



I-WeBS

The Newsletter of the Irish Wetland Bird Survey

Issue 14 August 2010



Gadwall. - (Graham Catley)

The 2010/11 winter count season

It really does only seem like yesterday that I was putting together last season's newsletter. And yet here we are again, hurtling towards autumn, with our lakes and estuaries filling up with our favourite wintering birds. I hope you all enjoyed the summer months. We certainly got a lot more sunshine than in 2009, but that wouldn't be hard. This winter will be the 17th season's worth of wintering waterbird counts gathered through I-WeBS, and what an incredible dataset we now have.

It will be interesting to see if the very cold weather we experienced last winter affected our waterbird numbers. We can't look at this, of course, until we have all of the data in. We now have a lot of count forms from the 2009/10 season returned to us, and lots of data have also been entered through the I-WeBS Online system. Thanks so much for this. But there is certainly more to come, so please return your counts as soon as you can. Not only can the data then be made ready for its important functions, but we also feel it is extremely important for you to receive feedback on the incredible volume of counts that you gather at Ireland's wetlands each year. We would like to be able to provide this feedback to you as much and as often as possible. The sooner we have all of the data, the faster we can report back to you with results.

The 2008/09 winter's counts have now all been entered and incorporated to the I-WeBS database, and we can report on this very shortly. Thank you to everyone that contributed to last January's International Swan Census. Despite the freezing conditions we covered a lot of ground and counted a lot of Whoopers, and not very many Bewick's. Please see our summary inside for more details. The low-tide waterbird survey work continues this winter, but this year at a different group of coastal SPA sites. These data will be very interesting and will complement I-WeBS high/rising-tide information very well. There is more about this inside too. And we have put a little reminder for you on the back page about recording all the necessary details during your I-WeBS counts, so do please have a look.

Most importantly, thanks so much for your continued support, and for all of the time and effort you continue to give to the Irish Wetland Bird Survey. It really is worth it (even if some of those cold, wet, blustery days occasionally make you question it at the time!). I look forward to catching up with many of you this season. As always, if you have any queries at all, please get in touch.

Helen Boland,
I-WeBS Organiser

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Low-tide waterbird survey programme

As participants in I-WeBS, you'll know that in coastal sites I-WeBS is traditionally a high-tide survey, commencing on a rising tide when birds are closer to you as they are pushed up with the tide towards their high-tide roosts. Being easier to count in this way, the resulting waterbird counts allow us to measure the importance of wetland sites for wintering waterbirds, estimate the size of non-breeding waterbird populations in Ireland, and to assess trends in their numbers and distribution.

But if you have been to your I-WeBS site during the low-tide period then you will know that it is a very different picture; the large numbers counted at high tide can appear to be little more than dots in a landscape of rolling mud and sandflats – quite a different challenge!

So why is knowledge of low-tide distribution of waterbirds so important? In winter, feeding during the low-tide period is the main goal of most waterbird species in order for them to gain and maintain enough energy (fat reserves) to migrate back to their breeding grounds and breed successfully in the following year. Our coastal estuaries and bays are under pressure from a wide range of activities, from industry and infrastructure, to fisheries, recreation and tourism. An understanding of how waterbirds distribute themselves across sites, and monitoring this aspect of their life-cycle in light of these human influences, is of increasing importance in order to better manage sites and their important feeding grounds for waterbirds.

Last winter (2009/10) we were delighted to be involved in a new programme of waterbird surveys at selected coastal wetland sites around the Republic of Ireland. Commissioned by NPWS, this survey programme ran alongside, and is complementary to, I-WeBS, and concentrated on counting waterbirds during a period extending from three hours before to three hours after the time of low water, when many species were distributed across exposed tidal flats. On a monthly basis between October 2009 and March 2010, teams of skilled



View of Castlemaine Harbour in Co Kerry at low tide. – (Sinead Cummins)

observers surveyed twelve prime coastal wetland sites which have been designated as Special Protection Areas (SPA) under the EU Birds Directive. The sites were varied, and included the vast estuary, salt marshes, lagoons and polderland that make up the site of Lough Swilly (Co Donegal), to the large shallow sandy sea bay of Dundalk Bay, to sheltered estuaries such as Blackwater Estuary (Cos Cork/Waterford) and Bannow Bay (Co Wexford), to large complex sites such as Donegal Bay, inner Galway Bay and Wexford Harbour and Slobs. Similar to I-WeBS, all sites were subdivided into count subsites, and the overall count area surveyed each month across all sites totalled 680 square kilometres.

The survey methodology focused on all waterbird species using a site and included not only waders distributed across tidal flats but also dabbling ducks, geese and swans in a variety of wetland habitats, along with divers and sea ducks in areas of open coastal water. Certainly this was a challenge in terms of identification and counting and was not helped in the least by the weather encountered in the early months of 2010!

In addition to counts, fieldworkers also recorded behaviour (foraging or roosting/other) and the position of waterbirds in relation to mud and sand flats, tidal channels or creeks, open sea or coastal habitats above the shoreline. In this way we can build a picture of how the birds use the site, and importantly, for what purpose.

