



GooseNews

The Newsletter of WWT's Goose Monitoring Programme

Issue no. 3 Autumn 2004

A monitoring scheme to be proud of

In April, a major conference on the conservation of waterbirds worldwide took place in Edinburgh. Organised by Wetlands International, 'Waterbirds around the World' attracted over 450 delegates from 90 countries to review and debate the conservation and sustainable use of the World's waterbirds¹. It was clear from the presentations and discussions at this conference that conservationists have amassed a vast amount of knowledge of the World's waterbirds in the past few decades, and achieved a great deal for their conservation. But it was clearer still that immense challenges remain. Large-scale issues, such as the threat posed by climate change, received worthy attention and helped to publicise the Conference and its messages. But many other less complex challenges were also highlighted. For example, for 24% of the World's waterbirds we do not have a basic population estimate, and for 50% there is no indication of the trend of the population. As all Goose Monitoring Programme counters will be aware, such information is a basic prerequisite to sound conservation, and these gaps are something that the global conservation community must address in the years ahead.

Thus, the importance of accurate and repeated population estimates could not have been emphasised further at this conference. They are the building blocks of waterbird conservation and GMP counters can therefore be justifiably proud of their contribution to one of the most effective waterbird monitoring schemes in the World. Alongside the dedicated counters that contribute data, the other great strength of the GMP is its integrated approach: it has strong links and a tradition of co-operation with other nations across the flyways of geese occurring in Britain and Ireland, and for almost all populations, data on the

abundance, productivity, movements and survival are collected.

Recently, the co-operation across flyways has been strengthened further by the establishment of a partnership between organisations within the flyway of Iceland Greylag Goose. The Icelandic Institute of Natural History, Norwegian Institute for Nature Research, Føroya Fuglafroðifelag (the Faroese Ornithological Society), the National Parks and Wildlife Service and BirdWatch Ireland have joined the partnership for the Icelandic-breeding Goose Census, a project that has also been recognised by the African-Eurasian Waterbird Agreement's (AEWA) Register of International Projects. This partnership will further enhance integrated monitoring of this population.

The value of integrated data collection has also been highlighted recently. Detailed monitoring of Greenland White-fronted Geese began in the late 1970s, and has been carried out ever since by the Greenland White-fronted Goose Study, with support from WWT and the Joint Nature Conservation Committee. This has included a thorough programme of counts, age assessments, and ringing, as well as more detailed ecological studies. In the light of the recent sharp decline shown by this already small population, these data are proving invaluable as they provide a better understanding of the demographic

factors driving the decline. This allows conservation action to be better targeted and, whilst this does not guarantee the security of Greenland Whitefronts, it does go a long way towards ensuring the success of conservation action.

This value of the GMP to conservation has recently been recognised through the signing of a new partnership agreement between WWT and JNCC, which will ensure continued funding for important elements of the GMP over the next three years. A key aim will be to develop further the support of statutory conservation needs by the GMP. Support from the counter network will be crucial to this process and for this reason WWT will undertake a full consultation process prior to changes being made. For example, new reporting deadlines may be necessary in some areas in order to ensure the data collected are of maximum utility to conservation practitioners, such as the Country Agencies. A particular data need for JNCC and Country Agencies in the near future will concern the use of so-called 'cropped' habitats (i.e. agricultural habitats) by geese, particularly in areas surrounding roosts designated as Special Protection Areas. WWT has recently carried out a study to identify and characterise the inland feeding areas of Dark-bellied Brent Geese (see page 13).

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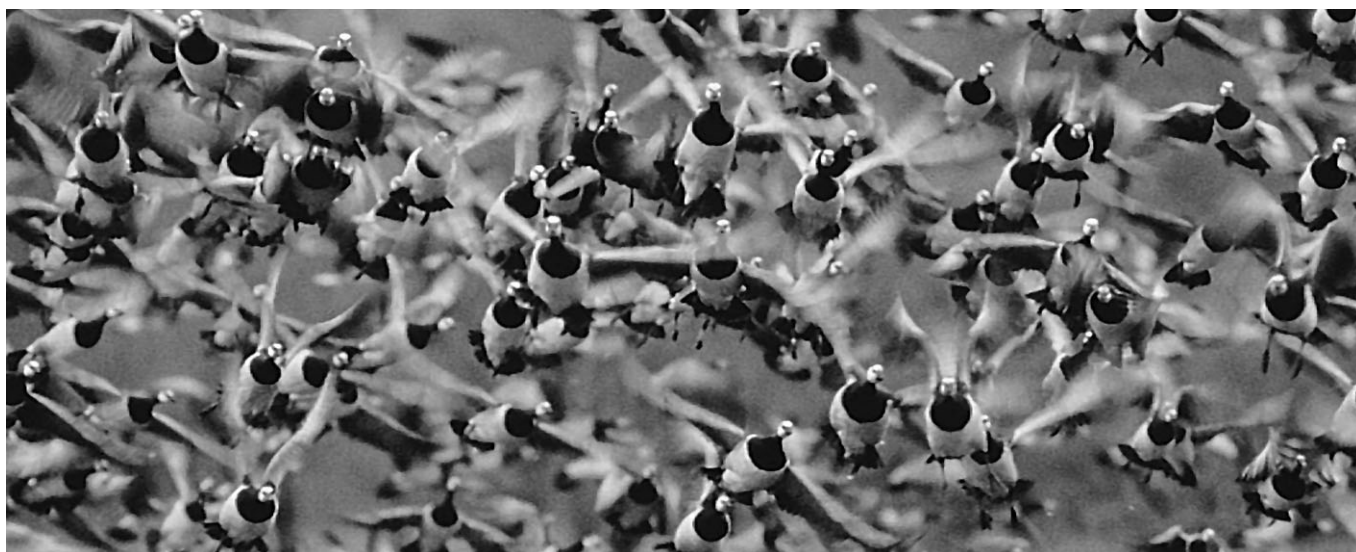
Finally, I hope that *GooseNews* continues to be a valuable and interesting source of information for those participating in the monitoring and conservation of goose populations in Britain and Ireland. I would like to thank those of you that have taken the time to provide feedback on this newsletter, and encourage any

others with comments to make to contact me at the usual address.

Richard Hearn

¹ Further information about 'Waterbirds around the World', including the text of the 'Edinburgh Declaration' (a top-level

summary of the issues considered by the Conference, endorsed by conference participants and targeted at government and international decision-makers, and which aims to raise the profile of these issues among them) can be found at <http://www.wetlands.org/GFC/Default.htm>



Barnacle Geese (WWT)

Announcements

Assessing productivity of European White-fronted Geese in the UK

Traditionally, the vast majority of age-ratio data for European White-fronted Geese have been collected at the key site for this population in the UK, the WWT reserve at Slimbridge. In recent years, however, the proportion of the UK population found at Slimbridge has decreased, whilst at the same time numbers elsewhere in the UK, particularly in East Anglia and, to a lesser extent, Kent, have increased. Data on the number of birds at these sites are good, but no information is available on the breeding success of these flocks. From 2004/05, effort will be made to collect age-ratio data from as many sites as possible. This work will be focused in the month of January, when peak numbers occur in the UK. Initially, experienced observers from WWT will undertake the survey, but at the same time we would like to meet with local observers who are interested in learning how to collect these data so that they can contribute to this work in the future. Therefore, if you have a flock near you and are interested in participating in this work, please contact the Waterbird Monitoring Unit at WWT Slimbridge.

