]	1	3	5	Jan	3
Fal Complex	1	1 [11]	1	8	5	Dec	3

† *as no British or All-Ireland thresholds have been set a qualifying level of five has been chosen to select sites for presentation in this report*

Common Gull

Larus canus

International threshold: 20,000**
Great Britain threshold: 9,000†
All-Ireland threshold: ?†

GB max: 71,276 Feb
NI max: 5,576 Sep

The peak monthly total of Common Gulls was the highest recorded by WeBS since January 2004. However as the counting of gulls remains optional during WeBS, numbers counted often reflect variation in coverage as much as fluctuation in actual numbers. Two sites qualified as being of international importance; Bewl Water and Derwent Reservoir.

Counts, particularly from roost sites, are very much sought after. A number of key sites, including several of national importance, will be lost from the table below in future reports if current numbers are not documented.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean	
Sites of international importance in the UK								
Bewl Water	75,000 [38]	75,000 [38]	90,000 [12]	75,500 [12]	59,650 [12]	Mar	75,030	
Derwent Reservoir	(6,500) [38]	80,000 [12]	40,000 [12]	18,500 [12]	5,000	Feb	35,875	
Sites of national importance in Great Britain								
Haweswater Reservoir	27,986 [13]	22,000 [12]	12,535 [12]	17,185 [12]	17,560 [12]	Mar	19,453	
Hallington Reservoir	25,000 [38]	13,300 [12]	34,000 [12]	700 [12]			18,250	▼
Chew Valley Lake	18,200 [38]						18,200	
Eyebrook Reservoir	16,100 [38]						16,100	
Tophill Low Reservoirs	16,530	6,500	21,600 [12]	8,000 [12]	25,000 [12]	Feb	15,526	
Humber Estuary	29,000 [38]	2,005	(120)	(74)	(298)	Aug	15,503	
Rutland Water	12,080 [38]	14,500	10,000	10,000	13,500	Mar	12,016	
Ullswater	11,470 [13]						11,470	
West Water Reservoir	10,050 [38]						10,050	
Solway Estuary	9,564 [38]	(2,275)	(1,692)	(2,463)	(2,504)	Sep	9,564	▲
Sites with mean peak counts of 3,000 or more birds in Great Britain†								
Colt Crag Reservoir	4,700 [38]	9,900 [12]					7,300	
Ribble Estuary	6,036	9,817	(253)	(1,973)	5,020	Nov	6,958	
Blyth Estuary	12,000 [38]	(822)	4,914	6,300	228	Feb	5,861	
Southwold Sole Bay	5,000 [38]						5,000	
Forth Estuary	6,321 [38]	2,500 [38]	2,100 [38]	(603)	(7,801)	Feb	4,681	
Inner Firth of Clyde	(7,723)	2,304	2,463	6,234	3,610 [11]	Feb	4,467	
Severn Estuary	3,714 [38]	4,259 [38]	5,110 [38]	(1,076)	(65)	Oct	4,361	
Stanford Reservoir	8,110 [38]	0					4,055	
Loch of Skene	17,284 [38]	361	370	889	1,245	Feb	4,030	
St Mary`s Island - N. Shields Quay			3,900 [12]				3,900	
Wigtown Bay	3,251	7,269	675	(3,291)	(727)	Feb	3,732	
Adur Estuary				3,440 [11]			3,440	
Longnewton Reservoir	4,400	1,300	2,700	3,400	5,400	Oct	3,440	
North Norfolk Coast	5,600 [38]	2,163	4,342	1,550	(790)	Nov	3,414	
Tees Estuary	4,033	6,193 [38]	2,103	3,523	1,170	Nov	3,404	
Eccup Reservoir	579 [38]	1,200			8,000	Dec	3,260	
Dungeness and Rye Bay	9,600 [38]	2,000	3,000 [13]	500	1,010	Jan	3,222	
Wet Sleddale Reservoir	9,418 [13]	2,330 [12]	1,765 [12]	2,020 [12]	533 [12]	Sep	3,213	

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Hamilton Low & Strathclyde Parks	3,200 [38]						3,200
Loch of Lintrathen	0	10,000		2,250	154	Mar	3,101
Thames Estuary	2,319 [38]	(3,669)	3,768	2,622	(1,442)	Nov	3,095
Morecambe Bay	4,358	3,633	2,802	2,322	2,059	Dec	3,035
Chichester Harbour	3,389	3,778	2,379	3,225	2,289	Nov	3,012
Moray Firth	5,208 [1]	809 [1]					3,009
Sites with mean peak counts of 1,000 or more birds in Northern Ireland†							
Lough Foyle	(5,930)	2,322	4,354	2,836	3,952	Oct	3,879
Belfast Lough	2,644 [11]	1,937 [11]	2,156	1,405 [11]	687	Jan	1,766
Outer Ards Shoreline	2,543	1,171	1,328	984	1,022	Jan	1,410
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain†							
Apex Pit - North Hykeham	750	500	2,000		(3,000)	Nov	1,563

† *as few sites exceed the British threhold and no All-Ireland threshold has been set, qualifying levels of 3,000 and 1,000 have been chosen to select sites, in Great Britain and Northern Ireland respectively, for presentation in this report*

Ring-billed Gull

Larus delawarensis

Vagrant
Native Range: N America

GB max: **2 Sep**
NI max: **1 Sep**

Ring-billed Gulls were seen on WeBS counts in all months from September to March, with peak monthly totals of three in September and November. Eight sites were involved, four of which were in Northern Ireland. Several traditional sites for this species featured, however birds at Bann Estuary and Burry Inlet were first WeBS records for those sites.

Lesser Black-backed Gull

Larus fuscus

International threshold: **5,500**
Great Britain threshold: **500**
All-Ireland threshold: **?†**

GB max: **49,392 Aug**
NI max: **583 Sep**

The monthly maximum of Lesser Black-backed Gulls was the highest since August 2002. However, as counting of gulls and terns remains optional during WeBS, summed national maxima may reflect changes in effort as much as actual numbers. Fives sites qualified as being of international importance, including Morecambe Bay which held more than at any time since July 1999. Traditionally, late summer numbers at Morecambe Bay comprise adults and juveniles from nearby Walney Island; suggestive of a productive breeding season in 2007.

Counts are very much welcomed for this species. A number of key sites, including two of international importance and several of national importance, are at risk of being lost from the table below in future reports if numbers are not documented.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean	
Sites of international importance in the UK								
Morecambe Bay	31,479	33,004	21,932	29,576	41,312	Aug	31,461	
Severn Estuary	(8,073)	(10,036)	4,696 [38]	(115)	(130)	Oct	7,602	
Cotswold Water Park (West)	5,800 [38]	(44)	(141)	6,500 [12]	9,500 [12]	Jan	7,267	▲
Chew Valley Lake	7,015 [38]						7,015	
Queen Mary Reservoir	6,656 [38]						6,656	
Sites of national importance in Great Britain								
Ribble Estuary	106	(113)	3,011	5,525	9,005	May	4,412	
Theale Gravel Pits	20,000 [38]	1,152 [38]	74	1	8	Dec	4,247	
R. Avon: Ford'bridge to Ringwood	6,550 [38]	3,500	5,100	3,160	500	Oct	3,762	
Belvide Reservoir	3,000 [38]						3,000	
Great Pool Westwood Park	3,800 [38]	2,500	2,500	2,000	3,500	Dec	2,860	
Solway Estuary	971	(154)	(363)	4,701	(202)	Jun	2,836	
Longnewton Reservoir	1,890	2,930	3,310	2,740	1,320	Sep	2,438	
Hule Moss	250 [13]	2,900 [13]	2,500	550	1,750	Oct	1,590	

	03/04	04/05	05/06	06/07	07/08	Mon	Mean	
Thames Estuary	1,898 [38]	2,966	775	273	(328)	Nov	1,478	
Lower Windrush Valley Gravel Pits	484	1,343	1,071	2,922	(750)	Dec	1,455	
Alde Complex	388 [38]	1,833	1,162	2,990	453	Feb	1,365	
Blithfield Reservoir		2,620 [38]			20	Feb	1,320	
Roadford Reservoir	6,031 [38]	110	71	56	188	Jan	1,291	
Rutland Water	2,500	200	1,200	50	2,500	Sep	1,290	
Llys-y-fran Reservoir	90	650	600	(4,000)	700	Nov	1,208	
Bartley Reservoir	1,200 [38]						1,200	
Pitsford Reservoir	2,000 [13]	550 [12]	1,500 [12]	1,000 [12]	700 [12]	Sep	1,150	
Alt Estuary	945	556	809	1,980	1,063	Aug	1,071	
The Wash	898	1,039	1,075	1,027	1,184	Feb	1,045	
Cleddau Estuary	723	1,537	552	786	1,614	Nov	1,042	
Hurleston Reservoir	1,500 [38]	3,500 [38]	84	35	50	Nov	1,034	
Haweswater Reservoir	1,450 [13]	1,796 [12]	337 [12]	775 [12]	700 [12]	Sep	1,012	
Heathfield Gravel Pits	(1,000)						(1,000)	
Chelmarsh Reservoir	3,500 [38]	83	56	47			922	
Inner Firth of Clyde	705	509	769	1,253	1,233	Aug	894	
Hayle Estuary	940	980	(552)	566			829	
Carsington Water	1,160 [38]	97	68	1,450	1,200 [12]	Jan	795	
Ouse Washes	760 [38]	256	2,305	44	5 [13]	Dec	674	
Fernworthy Reservoir	(139)	663	548	664 [12]	744	Sep	655	▲
Portworthy Mica Dam	700	960 [38]	469	475	654	Oct	652	
Llangorse Lake	1,140 [13]	1,400 [12]	28	74	520	Dec	632	
Lakenheath Fen			1,500	358	27	Dec	628	
Kennington Park	1,200	50					625	▲
Burghfield Gravel Pits	618 [38]						618	
Heaton Park Reservoir	200 [38]	870 [38]					535	
Hollowell Reservoir	500 [38]						500	
Sites no longer meeting table qualifying levels in WeBS-Year 2007/2008								
Wellington Gravel Pits	750	100		400 [13]	300	Nov	388	
Sites with mean peak counts of 500 or more birds in Northern Ireland†								
Loughs Neagh and Beg	1,115	(434)	997	1,136	387	Sep	909	
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain†								
Carsebreck and Rhynd Lochs	2	1	245 [12]	606 [12]	1,070 [13]	Sep	385	
Eversley Cross & Yateley GPs	26	3	6	862	693	Oct	318	
Duddon Estuary	325	490	(205)	333	(628)	Jun	444	
Fiddlers Ferry Power Stn Lagoons	(0)		(0)	0	600	Nov	300	
Nocton and Dunston Fens	30	1	5	11	560	Jul	121	
Cotswold Water Park (East)	133	700	404	48	500 [12]	Dec	357	
Gresford Flash	41	173	(50)	200	(500)	Sep	229	
Yare Valley: Marl'ford to Bawburgh				12 [13]	500	Oct	256	

† *as no All-Ireland threshold have been set a qualifying level of 500 has been chosen to select sites for presentation in this report*

Herring Gull

Larus argentatus

International threshold: 5,900
Great Britain threshold: 4,500†
All-Ireland threshold: ?†

GB max: 64,643 Feb
NI max: 4,175 Jan

The counted British maximum of Herring Gulls was only slightly lower than the total for 2006/07. However, as the counting of gulls remains optional during WeBS, any summed national maxima will reflect changes in effort as much as actual numbers.

Six sites qualified as being of international importance, one less than the previous year. Away from England, these sites included Forth Estuary in Scotland and Belfast Lough in Northern Ireland.

As with other gull species, counts are very much welcomed for this species. A number of key sites, including one of international importance, are at risk of being lost from the table below in future reports if current numbers are not documented.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites of international importance in the UK							
Ribble Estuary	14,859 [38]	(31,090)	2,060	25,336	(11,086)	Mar	18,336
Morecambe Bay	10,551	8,311	7,545	8,553	10,239	Aug	9,040
Queen Mary Reservoir	8,279 [38]						8,279
Forth Estuary	7,376 [38]	15,434	1,780	(2,814)	(2,764)	Sep	8,197
Belfast Lough	7,536 [11]	7,903 [11]	10,296 [11]	6,655 [11]	2,511	Jan	6,980
The Wash	10,703 [38]	3,258	(3,527)	6,212	5,960	Sep	6,533
Dungeness and Rye Bay	12,000 [13]	6,000 [13]	7,000 [13]	1,500 [13]	5,000 [13]	Sep	6,300
Sites of national importance in Great Britain							
Thames Estuary	(4,349)	8,504	3,680	4,456	6,655	Sep	5,824
Hastings to Bexhill	5,700 [38]						5,700
Isle of May			5,220 [38]				5,220
Hamilton Low and Strathclyde Parks	4,600 [38]						4,600
Sites no longer meeting table qualifying levels in WeBS-Year 2007/2008							
Inner Moray and Inverness Firth	2,341	2,003	(3,000)	2,352	(274)	Dec	2,424
Moray Firth	6,468 [1]	2,349 [1]					4,409
Sites with mean peak counts of 2,500 or more birds in Great Britain							
Glyne Gap			1,486	(2,700)	6,800 [12]	Feb	4,143
North Norfolk Coast	(3,047)	5,307	2,340	2,474	5,351	Jul	3,868
Guernsey Shore	2,759	3,744	2,362	5,704	(2,450)	Mar	3,642
Severn Estuary	3,500 [38]	(3,164)	(2,666)	(279)	(437)	Dec	3,500
Chew Valley Lake	3,400 [38]						3,400
Roughrigg Reservoir	15,144 [38]	416	210	135	489	Oct	3,279
Alt Estuary	3,825 [38]	7,155	2,150	1,005	2,000	Feb	3,227
Troon Meikle Craigs	3,174 [38]						3,174
Pegwell Bay	1,569 [38]	5,450	440	3,200	4,500	Feb	3,032
Caldey Island	2,800 [38]						2,800
Exe Estuary	4,130 [12]	2,074 [12]	2,574 [12]	2,357 [12]	2,849 [12]	Jan	2,797
Durham Coast	(62)	(618)	1,501	3,949	(300)	Aug	2,725
Dee Estuary (England and Wales)	4,052 [38]	4,244	1,210	(2,613)	1,360	Apr	2,717
Heaton Park Reservoir	1,755 [38]	3,400 [38]					2,578
Sites with mean peak counts of 1,000 or more birds in Northern Ireland							
Outer Ards Shoreline	1,351	1,179	1,304	1,602	1,053	Jan	1,298
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain†							
Afan Estuary & Port Talbot Harbour	712 [12]	306	298	222	4,000	Jan	1,108
Burry Inlet	1,904	1,089	3,007	2,407	3,037 [11]	Nov	2,289
Loch Spynie	1,600	1	2,240		(2,800)	Feb	1,660

† *as few sites exceed the British threhold and no All-Ireland threshold has been set, qualifying levels of 2,500 and 1,000 have been chosen to select sites, in Great Britain and Northern Ireland respectively, for presentation in this report*

Yellow-legged Gull

Larus michahellis

International threshold: **7,000**
Great Britain threshold: **?** †
All-Ireland threshold: **?** †

GB max: **96** **Aug**
NI max: **1** **Jan**

'Western' Yellow-legged Gulls were recorded at 50 sites in England, three in Wales, and single sites in Scotland, Channel Islands and Northern Ireland. Birds were noted in every month, with a peak of 96 in August; a similarly low monthly maximum as recorded during the previous year. Currently, WeBS coverage at several important localities for Yellow-legged Gulls on the south coast of England does not appear to be deriving a true picture of their numbers which traditionally peak in late summer.

Sites with 10 or more birds in 2007/08†					
King George VI Reservoir	31	Aug	Southampton Water	14	Sep
Queen Mary Reservoir	18	Aug	Glyne Gap	14	Oct
Rutland Water	17	Sep	Pagham Harbour	12	Aug
Thames Estuary	17	Sep	Humber Estuary	11	Jul

† *as no British or All-Ireland thresholds have been set a qualifying level of 10 has been chosen to select sites for presentation in this report*

Caspian Gull

Larus cachinnans

International threshold:	7,000
Great Britain threshold:	?
All-Ireland threshold:	?

GB max:	6	Mar
NI max:	0	

Caspian Gulls were noted at eight sites in 2007/08. With the exception of Scotland's first WeBS record at Lossie Estuary in July, all related to typical records of birds in England in winter. Both London Wetland Centre and Minsmere held two individuals in March.

Iceland Gull

Larus glaucoides

International threshold:	2,000
Great Britain threshold:	?
All-Ireland threshold:	?