We are now in the process of analysing the data. As the counts were carried out in a co-ordinated manner, we are able to examine each species' distribution across a site in terms of the relative numbers/proportions within each count subsite. One way of presenting count distribution data is in the form of dot-density maps (Figure 1). These maps show the number of birds represented by dots; each dot representing one or a pre-determined number of birds. As the dots are placed within appropriate count sections and broad habitat types for the species counted (e.g. intertidal, subtidal) the resulting map presents not only numbers but also densities and provides a relatively easy way of viewing species distribution.

The next step is to try to understand species distributions across the sites. Obtaining a sufficient intake of prey is the main driving factor in the distribution of foraging waterbirds, so we can also draw on data from other surveys undertaken by NPWS (e.g. benthic sampling). This provides information on the sediment distribution across a site together with related invertebrate (prey) data. Together with the bird distribution data, this should allow the identification of the most important foraging areas for different waterbird species and assemblages across each site.

These results, together with high-tide data from I-WeBS, will give us the most complete picture available to date on the waterbird distribution and usage of some of our prime wetland sites, and help in their management and protection into the future.

By Lesley Lewis
Waterbird Ecologist

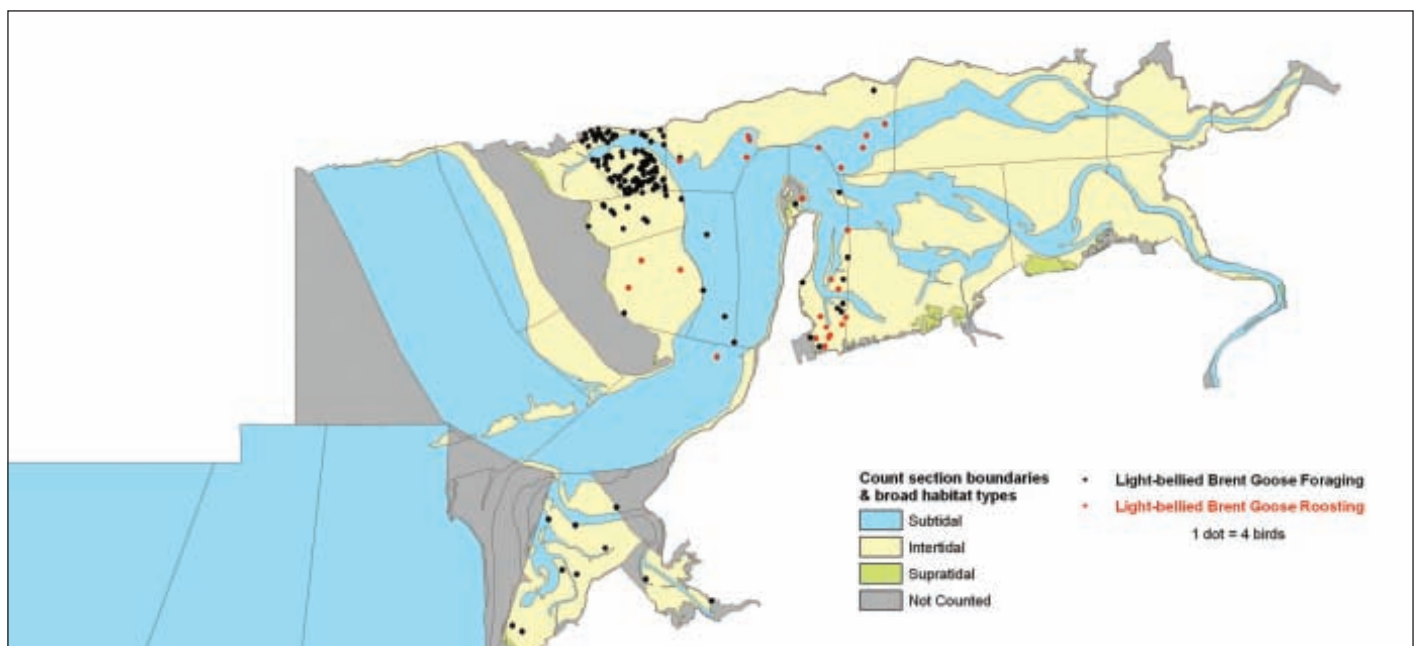
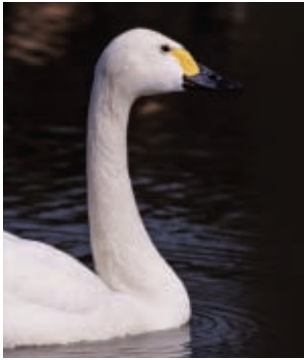


Figure 1. Dot-density diagram for Light-bellied Brent Geese foraging intertidally on 4th January 2010. This example shows the foraging distribution of the geese at Castlemaine Harbour, Co Kerry. The dots are placed randomly within count sections so do not represent the actual position of each bird, but the map clearly shows the main concentrations of foraging Brent (highest densities) by the aggregation of black dots.