Monitoring of wintering swans

Due to similarities with the requirements for monitoring geese, the new three-year partnership agreement between WWT and JNCC also includes elements for the monitoring of Whooper and Bewick's Swans. We are currently considering the most appropriate way in which to liaise with counters about this in the future, particularly concerning the collection of data for age assessments. In the meantime, any GMP counters interested in making age assessments of these two species are asked to contact the Waterbird Monitoring Unit at WWT Slimbridge for further details.

Survey dates for winter 2004/05

Icelandic-breeding Goose Census

Count forms for the 2004/05 IGC have been mailed to all counters or local organisers with this issue of *GooseNews*. If you have not received your forms, or would like to participate for the first time, please contact the Waterbird Monitoring Unit at WWT Slimbridge. The priority dates for this year are:

16/17 October and 13/14 November

If you are unable to count on these dates, please contact either your Local Organiser or the National Organiser, so that we may try to arrange for cover of your site by another counter. Note also that all counters are encouraged to carry out a count during September (see page 8 of *GooseNews* 2 for further details). Please also remember that, if possible, all sites should be covered during both the October and November counts as, although some may only support one species, in some years early arrivals of Greylag Geese or late arrivals of Pink-footed Geese mean that the best month for counting them may not be the usual one (normally November for Greylag Geese and October for Pink-footed Geese).

Age assessments

Age assessments will continue during 2004/05 as usual. Data for Whooper and Bewick's Swan would also be welcome. The survey periods vary between species and are shown below.

Population	Period	Notes
Whooper Swan	Oct – Jan	
Bewick's Swan	Nov – Feb	
Iceland Greylag Goose	Oct – mid Nov	care needed with age identification
UK Greylag Goose	Aug – Sep	
Pink-footed Goose	mid Sep – mid Nov	
Bean Goose	Oct – Nov	
European White-fronted Goose	Oct – Jan	focus on Jan
Greenland White-fronted Goose	Oct – Jan	focus on Dec
Dark-bellied Brent Goose	Sep – Mar	focus on Oct – Nov
Light-bellied Brent Goose (both populations)	Sep – Mar	focus on Oct – Nov
Barnacle Goose	Oct – Dec	
Canada Goose	Jun – Jul	care needed with age identification of fledged birds

Colour-mark reading

All sightings of colour-marked wildfowl, not just geese, can be sent either direct to the relevant project co-ordinator or to 'Colour-marked Wildfowl' at WWT Slimbridge, or by email to colourmarkedwildfowl@wwt.org.uk

Further details of other colour-marking projects can be found on the EURING colour-marking website: <http://www.cr-birding.be>

Changes in the status of Barnacle Geese at spring staging areas in Norway

Barnacle Geese from the Svalbard breeding population spend the winter on the Solway Firth (mainly in the areas of Caerlaverock and Southerness in Scotland and Rockcliffe Marsh, Burgh Marsh and Moricambe Bay in England). During the spring migration, in April and May, they replenish their fat reserves at several staging sites along the Norwegian coast between the Muddvær archipelago south of the island of Vega (65°40'N) and Andøya in Vesterålen (69°30'N). All of the sites currently known to be used are islands off the west coast of Nordland county (Figure 1). Whilst the southern limit has remained unchanged in recent years, the northern limit has extended from just above the Arctic Circle (66°N) in the early 1990s to the present northern limit in Vesterålen.

Monitoring at spring staging sites began in 1975, when a WWT team first visited islands in Helgeland. Other WWT expeditions subsequently visited these staging sites until 1993, and I was fortunate enough to join them between 1989 and 1993. Since then, I

have become a resident of Norway and continued this monitoring to the present day. This has provided a fascinating insight, as well as valuable data, on this part of the life cycle of this well-studied population.

Since this work began, the Svalbard Barnacle Goose population has steadily increased. However, the proportion of the population that has been located during the spring has decreased (Figure 2) because only a few sites are monitored on an annual basis. This suggests that the increase in population size has largely been accommodated away from traditionally used spring staging sites (the higher proportion of the population found in 1998 was the result of an aerial survey of all known spring staging areas carried out that year).

A consequence in some areas of the population increase has been greater conflict between staging geese and agriculture. The Herøy district of Helgeland was the first in Norway to prepare and implement a local management plan for Barnacle Geese. This plan covers the main islands of Tenna, Sør-Herøy and Nord-Herøy in the Herøy municipality of Nordland county.

Since the management plan came into effect, in spring 1996, geese have been allowed to feed undisturbed in some areas (the 'refuge zone'), whereas they are discouraged from feeding in other areas (the 'scaring zone'). The refuge zone comprises largely grazed coastal pastures and saltmarshes, some of which are fertilised. The scaring zone comprises intensively managed agricultural land (for grazing, hay or silage). Various scaring methods are employed, including coloured plastic tape stretched across grass fields, gas cannons, scarecrows and physical chasing.

Monitoring has shown that the total number of Barnacle Geese in the Herøy area has declined since the management plan was initiated in 1996. This is highly likely to be a result of the deliberate scaring and consequent reduction in the carrying capacity of the area, as geese no longer get access to the best quality foods (i.e. the intensively managed agricultural fields). The decline is most apparent at Tenna, where the scaring effort has been most intense. In addition, there has also been a decrease in the proportion of Barnacle Geese using the scaring zone and a consequent increase in the proportion now feeding within the refuge zone.

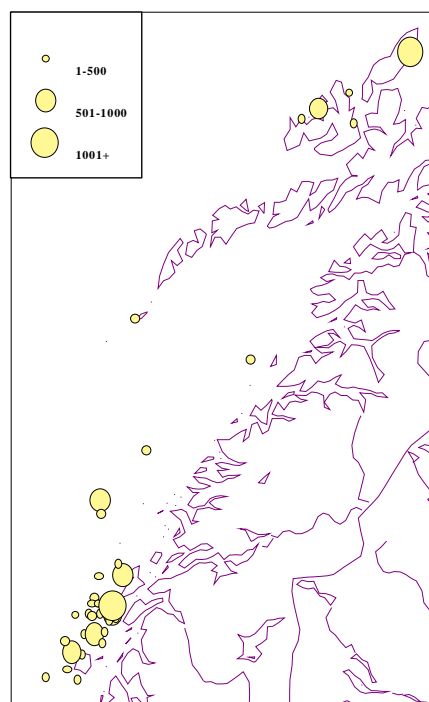


Figure 1. Known staging areas used by Svalbard Barnacle Geese during spring. Symbols represent maximum counts in the period 1994–2003.