GB max:	34	Feb
NI max:	1	Feb

2007/08 was another excellent year for records of Iceland Gull during WeBS counts. They were seen in every month from November to April with a marked peak in February when a total of 35 were counted, largely due to the efforts of RAF Ornithological Society in north-west Scotland.

Records were received from 35 sites, including 22 in Scotland and one in Northern Ireland. Most were single birds, notable exceptions being seven at Loch A Chairn Bain, five at Loch Eriboll and three at Loch Gairloch, all in February.

Glaucous Gull

Larus hyperboreus

International threshold:	10,000
Great Britain threshold:	?
All-Ireland threshold:	?

GB max:	23	Feb
NI max:	2	Feb

Glaucous Gulls were reported during the period September to April from 26 sites. As with Iceland Gull, peak numbers were in February when a total of 25 were counted. Site maxima for 2007/08 were seven at North Bay (South Uist) in February, three at both Ardivachar Point (South Uist) and Lower Derwent Ings in February-March, and three at Ditchford Gravel Pits in November.

Great Black-backed Gull

Larus marinus

International threshold:	4,400
Great Britain threshold:	400
All-Ireland threshold:	?†

GB max:	12,500	Oct
NI max:	544	Jan

Unusually, three sites recorded maximum counts in excess of 2000 Great Black-backed Gulls in 2007/08. These counts from The Wash, Thames Estuary and East Chevington Pools were all in October, and as a consequence contributed to a particularly high counted maximum for that month.

In Northern Ireland, the counted maximum was less than half the total of the previous year, largely due to low numbers recorded at the most important site in the country, Belfast Lough.

As with the other gulls, counts are very much welcomed for this species. This is especially the case with respect to a number of important sites that have not been counted since the last Winter Gull Roost Survey in 2003/04.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean	
Sites of national importance in Great Britain								
The Wash	4,628	(1,480)	1,773	1,186	(2,131)	Oct	2,529	
Humber Estuary	2,200 [38]	(226)	(66)	(20)	(165)	Aug	2,200	
Thames Estuary	857 [38]	1,648	1,972	1,096	2,107	Oct	1,536	
Dungeness and Rye Bay	2,000 [13]	1,500 [13]	1,000 [13]	700 [13]	1,200 [13]	Dec	1,280	
Tees Estuary	1,523	1,657	(366)	1,028	668	Nov	1,219	
Lynemouth Ash Lagoons	1,074						1,074	
Grafham Water	1,050 [38]						1,050	
Brogborough Clay Pit	997 [38]						997	
Coquet Island	980 [38]						980	
Ogston Reservoir	900 [38]						900	
Lower Derwent Ings	1,041 [38]		500	1,030	870	Jan	860	
Durham Coast	(41)	(684)	776	(659)	(35)	Aug	776	
Pegwell Bay	305	610	1,190	700	850	Oct	731	
East Chevington Pools	120	(80)	230	400	2,000	Oct	688	▲
Glyne Gap			355	655	(800) [12]	Jan	603	
Hastings to Bexhill	520 [38]						520	
Dee Estuary (England and Wales)	519 [38]	(169)	(58)	(176)	(152)	Sep	519	
Guernsey Shore	560	404	477	619	(114)	Jun	515	
Moray Firth	674 [1]	336 [1]					505	
Tyne Estuary	(166)	(221)	367	358	719	Dec	481	
Poole Harbour	476 [38]	(66)	(43)	(26)	(40)	Sep	476	▲
North Norfolk Coast	1,051	327	471	262	251	Sep	472	
Loch of Strathbeg	(606)	191	795	525	171	Nov	458	
Fleet and Wey	200 [38]	142	873	111	897	Dec	445	▲
Heaton Park Reservoir	494 [38]	340 [38]					417	
Linton Pond Ellington	62 [38]	18	14	1,900	52	Mar	409	
Southfield Reservoir	408 [38]						408	
Sites no longer meeting table qualifying levels in WeBS-Year 2007/2008								
Tophill Low Reservoirs	223 [38]	120	17	0	300 [12]	Jan	132	
Morecambe Bay	(322)	(296)	(313)	466	280	Jun	373	
Inner Moray and Inverness Firth	70	(93)	(4)	(5)	(45)	Dec	82	
Hoveringham and Bleasby GPs	1,600 [38]	2	0	0	4	Dec	321	
Eyebrook Reservoir	500 [38]				2	Nov	251	
Sites with mean peak counts of 500 or more birds in Northern Ireland†								
Belfast Lough	436 [11]	1,008	1,281	(827)	333	Jan	777	

† *as no All-Ireland threshold have been set a qualifying level of 500 has been chosen to select sites for presentation in this report*

Little Tern

Sternula albifrons

International threshold:	**490**
Great Britain threshold:	**?†**
All-Ireland threshold:	**?†**

GB max: **946** **Jun 2007**
NI max: **0**

Little Terns were recorded at 40 sites in 2007 most of which were in England, with the counted maximum representing a slight increase on the recent average. Typically, all records were in the period of April to September.

High counts compared to recent years were received from Norfolk; with a maximum of 496 recorded in July, the North Norfolk Coast overtook Dee Estuary (where numbers remained consistent compared to 2006) as the top site on average for the species. Numbers at The Wash also increased, three-fold, compared to last year.

Little Tern (Jill Pakenham)

	2003	2004	2005	2006	2007	Mon	Mean
Sites with mean peak counts of 50 or more birds in Great Britain†							
North Norfolk Coast	405	233	246	284	496	Jul	333
Dee Estuary (England and Wales)	(256)	300	411	250	251	Jul	303
The Wash	68	108	(182)	83	255	Aug	139
Thames Estuary	(28)	33	74	154	101	Aug	91
Duddon Estuary	42	84	92	52	56	May	65
Durham Coast		(0)	67	39	49	Jun	52
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain†							
Dengie Flats	(2)	5	(18)	2	(67)	Aug	23

† *as no British or All-Ireland thresholds have been set a qualifying level of 50 has been chosen to select sites for presentation in this report*

Whiskered Tern

Chlidonias hybrida

Vagrant
Native Range: Worldwide

GB max: **1** **May 2007**
NI max: **0**

In 2007, a Whiskered Tern was at Old Moor in South Yorkshire in May; the fourth record for WeBS.

Black Tern

Chlidonias niger

International threshold: **7,500**
Great Britain threshold: **?**
All-Ireland threshold: **?**

GB max: **6** **Oct 2007**
NI max: **0**

In 2007, Black Terns were recorded during WeBS counts at just 14 sites, including Forth Estuary and Lunan Bay in Scotland. The monthly maximum was a mere six in October, when the largest count of the year, three, was at Chichester Gravel Pits.

Sandwich Tern

Sterna sandvicensis

International threshold: **1,700**
Great Britain threshold: **?†**
All-Ireland threshold: **?†**

GB max: **7,970** **Aug 2007**
NI max: **321** **Sep 2007**

Sandwich Terns were noted at 130 sites in 2007, seven of which were in Northern Ireland. The majority of records were for April though to October, although records were received for all other months too. Pegwell Bay and Guernsey Shore hosted wintering birds at both ends of the year.

The British maximum fell in comparison to 2006 largely due to there being no repeat of that year's record count from the North Norfolk Coast, and was more similar to the longer term average for the last ten years. For the second successive year, the breeding colony at Cemlyn Bay and Lagoon was not counted, resulting in a low count for that site.

	2003	2004	2005	2006	2007	Mon	Mean
Sites of international importance in the UK							
North Norfolk Coast	4,170	5,533	3,228	8,062	2,873	Jun	4,773
Forth Estuary	(2,802)	(1,526)	(1,243)	(1,037)	(680)	Jul	(2,802)
Sites no longer meeting table qualifying levels in Summer 2007							
Cemlyn Bay and Lagoon	2,455	2,700	2,000	12	208	Apr	1,475
Sites with mean peak counts of 200 or more birds in Great Britain†							
Cemlyn Bay and Lagoon	2,455	2,700	2,000	12	208	Apr	1,475
Humber Estuary	(303)	(324)	(325)	(957)	(805)	Aug	(957)

	2003	2004	2005	2006	2007	Mon	Mean
Tees Estuary	2,601	(333)	221	490	438	Aug	938
Dee Estuary (England and Wales)	716	759	829	530	1,334	Jul	834
Duddon Estuary	955	1,144	604	843	460	Jul	801
Pegwell Bay	(930)	(680)	824	650 [13]	520	Jul	721
Solway Estuary	(548)	(282)	(209)	(339)	(162)	Aug	(548)
Tay Estuary	(310)	(96)	(126)	(377)	545	Aug	545
Morecambe Bay	531	500	110	190	(201)	Jul	333
Eden Estuary	112	139	33	766	460	Sep	302
The Wash	223	208	307	164	338	Aug	248
Alt Estuary	178	219	116	207	348	Aug	214
Sites with mean peak counts of 200 or more birds in Northern Ireland†							
Dundrum Inner Bay	264	173	133	311	233	Jun	223
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain†							
Don Mouth to Ythan Mouth	3	158	(254)	58	298	Aug	154
Exe Estuary	110	237	95	155	285	Jul	176
Ribble Estuary	(42)	(14)	(32)	7	256	Aug	132
Lavan Sands	(170)	250	(235)	28	247	Aug	190

† *as no British or All-Ireland thresholds have been set a qualifying level of 200 has been chosen to select sites for presentation in this report*

Common Tern

Sterna hirundo

International threshold: 1,900
Great Britain threshold: ?†
All-Ireland threshold: ?†

GB max: 6,022 Jul 2007
NI max: 79 Jul 2007

For Common Tern, the British maximum for 2007 was the highest recorded since 2003. The species was recorded at 302 sites, with all but a very small number between April and October. Numbers at the two key English sites, the Alt and Tees Estuaries, although retaining five-year mean peaks of more than 1,000 birds, continued on recent downward trends. In contrast, the principal sites in Scotland and the Dee Estuary in Wales all showed increases. In Northern Ireland most records were from Dundrum Inner Bay where a maximum of 79 was recorded in July.

Typically August provided the largest number of peak counts, none more so than a supplementary count of 8,720 birds at Breydon Water and Berney Marshes which constituted a record aggregation in Norfolk (G.Dunmore pers. comm.). This count alone is greater than any previous maximum monthly WeBS total, and may represent a phenological occurrence arising from breeding success or failure (see Arctic Tern).

	2003	2004	2005	2006	2007	Mon	Mean	
Sites of international importance in the UK								
Breydon Water and Berney Marshes					8,720 [13]	Aug	8,720	▲
Sites with mean peak counts of 200 or more birds in Great Britain†								
Alt Estuary	1,664	1,135	2,010	1,503	1,074	Aug	1,477	
Tees Estuary	1,678	1,251	(521)	869	618	Jun	1,104	
Tay Estuary	(23)	(40)	(123)	(100)	600	Aug	600	
North Norfolk Coast	419	476	450	606	894	Aug	569	
Thames Estuary	(224)	(553)	(219)	(206)	(198)	Aug	(553)	
Dee Estuary (England and Wales)	(384)	(180)	(109)	454	579	Aug	517	
Ythan Estuary	415						415	
The Wash	122	199	129	1,092	(342)	Aug	386	
Loch of Strathbeg	199	151	449	326	554	Jul	336	
Humber Estuary	(280)	(160)	(61)	(19)	(330)	Aug	(330)	
Chichester Harbour	(314)	(44)	(102)	(54)	(25)	Aug	(314)	
Forth Estuary	(193)	(183)	(287)	(216)	(207)	Jul	(287)	
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain†								
Don Estuary	7	39	260	35	500	Jul	168	

† *as no British or All-Ireland thresholds have been set a qualifying level of 200 has been chosen to select sites for presentation in this report*

Roseate Tern

Sterna dougallii

Scarce

GB max: 12 May 2007
NI max: 0

Roseate Terns were reported from eight sites in 2007. Counts of eight and four on the Exe and Beaulieu Estuaries respectively in May are the highest ever recorded during WeBS counts in southern England. Elsewhere, during June to August, 1-3 were seen at East Chevington Pools, Alnmouth, Spittal to Cocklawburn, Pegwell Bay and Humber Estuary.

Arctic Tern

Sterna paradisaea

International threshold: 0
Great Britain threshold: ?†
All-Ireland threshold: ?†

GB max: 4,664 Jul 2007
NI max: 10 May 2007

The counting of terns remains optional during WeBS, therefore any summed national maxima may reflect changes in effort as much as actual numbers.

Typically most of the largest counts of Arctic Terns in 2007 were from sites in Scotland, particularly the traditionally important sites of Tay Estuary and Loch of Strathbeg. In total, birds were reported from 102 sites, the majority between May and September. A small number were seen in April and October-November, the last of which were three at Camarthen Bay and 1+ in Essex at Hamford Water, Holland Marshes and Stour Estuary. Records were received from three sites in Northern Ireland.

The British maximum of 4,664 in July was the highest ever, double that of the previous largest in 2005. The size of summer flocks on Scottish Estuaries is likely to be sensitive to the outcome of breeding attempts at colonies, such as those on Shetland and Orkney. The well-documented breeding failures in recent years have tended to lead to abandonment of breeding colonies during the summer, and therefore could have resulted in displacement to such estuaries. Interestingly, and perhaps linked, recent summers have seen an increased number of birds in first-summer ('*portlandica*') plumage in north-east Scotland (C.Gibbins pers. comm.).

	2003	2004	2005	2006	2007	Mon	Mean
Sites with mean peak counts of 50 or more birds in Great Britain†							
Tay Estuary	(290)	(0)	(10)	(50)	1,841	Jul	1,841
Loch of Strathbeg	(68)	40	2,100	164	1,210	Jul	879
Ythan Estuary	860						860
Loch of Beith	31		1,000	45	250	Jul	332
Loch An Duin (Aird Point) (Lewis)			300				300
Eden Estuary	320	4	0	209	617	Jul	230
Morecambe Bay	(178)	(59)	(16)	(11)	(30)	May	(178)
The Houb (Whalsay)	82	300	3	200	275	Jul	172
St Andrews Bay	(0)	192	70	110	(0)		124
Forth Estuary	197	(186)	7	32	28	Jul	90
Loch a` Phuill (Tiree)	150	120	58	37	77	Jun	88
Ness of Sound				90	80	Aug	85
Inner Loch Indaal	76						76
Nor Wick and Skaw	32	(10)	9	214	23	Jul	70
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2007/08 in Great Britain†							
Nigg Bay to Cove Bay			0	0	94	Aug	31
Braewick Loch	50	30	47 [13]	18	80	May	45
Alt Estuary	16	15	15	9	78	Aug	27
North Norfolk Coast	12	(16)	(65)	10	71	Jun	40
Loch Mor (Benbecula)			0	60	70	Jun	43

† *as no British or All-Ireland thresholds have been set a qualifying level of 70 has been chosen to select sites for presentation in this report*

Kingfisher

Alcedo atthis

International threshold:	?
Great Britain threshold:	?†
All-Ireland threshold:	?†

GB max:	564	Oct
NI max:	9	Oct

Owing to its ubiquitous, yet relatively elusive, nature the Kingfisher is a difficult species to monitor by WeBS methods. The British counted maximum of 564 in October was slightly higher than in recent years. In general, gravel pit complexes continue to be those WeBS sites where the species is most frequently encountered. Peak numbers at such inland sites are frequently in autumn before any winter dispersal to more coastal sites. Maxima this year were 11 at Wraysbury Gravel Pits in August, and nine at both Gunthorpe Gravel Pits in August and Pitsford Reservoir in October.

The Northern Ireland maximum has never exceeded single figures, and birds were recorded at just four sites in 2007/08.

	03/04	04/05	05/06	06/07	07/08	Mon	Mean
Sites with mean peak counts of 7 or more birds in Great Britain†							
Somerset Levels	(12)	20	(18)	17	22	Oct	20
Wraysbury Gravel Pits	12	18	16	17	14	Aug	15
Ditchford Gravel Pits	13	12	13	12	19	Oct	14
North Norfolk Coast	6	8	10	14	20 [11]	Nov	12
Southampton Water	(6)	9	(11)	(8)	(4)	Oct	10
Chichester Gravel Pits	7	9	11	7	9	Oct	9
Lee Valley Gravel Pits	10	6	9	(13)	(9)	Aug	9
The Wash	(1)	(0)	(0)	(0)	9	Sep	9
Colne Valley Gravel Pits	(4)	5	9	9	7	Aug	8
Thames Estuary	(7)	7	10	9	6	Aug	8
Avon Valley: Salisbury-Fordingbr'	(6)	(5)	(7)	(4)	(3)	Sep	(7)
Humber Estuary	6	6	9	(3)	(8)	Feb	7
Orwell Estuary	(2)	(5)	(7)	(3)	(5)	Oct	(7)
Pitsford Reservoir	11	(3)	6	3	9	Oct	7
Stour Estuary	6	(6)	6	4	12	Oct	7
Other sites surpassing table qualifying levels in WeBS-Year 2007/2008 in Great Britain†							
Gunthorpe GPs & River Trent	2	(2)	5	7	9	Aug	6
Old Moor	7	5	(5)	4	8	May	6
Hamford Water	3	(5)	7	6	7	Feb	6

† *as no British or All-Ireland thresholds have been set a qualifying level of seven has been chosen to select sites for presentation in this report*

Kingfisher (John Harding)

PRINCIPAL SITES

Table 6 below lists the principal sites for non-breeding waterbirds in the UK as monitored by WeBS. All sites supporting more than 10,000 waterbirds are listed, as are all sites supporting internationally important numbers of one or more waterbird species. Naturalised species (*e.g.* Canada Goose and Ruddy Duck) and non-native species presumed to have escaped from captive collections have been excluded from the totals, as have gulls and terns since the recording of these species is optional (see *Analysis*). Table 7 lists other sites holding internationally important numbers of waterbirds, which are not routinely monitored by standard WeBS surveys but rather by the Icelandic Goose Census and aerial surveys.