International Swan Census 2010

One to remember



Whooper Swan. – (Billy Clarke)

The cold winter of 2009/10, with a freeze setting in before Christmas and lingering well into the month of January, will not be too easily forgotten, especially by those of you who were out and about looking for swans during the census weekend of 16th/17th January. In fact, Swan Census organisers in Britain and Ireland were seriously considering postponing the survey. However, despite the horrendous conditions, Ireland's Team Swan, consisting of more than 180 observers, did us proud, and your efforts were well worthwhile.

To date, we have received data from 1,224 haunts, the large majority of which were checked over the scheduled weekend. In total 15,049 Whooper Swans were tallied, including 10,433 in the Republic and 4,616 in Northern Ireland. This represents a marginal increase, in both the Republic and in Northern Ireland, of fewer than 1,000 birds when compared with the total recorded at the last census in 2005. Whoopers were widely distributed and were recorded in all counties except Dublin and Carlow, with highest numbers recorded in Galway and Derry. Despite the numerous reports of swans turning up in all kinds of odd places where they had not been seen

Table 1. Total numbers of individuals and flocks recorded, together with an indication of % change compared with the census in 2005.

County	Total	(% change)	Flocks	(% change)
Armagh	520	(-13)	13	(0)
Antrim	508	(-24)	14	(-36)
Derry	1,673	(9)	28	(61)
Down	548	(33)	10	(0)
Fermanagh	1,020	(12)	27	(-4)
Tyrone	347	(74)	10	(-9)
NI total	4,616	(7)	102	(0)
Cavan	865	(-4)	29	(-19)
Clare	639	(6)	17	(-35)
Cork	215	(-33)	10	(150)
Donegal	944	(-12)	19	(-10)
Galway	1,104	(37)	35	(46)
Kerry	540	(38)	7	(40)
Kildare	112	(129)	5	(67)
Kilkenny	1		1	
Laos	151	(107)	2	(100)
Leitrim	137	(-72)	13	(-52)
Limerick	184	(-19)	2	(-67)
Longford	277	(-2)	9	(-18)
Louth	25		1	
Mayo	966	(-6)	33	(-5)
Meath	416	(65)	7	(0)
Monaghan	414	(-8)	23	(77)
Offaly	650	(-11)	9	(0)
Roscommon	588	(0)	23	(-4)
Sligo	186	(-11)	9	(-25)
Tipperary	276	(-11)	8	(14)
Waterford	485	(43)	11	(83)
Westmeath	566	(58)	7	(40)
Wexford	641	(38)	5	(0)
Wicklow	41	(-2)	2	(100)
ROI total	10,433	(4)	287	(-3)
All-Ireland total	15,049	(5)	389	(-1)

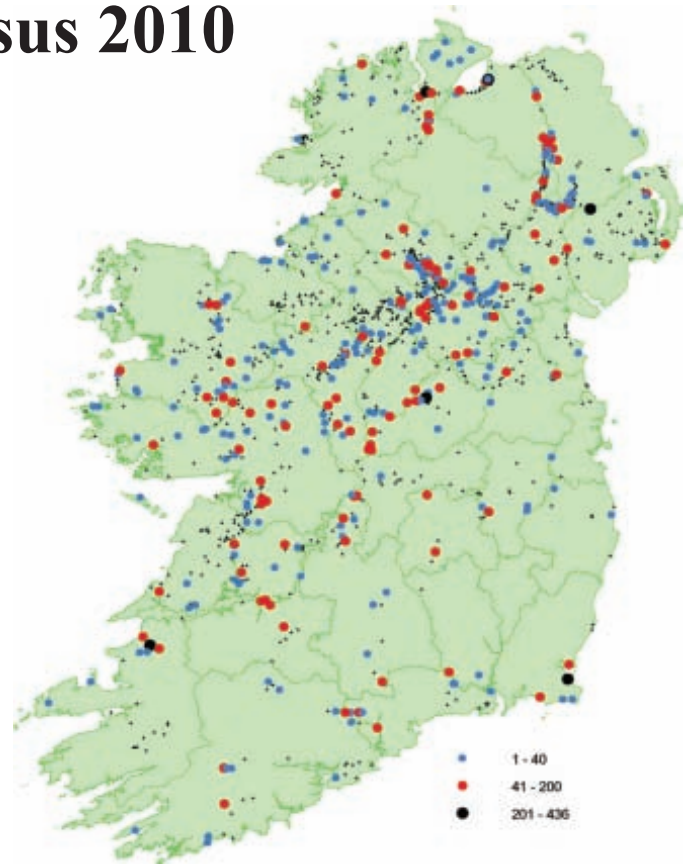


Figure 1. Distribution of flocks recorded during the 2010 census. Small black dots indicate sites that were counted but where no birds were found.

before, the total of 389 flocks is consistent with that reported in 2005, although there were some differences at finer, county levels. Overall, Whooper Swan productivity seemed to be slightly lower than previously reported, at 17.4% juveniles, including 19% in Northern Ireland and 16.7% in the Republic.