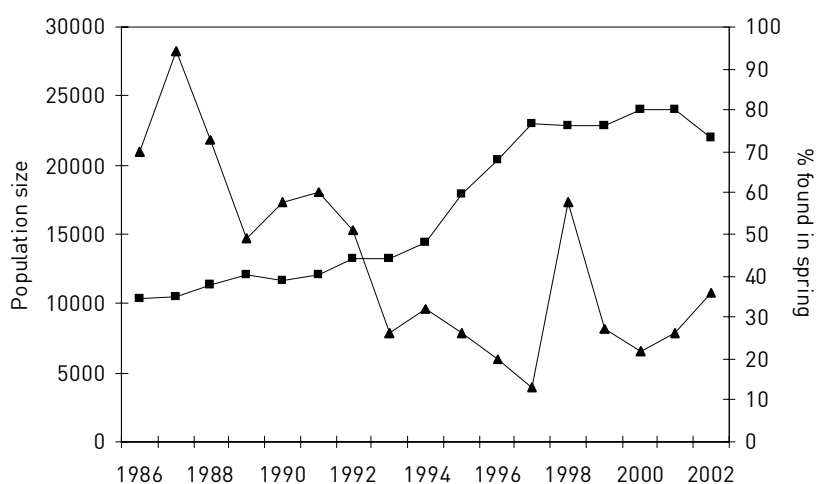


Figure 2. Growth of the Svalbard Barnacle Goose population (■) and the percentage of the population counted at spring staging sites (▲), 1986–2002.

A further change that has taken place since the introduction of the management plan has been a reduction in flock size. Before the management plan came into effect, large numbers of Barnacle Geese gathered on what is now the scaring zone to feed, particularly during late evening and early morning when disturbance from human activities was less. Since 1996, however, the geese have had little chance to form large flocks and there is now less grazing pressure (i.e. goose days per field) within the study area.

In contrast, counts reveal that Barnacle Geese have increased in number in the north of the staging range, with most sites where an increase has been noted being to the north of Herøy (Table 1).

Resighting data reveal that individual geese that formerly staged in the Herøy area now stage farther north, for example in Vesterålen. Few 'Herøy geese' were recorded in Vesterålen before 1996, but there has since been a sharp increase in the number switching areas (Figure 3). The increase in use of Vesterålen may be accounted for both by an increase in the total Svalbard Barnacle goose population, and by birds adapting their staging strategy according to changes in agricultural management practices (e.g. birds moving from Herøy and other staging sites in the south of the range). A similar pattern has also been observed at sites north of Herøy, although data for those sites are not as extensive as for Vesterålen.

So why have numbers declined in the Herøy area? Several factors are known to influence the distribution of Barnacle Geese during the staging period, including:

- land management practices: cessation of management of outlying islands has resulted in overgrowing of hay meadows, making these areas less attractive to Barnacle Geese, which have moved to other islands where they come into conflict with agricultural interests. As a result, local management plans have been implemented in order to alleviate the conflict, and others in the process of being developed;
- climate: an increase in mean spring temperatures has caused earlier spring growth farther north, such that more fresh grazing is available to staging Barnacle Geese; and
- an increase in the Svalbard Barnacle Goose population: more geese need more food! As existing staging sites reach carrying capacity then geese need to find new staging sites.

Whether the trend towards a more northerly distribution will continue in future seasons or not will depend on many factors, including the management regimes mentioned above. At present the population continues to grow, and the conflict between geese and agriculture is likely to extend to new areas. Only through monitoring of goose numbers, resightings of ringed individuals and a continuing dialogue with local authorities will it be possible to alleviate any conflict in a way that is satisfactory both for farming and for geese.

Paul Shimmings

Table 1. Count trend at sites north and south of Tenna and Herøy since the management plan was implemented in 1996.

	No. sites	Increase	Stable	Decrease	Unclear trend
North of Herøy	15	13			2
Herøy district	19	2	2	6	9
South of Herøy	19	7	1	3	8

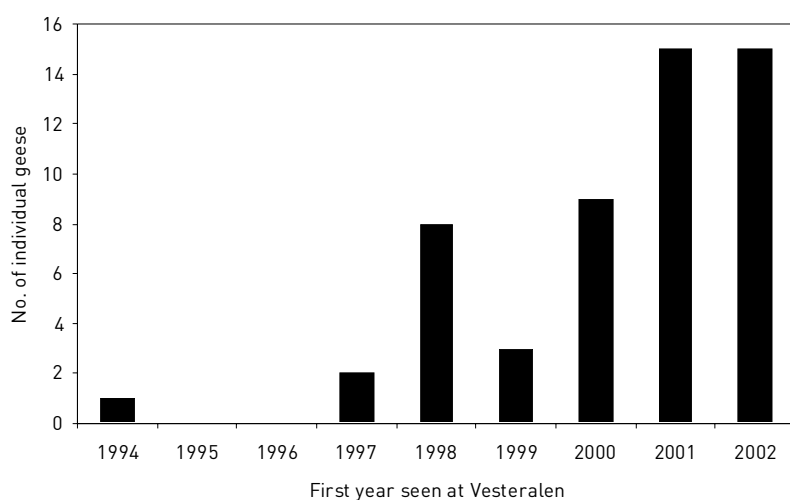


Figure 3. Year when known individual moved from staging site in Herøy to staging site in Vesterålen.

International census of East Canadian High Arctic Light-bellied Brent Goose, 2003/04

Censusing of the ECHA Light-bellied Brent Goose was undertaken for the eighth consecutive year in 2003/04. Two counts were conducted, one in October and another in January. The October count took place on 11th/12th, with the aim to achieve comprehensive coverage of all key sites. Typically, numbers at the key arrival site (Strangford Lough, Co. Down) peak during October, with birds dispersing to other sites in Ireland shortly thereafter. The count is therefore timed to coincide with peak staging numbers at this site. This also facilitates obtaining a large sample for the assessment of annual productivity. For the second year running, an aerial and ground census was undertaken in western Icelandic staging areas at the same time.

Just over 27,000 birds were recorded in October. Strangford Lough, Lough Foyle and western Icelandic sites were covered on the 10th and 11th, accounting for 21,500, 3,277 and 1,956 birds, respectively. With smaller numbers at a number of other sites (Table 2), the total number of birds counted was 27,285, with a further 1,572 estimated to give a total of 28,857. This is likely to be a conservative estimate given that coverage was incomplete at the time of the census. Breeding performance during 2003 was estimated at 17%, based on a sample of almost 13,000 birds aged.

The January count is restricted to Ireland and aims primarily to assess the numbers and distribution during mid winter. During

this period the population is widely dispersed at sites around the Irish coast, with smaller numbers in the Channel Islands, northern France and northern Spain. Some 10,349 birds were counted at 32 sites, although these data are provisional as counts are awaited from a significant number of other sites. The proportion of first-winter birds in flocks at this time of year was estimated at 20.5%, but this is based on a small sample of just 542 birds aged.

The population estimate of almost 29,000 is the largest recorded for this population and exceeds the previous recent maximum of 24,500, recorded in 1984/85. Though undoubtedly the level of accuracy in the census has improved through the extension of coverage during autumn – most significantly through counting in Iceland – the population is still believed to be undergoing a period of growth. The mid-1980s peak followed successive years of relatively high breeding success (averaging at 22.6% in 1980/81–1984/85) but productivity for the 5-year period up to 2003/04 averaged just 13%. Such apparent anomalies require further explanation through appraisal of count accuracy, productivity assessments and survival rates. Further improvements to census coverage in autumn and attaining larger samples of aged birds should facilitate such analyses.