A total of 244 sites are listed in tables 6 and 7. Of these 225 supported one or more species in internationally important numbers and 85 held a five-year mean peak of 10,000 or more birds. Typically there are few changes to the top twenty sites listed in the principal sites table, with the order of the top ten changing little from year to year.

The Wash remains as the key waterbird site in terms of absolute numbers and in 2007/08 held figures very similar to the average of the preceding five years. The Ribble Estuary rises to second in the table following the highest total there for ten years. Decreases were noted at both Morecambe Bay and North Norfolk Coast (however some late data may still need to be included). A reassessment of the incorporation of some annual goose roost data, in order to minimise possible duplication, has lowered the longer-term average for the latter site. Total numbers at the Thames Estuary were very similar to the average for recent years, but those on the Humber Estuary and Dee Estuary fell for the second year in succession.

Totals at the two most important non-estuarine sites, namely Somerset Levels and Ouse Washes, were slightly higher and lower respectively compared to those of the previous year; representative of the trends for the two sites in recent years.

Overall, five-year averages of sites holding 10,000 or more waterbirds were relatively similar compared to the previous year, with 71 of the 85 sites undergoing changes of less than 10%. The greatest increases were experienced at Slains Lochs (29%) and Blyth Estuary (25%). The greatest decreases were seen at Loch Spynie (22%), Loch Leven and Morecambe Bay (both 12%), Nene Washes and Southampton Water (both 11%).

Table 6. Total number of waterbirds at principal sites in the UK, 2003/2004 to 2007/08 (includes data from all available sources) and species occurring in internationally important numbers at each. (Species codes are provided in Table 8.)

Site	03/04	04/05	05/06	06/07	07/08	Average	Int.Imp.Species
The Wash	338,499	369,608	398,364	379,980	370,090	371,308	PG DB SU PT OC RP GP GV L. KN SS DN BW BA CU RK
Ribble Estuary	252,374	242,666	220,693	214,275	260,794	238,160	WS PG SU WN T. PT OC RP GV L. KN SS DN BW BA RK
North Norfolk Coast	215,912	221,281	241,314	215,353	139,655	206,703	PG DB WN PT RP KN BW BA
Morecambe Bay	249,255	206,066	205,568	194,368	131,200	197,291	PG SU PT OC RP KN DN BW BA CU RK
Thames Estuary	160,189	172,446	186,370	226,113	186,393	186,302	DB T. SV OC AV RP GV KN DN BW BA RK
Humber Estuary	217,805	163,340	187,049	160,008	145,699	174,780	PG DB SU RP GP GV L. KN DN BW BA RK
Dee Estuary (England and Wales)	171,912	115,303	130,352	125,319	103,468	129,271	SU PT OC KN DN BW RK
Solway Estuary	145,051	140,091	103,051	118,194	106,625	122,602	WS PG YS SU PT SP OC RP KN RK
Somerset Levels	85,165	99,775	87,827	108,161	114,247	99,035	MS WN GA T. SV L.
Breydon Wtr & Berney Mshs	75,833	110,697	106,432	96,836	100,556	98,071	PG WN SV AV GP L. BW

Site	03/04	04/05	05/06	06/07	07/08	Average	Int.Imp.Species
Ouse Washes	85,735	112,897	133,465	72,208	66,960	94,253	MS BS WS WN GA T. PT SV BW
Strangford Lough	88,903	78,449	83,313	74,419	75,515	80,120	MS WS QN SU KN BW BA RK
Mersey Estuary	97,788	85,571	84,125	61,546	68,491	79,504	SU T. DN BW RK
Swale Estuary	86,974	73,831	82,907	61,645	91,446	79,361	PT GP BW
Forth Estuary	91,159	85,019	76,265	59,922	75,912	77,655	PG JI SU SZ KN BA RK
Loch of Strathbeg	79,231	81,644	84,269	51,234	52,063	69,688	WS PG YS
Severn Estuary	65,162	64,057	79,953	66,450	71,789	69,482	MS BS SU PT SV RP DN
Blackwater Estuary	64,533	78,259	70,060	30,264	70,890	62,801	DB GP GV KN DN BW
Inner Moray/Inverness Firth	76,826	63,704	73,248	47,199	43,378	60,871	PG JI
Loughs Neagh and Beg	59,026	56,261	58,256	50,735	56,271	56,110	MS WS PO SP CA
Alt Estuary	72,792	53,071	41,836	50,359	40,253	51,662	PG KN SS BA
Lindisfarne	56,841	55,413	59,257	47,958	37,867	51,467	PG YS QS BA
Dengie Flats	23,896	45,747	58,280	61,844	53,040	48,561	DB GV KN BA
Carmarthen Bay	47,103	55,753	45,075	52,860	39,639	48,086	CX SS
Burry Inlet	52,852	49,290	46,255	44,421	44,717	47,507	PT OC KN BW
Montrose Basin	35,461	50,184	57,114	45,569	45,839	46,833	PG
Chichester Harbour	43,737	43,380	47,679	44,027	54,118	46,588	DB DN BW
Hamford Water	37,993	39,943	43,468	34,133	44,843	40,076	DB GV
Stour Estuary	41,061	40,855	37,956	34,924	39,797	38,919	MS GV KN BW
Langstone Harbour	42,036	45,651	41,478	28,032	30,769	37,593	DB DN BW
Dungeness and Rye Bay	32,989	41,500	33,894	34,855	37,585	36,165	MS SV
Lough Foyle	37,294	33,080	38,651	35,250	34,120	35,679	WS QN BA
Cromarty Firth	41,774	37,955	35,799	23,332	39,053	35,583	PG JI BA
Lower Derwent Ings	32,627	34,619	38,498	37,610	33,237	35,318	
Dornoch Firth	38,256	37,057	34,311	28,356	30,936	33,783	WS JI
West Water Reservoir	34,210	.	28,244	43,252	27,960	33,417	PG
Loch Leven	37.340	33.773	40.355	34.279	19.699	33.089	MS PG
WWT Martin Mere	30,883	45,352	37,628	28,328	22,267	32,892	WS PG
Duddon Estuary	32,592	29,349	34,652	28,782	34,687	32,012	PT
Alde Complex	22,909	31,841	34,368	32,772	37,456	31,869	AV BW
Crouch-Roach Estuary	18,219	41,774	29,553	31,797	36,010	31,471	DB BW
Abberton Reservoir	31,385	24,135	50,319	12,675	30,137	29,730	MS GA SV
Medway Estuary	26,174	30,542	30,870	24,224	35,255	29,413	PT AV BW
Nene Washes	20,914	29,256	20,702	30,294	37,767	27,787	BS PT BW
Rutland Water	28,238	26,203	31,193	30,376	22,897	27,781	MS GA SV
Cleddau Estuary	20,386	27,748	33,417	19,643	23,331	24,905	
Tees Estuary	30,086	21,040	23,593	22,597	22,626	23,988	
Pegwell Bay	25,509	18,222	20,188	29,811	23,936	23,533	
Inner Firth of Clyde	23,741	19,915	23,161	24,258	22,171	22,649	
Orwell Estuary	26,298	20,758	26,377	23,322	16,376	22,626	BW
Tay Estuary	21,312	20,585	25,893	18,460	18,194	20,889	PG BA
Loch of Skene	13,696	18,835	24,764	24,339	20,620	20,451	PG JI
Lavan Sands	21,153	22,036	19,285	22,555	16,111	20,228	
Poole Harbour	24,862	26,364	17,686	15,976	15,752	20,128	AV BW
Belfast Lough	19,556	23,199	19,662	18,804	19,278	20,100	BW
Wigtown Bay	21,606	19,049	14,994	18,100	26,145	19,979	WS PG YS
Colne Estuary	19,342	18,425	19,105	16,669	25,977	19,904	DB
Exe Estuary	22,899	20,129	19,140	17,747	19,243	19,832	BW
Pagham Harbour	14,568	20,529	20,776	22,630	18,432	19,387	DB PT BW
Deben Estuary	17,878	19,054	19,060	17,171	21,364	18,905	BW
West Mainland	.	20,653	17,008	.	.	18,831	JI
Loch Spynie	15,748	30,733	27,245	9,000	1,181	16,781	PG JI

Site	03/04	04/05	05/06	06/07	07/08	Average	Int.Imp.Species
Fleet and Wey	16,292	17,496	17,349	13,772	13,045	15,591	MS
Carsebreck and Rhynd Lochs	16,531	12,262	17,028	17,239	14,294	15,471	PG
Middle Yare Marshes	9,742	17,585	18,038	11,940	18,110	15,083	
WWT Caerlaverock (Inland)	14,142	16,137	16,298	14,199	13,931	14,941	WS YS
North West Solent	15,144	16,229	13,708	13,911	15,617	14,922	DB
Ythan Estuary	8,049	13,595	17,746	20,245	14,116	14,750	
Portsmouth Harbour	16,424	9,666	17,233	14,275	14,022	14,324	DB
Taw-Torridge Estuary	10,320	16,426	17,254	13,142	10,236	13,476	
Southampton Water	15,447	15,048	13,669	11,460	9,572	13,039	
Dyfi Estuary	11,524	12,418	12,016	13,116	12,323	12,279	
Eden Estuary	15,366	14,214	12,191	5,688	12,959	12,084	
Loch of Lintrathen	16,417	11,067	10,330	10,937	11,156	11,981	PG
Slains Lochs (Meikle, Sand	576	17,309	12,614	11,408	17,603	11,902	PG
Cotswold Water Park (West)	12,474	10,178	12,156	12,151	12,438	11,879	
Firth of Clyde	15,276	13,042	8,055	9,590	.	11,491	
Arun Valley	12,161	9,981	9,599	13,500	11,595	11,367	
Mersehead RSPB Reserve	11,120	15,290	124	16,113	12,457	11,021	YS PT
Pitsford Reservoir	12,533	10,267	12,198	11,175	8,153	10,865	
Camel Estuary	5,426	12,962	16,420	10,046	8,152	10,601	
Outer Ards Shoreline	12,748	9,551	9,952	12,291	8,420	10,592	QN
Carlingford Lough	10,282	10,949	10,165	9,691	10,705	10,358	QN
Blyth Estuary	1,384	4,831	11,769	13,432	19,188	10,121	
Stodmarsh NNR/Collards	8,346	10,477	12,053	9,310	10,379	10,113	
Chew Valley Lake	10,110	9,285	13,540	8,017	7,403	9,671	SV
Loch of Harray	12,330	8,501	7,566	12,639	7,250	9,657	MS JI
Upper Lough Erne	9,239	9,369	9,152	8,711	7,396	8,773	MS WS
Dundrum Inner Bay	7,058	7,490	8,433	6,559	13,580	8,624	QN
Lee Valley Gravel Pits	9,005	8,403	8,823	7,432	9,011	8,535	GA
Hule Moss	15,908	9,009	6,955	2,647	7,092	8,322	PG
R.Nith: Keltonbnk-Nunholm	10,008	5,976	.	8,116	.	8,033	PG YS
Tiree	7,452	8,411	15,171	974	4,196	7,241	NW JH YN
R.Avon: Fordingbr'-Ringwd	6,790	6,405	6,308	8,523	8,078	7,221	GA BW
Loch Fleet Complex	6,857	5,177	7,971	7,142	7,755	6,980	JI
Horsey Mere	8,465	7,231	6,240	5,430	.	6,842	PG
R.Avon: Ringwd-Christhurch	4,767	2,799	2,796	12,591	9,024	6,395	BW
Loch of Boardhouse	7,111	5,904	7,159	5,983	4,941	6,220	JI
Loch Eye	4,474	8,352	15,004	1,087	1,667	6,117	WS JI
Hornsea Mere	7,354	7,064	6,337	4,244	4,559	5,912	MS
Loch of Stenness	5,638	5,069	6,475	6,039	5,993	5,843	JI
Heigham Holmes	.	.	5,670	.	.	5,670	PG
East Mainland	.	7,325	8,589	424	.	5,446	JI
R.Clyde: Carstairs-Thank'tn	6,623	4,510	5,785	3,666	6,283	5,373	PG
East Chevington Pools	5,927	4,802	4,465	4,911	5,617	5,144	PG
Milldam/Balfour Mains Pools	6,216	3,917	4,838	4,200	4,909	4,816	JI
Larne Lough	5,297	4,991	5,548	4,109	4,050	4,799	QN
Holburn Moss	10,502	5,398	3,000	2,400	2,300	4,720	PG
Loch Heilen	1,180	6,698	7,862	2,563	4,898	4,640	JI
Dupplin Lochs	14,110	2	.	1,450	2,100	4,416	PG
Loch a` Phuill (Tiree)	3,356	3,114	6,836	4,547	3,964	4,363	JH
Loch Bee (South Uist)	3,454	4,973	4,365	4,814	4,159	4,353	MS JH
Orchardton & Auchencairn	8,144	3,072	3,570	4,170	2,798	4,351	YS
R.Tay: Haughs of Kercock	799	6,029	6,254	5,045	3,622	4,350	PG JI
Kilconquhar Loch	5,869	2,985	3,731	1,189	7,622	4,279	JI

Site	03/04	04/05	05/06	06/07	07/08	Average	Int.Imp.Species
South Ford	4,487	5,084	3,244	4,476	3,475	4,153	JH
Rossie Bog	.	6,410	3,060	.	2,645	4,038	PG
Loch Tullybelton	.	6,500	.	2,757	2,800	4,019	PG
Loch Gruinart Floods	5,024	4,319	4,651	3,684	2,048	3,945	JH
Island of Egilsay	3,548	5,401	3,610	3,051	.	3,903	JI
Island of Papa Westray	4,106	3,320	4,069	.	.	3,832	JI
St Benet`s Levels	3,763	.	.	.	.	3,763	BS
Loch Gruinart	3,472	4,688	3,806	3,042	3,297	3,661	JH
Lake of Menteith	4,639	6,462	732	5,645	805	3,657	PG
Dee Flood Meadows	2,860	2,235	4,110	5,533	3,449	3,637	PT
Tweed Estuary	4,180	3,525	3,521	3,672	2,786	3,537	MS
North Uist	2,642	5,806	2,671	2,318	.	3,359	JH YN
Loch Scarmclate	3,197	2,699	3,868	3,637	2,501	3,180	JI
Loch of Skaill	3,053	2,649	4,310	2,542	2,785	3,068	JI
Warton Floods	.	.	.	.	3,049	3,049	BW
Loch of Swannay	2,660	2,910	2,779	3,075	3,730	3,031	JI
Fala Flow	5,450	741	.	2,170	3,650	3,003	PG
Lower Lough Erne	2,486	3,343	2,878	2,999	3,245	2,990	MS
Islands of Shapinsay	.	3,469	5,200	178	.	2,949	JI
Isle of Coll	2,767	4,267	4,818	687	1,245	2,757	NW JH YN
Killough Harbour	1,158	2,736	4,164	2,837	.	2,724	QN
Sanday	.	2,365	2,990	.	.	2,678	JI
Balranald Nature Reserve	2,377	3,288	1,844	1,829	2,569	2,381	JH
Loch Paible (North Uist)	2,767	2,996	1,757	2,191	1,474	2,237	JH
Loch Hempriggs	.	3,891	1,240	2,127	1,153	2,103	JI
South Uist	2,102	2,111	2,119	1,719	.	2,013	JH
Loch nan Capull (S.Uist)	1,736	.	.	.	.	1,736	JH
Upper Quoile River	1,241	977	4,394	1,177	653	1,688	MS
Machrihanish	1,523	1,487	2,106	1,831	1,345	1,658	NW
Melbost Sands (Lewis)	398	1,894	1,664	1,924	2,263	1,629	JH
Loch Garten and Mallachie	.	.	1,472	.	.	1,472	JI
Baleshare (North Uist)	1,530	1,201	834	1,742	1,850	1,431	JH
Loch Garten	1,151	2,416	1,715	1,573	284	1,428	JI
Stronsay (Whole Island)	41	1,775	2,393	.	.	1,403	JI
Broubster Leans	.	75	1,123	2,979	.	1,392	JI
Loch Ussie	667	458	3,603	447	1,514	1,338	JI
Ceann a Bhaigh	.	1,367	1,099	1,268	1,409	1,286	JH
Loch Bhasapoll (Tiree)	1,241	1,318	1,736	961	753	1,202	JH
Colonsay/Oronsay	.	.	.	.	1,200	1,200	YN
Scapa Flow and Shapinsay	.	.	1,177	.	.	1,177	ND
Scarp to Vatersay offshore	1,467	740	1,228	.	.	1,145	ND
Loch Gorm	.	191	2,049	.	.	1,120	NW JH
Rhunahaorine	1,337	894	955	940	1,451	1,115	NW
Scapa Flow	1,282	793	.	.	.	1,038	ND
North Sutherland	.	.	.	.	1,037	1,037	YN
Island of Eday	.	890	1,060	.	.	975	JI
Balnakiel Farm	.	.	1,195	288	1,109	864	YN
Loch Sandary (North Uist)	1,180	826	942	559	748	851	JH
Loch Riaghain (Tiree)	764	922	690	770	1,068	843	JH
Loch An Eilein (Tiree)	656	846	1,208	588	910	842	JH
Keills Peninsula and Isle of	1,017	1,051	816	300	913	819	NW YN
Loch Eaval and Loch Hosta	650	978	479	848	805	752	JH
Loch Fada (Benbecula)	.	.	454	982	732	723	JH

