

WWT/JNCC/SNH Goose & Swan Monitoring Programme

survey results 2010/11

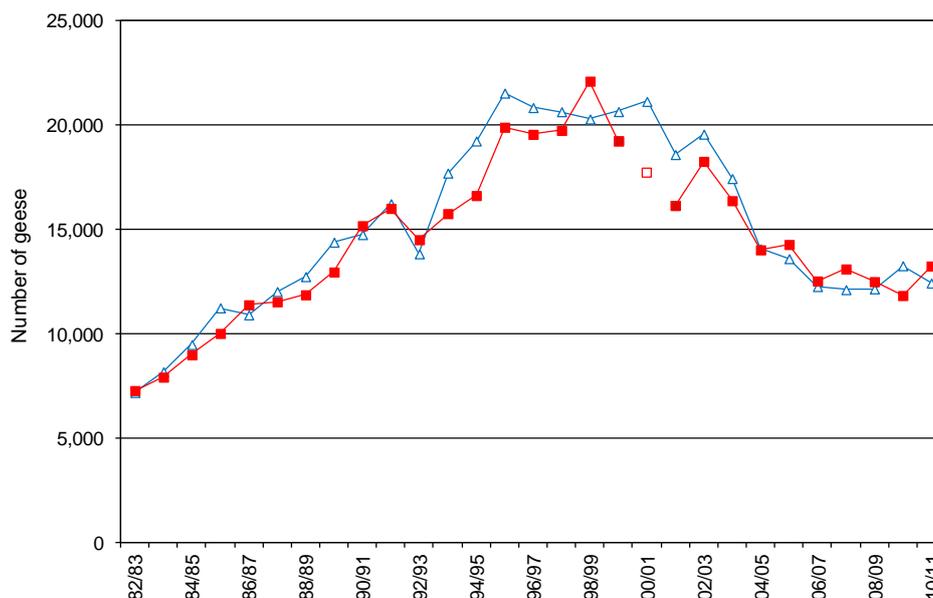
Greenland White-fronted Goose *Anser albifrons flavirostris*

1. Abundance

Coordinated spring and autumn censuses of the Greenland White-fronted Goose were carried out in Great Britain and Ireland for the 29th consecutive winter. Censuses were organised by the Greenland White-fronted Goose Study in Britain and by the National Parks and Wildlife Service in Republic of Ireland and Northern Ireland.

Combining the results for Britain and Ireland from the spring 2011 census gives an overall population estimate of 25,765, which is 12.8% higher than that recorded in spring 2010 and just below the previous ten-year average (25,825 for 2001-2010).

All wintering resorts in Britain were covered at least once during the 2010/11 season. For any sites not covered during the census period, counts were substituted with those undertaken close to the defined dates; amounting to 5% of the autumn and spring totals. Overall, totals of 12,435 and 13,255 Greenland White-fronted Geese were recorded in autumn 2010 and spring 2011, respectively. This represents a 6.3% decrease and an 11.9% increase compared to autumn 2009 and spring 2010, respectively. The autumn 2010 total comprised 59 birds in Wales and 12,370 in Scotland, of which 6,891 were observed on Islay; the count of six birds in England were substituted counts. During the spring 2011 census, seven geese were seen in England, 63 in Wales and 13,185 in Scotland, 6,911 of these birds being seen on Islay.



Counts of Greenland White-fronted Geese in Britain, 1982/83-2010/11, showing autumn (open triangles) and spring (filled squares) census results for each season. Note the missing value for spring 2001 (unfilled square) on account of the outbreak of Foot and Mouth Disease that year (from Fox et al 2011).

Coverage of Ireland was also near complete; counts were substituted for sites not covered during the census periods, contributing 3.8% and 3.0% of the autumn 2010 and spring 2011 totals, respectively. A total of 11,035 Greenland White-fronted Geese was recorded in autumn and 12,510 during the spring census, representing increases of 10.4% and 13.7% compared with the autumn 2009 and spring 2010 counts, respectively. As usual, Wexford held a high proportion of the geese, with 8,524 seen during the autumn count and 9,733 observed in spring. This latter total from Wexford is the highest spring count recorded there since 1996 (9,965), and has only been exceeded twice before, by those recorded during the springs of 1989 (9,799) and 1994 (10,356).