Table 2. Census totals from principal sites covered in October 2003 and January 2004. * - counts estimated; nc – no count. The month in which the proportion of juveniles was measured is identified as Oct (October) or Jan (January).

Site	October	January	% juvs (aged sample)
Strangford Lough	21,500	nc	16.4% (11,970) Oct
Lough Foyle	3,277	205	23.2% (818) Oct
Iceland – all	1,956	nc	
Faxaflói	1,721		
Breidafjörður	235		
Larne Lough	0	187	
Trawenagh Bay	0	141	
Sligo Bays	nc	292	13.3% (15) Jan
The Mullet, Broadhaven & Blacksod Bays	16	306	21.2% (278) Jan
Inner Galway Bay	0	896	
Shannon & Fergus Estuary	nc	192	
Tralee Bay	1,460*	1,724	
Castlemaine Harbour	112*	59	
Tramore Backstrand	191	nc	43.4% (191) Oct
The Cull & Killag	nc	485	
North Wicklow Marshes	nc	151	
Dublin Bay	246	2,698	43.4% (214) Oct
Baldoyle Bay	0	317	
Seagrang Park	0	120	28.5% (42) Jan
Malahide	0	131	
Rogerstown Estuary	6	1,691	
Dundalk Bay	93	175	
Carlingford Lough	nc	143	

Gaps in coverage still exist for this census, so if you would like to contribute to the annual counting and/or productivity assessment, please contact Kendrew Colhoun, Secretary and Census Co-ordinator for the Irish Brent Goose Research Group.

Acknowledgements

Thanks as ever to the large number of people who undertook the counts in October and January without whom we would not have this information. These include volunteers from Government and non-Government organisations and Brent enthusiasts in the Republic of Ireland, Northern Ireland and Iceland. The aerial census in Iceland was undertaken by Guðmundur Guðmundsson (Icelandic Institute of Natural History) and was funded by WWT under grants from the Environment & Heritage Service and Duchas. These data were collated by the Irish Brent Goose Research Group in collaboration with the I-WeBS scheme and WWT.

Kendrew Colhoun, Guðmundur A. Guðmundsson, James Robinson & Kerry Mackie

The 2003 Census of Greenland Barnacle Geese

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

The surveys are usually conducted in March or early April, avoiding the short daylight hours and frequent bad weather conditions in mid winter which hamper aerial survey. All islands known to have held geese are surveyed, as are adjacent islands and coast that appear suitable. Flying altitude of 150-200 m, most flocks are flushed as the aircraft approaches. One observer then makes a visual estimate of numbers at each location – a challenge in a fast moving aircraft with only a few moments to count, perhaps, several hundreds of geese, and for this reason a second observer attempts to photograph the geese (often, an equally difficult task!). Photographs are then used to verify the visual estimates and assess the accuracy of counts.

The most recent international census, funded by JNCC, WWT and the Irish National Parks and Wildlife Service, was undertaken in spring 2003, and preliminary results were

reported in *GooseNews* 2 (see page 5). During the 2003 census, a total of 323 islands and mainland sites was visited. In Scotland, 47,256 geese were counted, while in Ireland, 9,034 geese were recorded. Of interest is the flock of 96 Barnacle Geese thought to be part of the Greenland stock that were recorded at the Dyfi Estuary, Wales, which arrived and departed within a few days of the Greenland White-fronted Geese that regularly occur at this site. Historical records show that a small flock of Barnacle Geese regularly wintered in Pembrokeshire until the late 1980s/early 1990s when the flock abandoned the area. Coincidentally, a small number of Barnacle Geese appeared on the Dyfi Estuary in the 1980s and numbers here have steadily increased. Inclusion of this small Welsh flock adjusts the total wintering population to 56,386.

This total represents the largest number of geese recorded to date (see Table 3). Since the first full census in 1959, Greenland Barnacle Goose numbers have steadily increased except for a number of years in the 1980s when numbers declined during a period when shooting intensity on Islay increased. Potential decreases in mortality owing to a decrease in shooting over recent years and the introduction of goose management schemes, aimed to benefit geese, probably underlie the recent population growth.

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

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

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

The full report for the Spring 2003 Greenland Barnacle Goose Census can be downloaded from <http://www.wwt.org.uk/publications>

Jenny Worden

Table 3. Percentage change in Barnacle Goose numbers in Scotland and Ireland between March 1999 and March 2003.

	March 1999	March 2003	Change (%)
Islay	35,172	36,478	3.7
Scotland excluding Islay	9,987	10,778	7.9
Scotland total	45,159	47,256	4.6
Inishkea Islands	2,841	2,052	-27.8
Ireland excluding Inishkea Islands	5,823	6,982	19.9
Ireland total	8,664	9,034	4.3
Wales (Dyfi Estuary)	-	96	-
Population total	53,823	56,386	4.8

Recent successes with capture and marking

Here we provide a summary of some of the more notable catches of geese by various ringers and ringing groups during the 2003/04 winter and summer 2004.

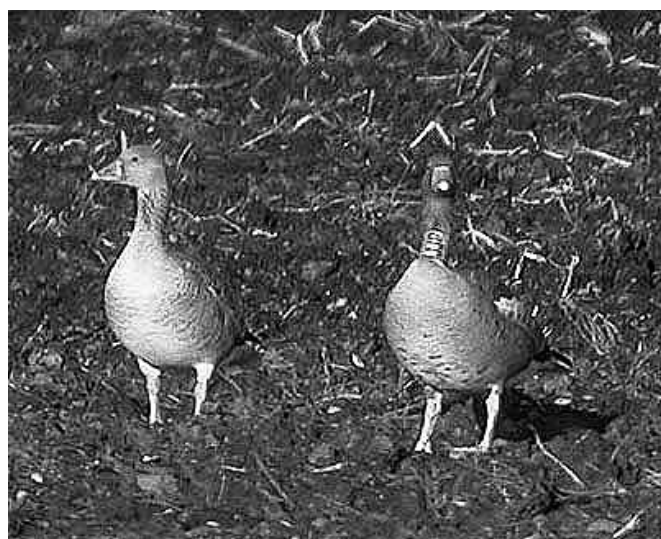
Greylag Geese were caught at a number of different locations. At Nosterfield (North Yorkshire), East Dales RG and WWT made a catch of 29 birds in February 2004 that brought the total marked at that site to 70. A number of these have now been reported from Iceland, further confirming the presence of both Iceland and Re-established Greylag Geese at this site. Another 40 Iceland Greylag Geese were captured at Loch of Lintrathen in November 2003 by Les Hatton and others. Re-established Greylag Geese were marked at several locations during summer 2004 by Phil Bone (Yorkshire), Goldcliff RG (Gwent), Jerry Lewis (Gloucestershire), Dartford RG (Kent) and Bernie Zonfrillo (Clyde).