Meanwhile, Bewick's Swan numbers continue to dwindle in Ireland. A grand total of just 80 birds recorded represents a 64% decline when compared with 2005. Just five flocks were reported, including North Slob and Cull/Killag in Wexford (65 and 2 birds respectively), River Upper Bann in Armagh (1 bird), and Brideswell and Feacle Turlough in Roscommon (10 and 2 birds respectively). Wexford birds were also recorded at nearby Tacumshin Lake. We had originally thought that birds might get pushed across to Ireland from Britain, which seemed to bear the brunt of colder conditions, but that clearly was not the case.

While we are expecting a few more results still to come, it must be reiterated that there was a considerable change in the weather over the weekend of the survey. The thaw that set in over the scheduled survey weekend would have undoubtedly been associated with re-distribution of birds in subsequent days and weeks, as their frozen wetlands became available once again. Coverage at one or two key sites was not possible until a week or two after the scheduled weekend, and it is quite possible that there was some duplication/omission of counts in places.

We offer a huge thanks to all of you that took the time to contribute to this important census during those cold days in January. We salute you. The information you collectively gathered is of enormous use in helping us to monitor, understand, and thus protect, these species. And a special thank you goes to those of you that took part who had not been involved in either the Swan Census or I-WeBS before. We hope to have you on board again.

**By Olivia Crowe & Helen Boland (I-WeBS Office)
& Graham McElwaine (Irish Whooper Swan Study Group)**

The International Whooper and Bewick's Census is organised by the Swan Specialist Group of Wetlands International, and is co-ordinated in Ireland by the I-WeBS Office and the Irish Whooper Swan Study Group; in Britain by the Wildfowl and Wetlands Trust; and in Iceland by the University of Iceland.

Migration mysteries of small Irish waders

Review of wader catching and tagging in County Clare in April 2010

There has been relatively little research carried out in Ireland on the wintering waders that migrate here each year. Certainly, waders have been monitored routinely for many years through the Irish Wetland Bird Survey and its forerunners, so we know a considerable amount about numbers and distribution and where the most important sites are for many wader species. And we have gained knowledge through resightings and ringing recoveries, but, beyond that, very little specific investigation has been carried out in this country into this group of birds. One main notable exception is the work that has been done on Black-tailed Godwits, a species which has been the subject of studies carried out in conjunction with the University of East Anglia and University College Cork.

Wader species that favour non-estuarine coast provide a particular fascination given the extensive amount of this habitat in Ireland (to be precise, 2,940km of rocky, sandy or shingle shoreline) and yet we know relatively little about some of the species that use it most. Much of the non-estuarine coast in Ireland is not routinely monitored through I-WeBS, and the majority of information we have is limited to two Non-Estuarine Waterbird Surveys – NEWS I and NEWS II – carried out under the umbrella of I-WeBS in the winters of 1997/98 and 2006/07 respectively.

Three key species of this habitat are Purple Sandpiper, Sanderling and Turnstone, with substantial proportions of the national populations of all three species being found on non-estuarine coastline. When the current national population estimates were derived it was found that 86% of the population of Purple Sandpiper, 64% of that of Sanderling and 61% of Turnstone were based on NEWS data.

These are high-Arctic-nesting waders which winter in temperate or equatorial latitudes, using Irish coastlines on passage or for overwintering. They share some similar ecological attributes in that they have a circumpolar nesting distribution in tundra environments (northeast Canada, northern Greenland, Svalbard, Siberia) and migrate south following the breeding season. However, the biogeography of Irish passage and wintering populations of Purple Sandpiper and Sanderling in particular is largely unknown.



Most of the wader-ringing team in Clare, April 2010.

In the case of Sanderling, resightings of colour-marked birds indicate that at least some of our birds belong to the Greenlandic breeding stock which occurs in Iceland on passage. The presence of northeast Canadian-breeding birds here in the winter is possible but is as yet unproven.

We do not know the origins of our Purple Sandpipers but research in Scotland has established that some Scottish birds breed in Svalbard and Norway, but that most are from another population that occurs on passage in Iceland, winters in northern Scotland and is suspected to breed in Canada, though there is no evidence for this as yet. Based on ringing recoveries it is thought that most of the Turnstones wintering in Britain and Ireland are of the Canada/Greenland population. However, most of the evidence is based on birds ringed in Britain. The lack of basic information on these species (e.g. their origins and migrations) makes it difficult to understand the potential drivers of any population change.

Finding answers in Clare

Motivated by a desire to fill this gap in our knowledge, and equipped with Heritage Council funding, in spring 2010 a group comprising members of the Highland Ringing Group, BirdWatch Ireland, the National Parks

and Wildlife Service, the Irish Brent Goose Research Group, the Wildfowl and Wetlands Trust, and a number of Irish ringers, took steps to establish the origins of these species and the role that Ireland's coastline plays in their migration.

On 1st April, on the Clare coast in the west of Ireland, using cannon nets we caught and ringed 84 Purple Sandpipers, 23 of which were also fitted with devices called geolocators, and we caught and colour-ringed four Sanderlings. The marking of Purple Sandpipers forms part of a flyway-scale project led by Ron Summers, Brian Etheridge and others from the Highland Ringing Group on 'Purps,' and the marking of Sanderling is in collaboration with Jeroen Reneerkens's International Wader Study Group Sanderling project. We also initiated a project of colour-marking Turnstones to try to identify their passage routes and the breeding areas of Irish-wintering birds, and so 56 of the 128 Turnstones caught were fitted with colour-rings. These activities on these three species are all 'firsts' for Ireland.