Autumn and spring census counts in Britain and Ireland 2010/11 (includes substituted counts; see above)

Region	Autumn Census	Spring Census
Orkney	59	70
Caithness	289	253
Western Isles	164	164
Inner Hebrides	49	43
Lochaber/North Argyll	1,263	1,635
South Argyll	3,352	3,597
Islay	6,891	6,911
Dumfries & Galloway	303	512
Wales	59	63
England	6	7
Britain total	12,435	13,255
Donegal	1,260	1,403
North Central	85	94
Mayo	111	115
Mayo/Galway Uplands	27	44
Galway Lowlands	152	182
Clare/Limerick	73	73
Shannon headwaters	148	148
Middle & lower Shannon	412	396
Midlands	235	314
Southwest	8	8
Wexford	8,524	9,733
Ireland total	11,035	12,510
Population estimate	n/a	25,765

2. Breeding success

During 2010/11, 6,820 Greenland White-fronted Geese were aged at 22 sites in Britain and brood size was assessed for 330 families. Overall, the percentage young was 21.2%, this being over 8% higher than in 2009/10 and well above the previous ten-year mean (9.4% for 2000/01-2009/10). The mean brood size (3.37 young per successful pair) was only slightly higher than the previous winter and just above the previous ten-year average (3.15 for 2000/01-2009/10).

The percentage of young varied between wintering sites, ranging from 0-42.9%, with all but five sites recording over 10% young. On Islay, the proportion of young was well above average (13.9% for 1962/63-2010/11; 13.1% for 1982/83-2010/11), with 22.9% of the 3,079 geese aged being reported as juveniles; this is the third highest recorded there since 1962 and the highest since 1985 (27.3%). Elsewhere in Britain, productivity was also higher than in recent years (19.7% young) confirming that breeding success was good throughout most flocks.

In Ireland, age assessments were made at ten sites, where a total of 6,346 birds were aged and brood size was collected for a total of 210 families. The overall percentage young was 14.4%, an increase of 5.2% on the previous winter, and mean brood size was 3.27 young per successful pair, just slightly higher than in 2009/10. As in Britain, breeding success varied between sites, ranging from 6.2-35.1%. The majority of birds were aged at Wexford, where 14.7% of the 1,080 geese aged were juveniles; compared with 9.1% in 2009/10 and well above

the previous three-year average (8.6% for 2007/2008-2009/2010). In areas away from Wexford, flocks held 13.1% young; compared with 10.1% for the previous winter and well above the previous three-year average (9.8% for 2007/08-2009/10).

Percentage of young and mean brood size during winter 2010/11

Region	% young (n)	Mean brood size (n)
Islay	22.9 (3,079)	3.93 (112)
Britain excluding Islay	19.7 (3,741)	3.09 (218)
Britain overall	21.2 (6,820)	3.37 (330)
Wexford	14.7 (5,266)	3.39 (168)
rest of Ireland	13.1 (1,080)	2.81 (42)
Ireland overall	14.4 (6,346)	3.27 (210)

3. Discussion

2010 was an excellent breeding year for the Greenland White-fronted Geese, with the proportion of young being well above average. Conditions in Greenland were favourable, with spring being mild and free of snow, a contrast to the conditions witnessed in many recent years, and the summer was warm and relatively dry. This successful breeding season will, for the most part, account for the moderate upturn in numbers recorded during the spring 2011 census. Having steadily declined since the peak in 1999, the population has been stable in the past few years, since the autumn hunt in Iceland was banned. Although the increase in numbers seen in 2010/11 is encouraging, it is unlikely that this one successful year will make any long-term difference to the population, particularly if the reproductive success returns to the low levels seen during the 1990s and 2000s (Fox *et al* 2011).

4. References

Fox, TD, I Francis & A Walsh. 2011. *Report of the 2010/2011 International Census of Greenland White-fronted Geese*. Greenland White-fronted Goose Study. Kalo

This report should be cited as:

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Goose & Swan Monitoring