Worthy of mention are the small numbers of birds marked by Jerry Lewis at Speech House ponds in the Forest of Dean, and Bernie Zonfrillo at Hogganfield Loch, near Glasgow. Of the 12 breeding birds that Jerry marked in 2003, five were resighted in June 2004 at Hogganfield Loch, where a moult flock gathers each summer. Bernie Zonfrillo managed to colour-mark 11 other birds at Hogganfield during June-August 2004, and four of these have already been resighted at WWT Slimbridge. Although more evidence from a larger sample of birds is needed, it would appear that some Greylag Geese from Gloucestershire undergo a moult migration to Hogganfield, and possibly other sites in that area too.

Pink-footed Geese have been caught in very modest numbers in recent years, so the superb catch of 182 by Grampian RG in October 2003 was particularly welcome. Particular thanks go to Raymond Duncan and Rab 'Skitz' Rae for their efforts.

Many thousands of sightings of Greylag and Pink-footed Geese were again reported during winter 2003/04 – many thanks go to all the observers who took the time to report their sightings. One of the more unusual records was of an Iceland Greylag Goose (JJP) resighted in Denmark. Raymond Duncan takes up the story:

“From the woeful goose misfire at Blackburn (Aberdeenshire) on 6/4/02 comes news of ALL 3 GEESE collared that day! Most amazing of all is greylag JJP which has turned up in Denmark! In winter 2002-03 it was seen back at Blackburn in November then at Rigifa Pool, Cove Bay (Aberdeen) in December and February. On 29/11/03 it was sighted at Vidmosegard Farm, Little Vidmose, Jutland, Denmark (see photo below) and was still there on 9/12/2003. According to Bob Swann, this is only the second record of a Scottish-ringed Greylag in Denmark and the other one was in the 1950s. As well as greylag JJP, both the Pinkfeet marked that day have been resighted - CCI arrived at Martin Mere in Lancashire in late September 2002 before moving across to Norfolk in December and returning back to Lancashire in January 2003 where it was seen regularly until the end of February, and CCJ was seen in Norfolk on 6/2/03.”



Greylag Geese

The marking of Svalbard Barnacle Geese continued with a sizeable catch of 75 on 13 February 2004, with the help of the North Solway Ringing Group. Paul Shimmings also successfully caught and marked four birds in Helgeland, Norway.

Finally, Robin Ward reports that a series of cannon net catches in Northern Ireland and Iceland during 2003/04 resulted in the colour-marking of over 200 East Canadian High Arctic Light-bellied Brent Geese. During mid winter, over 160 were caught at Strangford Lough, including one catch of over 100 in February. Thanks go to Kerry Mackie's superbly crafted decoys (see photo), and the commitment of Kerry and many other local people to the catching effort.



Kerry Mackie with Brent Goose decoys (by Graham McElwaine)

Success continued at spring staging sites in Iceland in May 2004. With help from Icelandic colleagues, in particular Guðmundur Guðmundsson, three birds were fitted with satellite transmitters in southwest Iceland, and a further 50 individuals were also colour-marked. This was a continuation of the satellite telemetry study started in 2002 (see <http://www.wwt.org.uk/brent/>) and is providing more information about the migration and stopover sites used by this population. By early June all three satellite-tagged birds had arrived at their breeding grounds in the Queen Elizabeth Islands, having followed a similar route to the six birds tracked in 2002.

The return passage of the satellite-tagged birds is now eagerly awaited to see whether any will not take the conventional route through Iceland: small numbers of ECHA Light-bellied Brent Geese are known to winter in northern France, the Channel Islands and Spain; the birds that arrive in Spain do so around the same time as most of the birds reach Ireland and could mean that the geese have more than one migratory route.

In the past four years, over 350 ECHA Light-bellied Brent Geese have been colour-marked, each bird bearing two rings (one on each leg) with an engraved code (one letter on each ring). Sightings will form an integral part of the baseline information about this goose population. Please send any sightings to: Graham McElwaine, 100 Strangford Road, Downpatrick, Co. Down, Northern Ireland BT30 7JD. Graham.McElwaine@virgin.net

Monitoring Greenland White-fronted Geese in Britain during 2002/03

Two complete counts of all known Greenland White-fronted Goose wintering haunts were conducted in 2002/03. A total of 19,577 birds were counted in autumn 2002 and 18,272 in spring 2003. These comprised nine birds in England, 126 in Wales, 12,253 and 10,677 on Islay and 7,189 and 7,460 in the rest of Scotland, in autumn and spring, respectively. Counts were missing from Muck and North Uist (where the counts from last year were substituted, comprising <0.3% of the totals), we were some counts from Caithness, South Uist, Skye, Eriska, Oronsay and Jura (where counts from adjacent months were also substituted). In all, these substitutions contributed 3.9% and 2.4% of the British totals in autumn and spring. No birds were found at the Loch Snizort site, Skye, for the third winter running, but 20 birds discovered north of the most regularly used site gives some optimism that this group persists. Breeding success was well below the average for the last 15 years at 9.9% young (n = 8,293 aged) and brood size was 3.2 young per successful pair (n = 180 broods). Despite this relatively low production, these counts represent an increase of 5.3% over the autumn 2001 count and a 13.1% increase over the spring total in the previous year. We await the count data from the rest of Ireland away from Wexford before we can provide the global population estimate for 2002/2003, but it seems likely that the spring 2003 total may now exceed 30,000 based on previous Irish counts (unless there was a serious decline in Ireland away from Wexford), suggesting some stabilisation in numbers in this population.

Tony Fox & Ian Francis

Latest results from monitoring of Svalbard Barnacle Geese

The 2003/04 winter was another successful season for the long-term monitoring of Svalbard Barnacle Geese. Some 10,000 ring sightings of just over 2,200 individuals were made and by comparison with observations of marked birds made in Helgeland in the following spring, and in Varsolbukta during the preceding summer, it seems there may be as many as 2,700 marked birds in the population at present, which is about 10% of the whole population, as again this year the population seems to have held at about 27,000. Fortnightly censuses were again carried out with the help of volunteers and staff at other reserves, and they again revealed the increasing use of areas further to the west on the north side of the Solway. Ring sightings made in these areas suggest these are definitely birds of Svalbard origin. A research assistant recruited to the project enabled detailed data to be collected on far more individuals this season, and productivity data have been made available to co-workers in Norway as part of the research following the fate of geese whose abdominal profiles were measured on final pre-breeding areas in Varsolbukta. Family size information was not easy to come by though in such a poor breeding season, with 4% juveniles on average in the population, and about 2 young per successful pair.

Larry Griffin

The 2002 Icelandic-breeding Goose Census

The 43rd consecutive census of Iceland/Greenland Pink-footed Geese and Iceland Greylag Geese took place during autumn and early winter 2002. Two discrete counts were undertaken, one in October and another in November. Some sites were also counted during September. Coverage in Britain was reasonable, although some important sites were not surveyed. Importantly, the survey was again extended beyond Britain and Ireland: comprehensive coverage was achieved in the Faeroe Islands and estimates were also available for parts of Iceland and Norway.

Maxima of 210,923 Pink-footed Geese and 62,145 Greylag Geese were recorded in November. These figures were adjusted to account for major sites that were not counted and for the number of Greylag Geese from the Re-established and NW Scotland populations in the UK counted prior to this census, resulting in population estimates of 229,824 Pink-footed Geese and 73,115 Greylag Geese (Figure 4). Both figures were lower than those calculated for 2001: the Pink-footed Goose estimate represents a decrease of 15.2% and that for Greylag Goose a decrease of 18.4%.