Incredibly, of the sample of just four Sanderlings that we colour-ringed during this venture, one has already been resighted in a place called Kopasker in northeast Iceland; this was just one month later, in May!



Left: Cannon nets being fired over mixed wader flock in Clare, April 2010. – (Kendrew Colhoun)

Right: Sanderling ringed in Clare in April 2010: it was resighted in Iceland in May. – (Guðmundur Örn Benediktsson)



A newly colour-ringed Turnstone in Clare, April 2010; the flag on the left tibia is not visible in the picture. – (Patrick Manley)

The primary focus of this endeavour in Co Clare was the Purple Sandpiper. This species has been the subject of a number of studies that started in 1969 in Scotland when members of the Tay Ringing Group decided to concentrate on this poorly understood wader. These studies established the winter population size, seasonal patterns of abundance, mass and moult, and provided a description of the population structure. The key elements of the population structure are an uneven sex ratio (more males) and that the east Scotland birds comprise largely short-billed birds, whilst northern Scotland birds comprise long-billed birds. These two populations vary in their migration phenology.

Given that ringing recoveries are rare on the Arctic breeding grounds, trips were made to Norway, Iceland and Svalbard to colour-mark breeding birds so that they could then be searched for on the Scottish wintering grounds. This work established that the short-billed 'Purps' originated from southern Norway, and that the long-billed birds did not breed in Iceland, but passed through there in spring to breeding grounds further west, probably Canada because of the match in biometrics. However, there is no evidence for this despite having ringed thousands of birds in the hope that some researcher may see one on the suspected Canadian breeding grounds.

The role of technology

It is only the very recent miniaturisation of technological devices that is now making it possible to

track birds as small as Purple Sandpipers on their long-distance migration. These devices are already showing some incredible movements of birds but at a fraction of the cost of satellite transmitters. You may have heard about the four Turnstones fitted with geolocators in Australia that made an initial non-stop flight of 7,600km in just six days?! Geolocators operate by recording light levels and hence the time of sunrise and sunset each day, the timing of which is specific to a part of the earth, and so it is possible to calculate the daily positions of the birds on the planet. The tags are so small as their batteries are tiny. This is possible as the mechanism for recording light levels is not very energy-intensive and these devices can even record this data for several years. Not bad for something that weighs just 0.75g! This technique will absolutely confirm the migratory routes and schedules for birds which effectively 'disappear' into the vast uninhabited wilderness of the Arctic. One drawback, however, is that we have to retrieve the geolocators to download the data, which means re-catching the same birds!

In this catch of assorted waders in April 2010, the biometrics confirmed that the Purple Sandpipers that winter in Ireland, at least those that winter at this west coast location, are of the long-billed population and hence are the ones that we know little about except that they occur on passage in Iceland. The next phase of the project is a repeat catch of these marked birds this winter, 2010/11, to recover the geolocators and examine the data – thereby solving the mystery. If we

can do this, we will have data that will confirm the origin of most of the Purple Sandpipers that winter in Britain and Ireland. Wish us luck!

By Kendrew Colhoun (Wildfowl and Wetlands Trust), Helen Boland (I-WeBS Office) and Brian Etheridge, Ron Summers and Simon Foster (Highland Ringing Group).

Additional reading

Minton, C, Gosbell, K, Johns, P, Christie, M, Fox, JW & Afanasyev, V (2010). Initial results from light level geocator trials on Ruddy Turnstone *Arenaria interpres* reveal unexpected migration route. *Wader Study Group Bulletin* 117(1).
 Reneerkens, J, Behoussa, A, Boland, H, Collier, M, Grond, K, Gunther, K, Hallgrimsson, GT, Hansen, J, Meissner, W, de Meulenaer, B, Ntiamoa-Baidu, Y, Piersma, T, Poot, M, van Roomen, M, Summers, RW, Tomkovich, PS & Underhill, LG (2009). Sanderlings using African-Eurasian flyways: a review of current knowledge. *Wader Study Group Bulletin* 116: 2-20.
 Summers, RW, Hallgrimsson, GT, Aiton, D, Etheridge, B, Heaton, J & Swann, RL (2009). Population structure, biometrics and moult of migrant Purple Sandpipers *Calidris maritima* in southwest Iceland in spring. *Bird Study* 56: 357-368.



This project is funded by The Heritage Council. Permissions from the National Parks and Wildlife Service, the Department of Justice Equality and Law Reform, and An Garda Síochána facilitated the work.