Site	03/04	04/05	05/06	06/07	07/08	Average	Int.Imp.Species
Sound of Barra (Barra)	891	1,181	37	.	.	703	ND
Isle of Colonsay	195	2,152	111	76	.	634	NW
Loch Mor (Benbecula)	.	.	504	703	581	596	JH
Loch Ewe	.	544	377	844	609	594	JH
Whiteness to Skelda Ness	650	543	521	538	699	590	SZ
Loch na Meallaird	.	.	477	676	555	569	JH
Stranraer Lochs	281	257	282	1,105	877	560	NW
Coll and Tiree offshore	743	374	.	.	.	559	ND
Sound of Gigha	95	696	1,143	105	194	447	ND
Claish Moss and Lower Loch	379	499	413	352	491	427	JH
South Uist West Coast	510	286	.	.	.	398	ND
Coll & Tiree & west Mull	.	.	340	.	.	340	ND
Back Pools	183	506	328	194	356	313	JH
Lch Shawbost/Lch A` Bhaile	.	284	.	.	.	284	JH
Loch Broom	.	40	112	253	602	252	JH
Outer Loch Indaal	.	57	279	.	.	168	ND
Steinish Canal	.	168	5	.	.	87	JH

Table 7. Other sites in the UK holding internationally important numbers of waterbirds in 2007/08 which are not routinely monitored by standard WeBS surveys. (Species codes are provided in Table 8.)

Site	Int.Imp.species	Site	Int.Imp.species
Benbecula	JH	Holme and Thornham	PG
Berney Marshes	PG	Norton Marsh	PG
Bute	JI,JH	Scolt Head Roost	PG
Caithness Lochs	JI	Snettisham Roost	PG
Colonsay/Oronsay	YN	Wells-next-the-Sea	PG
Cromarty Firth	JI	North Uist	JH,YN
Dingwall Bay	JI	Baleshare and Carinish (Grimsay)	JH
Nigg Bay	JI	Balmartin To Vallay	JH
Dalreoch	WS,JI	Balranald Clettraval and Tigharry	JH
East Mains Flood	JI	Berneray	JH,YN
Floodwater South Of Braco	PG	Boreray and Lingay	JH
Forth Estuary	PG	Malaclate To Grenitote	JH,YN
Aberlady Bay	PG	Oronsay	JH
Forth Grangemouth to Kincardine	PG	Paible	JH
Hule Moss (West)	PG	Trumisgarry Clachan and Newton	JH
Read`s Island Flats	PG	Trumisgarry to Newton	JH
Inner Moray and Inverness Firth	PG,JI	Orkney	JI, YN
Easterton - Fort George	PG,JI	Isle of South Ronaldsay	JI
Findhorn Bay	PG	South Walls (Hoy)	YN
Island of Islay	NW,JH,YN	Simonswood Peat Moss	PG
Isle of Oronsay	YN	Solway Firth	YS
Isle of Lismore	NW	South Uist	
Loans of Tullich	WS	Askernish To Smerclate	JH
Loch Eye and Cromarty Firth	WS,JI	Bornish To Askernish	JH
Loch Fleet	JI	Drimore To Howmore	JH
Lune Estuary	PG	Howbeg To Bornish	JH
Martin Mere and Ribble Estuary	WS	Lochdar, Gerinish and Drimsdale	JH
Meikle Loch - Slains Cotehill)	PG	Southwest Lancashire	PG
Moray Firth	ND	Strathearn (West)	PG JI
Morecambe Bay	PG	Tay and Isla Valley	PG,JI
Wyre to Cockerham	PG	Tayinloan	NW,JH
Wyre Estuary	PG	The Wash	PG
Wyre Estuary to Arm Hill	PG	Winter Loch, St Fergus Gas Term.	PG
North Norfolk Coast & The Wash	PG	Ythan Estuary and Slains Lochs	PG
Holkham Bay Roost	PG		
Holkham and Burnham Overy	PG		

Table 8. Species codes for species listed in tables 6., 7. and 9.

AV	Avocet
BA	Bar-tailed Godwit
BS	Bewick's Swan
BV	Black-throated Diver
BW	Black-tailed Godwit
CA	Cormorant
CO	Coot
CU	Curlew
CX	Common Scoter
DB	Dark-bellied Brent Goose
DN	Dunlin
E.	Eider
EW	European White-fronted Goose
GA	Gadwall
GG	Great Crested Grebe
GK	Greenshank
GP	Golden Plover
GV	Grey Plover
JH	Greylag Goose Northwest Scotland population
JI	Greylag Goose Icelandic population
KN	Knot
L.	Lapwing
LG	Little Grebe
MA	Mallard
MS	Mute Swan
ND	Great Northern Diver
NW	Greenland White-fronted Goose
OC	Oystercatcher
PG	Pink-footed Goose
PO	Pochard
PS	Purple Sandpiper
PT	Pintail
QN	Light-bellied Brent Goose Nearctic population
QS	Light-bellied Brent Goose Svalbard population
RH	Red-throated Diver
RK	Redshank
RM	Red-breasted Merganser
RP	Ringed Plover
RU	Ruff
SP	Scaup
SS	Sanderling
SU	Shelduck
SV	Shoveler
SZ	Slavonian Grebe
T.	Teal
TT	Turnstone
WN	Wigeon
WS	Whooper Swan
YN	Barnacle Goose Nearctic population

WeBS Low Tide Counts

AIMS

Estuarine sites in the UK provide the most important habitat for non-breeding waterbirds, acting as wintering grounds for many migrants but also as stopover feeding locations for other waterbirds passing along the East Atlantic Flyway. Core Counts on estuaries tend to quantify birds present at high tide roosts. Although important, knowledge of roost sites provides only part of the picture, and does not elucidate the use that waterbirds make of a site for feeding.

The WeBS Low Tide Counts scheme has flourished since its inception in the winter of 1992/93, with most of the major estuaries covered. The scheme aims principally to monitor, assess and regularly update information on the relative importance of inter-tidal feeding areas of UK estuaries for wintering waterbirds and thus to complement the information gathered by WeBS Core Counts.

The data gathered contribute greatly to the conservation of waterbirds by providing supporting information for the establishment and management of UK Ramsar sites and Special Protection Areas (SPAs), other site designations and whole estuary conservation plans. In addition, WeBS Low Tide Counts enhance our knowledge of the low water distribution of waterbirds and provide data that highlight regional variations in habitat use, whilst also informing protection of the important foraging areas identified. WeBS Low Tide Counts provide valuable information needed to gauge the potential effects on waterbirds of a variety of human activities which affect the extent or value of inter-tidal habitats, such as proposals for dock developments, recreational activities, tidal power barrages, marinas and housing schemes. Designing mitigation or compensation for such activities can be assisted using data collected under the scheme. Furthermore, the effects on bird distributions of climate change and sea level rise can be assessed.

METHODS

The scheme provides information on the numbers of waterbirds feeding on subdivisions of the inter-tidal habitat within estuaries. Given the extra work that Low Tide Counts entail, often by the same counters that carry out the Core Counts, WeBS aims to cover most individual estuaries about once every six years, although on some sites more frequent counts are made. Co-ordinated counts of waterbirds are made by volunteers each month between November and February on pre-established subdivisions of the inter-tidal habitat in the period two hours either side of low tide.

DATA PRESENTATION

Tabulated Statistics

Table 10 presents three statistics for 18 of the more numerous waterbird species present on 18 estuaries covered during the 2007/08 winter: the peak number of a species over the whole site counted in any one month (with checks for count synchronicity made from assessing proximity of count dates and consultation with Local Organisers); an estimate of the mean number present over the winter for the whole site (obtained by summing the mean counts of each species for each count section) and the mean density over the site (in birds per hectare), which is the mean number divided by the total area surveyed (in hectares). The area value used for these calculations is the sum of the inter-tidal and non-tidal components of each count section but omits the sub-tidal areas (*i.e.* those parts of the count section which are under water on a mean low tide).

Dot Density Maps

WeBS Low Tide Count data are presented as dot density maps, with subdivision of count sections into basic habitat elements. The reason for such a subdivision is to ensure species are plotted on appropriate habitat areas and to improve the accuracy of density

estimates. Each section for which a count has been made is divided into a maximum of three different habitat components:

Inter-tidal: Areas that lie between mean high water and mean low water.

Sub-tidal: Areas that lie below mean low water. In more 'open-coast'-type situations, a sub-tidal zone reaching 500 m out from the inter-tidal sections has been created arbitrarily, to indicate the approximate extent of visibility offshore from land-based counts.

Non-tidal: Areas that lie above mean high water (usually saltmarsh although some grazing marshes are also covered).

The mean count for the sector is then divided amongst a varying number of the different components, dependent on the usual habitat preferences of the species involved. For example, Dunlin dots are plotted exclusively on inter-tidal sections whereas Wigeon dots are spread across inter-tidal, sub-tidal and non-tidal areas (in proportion to the relative areas of these three components).

Currently, throughout all WeBS Low Tide Count analyses, mean low tide and mean high tide are taken from the most recent Ordnance Survey 1:25000 maps (in Scotland, the lines on the OS maps are mean low water springs and mean high water springs instead). It is recognised, unfortunately, that these maps represent the current real shape of the mudflats, water channels and saltmarshes to varying degrees of accuracy. However, in the interests of uniformity across the UK, the Ordnance Survey outlines are adhered to throughout the analyses.

The maps display the average number of birds in each count section as dots spread randomly across habitat components of count sections, thus providing an indication of both numbers and density. **It is important to note that individual dots do not represent the precise position of individual birds; dots have been assigned to habitat components proportionally and are then randomly placed within those areas. No information about the distribution of birds at a finer scale than the count sector level should be inferred from the dot density maps.** For all maps in the present report, one dot is equivalent to one bird, except where stated. The size of individual dots has no relevance other than for clarity.

As most estuaries have now been covered more than once at low tide, density maps show the relative distributions of species in the winter of 2007/08 compared to an earlier winter of survey. It is hoped that comparative dot density distributions will lead to an easier and fuller appreciation of low tide estuarine waterbird distribution, and changes therein. The following colour conventions apply to density maps: red dots = 2007/08 winter; blue dots = earlier winter; pale blue = water; yellow = inter-tidal habitat (e.g. mudflat, sandflat); pale green = non-tidal habitat (e.g. saltmarsh, reedbed); grey or brown = not covered in one survey winter; dark blue = sector never covered. More detailed information concerning analysis and presentation of WeBS Low Tide Counts can be obtained from Neil Calbrade, the National Organiser (WeBS Low Tide Counts), or from the publication *Estuarine Waterbirds at Low Tide* (Musgrove *et al*. 2003)

ESTUARY ACCOUNTS

The main estuaries counted at low tide in the winter of 2007/08 are discussed. WeBS Low Tide Counts were carried out on 18 different sites, with estuary accounts encompassing 9 of these. Other counts, usually on limited numbers of sectors or only in one month, were made in the winter of 2007/08 on Adur Estuary, Burry Inlet, Carmarthen Bay, Duddon Estuary, Killough Harbour, Langstone Harbour, Swansea Bay and Tyne. These sites are not included in the estuary accounts, but data can be obtained from the WeBS Low Tide Count National Organiser upon request.

For the main site accounts, data were collected during the period November to February. Assessment of national and international importance is based on five year peak mean counts from the main

species accounts in this volume of *Wildfowl & Wader Counts*. Figure 58 shows the location of the sites discussed, and a site description is presented for each estuary. Distribution maps are presented for selected species, which are those of national or international importance, or are known to be undergoing site-level changes, where possible. General bird distribution is described for the winter of 2007/08, focusing on species held in important numbers at the site in question.

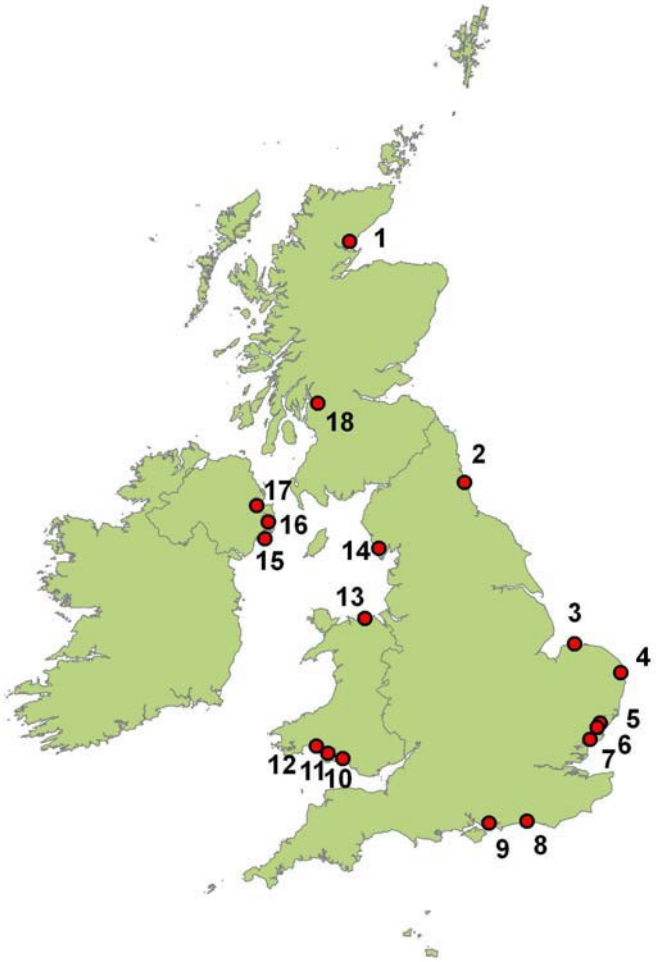
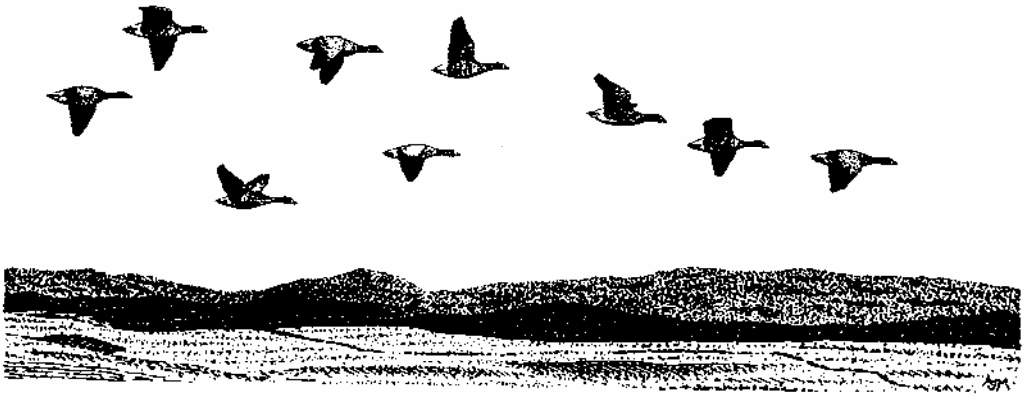


Figure 58. Map showing estuaries covered at low tide in the winter of 2007/08. 1: Loch Fleet; 2: Tyne Estuary; 3: North Norfolk Coast; 4: Breydon Water; 5: Orwell Estuary; 6: Stour Estuary; 7: Colne Estuary; 8: Adur Estuary; 9: Langstone Harbour; 10: Swansea Bay; 11: Burry Inlet; 12: Carmarthen Bay; 13: Clwyd Estuary; 14: Duddon Estuary; 15: Killough Harbour; 16: Strangford Lough; 17: Belfast Lough; 18: Inner Firth of Clyde.