The low count totals are, in part, because a number of key sites were not counted, particularly for Greylag Geese. However, even allowing for numbers of birds missed at these sites, the population estimates still remained considerably lower than in 2001. Notably, numbers of Greylag Geese in 2002 were the lowest since 1985.

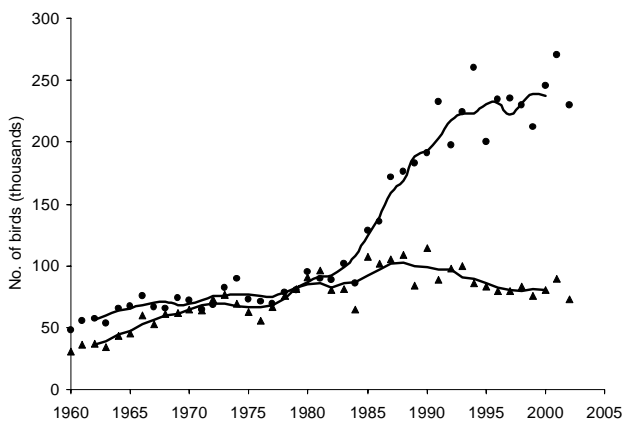


Figure 4. Population estimates of Pink-footed Goose (dots) and Iceland Greylag Goose (triangles), 1960 to 2002. The 5-year running means (e.g. the value for 2000 is the mean of estimates for 1998–2002) are shown as lines.

Estimates of the Icelandic hunting bags for both species during 2002/03 were below the long-term average, although they may be less accurate than in previous years because some difficulties with compliance were experienced following a ban on Ptarmigan hunting in Iceland. Nevertheless, given that hunting is the main cause of mortality in both of these populations, particularly Greylag Goose, the below average hunting mortality reported in Iceland suggests that a large decrease in abundance in these populations since the 2001 census is unlikely.

Furthermore, the proportion of young in autumn flocks was higher than average for Pink-footed Geese and only just below average for Greylag Geese, again suggesting that a large reduction in abundance is unlikely. Pink-footed Goose autumn flocks contained 21.0% young and mean brood size was 2.3 goslings per successful pair. Greylag Goose autumn flocks contained 15.9% young and mean brood size was 2.8 goslings per successful pair.

Several factors support the indication from the hunting bag and productivity data that the counts underestimate the true population size in 2002. Firstly, in addition to the sites that were not counted but where estimates could be made based on counts in previous years, there were a number of others that were likely to have supported large numbers of one species or the other, but for which there were insufficient data to allow the calculation of estimates. Secondly, there appears to have been a very late departure of geese from Iceland during 2002, and it is possible that large numbers remained there uncounted at the time of both counts. During October, when Greylag Geese are typically still present in large numbers, reports were received of at least 3,500–4,000 Pink-footed Geese present at the time of the co-ordinated count. Less information was available during November, but reports of larger than average numbers of Greylag Geese at the time of the count were received, with some remaining until December. Reports from Norway also suggested that few had arrived there by the November count.

Recent counts of Greylag Geese during October support the assertion that departures from Iceland are becoming later. Since the very early arrival in 1998, the proportion of the November peak count recorded during October has decreased steadily. It is possible, although currently unknown, that this later departure may now be extending into November, and thus affecting the November count. A more detailed examination of this is of high priority.

If there is a likelihood of later departures from Iceland, it is now increasingly important to ensure comprehensive coverage of all areas (both within and outwith Britain) during the census if accurate population estimates are to be made in the future. This may mean reassessing the best period in which to carry out the census if, for example, an increasing proportion of the Greylag Goose population is in inaccessible parts of Iceland during November, making it better to conduct surveys later in the winter (e.g. December) when we can be more confident that the whole population has left Iceland, even if the population is then more dispersed in Britain.

The full report can be downloaded from <http://www.wwt.org.uk/publications>

Richard Hearn

Breeding success of Dark-bellied Brent Geese in 2003

For the nineteenth consecutive winter, experienced volunteer observers assessed the breeding performance of Dark-bellied Brent Geese wintering in the UK. A total of 78,044 birds were aged at 15 estuaries and coastal areas between October 2003 and April 2004. The overall proportion of juvenile birds present was 10.0%, varying between 12.8% in October and 0% in April. The mean brood size per successful pair was 2.15 young.

The proportion of young and mean brood size recorded in flocks in the UK since 1992 is shown in Figure 5. Breeding success is strongly influenced by complex interactions between lemming abundance, predator pressure, and other factors such as weather. In the past, this has followed a three year cycle of 'good', 'poor' and 'variable' success. It was expected that breeding success in 2003 would be 'poor' because of a predicted collapse of the lemming population. Indeed, lemming abundance on the Taimyr Peninsula was low in 2003, and in the Medusa Bay area nest predation by foxes was recorded as high (see <http://www.soil.msu.ru/~soloviev/arctic/index.html>). The proportion of young Dark-bellied Brent Geese recorded in winter 2003/04 was, however, moderate and is in fact the highest recorded breeding success in a predicted 'poor' year since 1992.

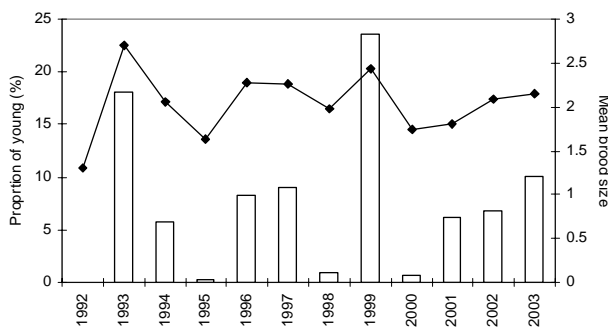


Figure 5. The proportion of young (bars) and mean brood size (dots) of Dark-bellied Brent Geese recorded in Britain, 1992-2003.

The full report can be downloaded from <http://www.wwt.org.uk/publications>

Jenny Worden

Bean Geese in Scotland – latest news from the Slamannan Plateau

Taiga Bean Geese have occurred on an irregular basis at the Slamannan Plateau, near Falkirk, since 1981, although regular wintering, and monitoring, did not begin until 1989. Monitoring and other conservation activities are overseen by the Bean Goose Action Group (BGAG), which consists of representatives from Scottish Natural Heritage, RSPB, local Councils and a number of other interested parties. The birds are now flagship species for both councils and a Local Biodiversity Action Plan has recently been completed.

Their primary roost is on either of the Fannyside lochs and both are protected to some degree – the larger west loch borders a country park and the smaller east loch is owned and managed by the RSPB. No protection is afforded to any of the feeding sites, however, and these areas are increasingly threatened by a range of developments, such as afforestation and the regeneration of dormant farms and smallholdings. Levels of disturbance in the area are also increasing, as a result of these factors and others such as low-flying helicopters and, occasionally, birdwatchers. Consequently, the protection of these last remaining feeding sites is now a priority for the BGAG.