Left: Purple Sandpiper fitted with a small 0.75g geocator. – (Simon Foster)



Right: Purple Sandpiper with short-bill (left) and one with long bill (right). – (Simon Foster)



Great Northern Diver on Lough Conn in summer
(James Kilroy)

Lough Conn: one of the great western lakes

Lough Conn is situated around 7km southwest of Ballina, Co Mayo. It is almost 12km in length (north to south) and is 5km at its widest point. Adjoining Lough Conn at Pontoon Bridge is another important I-WeBS lake, Lough Cullin. Both are Special Protection Areas (SPAs) but Lough Conn is also a statutory Wildfowl Sanctuary under the Wildlife Acts.

I have been counting for I-WeBS on Lough Conn for almost ten years as part of my duties as a Conservation Ranger with the National Parks and Wildlife Service. Due to the size of Lough Conn, I have been mainly counting the western side of the lake from Pontoon Bridge all the way up to Gortnorabbey Pier. The western side is divided into eight subsites for the purposes of my counting. The eastern side has not traditionally been counted, but with help from the Birdwatch Ireland Mayo Branch at least one count of the entire lake is completed each year. Accessing the vantage points means a lot of driving, although in finer weather I have completed the count by bicycle, which is very enjoyable and assists Bird Atlas recording along the way!

I now submit my data via the I-WeBS Online system throughout the season instead of waiting until the end of the season to post my paper forms, as I used to do. This has helped my own efficiency by allowing me to submit the information in smaller chunks as I go along, whilst also knowing that I'm helping to reduce paper as well as reducing data inputting work at the other end.

Looking forward to the I-WeBS season, the early counts tend to show lower numbers of birds but you never know what you might see. As the season progresses, some of the priority species can be observed. The most notable is Greenland White-fronted Goose. A flock of

'White-fronts' have been wintering on Lough Conn for many years. While there has been a considerable decrease in the flock size from over 100 in the late 1990s down to an average of 60 geese today, the arrival of the geese is always a welcome sight. There are two main sites they use: one is an area which becomes an island in the winter and which is used as a roosting site as well as feeding site, and the second is a daytime feeding site.

In addition to the I-WeBS count each month, I monitor the flock of White-fronts and carry out counts as part of the national and international Greenland White-front surveys. I am mindful of not disturbing them, particularly during the early part season when they need to feed following the migration. But with the use of a hide and some patience, I usually get an opportunity in the winter to age and count the flock and especially count how many juveniles are present when the low winter sun is in the right place. Occasionally, there are Pink-footed Geese attached to the flock.

The enjoyment of the monitoring was added to in my early days when a White-front with a neck band appeared in the flock. 'C4H', as she was known, was ringed in 1992 and used to winter in Wexford. She associated with two other ringed geese before appearing on Lough Conn in 2001. I recall being excited to see a ringed goose, but co-ordinators Alyn Walsh in Wexford and Tony Fox in Denmark were equally excited as it was not known that White-fronts switch from their traditional winter site to another. C4H spent a further three seasons on Lough Conn before disappearing.

Other species recorded have included Golden Plover, Lapwing (with the occasional Peregrine having a go at them), Tufted Duck, Pochard, Whooper Swan and Great-

crested Grebe. Recently, there have been up to three Great Northern Divers occurring regularly on the lake during the winter.

As part of my job as a ranger, surveying doesn't stop at the end of the I-WeBS season. In 2010, Loughs Conn and Cullin are to be amalgamated as a single SPA and a number of projects are underway on this new SPA already. The SPA is being designated for the presence of Common Scoter, Greenland White-fronted Goose, Tufted Duck and Common Gull. For the second successive year, National Parks and Wildlife Service has undertaken a mink trapping programme on these lakes. This will benefit Common Scoter and Common Gulls breeding on the lake in the long term.

Monitoring is taking place concurrently with the trapping and has noted some odd summer visitors this year but which may be attributed to the good weather, a Great Northern Diver in breeding plumage being one such species. The summer monitoring is mainly by boat, though a cautious note must be added: often the conditions on the lake can change rapidly and therefore the weather and conditions have to be equally monitored at all times.

The challenge for I-WeBS on this new SPA of Lough Conn and Cullin will be organising a count of both lakes at the same time and ensuring that there will be enough volunteers as the area of the SPA is so large. This can be achieved by breaking it up and even rotating volunteers to keep the counts interesting. So if anyone is interested in helping out, please contact the I-WeBS Office.

By Cameron Clotworthy, Conservation Ranger with the National Parks and Wildlife Service

Goose Census updates: 2009/10 season

Light-bellied Brent Geese

In mid-October 2010 a network of observers surveyed Brent for the 14th consecutive autumn. This entailed an aerial survey of the staging areas in Iceland, and the unenviable, but by now routine, task of counting about two-thirds of the population (25,000+) of Brent Geese at Strangford Lough. And the rest of us did our bit counting our local but collectively important other sites.

Our total count of just over 37,000 individuals is consistent with a recent population estimate of around 40,000 birds. Additional data from sites including Killala, Sligo and Dungarvan may increase the total closer to 38,000 birds. Peak counts included Strangford (26,041), western Iceland (2,239), Lough Foyle (2,200), Castlemaine Harbour/Tralee Bay (2,067) and Dublin Bay (1,303). Aging of flocks to assess productivity of these high-arctic breeders revealed that 2009 was an especially bad year. Out of 17,000 birds that were aged, only 69 young birds were recorded, equivalent to just 0.4% of the population being newly recruited.