Table 9. Sites with Estuary Accounts and important bird numbers held. Numbers in parentheses refer to the location in Figure 58. For species codes see table 8.

	International Importance	**National Importance**
Adur Estuary (8)	None	None
Belfast Lough (17)	BW	SU, SP, E., GN, RM, RH, BV, GG, OC, RP, PS, RK, TT
Breydon Water (4)	BS, PG, WN, T., SV, AV, GP, BW, RK	BS, EW, PT, RU
Burry Inlet (11)	PT, OC, BW	DB, SV, DN, CU, GK
Carmarthen Bay (12)	CX, SS	OC, GP, BW, GK
Clwyd Estuary (13)	None	None
Colne Estuary (7)	DB	SU, AV, BW, GK
Duddon Estuary (14)	None	RP, SS, DN, CU
Firth of Clyde (18)	E.	GN, RM, SZ, CA, SA, OC, CU, GK, RK
Killough Harbour (15)	QN	None
Langstone Harbour (9)	None	TT
Loch Fleet (1)	JI	None
North Norfolk Coast (3)	PF, EW, DB, WN, PT, CX, KN, BA	SU, T., SV, RM, RX, CA, OC, BW, AV, RP, GP, GV, SS, RU, CU, GK, RK, TT
Orwell Estuary (5)	None	DB, GA, PT, AV, KN, BW, RK
Stour Estuary (6)	BW, GV	DB, SU, PT, AV, DN, RU, , RK, TT
Strangford Lough (16)	MS, WS, QN, SU, GP, KN, BA, RK	T., WN, MA, PT, SV, E., GN, RM, BV, GG, CO, RP, GV, L., DN, BW, CU, GK
Swansea Bay (10)	None	OC
Tyne Estuary (2)	None	None



White-fronted Geese (Andy McKay)

Table 10. Peak and mean counts and mean density (birds per ha) of 18 waterbird species across 18 estuaries covered by the 2007/08 WeBS Low Tide Counts. Stour and Orwell estuaries displayed separately. "+" indicates non-zero densities of <0.01 birds per ha.

Species	Adur Estuary			Belfast Lough			Breydon Water		
	Peak No.	*Mean No.*	*Mean Dns.*	***Peak No.***	*Mean No.*	*Mean Dns.*	***Peak No.***	*Mean No.*	*Mean Dns.*
Brent Goose	1	0	+	92	67	0.03	0	0	0
Shelduck	0	0	0	322	224	0.11	98	53	0.11
Wigeon	0	0	0	248	202	0.09	9750	6211	12.94
Teal	23	19	0.21	713	560	0.26	965	431	0.9
Mallard	11	5	0.06	496	363	0.17	167	94	0.2
Pintail	0	0	0	0	0	0	67	40	0.08
Oystercatcher	7	3	0.11	3416	3102	6.94	15	5	0.01
Ringed Plover	38	21	0.73	174	142	0.32	24	12	0.03
Golden Plover	0	0	0	0	0	0	14000	6344	15.78
Grey Plover	15	7	0.24	0	0	0	82	29	0.07
Lapwing	481	270	3.6	1018	750	1.65	17335	7381	18.36
Knot	0	0	0	24	9	0.02	195	148	0.37
Dunlin	222	100	3.46	420	265	0.59	6650	4597	11.64
Black-tailed Godwit	0	0	0	276	210	0.46	2042	857	2.13
Bar-tailed Godwit	0	0	0	45	29	0.07	3	1	+
Curlew	1	0	+	471	402	0.88	602	279	0.69
Redshank	21	17	0.23	828	783	1.72	1222	1171	2.91
Turnstone	64	28	0.95	264	218	0.49	2	1	+

Species	Burry Inlet			Carmarthen Bay			Clwyd Estuary		
	Peak No.	*Mean No.*	*Mean Dns.*	***Peak No.***	*Mean No.*	*Mean Dns.*	***Peak No.***	*Mean No.*	*Mean Dns.*
Brent Goose	570	373	0.05	1	0	+	0	0	0
Shelduck	608	343	0.05	184	122	0.02	64	47	0.14
Wigeon	847	333	0.05	330	203	0.04	284	164	0.48
Teal	25	18	+	166	153	0.03	10	4	0.01
Mallard	59	31	+	215	108	0.02	68	41	0.12
Pintail	1531	865	0.12	261	165	0.03	0	0	0
Oystercatcher	12861	10527	2.63	10911	8732	2.59	280	227	1.21
Ringed Plover	18	10	+	52	35	0.01	0	0	0
Golden Plover	750	417	0.07	2033	567	0.14	4	1	0.01
Grey Plover	240	171	0.04	64	31	0.01	0	0	0
Lapwing	872	434	0.07	973	611	0.15	880	599	3.2
Knot	850	431	0.11	6486	3538	1.05	0	0	0
Dunlin	3339	2285	0.57	1302	925	0.27	99	95	0.51
Black-tailed Godwit	50	16	+	68	31	0.01	0	0	0
Bar-tailed Godwit	0	0	0	30	9	+	0	0	0
Curlew	823	771	0.13	544	438	0.11	166	128	0.69
Redshank	303	215	0.04	640	489	0.12	216	184	0.98
Turnstone	35	19	+	74	44	0.01	78	46	0.24

Species	Colne Estuary			Duddon Estuary			Inner Firth of Clyde		
	Peak No.	*Mean No.*	*Mean Dns.*	***Peak No.***	*Mean No.*	*Mean Dns.*	***Peak No.***	*Mean No.*	*Mean Dns.*
Brent Goose	2464	1336	0.44	0	0	0	0	0	0
Shelduck	1600	1210	1.61	213	213	0.14	262	162	0.05
Wigeon	1927	1184	0.39	389	389	0.25	771	682	0.19
Teal	1052	772	0.26	1	1	+	995	515	0.14
Mallard	188	148	0.05	18	18	0.01	483	316	0.09
Pintail	42	27	0.01	0	0	0	10	6	+
Oystercatcher	713	619	0.5	1679	1679	1.4	2861	2468	1.29
Ringed Plover	177	126	0.1	49	49	0.04	31	18	0.01
Golden Plover	2828	1287	0.64	0	0	0	3	1	+
Grey Plover	575	475	0.38	19	19	0.02	2	1	+
Lapwing	3329	1745	0.87	295	295	0.25	2301	1660	0.84
Knot	3051	2005	1.62	210	210	0.17	13	3	+
Dunlin	6716	5736	4.63	351	351	0.29	1027	473	0.25
Black-tailed Godwit	617	488	0.24	0	0	0	19	7	+
Bar-tailed Godwit	220	185	0.15	0	0	0	32	18	0.01
Curlew	525	469	0.23	218	218	0.18	1440	1169	0.59
Redshank	1442	1272	0.63	162	162	0.13	1864	1480	0.75
Turnstone	304	219	0.18	36	36	0.03	0	0	0

	Killough Harbour			Langstone Harbour			Loch Fleet		
	Peak	*Mean*	*Mean*	***Peak***	*Mean*	*Mean*	***Peak***	*Mean*	*Mean*
Species	***No.***	*No.*	*Dns.*	***No.***	*No.*	*Dns.*	***No.***	*No.*	*Dns.*
Brent Goose	225	129	1.79	1602	1368	2.9	0	0	0
Shelduck	4	2	0.02	400	178	0.38	74	61	0.08
Wigeon	47	21	0.29	360	214	0.45	789	596	0.76
Teal	93	24	0.34	34	22	0.05	173	104	0.13
Mallard	0	0	0	39	14	0.03	80	57	0.07
Pintail	0	0	0	32	11	0.02	0	0	0
Oystercatcher	67	45	0.69	539	425	1.05	535	428	0.75
Ringed Plover	16	9	0.14	139	69	0.17	0	0	0
Golden Plover	2500	808	12.42	0	0	0	0	0	0
Grey Plover	0	0	0	213	208	0.51	0	0	0
Lapwing	452	182	2.8	30	18	0.05	73	27	0.05
Knot	68	42	0.64	193	99	0.24	40	35	0.06
Dunlin	315	251	3.85	5403	3869	9.58	70	36	0.06
Black-tailed Godwit	0	0	0	37	34	0.09	0	0	0
Bar-tailed Godwit	0	0	0	29	28	0.07	97	65	0.11
Curlew	38	29	0.45	287	221	0.55	147	169	0.29
Redshank	76	65	0.99	225	196	0.49	113	100	0.17
Turnstone	0	0	0	60	44	0.11	12	5	0.01

	North Norfolk Coast			Orwell Estuary			Stour Estuary		
	Peak	*Mean*	*Mean*	***Peak***	*Mean*	*Mean*	***Peak***	*Mean*	*Mean*
Species	***No.***	*No.*	*Dns.*	***No.***	*No.*	*Dns.*	***No.***	*No.*	*Dns.*
Brent Goose	7828	4721	0.53	1601	1059	0.61	1686	1526	0.63
Shelduck	1222	1048	0.12	618	552	0.32	2130	1838	0.75
Wigeon	7740	3570	0.4	1615	1432	0.82	3729	3506	1.44
Teal	3278	2840	0.32	714	560	0.32	1474	906	0.37
Mallard	675	540	0.06	461	380	0.22	194	142	0.06
Pintail	697	433	0.05	192	151	0.09	234	191	0.08
Oystercatcher	3699	3421	0.98	1653	1444	2.2	1098	1065	0.68
Ringed Plover	355	312	0.09	86	54	0.08	167	161	0.1
Golden Plover	2919	1439	0.23	150	85	0.07	2608	1671	1.03
Grey Plover	1339	1265	0.36	309	184	0.28	2329	1792	1.15
Lapwing	3277	1647	0.26	1810	750	0.61	4203	2069	1.27
Knot	9597	5538	1.59	3552	1982	3.02	5734	4109	2.63
Dunlin	5731	4617	1.33	3140	2558	3.9	14091	11988	7.68
Black-tailed Godwit	145	49	0.01	845	614	0.5	902	646	0.4
Bar-tailed Godwit	1463	1143	0.33	9	5	0.01	215	122	0.08
Curlew	2538	1745	0.28	753	624	0.51	866	741	0.46
Redshank	2899	2602	0.41	1375	1238	1.01	1811	1630	1
Turnstone	588	528	0.15	150	125	0.19	434	381	0.24

	Strangford Lough			Swansea Bay			Tyne Estuary		
	Peak	*Mean*	*Mean*	***Peak***	*Mean*	*Mean*	***Peak***	*Mean*	*Mean*
Species	***No.***	*No.*	*Dns.*	***No.***	*No.*	*Dns.*	***No.***	*No.*	*Dns.*
Brent Goose	4903	2681	0.32	0	0	0	0	0	0
Shelduck	6084	3762	0.45	0	0	0	17	9	0.05
Wigeon	627	404	0.05	0	0	0	0	0	0
Teal	905	724	0.09	0	0	0	23	10	0.06
Mallard	454	327	0.04	0	0	0	14	10	0.06
Pintail	591	381	0.05	0	0	0	0	0	0
Oystercatcher	6864	5377	1.52	646	646	1.57	115	63	1.8
Ringed Plover	227	134	0.04	37	37	0.09	10	7	0.2
Golden Plover	8817	5668	1.6	0	0	0	0	0	0
Grey Plover	47	34	0.01	3	3	0.01	0	0	0
Lapwing	3906	2619	0.74	0	0	0	66	19	0.55
Knot	7360	3687	1.04	0	0	0	0	0	0
Dunlin	4115	2378	0.67	283	283	0.69	66	28	0.8
Black-tailed Godwit	311	209	0.06	0	0	0	0	0	0
Bar-tailed Godwit	1069	705	0.2	0	0	0	0	0	0
Curlew	1221	1078	0.3	8	8	0.02	8	7	0.2
Redshank	2413	2099	0.59	7	7	0.02	334	203	5.8
Turnstone	202	158	0.04	0	0	0	37	24	0.69

BELFAST LOUGH

Site description

Belfast Lough is a large sea lough in the northeast of Ireland, with the city of Belfast at its head. The area surveyed comprised the coast from Carrickfergus on the north shore around to the eastern end of Bangor on the south shore. Much of the site is afforded SPA and Ramsar status, with a further proposed SPA over open water. The outer parts of the Lough's shore are generally rocky with some sandy bays, although more extensive areas of intertidal mud are found toward Belfast. Industrial land claim has reduced the area of the mudflats over the last 150 years, and Belfast has become the main port in Northern Ireland for heavy cargo. More recently, all of the area, including the important Belfast Harbour Pools, has been given a degree of protection. Extensive areas of the lough support commercial shellfisheries. There are problems of refuse disposal, pollution and general disturbance, but notably bait diggers on the north shore can pose potentially high levels of disturbance.

General bird distribution 2007/08

Area covered 456 ha; Mean total birds 10,818; Mean bird density 23.7 birds per ha.

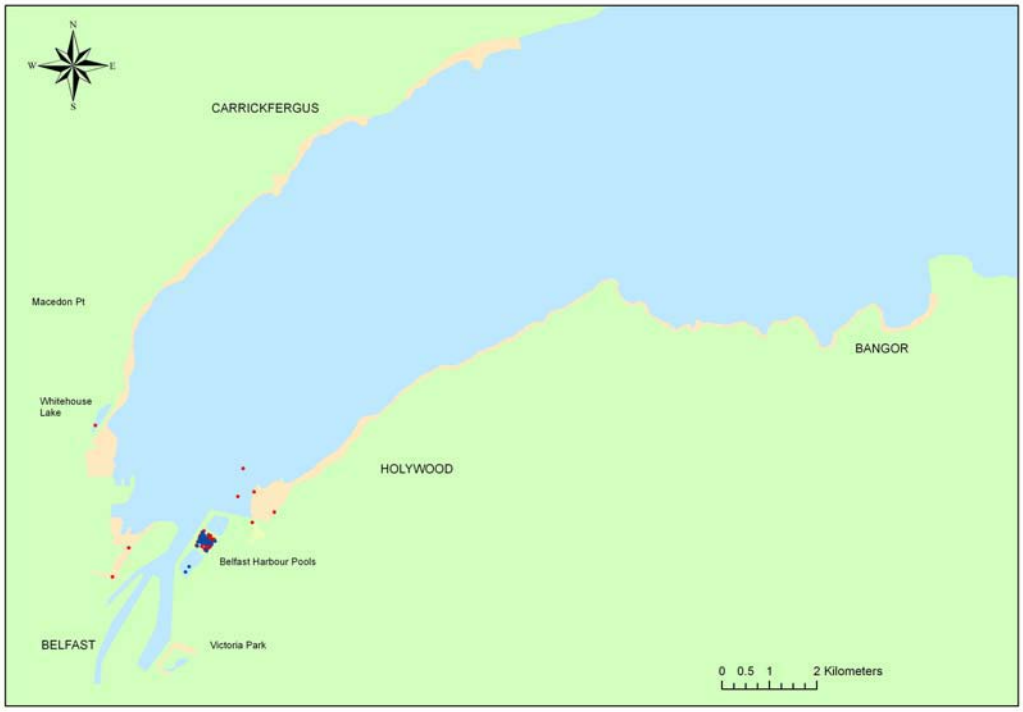
The Belfast Lough area supports significant populations of a range of birds, some of which have shown an increase in recent years. Between the winters of 1997/98 and 2007/08, low tide counts (of the same area) of Shelduck increased from 164 to 224; Wigeon almost doubled from 107 to 202; Teal up from 285 to 560; Mallard from 272 to 363; Ringed Plover from 46 to 142; and Black-tailed Godwit from 162 to 210.

However, several key species present in large numbers have declined drastically over the same time period. They include: Oystercatcher down from 6,014 to 3,102; Lapwing down from 1,167 to 750; Knot down from 216 to just 9 birds; Dunlin down from 1,469 to 265; Curlew halved from 861 to 402 and Redshank from 2,083 to just 783; all serious declines. In the cases of Knot and Dunlin at least, it is possible that the reductions may be a response to climate change in that they are choosing to winter on British east coast estuaries rather than venturing further west to Irish estuaries. Amongst the more regular birds recorded was a vagrant Ring-billed Gull.