Despite these threats, there has been a steady increase in the number of birds wintering at the site. In 1989, the flock totalled just 112 birds, but has since reached a peak of 325 in 2003/04, making it the largest in the UK. The geese are also present each winter for much longer than those in the other wintering flock in the UK, at the Yare Marshes in Norfolk – the Slamannan flock reaches its peak relatively early in the season, usually around late October, and remains in full until departure in early March.

Little else is known about this wintering flock. In the early 1990s, some colour-marked birds from a re-introduction scheme in central Sweden wintered at the Slamannan Plateau, but these have since disappeared. No successful catching attempts have been made at the Slamannan Plateau, but it is hoped to initiate capture and marking of these birds in the future in order to elucidate their migratory route and breeding sites.

For further information about this flock, please visit <http://www.bean-geese.pwp.blueyonder.co.uk>. Visitors to Scotland that would like to see the birds are free to contact either of us for further information.

John Simpson & Angus Maciver

Latest results from monitoring of Greylag Geese in the Uists

The latest count in the bi-annual census of Greylag Geese in the Uists, Outer Hebrides, was carried out in February 2004. Counts revealed a total of 3,422 Greylag Geese and, although slightly lower than the previous February count, is part of a long-term increase in numbers (Figure 6).

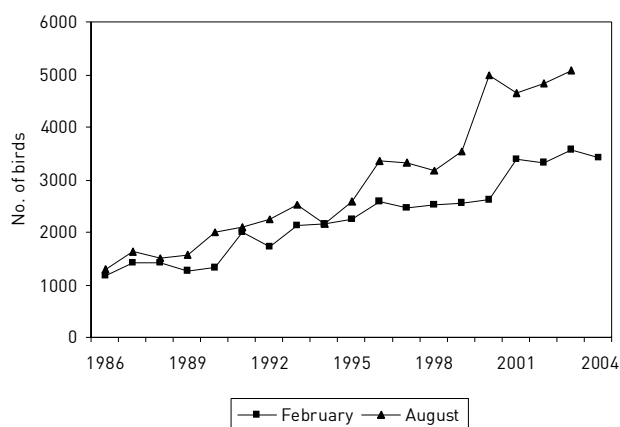


Figure 6. The total number of Greylag Geese counted during the bi-annual census on the Uists.

Roderick MacDonald

The Naturalised Goose Survey 2000

During 2000, a survey of naturalised geese was carried out in Britain. It focused primarily on Canada Goose and the Re-established Greylag Goose, but also included all other species of introduced geese, including escapes, exotics and hybrids. The

main aims were to provide an updated estimate of population size and distribution since the last national survey in 1991, and to assess productivity in these populations during 2000. The survey used a site-based approach to survey moult sites between 22 June and 21 July 2000. Volunteer counters were asked to survey the sites they regularly monitored as part of the Wetland Bird Survey (WeBS), as well as any additional sites not usually surveyed for WeBS but which were known to hold naturalised geese.

The survey recorded a total of 17 species of introduced goose (Table 4), along with 22 types of hybrid. Totals of 54,587 Canada Geese and 25,640 Re-established Greylag Geese were recorded. The number of Canada Geese was 14% lower than in 1991, and the number of Re-established Greylag Geese was 31% higher. The 2000 totals for both species were similar to those recorded through WeBS, but the Canada Goose total was significantly lower than the current estimate of 96,100, based on WeBS and a stratified sample survey carried out in 1999. This difference may be partly explained by the suggestion that much of the growth of the Canada Goose population in Britain may be occurring on new or small sites that are not usually surveyed by WeBS, causing a greater proportion of the population to have been missed by this survey compared to previous ones. Therefore, it is recommended that future surveys adopt a randomised stratified sample approach in order to reduce the number of sites that need to be visited, and to provide confidence limits for the population estimate.

A number of other goose species were recorded as having bred successfully, namely Barnacle, Egyptian, Snow, Bar-headed and Pink-footed Geese. These populations remain small, but have the potential to increase in the future. The most common hybrid was between Canada Goose and Greylag Goose.

Helen Rowell

Table 4. The number of adult and juvenile geese counted during the Naturalised Goose Survey

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

Inland feeding of Dark-bellied Brent Geese

In 2003, WWT undertook a survey to identify and characterise the inland feeding areas of Dark-bellied Brent Geese around the 19 Special Protection Areas (SPAs) in the UK for which it is a qualifying species. Few areas of so-called cropped habitats (i.e. cultivated land) have been included in UK SPAs to date, yet there is a need to assess their value for birds. To address this issue, there is a need to collate information on those species that rely in whole or in part on 'cropped' habitats, so as to inform discussions on their site-based conservation needs.

There was not the scope within this study to collect new data on the use of cropped habitats by Dark-bellied Brent Geese, thus, a questionnaire was sent to relevant local experts for each SPA, along with a map of the site, onto which they were asked to mark the fields used by the birds and, if possible, the land use type of each field. Information was received for all but one of the 19 SPAs although, understandably, the detail varied markedly between sites according to the amount and quality of data in existence. Consequently, it is important to highlight that any conclusions drawn from this review of the use of inland habitats by Dark-bellied Brent Geese should be treated with caution.

Inland feeding was recorded at all sites, although recent information on the use of habitats outside the statutory boundary was not available for Benfleet and Southend Marshes SPA. In general, the results showed the expected pattern of birds feeding on their traditional estuarine habitats when they arrive in autumn (September-November), then moving inland to feed as the winter progressed (December-February), with movement back to estuarine areas in the spring (March-May). Feeding on cropped land was, however, recorded during the autumn at only nine sites and during spring at ten sites. The use of inland feeding areas was recorded to varying extent at all sites surveyed during the winter.

The maps produced by local experts showed that for each SPA, inland feeding areas were generally located just outside the SPA boundary. Overall, at those sites for which data had been provided, feeding on permanent pasture was recorded at 38%, on fertilised pasture at 63%, on winter cereals at 88%, on oilseed rape at 38%, on golf courses at 19%, on amenity/recreational land at 25%, and on other grassed habitats at 19%. There were no records of birds feeding on spring cereals.

The relative use of different habitats by Dark-bellied Brent Geese remained very similar through the non-breeding season (Figure 7), with winter cereals being used more frequently than any other habitat in each of the three seasons defined. The percentage of time spent feeding on improved permanent pasture, winter cereals and oilseed rape peaked in winter (December-February). In contrast, the use of permanent pasture increased through until spring. Birds only used golf courses and amenity/recreational land beyond November.

This study has highlighted the importance of inland feeding areas for Dark-bellied Brent Geese outside the UK SPA suite.

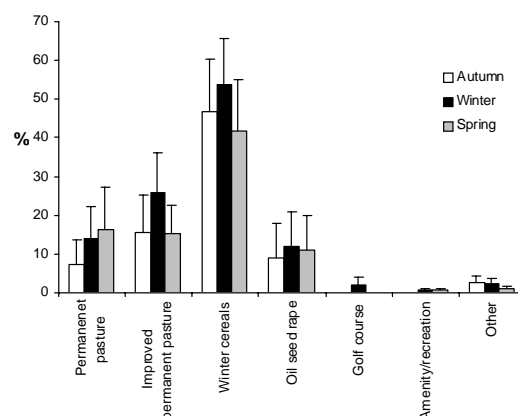


Figure 7. Mean percentage use of different inland feeding habitats by Dark-bellied Brent Geese in and around SPAs in the UK (bars represent 1SE).