This winter's Light-bellied Brent Goose census dates are 16th/17th October 2010 and 8th/9th January 2011.

The Brent Goose survey is supported by the Northern Ireland Environment Agency, National Parks & Wildlife Service, the Irish Brent Goose Research Group and the Wildfowl & Wetlands Trust.

FINAL CALL for Greenland White-fronted Goose census results!

If there are any participants in the Greenland White-fronted Goose Census who have yet to submit their 2009/10 season's counts, please do so as soon as you can. The results are currently being collated.

Please return your survey cards to Alyn Walsh, Wexford Wildfowl Reserve, North Slob, Co Wexford, or via email to Alynwalsh@eircom.net.

Greylag Geese

The Icelandic population of Greylag Geese is currently estimated at roughly 90,000 birds, with 85,000 wintering in Britain and 5,000 in Ireland. Most of the Icelandic-breeding birds that winter in Ireland are found within seven main flocks which occur at roughly 20 locations in Donegal, Louth, Dublin, Wicklow and Waterford. The feral population is much more widespread.

To date in the Republic we have limited the counts to the above-mentioned Icelandic flocks, and to the mid-November census date only, by which time most Icelandic birds have arrived at their wintering areas. In the 2009/10 season numbers were low at several sites, especially at Lough Swilly which is traditionally a stronghold for them when they arrive from Iceland in early November. The counts at this site were carried out towards the end of November, rather than in the middle as scheduled, and it is possible that some proportion of birds had already moved on to other sites in Ireland and possibly Britain. Moreover, no counts were carried out at nearby River Foyle which also supports a substantial proportion of these newly arrived birds. This points towards the importance of achieving as co-ordinated a count as possible.

Counts from the November 2009 census are as follows: Donegal (Swilly): 1,500 (this figure has been adjusted to account for the feral flock of approx. 500 birds present at this site); Louth: 508; North Dublin: 15; North Wicklow Coast: 245; Wicklow (Poulaphouca): 11; Waterford (River Suir): 38.

Thank you to the observers who submit counts as part of this November census. The 2010 Greylag census weekend is scheduled for 6th/7th November 2010.

The Greylag Goose census is carried out in conjunction with the Wildfowl & Wetlands Trust.

By I-WeBS Office

Use of terrestrial sites by Brent Geese



Light-bellied Brent Geese. – (John Fox)

Over the last 10 years the Canadian/Irish flyway population of Brent Geese has doubled. Such an increase, coupled with access to inter-tidal food resources (primarily *Zostera* and green algae) being constrained by the tide, it is not unexpected that feeding on saltmarshes, grasslands and other terrestrial habitats has increased. This has been

witnessed in wintering grounds all around the Irish coastline and at many of the spring staging areas in western Iceland. Such a change has the potential to lead to conflict with agriculture and other interests (e.g. golf clubs).

As part of our ongoing monitoring and research programme, supported by the Northern Ireland Environment Agency and the National Parks & Wildlife Service, we have undertaken a review of the usage of terrestrial sites by Brent Geese. A **questionnaire** has been circulated to the counters of the main sites used by Brent in Ireland. We aim to build up a detailed inventory of sites and habitat types, and obtain information on fine-scale usage patterns and phenology. This will help us to understand the potential implications of increased terrestrial grazing on both the birds and humans. We look forward to your responses in due course.

By **Kendrew Colhoun**
Irish Brent Goose Research Group Secretary

Long-term wintering waterbird data

New study gets underway

Funded by the Heritage Council, and working with the British Trust for Ornithology, BirdWatch Ireland is working on a new project looking at how wintering waterbird numbers and distribution have changed at Ireland's most important wetland sites since the 1970s.

More than one million waterbirds migrate here from their arctic breeding areas each winter. Familiar species such as Brent Geese, Whooper Swans and Black-tailed Godwits are attracted by the mild climate and broad diversity of wetlands in Ireland, many of which are nationally or internationally important.



Tufted Duck. – (John Fox)

Wintering waterbird data have been collated nationally since the late 1960s, and most notably as part of two large-scale projects known as the Wetlands Enquiry (1970s) and the Winter Wetlands Survey (1980s). We will be integrating these historical datasets with the I-WeBS dataset (1994 to present) in an attempt at examining changes in the abundance and distribution of wintering waterbirds over the past 40 years. We are expecting to see significant shifts in the distribution and range of several species.

Evidence of climate change affecting waterbird distributional and migration patterns has previously been documented. Here in Ireland we have witnessed the decline in numbers of several of our Siberian/Russian migrants. Most notably, numbers of Bewick's Swans wintering here have declined from more than 2,000 birds during the 1970s and 1980s to less than 100 birds in 2010 (see migratory swan census article on page 3). These analyses may shed some light on reasons for the massive declines in the Lough Neagh diving duck populations in the past 10 years.