Comparative bird distribution

In both winters, Teal have shown aggregated distributions, which in 1997/98 involved birds being concentrated almost exclusively at just one location, Belfast Harbour pools. However in 2007/08 they were more widespread, using four locations: Belfast Harbour Pools, Whitehouse Lake, Holywood and Belfast Docks area, along with a small cluster at Victoria Park. Hence, it appears that the increase in numbers of this species may have required it to distribute more widely around the site, although other factors (such as changes disturbance) could also be at play. Numbers counted on core counts here have also increased in recent years, with the Belfast Harbour Pools being the favoured location.

In contrast, Bar-tailed Godwit has undergone a big decline over the same period, although numbers have fluctuated, with the site being issued with a High Alert (see http://www.bto.org/webs/alerts/) over the ten-year period (Maclean & Austin 2008). In a similar fashion to Teal, Bar-tailed Godwit displayed a similar distribution between the two winter periods, although slightly less aggregated. In 1997/98, godwits were mostly clustered around Whitehouse Lake and the south end of Holywood with few birds elsewhere. However in 2007/08 the mean count had decreased from 56 to 29 birds. Although numbers had declined, they were more dispersed, perhaps giving a false impression of an increase on the map (Figure 59), and birds were now to be found feeding all along the western shore from Belfast to Carrickfergus.



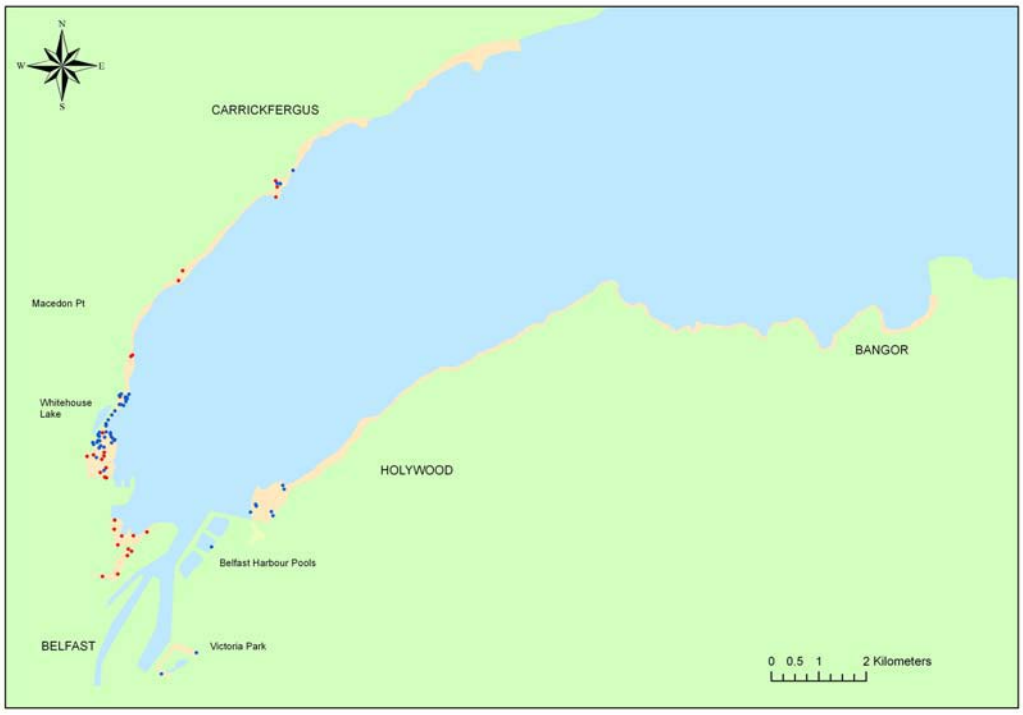


Figure 59. Low Tide distribution of Teal (above: 1 dot = 10 birds) and Bar-tailed Godwit (below) for the winters of 1997/98 (blue) and 2007/08 (red) at Belfast Lough. Yellow = intertidal; pale green = non-tidal; blue = subtidal.

BREYDON WATER

Site description

Breydon Water is a bar-built estuary separated from the North Sea by the spit of land on which Great Yarmouth sits. The estuary forms the lower reaches of the Yare and Waveney rivers, which drain much of central East Anglia. The rivers are tidal for many miles inland but only the estuary area from the confluence of the rivers is considered here. At high tide, Breydon Water forms a large lake but as the tide recedes, the only water that remains forms a narrow channel, well marked by buoys for the numerous leisure cruisers. There are small areas of saltmarsh, principally at the eastern end. To the north of the estuary stretches the huge expanse of the Halvergate Levels, Breydon Marshes and Berney Marshes. These form an extensive area of grazing marsh that has been subject to varying degrees of drainage in recent years. The main high tide roosts occur at the RSPB reserve at Berney Marshes (only accessible by boat, train or a very long walk) and in the eastern saltmarsh. The site is designated as a SPA and is judged in favourable condition (Broads Authority 2007). The main conservation issues in the area involve boating, shooting and grazing marsh management. The river channel leading out through Great Yarmouth to the sea is highly industrialized.

General bird distribution 2007/08

Area covered 402 ha; Mean total birds 28,043; Mean bird density 69.8 birds per ha.

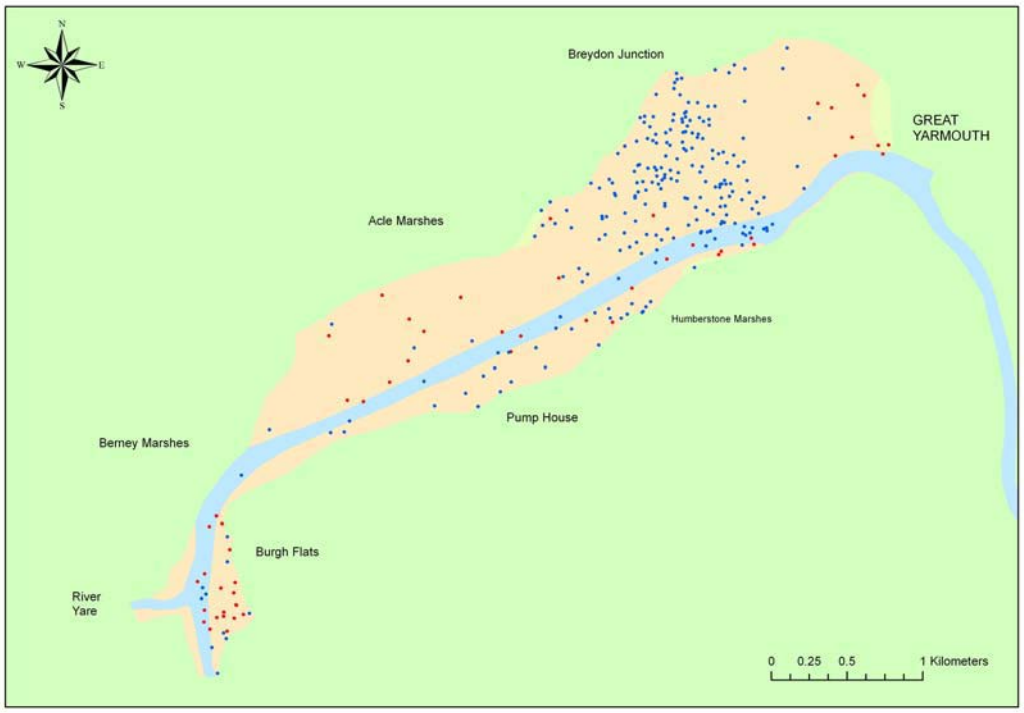
Breydon Water once again supported the highest overall mean density of all sites included in the 2007/08 Low Tide Counts. However, the mean density of 69.8 birds per ha was much lower than for 2006/07 when the mean site density was 93.5 birds per ha, largely due to a reduction in Golden Plover and Wigeon numbers. Lapwing were present in the highest numbers (peak count of 17,335 birds) and densities (18 birds per ha on average across the winter) whilst Golden Plover numbers peaked at 14,000 birds. Again, the relatively small area for feeding supported high densities of many species including Golden Plover (15.78 birds per ha), Wigeon (12.94 birds per ha), Redshank (2.91 birds per ha) and Black-tailed Godwit (2.13 birds per ha).

Comparative bird distribution

Since 1998/99, WeBS has received regular counts of Breydon Water at low tide. The winters of 2007/08 and 1998/99 are compared for the distributions of two species, Shelduck and Dunlin.

Shelduck have been in long-term decline for many years, possibly due to the accretion of mud on the northeast section of the estuary (Rowe pers. comm.) Between the two winters, the mean count has declined from 234 to 53 birds. In 1998/99 there was a broad scatter of birds but with the bulk of records concentrated on the flats between Breydon Junction and Stone Corner, and a smaller congregation at Burgh Flats. By 2007/08 there was still a cluster of birds at Burgh Flats, although the mass of birds on the main Breydon Junction section had disappeared.

Conversely, Dunlin has undergone an increase with the mean count going up from 3,779 to 4,597 birds. Figure 60 shows the distribution of Dunlin between the two winters, with the bulk of the wintering population located in the eastern-most half of the estuary between Breydon Junction and Great Yarmouth. The increase in Dunlin over this 10-year period is believed to be related to climate change with birds now preferring to spend the winter on the now-milder east coast, rather than heading to the west coast (e.g. the Severn). Numbers of Dunlin have been declining on the west coast, switching to the east coast where winters are less severe than in former years. This may be the factor that is driving the observed increases in Golden Plover, Lapwing and Black-tailed Godwit too.



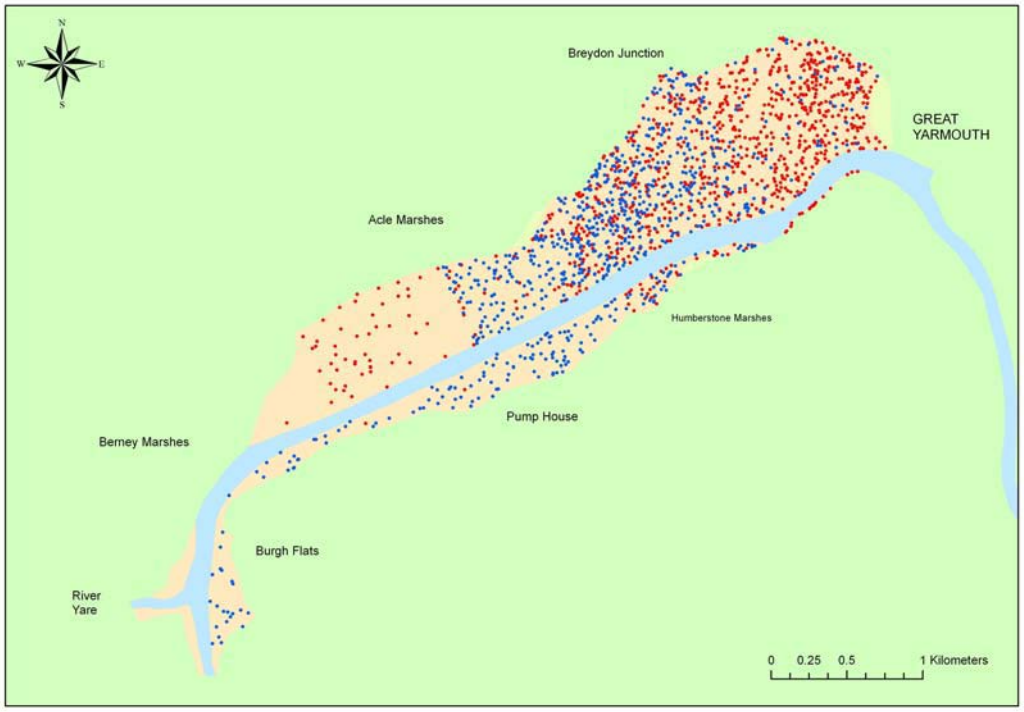


Figure 60. Low Tide distribution of Shelduck (above) and Dunlin (below: 1 dot = 5 birds) for the winters of 1998/1999 (blue) and 2007/08 (red) at Breydon Water. Yellow = intertidal; pale green = non-tidal; blue = subtidal.

CLWYD ESTUARY

Site description

The Clwyd is a small estuary that lies on the north Wales coast between Kinmel Bay and Rhyl. The river channel is narrow and entirely canalised, with a restricted mouth opening onto a wide sandy beach at Rhyl. The inner estuary is mostly muddy with a limited saltmarsh fringe. The adjacent marine lake at Rhyl is also a suitable feeding ground when partially drained in the winter. Most disturbance at the site comes from human recreational activities, most intensively during the summer months, but industrial activities are limited. The estuary does not have any statutory designation, not overlapping with any SPAs or SSSIs.

General bird distribution 2007/08

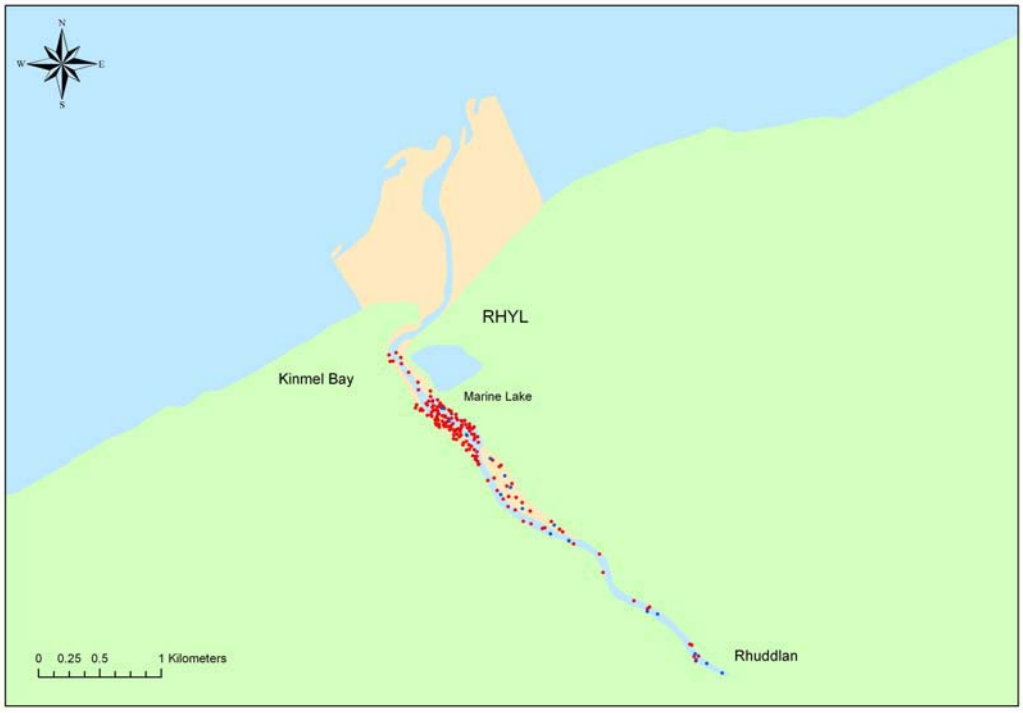
Area covered 187 ha; Mean total birds 1,661; Mean bird density 8.9 birds per ha.

Counts were received from three months of the winter, and unsurprisingly, this small estuary produced the lowest diversity of waterbirds of the sites covered in 2007/08, with just 20 species recorded. This total included Common Scoter, a seldom-recorded species on low tide counts, with a count of 75 birds offshore in December representing a very small proportion of the total numbers further offshore in Liverpool Bay. Little Egrets were absent when this site was last covered in 1992/93 at low tide when they were still a rare bird in much of the UK but three were present in January, typically along the narrow central creek. Lapwings were present in good numbers with a peak of over 800 birds, largely around the marine lake and adjacent creek. Curlew favoured the intertidal areas along the channel rather than the more exposed areas along the beach, possibly due to increased disturbance here or increased food availability in the muddier sediments.

Comparative bird distribution

Wigeon are present on the Clwyd estuary along the riverine channel solely south of Rhyl, and not on the sands or coastal area along the Rhyl seafront. The mean counts of Wigeon increased on the Clwyd estuary from 16 to 164 between the winters 1992/93 and 2007/08, an increase by a factor of ten in this period. Although this is a big increase, these are low numbers on a national scale. The main concentration of Wigeon was just south of the Marine Lake with a mean density of 11.5 birds per hectare recorded on the narrow intertidal area. Unlike Wigeon, Oystercatchers frequented all the intertidal zones, both within the Clwyd river channel and the coastal flats north of Rhyl. Mean counts increased from 62 to 227 birds between the winters 1992/93 and 2007/08, a more than three-fold increase in this period. This was reflected in the density of birds on the site, which increased from 0.33 birds per hectare in 1992/93 to 1.21 birds per hectare in 2007/08. However, the intertidal area north of Rhyl counted is just a small area compared with the extensive mudflats that extend both east and west from the site, which must be borne in mind with this species.