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

Helen Rowell

Arctic Birds – an international breeding condition survey

The International Breeding Conditions Survey on Arctic Birds (ABBBCS) is a joint venture of International Wader Study Group and Wetlands International's Goose and Swan Specialist Groups, co-ordinated by Mikhail Soloviev and Pavel Tomkovich. This project aims to collate information on environmental conditions on the breeding grounds of arctic-nesting birds in a constantly updated database. Analyses of data on bird numbers and breeding performance during the arctic summer in relation to climatic, predatory and other relevant factors can give insights into ecological processes acting at wide scale, and also provide valuable information for the conservation of sites and species. Currently, information is available on bird breeding success, rodent abundance and certain weather characteristics in the Arctic for summers 1992 to 2003 from the ABBBCS website (<http://www.soil.msu.ru/~soloviev/arctic/index.html>). The first five issues of the annual newsletter (1998 to 2002) are also available for download as pdf documents from this site, or as hardcopies from the project co-ordinators.

Dibden Bay development shelved

After a lengthy public inquiry, on 20 April 2004 it was announced that the Government had rejected the Associated British Ports (ABP) proposal to build a new £600 million container terminal at Dibden Bay, Southampton Water. This represents a highly significant victory for conservation over big business. In turning down the proposal, Transport Minister Tony McNulty said: "One important factor in making the decision was the environmental impact of the proposals on internationally protected sites".

One of the main concerns was that the proposed development would have had a detrimental effect on two Special Areas of Conservation (SACs), a Special Protection Area (SPA) and a Ramsar site. It would also affect eight Sites of Special Scientific Interest (SSSIs). The area is of international importance for wintering wildfowl, and the Solent and Southampton Water SPA is used by 50,000 waterbirds every winter, including internationally important numbers of Dark-bellied Brent Geese. The development would have resulted in a loss of over 40 hectares of intertidal mudflats that fall within the Solent and Southampton Water SPA and Ramsar site, and the loss of approximately 240 hectares of the reclaimed Dibden Bay SSSI.

For further information see <http://www.portswatch.org.uk>

Twinning Brent Goose habitat

In May, WWT Castle Espie Centre Manager James Orr and Community Education Officer John McCullough spent a week with Icelandic schoolchildren on the Alftanes Peninsula near Reykjavik. The area is an important staging post for migrating East Canadian High Arctic Light-bellied Brent Geese. WWT's presence helped facilitate an agreement between the local community mayor, the local school, the Icelandic Institute of Natural History and WWT to cooperate on protecting the staging area. In the first of an annual 'Brent Day', inspired by Castle Espie's 'Brent Wildlife Festival', John gave talks and showed the geese to a hundred local children. WWT is now working on an initiative to twin schools and communities around Strangford Lough and this part of Iceland with a view to developing common ownership of Brent Goose habitat.

Source: Wildfowl & Wetlands 149 (Autumn 2004)



Greylag Geese (by Paul Marshall)

Goose Specialist Group meetings

This 8th annual meeting of the Goose Specialist Group was held in Odessa (Ukraine) in March 2004 and was attended by 70 people from 16 different countries. The meeting focused on the three goose species that winter along the Black Sea coast – Greater White-fronted Goose, Red-breasted Goose and Greylag Goose. Presentations were also made on Lesser White-fronted Goose, Bean Geese in Germany, Dark-bellied Brent Geese in France, Bar-headed Geese in Myanmar and India, and Pink-footed Geese in Spitsbergen (Svalbard). The full programme, as well as information about the next meeting that will be held in November 2005 in Sopron (Hungary), can be downloaded from <http://www.wetlands.org/networks/Goose/Goose.htm>

The State of the UK's Birds 2003

The latest edition of 'The State of the UK's Birds' has been recently published. The report highlights that most wintering goose populations in the UK have fared well over the long-term, although Iceland Greylag Goose has shown a 14% decline between 1991/92 and 2001/02, and there are recent concerns over the health of the Greenland White-fronted Goose (see page 1). The full report can be downloaded from <http://www.wwt.org.uk/publications>

Ducks, Geese and Swans of the World

After nearly a decade in preparation, an authoritative new book on wildfowl is just a few months away from publication. Edited by WWT Trustee Dr Janet Kear, who retired as WWT Director of Centres in 1993, the book is part of the Oxford University Press series 'Bird Families of the World'. Some 60 of the world's leading wildfowl specialists have contributed general chapters and 165 species accounts. Former WWT artist Mark Hulme has prepared 30 colour plates which Janet describes as "wonderful". Currently at proof stage, *Ducks, Geese and Swans* is due for publication, in two volumes, in November. The book – truly a labour of love – will be featured in the next issue of *GooseNews*.

Source: Wildfowl & Wetlands 149 (Autumn 2004)

The Waterbird Review Series – site inventories for Britain's wintering goose populations

WWT has recently produced The Waterbird Review Series – an inventory of important sites in Britain and Ireland for all major wintering goose and swan populations. The WRS collates up to four decades of data and knowledge from long-term studies and monitoring programmes. In each review, the abundance, distribution and ecology of each species is described, and a detailed inventory of sites of current and former importance is given, presenting numbers and trends, with a summary of site protection status, habitats and site usage. These reviews will provide a valuable tool for conservation managers and decision makers, working from site based to international level, and will be of interest to both professional and non-professional ornithologists alike.

The reviews have also highlighted a number of gaps in our current knowledge, and thus a need for continued and enhanced monitoring, and priority areas for future survey and research. For example, monitoring of these populations has focussed on wetland sites, but many swan and goose species feed on semi-natural and agricultural habitats, many of which are not considered when designating or recognising important areas (see article in this newsletter on the importance of feeding areas outside SPA boundaries – Inland feeding areas for Dark-bellied Brent Geese).

This series demonstrates, once again, the value of long-term monitoring schemes. Thanks go to the many skilled and dedicated volunteers who contribute vast amounts of waterbird data on which projects such as this are based. These reviews were funded by the WWT/JNCC partnership and will soon be available for download from <http://www.wwt.org.uk/publications>

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Dark-bellied Brent Geese (by Paul Marshall)

Many thanks for all your help

The greatest strength of the GMP lies in the tremendous volunteer input from you, the counters, ring-readers and other participants. We hope that you will continue to support the GMP and, through it, the conservation of geese and wetlands throughout the UK and beyond.

GooseNews is the newsletter of WWT's Goose Monitoring Programme. It is sent to participants each autumn and is available either as a printed copy or a pdf file that can be sent via e-mail. If you would prefer to receive *GooseNews* in an alternative format, please contact the GMP at geese@wwt.org.uk. The Goose Monitoring Programme receives financial support from the Joint Nature Conservation Committee (on behalf of the Countryside Council for Wales, English Nature, Scottish Natural Heritage and Environment and Heritage Service in Northern Ireland).

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