The study is particularly relevant at this time given the current concern over the impacts of global climatic change on our environment and biodiversity. The importance of long-term studies such as this is highlighted by the prediction of further changes in the climate due to increasing sea-levels, which will result in loss of much of the intertidal habitats that are presently so important for this group of birds. The findings of the study will undoubtedly have implications for conservation management of wetland sites in the future.

By **Laura McNaghten**, Project Officer

An Chomhairle Oidhreachta
The Heritage Council



This study is funded by the Heritage Council

Recommended I-WeBS Count Dates for 2010/11

The 2010/11 season's recommended count dates are listed below. They have been chosen based on tidal conditions around Ireland's coastline to allow coastal sites to be counted on a rising or high tide, but also to help maximise synchronisation of counts across the country, be they inland or coastal.

Of course, these dates may not suit everybody every month. If you can't do your count on the recommended date then choose the next most suitable date and try to co-ordinate with any nearby sites. Please refer to your Counter Manual for how best to cover your site.

High tides

In the recommended I-WeBS dates table, we always display the high-tide times for Dublin Port (to represent the east coast) and Cork Harbour (to represent the south and west coasts). Of course, the high-tide times for Cork are not going to be the same for every site on the south and west coasts, and likewise with Dublin and other east coast sites.

When selecting the count dates we look at the high-tide times for sites all around the coastline and try to choose the most appropriate consecutive weekends in each

month for the different coasts. The weekends that have been chosen give the best opportunity to count at high tide or on a rising tide. As you can imagine, it is often hard to find a weekend that is ideal for counting on a rising tide at all east coast sites, whilst also having ideal tides the following weekend for counts on south and west coasts! As a result, the recommended weekends are the ones that suit as many sites as possible. If you would like tidal information for your particular site you can get in touch with us and we can help you out as best we can.

Please record all necessary count details

Because I-WeBS data is put to so many critical uses – from informing the designation process for Special Protection Areas to providing supporting information during the planning process, to deriving population estimates for all of our waterbird species – we in the I-WeBS Office are always trying to ensure the data is as reliable and robust as it possibly can be.

With this in mind, we'd like to remind you of the importance of recording details of 'count accuracy' and, at coastal sites, the state of the tide at each count. If the site is broken up into several subsites, these details should be recorded for each section. This information plays a crucial part in us accurately understanding and analysing the numbers of birds recorded.

Recommended I-WeBS Count Dates

East Coast & Inland counties			South & West Coast counties		
High Tide Dublin*			High Tide Cork**		
Sep	11th/12th	15:05	18th/19th	16:19	
Oct	9th/10th	13:54	16th/17th	14:40	
Nov	6th/7th	11:52	13th/14th	11:30	
Dec	11th/12th	15:54	18th/19th	16:14	
Jan	8th/9th	14:32	15th/16th	14:51	
Feb	5th/6th	13:26	12th/13th	12:55	
Mar	5th/6th	12:27	12th/13th	11:00	

*Based on the high-tide time at Dublin Port.

**Based on the high-tide time at Cork Harbour.

The Light-bellied Brent Goose census dates are 16th/17th October 2010 and 8th/9th January 2011.

The 2010 Greylag census weekend is scheduled for 6th/7th November 2010.



Teal (drake). – (Eric Dempsey)

Plan to expand port into Dublin Bay halted

I-WeBS crucial in An Bord Pleanála decision

An Bord Pleanála has halted the infill of 52 acres of mudflat in Dublin Bay. The board based its decision on the fact that the Dublin Port Company could not show that there would be no adverse impact on the bird interests of Dublin Bay and River Tolka Estuary Special Protection Area, and would hence be in breach of European law.

I-WeBS data played a significant role in the case by showing that the proposed area of infill is used by birds of significant importance for the bay. The area in

question is only exposed at extreme low tides, and the numbers and species recorded there by the applicant at low tide comprised a significant proportion of the birds using the wider bay area, which is routinely covered by I-WeBS on a rising tide.

The case highlights the importance of consistent long-term datasets in not just looking at trends but also providing context, especially when survey work for planning proposals can often be piecemeal, one-off and open to interpretation.

I-WeBS Online

Thanks to everyone who has been using the I-WeBS Online data submission system. Completing and returning paper data forms is still perfectly fine, but for anyone who would like to submit their counts online please visit the following link:

<http://www.birdwatchireland.ie/?tabid=91>

Website of interest

The UNEP-GEF African-Eurasian Flyways Project is described in detail, including a movie trailer, at:

<http://www.wingsoverwetlands.org/>



Comhshool, Oldhrecht agus Rialtas Áitiúil
Environment, Heritage and Local Government



BirdWatch Ireland
birdwatchireland.ie
protecting birds and biodiversity

The Irish Wetland Bird Survey (I-WeBS) is the monitoring scheme for non-breeding waterbirds in the Republic of Ireland which aims to be the primary tool for monitoring their populations and the wetland habitats on which they depend. The data generated are used to assess the sizes of non-breeding waterbird populations, identify trends in their numbers and distribution, and assess the importance of individual sites for them. I-WeBS is a joint project of BirdWatch Ireland and the National Parks and Wildlife Service.

The I-WeBS Office

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