Wigeons (Dawn Balmer)



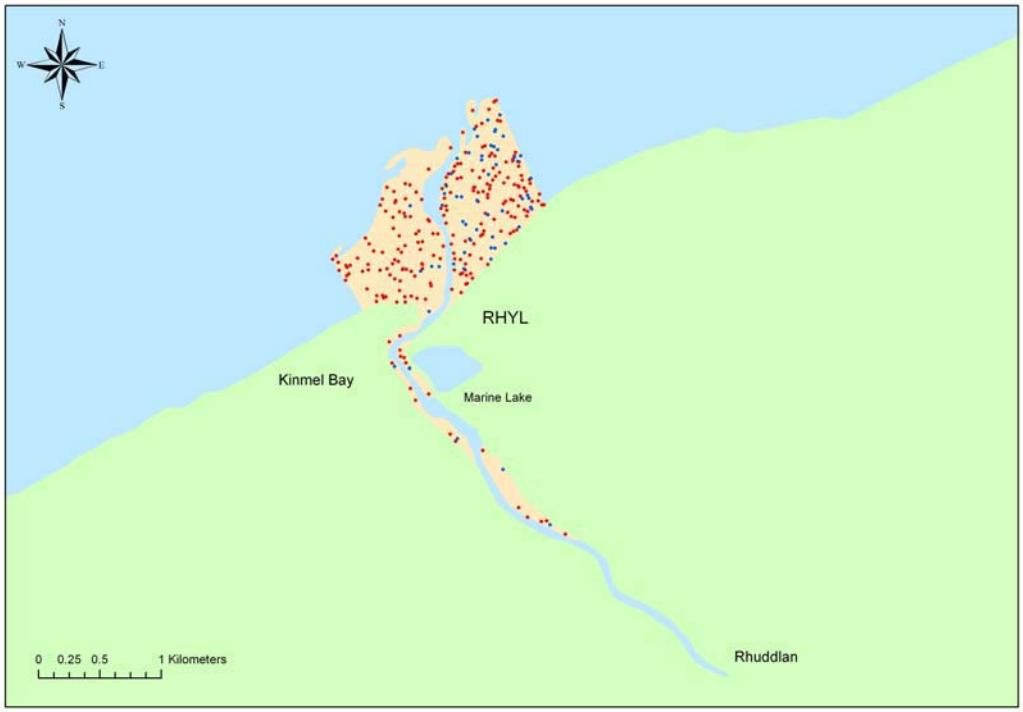


Figure 61. Low Tide distribution of Wigeon (above) and Oystercatcher (below) for the winters of 1992/93 (blue) and 2006/07 (red). Yellow = intertidal; pale green = non-tidal; blue = subtidal.

Site description

The Colne Estuary is located on the coast of Essex in eastern England. It is a comparatively short and branching estuary, with five tidal arms that flow into the main channel of the River Colne. The estuary has a narrow intertidal zone predominantly composed of flats of fine silt with mud-flat communities typical of southeastern English estuaries. There is a wide variety of coastal habitats which include mud-flat, saltmarsh, grazing marsh, sand and shingle spits, disused gravel pits and reedbeds which provide feeding and roosting opportunities for the large numbers of waterbirds that use the site. The Colne Estuary is an integral component of the phased Mid-Essex Coast SPA (Stroud *et al*. 2001).

Potential threats to this SPA and surrounding areas are posed by disturbance caused by air activities such as paragliding, the development of a wharf, sea defences, homes and shops, car parks, marinas, holiday parks and an airport, and saltmarsh loss caused by sea-level rise (BirdLife International 2003). Specific potential threats to this site include erosion of saltmarsh, sediment-flats and eel-grass, changes in water quality, deliberate goose scaring on adjacent farmland and recreational disturbance.

General bird distribution 2007/08

Area covered 2,010 ha; Mean total birds 25,510; Mean bird density 12.7 birds per ha.

The Colne Estuary has only previously been covered once for Low Tide Counts in 1994/95 when only the areas north of Mersea Island and Brightlingsea were counted. In 2007/08, Colne Point and the southeast side of Mersea Island were covered in addition. Counts were received from three months of the winter, with 45 species recorded, including both Slavonian and Red-necked Grebes. Dunlin were present in the largest numbers with a mean site count of over 7,000 birds whilst Dark-bellied Brent Goose, Shelduck, Wigeon, Golden Plover, Lapwing, Knot and Redshank also had four figure mean site counts. Great Crested Grebe numbers peaked at 411 in January, although counts of this species are dependent on weather condition and sea state, as most occur in offshore waters in this area.

Bird distribution

As only a small proportion of the total site was covered in 1994/95, Figure 62 just displays distributions from 2007/08.

Wigeon tend to favour the creeks off the main channel, and in some areas favoured the saltmarshes where they may be undercounted amongst the channels. The highest numbers were found along the Pyefleet Channel on the north side of Mersea Island where the peak count was 838 birds. The small area of non-tidal grassland on the east side of Mersea Island attracted the highest densities of the species with a mean of 22.87 birds per hectare recorded.

Since 1994/95, Avocet numbers on the Colne Estuary have increased dramatically (Maclean and Austin 2008). Although not directly comparable due to the different areas being covered the peak count in 1994/95 was 264 whilst in 2007/08, the peak count was 586. The main concentration of Avocets was of over 340 birds, mostly roosting, at the north end of the main channel where the mean density of birds was 5.21 birds per hectare. Another roost of up to 94 birds was present in the Brightlingsea Creek and birds were also present along the South Geedon Creek. Whilst many wading birds feed most actively at low tide, many Avocets feed on the edge of the rising tide of prey such as shrimps and so can often be found roosting over the low tide period.

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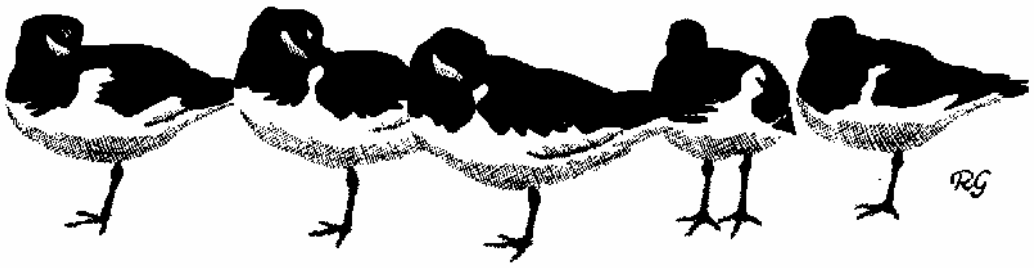

Oystercatchers (Robert Gillmor)

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Glossary

The terms listed below are generally restricted to those that have been adopted specifically for use within WeBS or more widely for monitoring.

1% criterion The criterion identifies sites as being of *international importance* if at least 1% of the *waterbirds* of a particular migratory flyway or population regularly make use of a site during their annual cycle. The term thus relates to the proportion (1%) that is used as a criterion of site selection. First used in the Ramsar Convention, the 1% criterion is used widely in assessment of site importance.

1% threshold This logically derives from the *1% criterion* and relates to the number of birds that are used as the nominal 1% of the population for the purposes of site selection. Thus, an international population of 75,215 Shelduck has a derived 1% threshold (adopting rounding conventions) of 750.

African-Eurasian Migratory Waterbird Agreement (AEWA) An independent international treaty developed under the Convention on the Conservation of Migratory Species of Wild Animals ('*Bonn Convention*'). Parties to the Agreement are called upon to engage in a wide range of conservation actions addressing key issues such as species and habitat conservation, management of human activities, research and monitoring, education and information, and implementation.

All-Ireland Comprises the whole island of Ireland (Northern Ireland and the Republic of Ireland).

British Trust for Ornithology (BTO) The BTO is a well-respected organisation, combining the skills of professional scientists and volunteer birdwatchers to carry out research on birds in all habitats and throughout the year. Data collected by the various surveys form the basis of extensive and unique databases, which enable the BTO to objectively advise conservation bodies, government agencies, planners and scientists on a diverse range of issues involving birds.

Complex site A *WeBS site* that consists of two or more *WeBS sectors*.

Core Counts The fundamental WeBS counts that monitor all types of wetlands throughout the UK once per month on, or as near as possible to, pre-selected *priority dates*. Used to determine population estimates and trends and identify important sites.

Great Britain The countries of England Scotland and Wales (excludes the Channel Isles and the Isle of Man).

Incomplete counts When presenting counts of an individual species, a large proportion of the number of birds was suspected to have been missed, *e.g.* due to part coverage of the site or poor counting conditions, or when presenting the total number of birds of all species on the site, a significant proportion of the total number was missed.

I-WeBS An independent but complementary scheme operating in the Republic of Ireland to monitor non-breeding *waterbirds*, organised by BirdWatch Ireland, the National Parks and Wildlife Service (Ireland) and The *Wildfowl & Wetlands Trust*.

Joint Nature Conservation Committee (JNCC) JNCC is the statutory body constituted by the Environmental Protection Act 1990 to be responsible for research and advice on nature conservation at both UK and international levels. The committee is established by Natural England, Scottish Natural Heritage and the Countryside Council for Wales, together with independent members and representatives from the Countryside Commission and Northern Ireland, and is supported by specialist staff.

Local Organiser Person responsible for coordinating counters and counts at a local level, normally a county or large estuary, and the usual point of contact with the *WeBS office*.

Low Tide Counts (LTC) WeBS counts made at low tide to assess the relative importance of different parts of individual estuaries as feeding areas for intertidal *waterbirds*.

Priority date Pre-determined dates published by the *WeBS Office* to aid coordination of surveys. Counters are asked to count on, or as near as possible to, priority dates to minimise the risk of missing birds or double counting.

Royal Society for the Protection of Birds (RSPB) The RSPB is the charity that takes action for wild birds and the environment in the UK. The RSPB is the national BirdLife partner in the UK.

United Kingdom *Great Britain* and Northern Ireland (excludes the Channel Isles and the Isle of Man).

Waterbirds WeBS follows the definition adopted by *Wetlands International*. This includes a large number of families, those occurring regularly in the UK being divers, grebes, cormorants, herons, storks, ibises and spoonbills, wildfowl, cranes, rails, waders, gulls and terns.

WeBS count unit The area/boundary within which a count is made. The generic term for *WeBS sites*, *WeBS sub-sites* and *WeBS sectors*.

WeBS Office Main administrative centre for the day-to-day running of WeBS and main point of contact for information or data pertaining to WeBS (see *Contacts* section).

WeBS Online The online database for the submission and retrieval of WeBS Core Count, Low Tide Count and supplementary data. www.bto.org/webs

WeBS sector The unit of division of large *sites* into areas that can be counted by one person in a reasonable time period. They are often demarcated by geographic features to facilitate recognition of the boundary by counters. The finest level at which data are recorded.

WeBS site A biologically meaningful area that represents a discrete area used by *waterbirds* such that birds regularly move within but only occasionally between sites. The highest level at which count data are stored.

WeBS sub-site A grouping of *sectors* within a *site* to facilitate coordination. In most cases, sub-sites also relate to biologically meaningful units for describing *waterbird* distribution.

WeBS Year Defined as July to June inclusive the WeBS Year is centred on the time when most *waterbird* species are present in their largest number, during *winter*. Counts during *autumn* passage and *spring* passage the following calendar year are logically associated with the intervening *winter*.

Wetlands International A leading global non-profit organisation whose mission is to sustain and restore wetlands, their resources and biodiversity for future generations through research, information exchange and conservation activities, worldwide.

Wildfowl & Wetlands Trust (WWT) Founded by Sir Peter Scott in 1946, WWT is the largest international wetland conservation charity in the UK. WWT works to conserve wetlands and their biodiversity, focusing particularly on waterbirds and their habitats, and seeks to raise awareness of the value of wetlands, the threats they face and the actions needed to save them. WWT has nine visitor centres throughout the UK.

Appendices

APPENDIX 1. INTERNATIONAL AND NATIONAL IMPORTANCE

Any site recognised as being of international ornithological importance is considered for classification as a Special Protection Area (SPA) under the EC Directive on the Conservation of Wild Birds (EC/79/409), whilst a site recognised as an internationally important wetland qualifies for designation as a Ramsar site under the Convention on Wetlands of International Importance especially as Waterfowl Habitat. Criteria for assessing the international importance of wetlands have been agreed by the Contracting Parties to the Ramsar Convention on Wetlands of International Importance (Ramsar Convention Bureau 1988). Under criterion 6, a wetland is considered internationally important if it regularly holds at least 1% of the individuals in a population of one species or subspecies of waterbird, while criterion 5 states that any site regularly supporting 20,000 or more waterbirds also qualifies. Britain and Ireland's wildfowl belong, in most cases, to the northwest European population and the waders to the east Atlantic flyway population (Wetlands International 2006).

A wetland in Britain is considered nationally important if it regularly holds 1% or more of the estimated British population of one species or subspecies of waterbird, and in Northern Ireland important in an all-Ireland context if it holds 1% or more of the estimated all-Ireland population.

The 1% thresholds for British, all-Ireland and international waterbird populations, where known, are listed in Table A1. Thus, any site regularly supporting at least this number of birds potentially qualifies for designation under national legislation, or the EC Birds Directive or Ramsar Convention. The international population for each species and subspecies is also specified in the table. However, it should be noted that, where 1% of the national population is less than 50 birds, 50 is normally used as a minimum qualifying threshold for the designation of sites of national or international importance.

It was agreed at the meeting of the Ramsar Convention in Brisbane that population estimates will be reviewed by Wetlands International every three years and 1% thresholds revised every nine years (Rose & Stroud 1994; Ramsar Resolution VI.4). 1% thresholds have not been derived for introduced species since protected sites would not be identified for these birds.

Sources of qualifying levels represent the most up-to-date figures following recent reviews: for wildfowl in Britain see Kershaw & Cranswick (2003); for waders in Britain see Rehfisch *et al*. (2003); for gulls in Britain see Burton *et al*. (2003); for all-Ireland importance see Crowe *et al*. (2008). International criteria follow Wetlands International (2006).

It should be noted that for some populations, where the British total is the international total, the precise figure given for the estimates may differ because of different rounding conventions applied in the relevant publications.

Table A1. 1% thresholds for national and international importance

	Great Britain	all-Ireland	International	Subspecies/Population
Mute Swan: *British*	375	n/a	320	Britain
Irish	n/a	110	100	Ireland
Bewick's Swan	81	*20	200	*bewickii*, NW Europe (non-br)
Whooper Swan	57	130	210	Iceland (br)
Bean Goose: *Taiga*	*4	+	800	*fabalis*
Pink-footed Goose	2,400	+	2,700	Greenland, Iceland (br)
European White-fronted Goose	58	+	10,000	*albifrons*, Baltic-North Sea
Greenland White-fronted Goose	209	110	270	*flavirostris*
Greylag Goose: *Iceland*	819	50	870	*anser*, Iceland (br)
Hebrides/N Scotland	90	n/a	100	*anser*, NW Scotland
Barnacle Goose: *Greenland*	450	90	560	E Greenland (br)
Svalbard	220	+	270	Svalbard (br)

Table A1. continued

	Great Britain	all-Ireland	International	Subspecies/Population
Dark-bellied Brent Goose	981	+	2,000	*Bernicla,* W Siberia (br)
Light-bellied Brent Goose: *Canada*	+	220	260	*hrota*, Ireland (non-br)
Svalbard	*30	+	70	*hrota*, Svalbard, N Greenland (br)
Shelduck	782	150	3,000	NW Europe (br)
Wigeon	4,060	820	15,000	NW Europe (non-br)
Gadwall	171	20	600	*strepera*, NW Europe (br)
Teal	1,920	450	5,000	NW Europe (non-br)
Mallard	3,520	380	**20,000	*platyrhynchos*, NW Europe (non-br)
Pintail	279	20	600	NW Europe (non-br)
Garganey	+	+	**20,000	W Africa (non-br)
Shoveler	148	25	400	NW & C Europe (non-br)
Red-crested Pochard	+	+	500	C Europe & W Mediterranean
Pochard	595	400	3,500	NE & NW Europe (non-br)
Tufted Duck	901	370	12,000	NW Europe (non-br)
Scaup	76	*45	3,100	*marila*, W Europe (non-br)
Eider	730	*30	12,850	*mollissimma*, NW Europe[1]
Long-tailed Duck	160	+	**20,000	W Siberia, N Europe (br)
Common Scoter	500	230	16,000	*nigra*
Velvet Scoter	*30	+	10,000	*fusca*, Baltic, W Europe (non-br)
Goldeneye	249	95	11,500	*clangula*, NW & Central Europe (non-br)
Smew	*4	+	400	NW & C Europe (non-br)
Red-breasted Merganser	98	*35	1,700	NW & C Europe (non-br)
Goosander	161	+	2,700	*merganser*, NW Europe[2]
Red-throated Diver	49	*20	3,000	NW Europe (non-br)
Black-throated Diver	*7	*1	3,750	*arctica*
Great Northern Diver	*30	?	50	NW Europe (non-br)
Little Grebe	78	25	4,000	*ruficollis*
Great Crested Grebe	159	50	3,600	*cristatus*
Red-necked Grebe	*2	?	5,10	*grisegena*, NW Europe (non-br)
Slavonian Grebe	*7	?	55	*auritus*, NW Europe (large billed)
Black-necked Grebe	*1	?	2,200	*nigricollis*, Europe, N Africa
Cormorant	230	140	1,200	*carbo*, NW Europe
Shag	?	?	2,000	*aristotelis*
Little Egret	?	?	1,300	*garzetta*, W Europe, NW Africa
Grey Heron	?	30	2,700	*cinerea*, W Europe, NW Africa (br)
Moorhen	7,500	?	**20,000	*chloropus*, Europe, N Africa (br)
Coot	1,730	330	17,500	*atra*, NW Europe (non-br)
Oystercatcher	3,200	680	10,200	*ostralegus*, Europe, NW Africa
Avocet	*35	+	730	W Europe (br)
Ringed Plover	330	150	730	*hiaticula*, Europe & N Africa (non-br)
Golden Plover	4,000	1,700	9,300	*altifrons*, Iceland & Faeroes, E Atlantic[3]
Grey Plover	530	65	2,500	E Atlantic (non-br)
Lapwing	6,200	2,100	**20,000	Europe (br)
Knot	2,800	190	4,500	*islandica*
Sanderling	210	65	1,200	E Atlantic, W & S Africa (non-br)
Purple Sandpiper	180	*35	750	*maritima*, E Atlantic
Dunlin	5,600	880	13,300	*alpina,* W Europe (non-br)[4]
Ruff	*7	+	?	W Africa (non-br)
Jack Snipe	?	250	?	NE Europe (br)
Snipe	?	?	**20,000	*gallinago*, Europe (br)
Woodcock	?	?	**20,000	Europe (br)
Black-tailed Godwit	150	140	470	*islandica*
Bar-tailed Godwit	620	160	1,200	*lapponica*
Whimbrel	+	+	6,800	*islandicus*
Curlew	1,500	550	8,500	*arquata*
Spotted Redshank	+	+	900	Europe (br)
Redshank	1,200	310	2,800	*brittanica*[5]
Greenshank	*6	*20	2,300	Europe (br)
Green Sandpiper	?	?	17,000	Europe (br)
Common Sandpiper	?	?	17,500	N, W & C Europe (br)
Turnstone	500	120	1,500	*interpres*, NE Canada, Greenland (br)

Table A1. continued

	Great Britain	all-Ireland	International	Subspecies/Population
Little Gull	?	?	1,230	N, C & E Europe (br)
Black-headed Gull	19,000	?	**20,000	N & C Europe (br)
Common Gull	9,000	?	**20,000	*canus*
Lesser Black-backed Gull	500	?	5,500	*graellsii*
Herring Gull	4,500	?	5,900	*argenteus*[6]
Great Black-backed Gull	400	?	4,400	NE Atlantic
Kittiwake	?	?	**20,000	*tridactyla*, E Atlantic (br)
Sandwich Tern	?	?	1,700	*sandvicensis*, W Europe (br)
Common Tern	?	?	1,900	*hirundo*, S, W Europe (br)
Little Tern	?	?	490	*albifrons*, W Europe (br)
Black Tern	?	?	7,500	*niger*

? *Population size not accurately known.*
\+ *Population too small for meaningful figure to be obtained.*
* *Where 1% of the British or all-Ireland wintering population is less than 50 birds, 50 is normally used as a minimum qualifying level for national or all-Ireland importance respectively.*
** *A site regularly holding more than 20,000 waterbirds qualifies as internationally important by virtue of absolute numbers.*

1 The degree of interchange of UK Eiders with birds on the continent is unclear, and although Wetlands International (2006) has recommended that birds in Britain and Ireland should be treated as a separate biogeographical population, a recent review of available data by DEFRA's SPA and Ramsar Scientific Working Group has found limited evidence to support this conclusion, and recommended that for site-selection purposes, British Eider continue to be considered as a component of the four groups of the Northwest European groups of the race *mollissima* with an international 1% threshold of 15,500. It is hoped that future genetic studies will help clarify the situation.

2 Although Wetlands International (2006) considers Goosanders breeding in Scotland, northern England and Wales to be a discrete population, a recent review of available data by DEFRA's SPA and Ramsar Scientific Working Group has found limited evidence to support this conclusion for the time being, and recommended that for site-selection purposes, British Goosanders continue to be considered as a component of the NW and C European population of Goosander, with an international 1% threshold of 2,700.

3 Three populations of Golden Plover listed by Wetlands International (2006) overlap in the UK in winter. Draft guidelines from Ramsar suggest that the largest of the three thresholds (*i.e.* that for *altifrons,* Iceland & Faeroes, E Atlantic) should be used for site-selection purposes.

4 Whilst several populations of Dunlin occur in the UK at different times of the year, most wintering birds are referable to the listed population.

5 Three populations of Redshank listed by Wetlands International (2006) overlap in the UK in winter: *totanus* E Atlantic (non-br), *robusta* and *brittanica*. Most *totanus* winter outside the UK but the other populations are known to occur widely. Draft guidelines from Ramsar suggest that the larger of the two thresholds (*i.e.* that for *brittanica*) should be used for site-selection purposes.

6 Two populations of Herring Gull overlap in the winter in the UK; *argentatus* and *argenteus*. Whilst substantial numbers of *argentatus* appear to winter in the UK, the largest proportion of Herring Gulls in winter is probably of *argenteus*. Following Ramsar guidance and given the conservation status of British-breeding Herring Gulls, the threshold for *argenteus* is used in this report for site-selection purposes.

APPENDIX 2. LOCATIONS OF PRINCIPAL WeBS COUNT SITES

Table A2 provides details of principal WeBS sites that are mentioned in the Principal Sites table (Table 6.). Sites are listed alphabetically with details of the Ordnance Survey 1-km square that the centre of the sites falls into. Numbers following Principal Core Count sites refer to the sites' location in Figure A1. Details of all sites covered by WeBS are available from www.bto.org/webs or the WeBS Office (see *CONTACTS*).

Table A2. Details for Principal Sites mentioned in Table 6. Numbers refer to the sites' location in figure A1.

Site	1-km sq	
Abberton Reservoir	TL9618	111
Alde Complex	TM4257	104
Alt Estuary	SD2903	85
Arun Valley	TQ0314	120
Baleshare	NF7862	18
Balnakeil Bay	NC3869	9
Balranald Nat. Res.	NF7169	15
Beaulieu Estuary	SZ4297	126
Belfast Lough	IJ3983	73
Blackwater Estuary	TL9307	110
Breydon Water & Berney Marshes	TG4706	99
Broubster Leans	ND0361	10
Burry Inlet	SS5096	138
Cameron Reservoir	NO4611	40
Carlingford Lough	IJ1814	77
Carmarthen Bay	SN2501	139
Carsebreck and Rhynd Lochs	NN8609	45
Chew Valley Lake	ST5659	135
Chichester Harbour	SU7700	122
Cleddau Estuary	SN0005	140
Colne Estuary	TM0614	109
Cotswold Water Park (West)	SU0595	136
Cromarty Firth	NH7771	26
Crouch-Roach Est.	TQ9895	105
Dalreoch	NN9917	46
Deben Estuary	TM2942	106
Dee Estuary England and Wales	SJ2675	89
Dee Flood Meadows	SJ4059	90
Dengie Flats	TM0302	112
Dornoch Firth	NH7384	29
Duddon Estuary	SD2081	80
Dungeness GPs	TR0619	119
Dyfi Estuary	SN6394	141
Eden Estuary	NO4619	39
Exe Estuary	SX9883	132
Fleet and Wey	SY6976	131
Forth Estuary	NT2080	48
Gadloch	NS6471	52
Hamford Water	TM2225	103
Hickling Broad	TG4221	96
Holburn Moss	NU0536	61
Hornsea Mere	TA1846	83
Hule Moss	NT7149	59
Humber Estuary	TA2020	84
Inner Firth of Clyde	NS3576	50
Inner Moray and Inverness Firth	NH6752	28
Island of Egilsay	HY4831	1
Isle of Coll	NM2055	24
Kentra Moss and Lower Loch Shiel	NM7168	25
Kilconquhar Loch	NO4801	42
Lake of Menteith	NN5700	49
Langstone Harbour	SU6902	123
Lavan Sands	SH6474	142
Lee Valley GPs	TL3807	102
Lindisfarne	NU1041	62
Loch An Eilein	NL9843	20
Loch Bee	NF7743	22
Loch Bhasapoll	NL9746	17
Loch Eye	NH8379	21
Loch Fleet Complex	NH7896	30
Loch Garten	NH9718	27
Loch Gorm	NR2365	36
Loch Gruinart Floods	NR2766	55
Loch Hempriggs	ND3447	56
Loch Ken	NX6672	12
Loch Leven	NO1501	64
Loch Lomond	NS3599	43
Loch Paible	NF7168	51
Loch Riaghain	NM0347	4
Loch Sandary	NF7368	7
Loch Scarmclate	ND1859	3
Loch Slapin	NG5516	38
Loch Spynie	NJ2366	5
Loch Tullybelton	NO0034	35
Loch a` Phuill	NL9541	8
Loch of Boardhouse	HY2625	32
Loch of Harray	HY2915	2
Loch of Hundland	HY2926	14
Loch of Lintrathen	NO2754	23
Loch of Skaill	HY2418	16
Loch of Skene	NJ7807	11
Loch of Stenness	HY2813	19
Loch of Strathbeg	NK0660	31
Loch of Swannay	HY3128	47
Lough Foyle	IC5925	71
Loughs Neagh& Beg	IJ0475	72
Lower Derwent Ings	SE6939	82
Lower Lough Erne	IH0960	79
Lower Teviot Valley	NT6725	58
Medway Estuary	TQ8471	114
Mersehead RSPB	NX9255	66
Mersey Estuary	SJ4578	88
Middle Yare Marshes	TG3504	98
Milldam & Balfour Mains Pools	HY4817	6
Moine Mhor & Add Estuary	NR8293	53
Montrose Basin	NO7057	37
Morecambe Bay	SD4070	81
Nene Washes	TF3300	92
North Norfolk Coast	TF8546	95
North West Solent	SZ3395	127
Orchardton and Auchencairn Bays	NX8151	65
Orwell Estuary	TM2238	107
Ouse Washes	TL5394	93
Outer Ards Shoreline	IJ6660	76
Outer Loch Indaal	NR2353	54
Pagham Harbour	SZ8796	121
Pegwell Bay	TR3561	116
Pitsford Reservoir	SP7870	100
Poole Harbour	SY9988	130
Portsmouth Harbour	SU6204	124
R Clyde: Carstairs to Thankerton	NS9841	57
Ribble Estuary	SD3825	87
R.Avon: Fordingbr'-Ringwood	SU1410	128
R.Avon: Ringwood-Christchurch	SZ1499	129
R.Nith: Keltonbank – Nunholm	NX9774	67
R.Tay: Haughs of Kercock	NO1339	44
Rutland Water	SK9307	91
Rye Harbour and Pett Level	TQ9418	117
Severn Estuary	ST5084	137
Slains Lochs (Meikle Sand & Cotehill)	NK0230	33
Solway Estuary	NY1060	69
Somerset Levels	ST4137	134
Southampton Water	SU4507	125
St Benet`s Levels	TG3815	97
Stour Estuary	TM1732	108
Strangford Lough	IJ5460	74
Swale Estuary	TQ9765	115
Taw-Torridge Est.	SS4731	133
Tay Estuary	NO4828	41
Tees Estuary	NZ5528	70
Thames Estuary	TQ7880	113
The Wash	TF5540	94
Traigh Luskentyre	NG0599	13
Tring Reservoirs	SP9113	101
Tweed Estuary	NU0052	60
Upper Lough Erne	IH3131	78
Upper Quoile River	IJ4745	75
Walland Marsh	TQ9923	118
Wigtown Bay	NX4456	63
WWT Caerlaverock	NY0565	68
WWT Martin Mere	SD4214	86
Ythan Estuary	NK0026	34

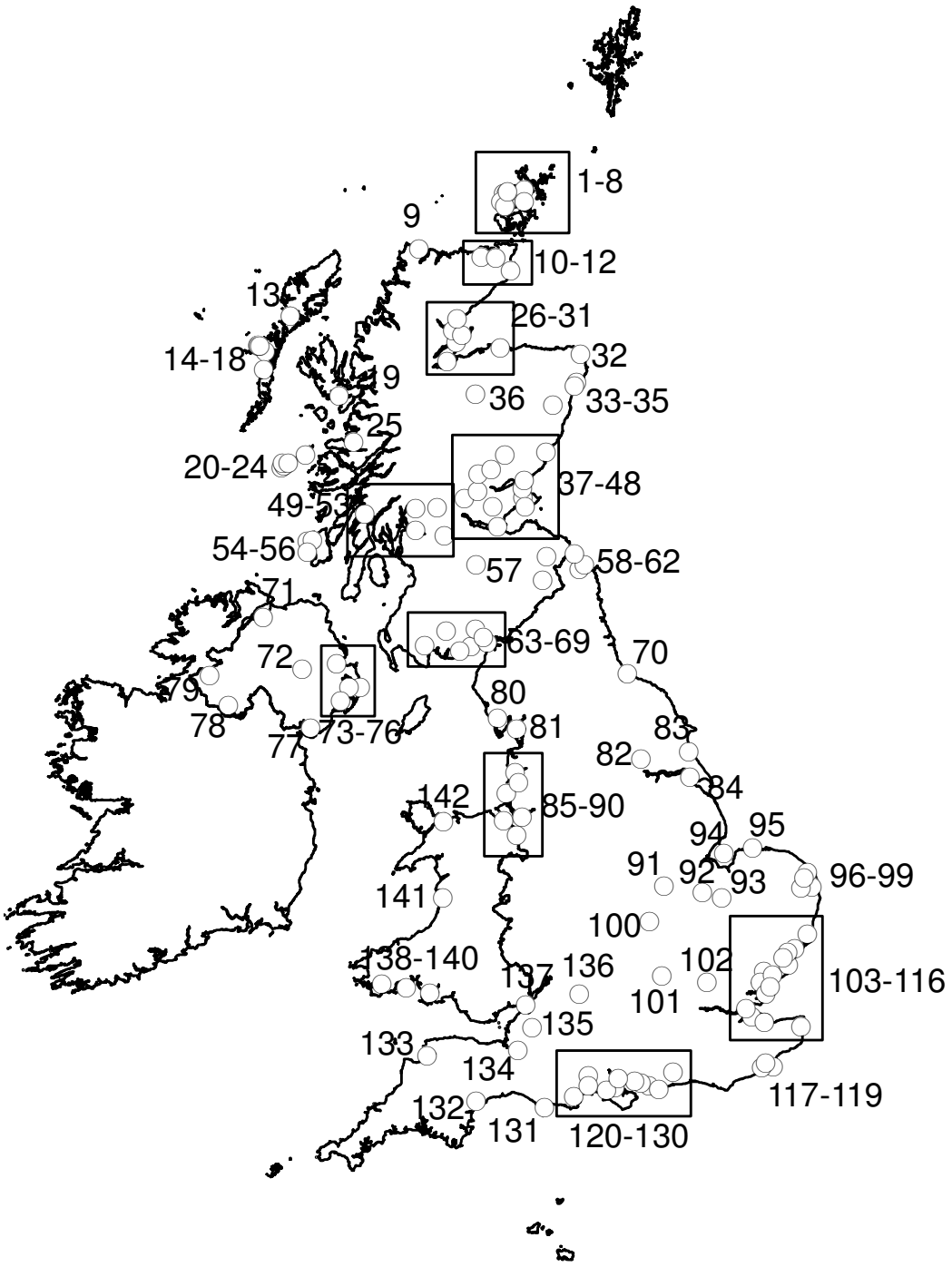

Figure A1. Locations of Core WeBS sites supporting more than 10,000 waterbirds or which support internationally important numbers of one or more waterbird species (see *PRINCIPAL SITES*). Numbers refer to sites listed in Table A2.