

WWT/JNCC/SNH Goose & Swan Monitoring Programme

survey results 2010/11

Iceland Greylag Goose *Anser anser*

1. Abundance

The 51st consecutive Icelandic-breeding Goose Census (IGC) took place during autumn and winter 2010, providing information on the abundance and distribution of Iceland Greylag Geese.

Counts were conducted by a network of volunteer observers and professional conservation staff over the weekends of 6/7 November and 4/5 December 2010. Coverage in Britain in November was similar to the preceding year, with 109 sites counted, however, due to widespread snow coverage and freezing temperatures throughout much of Scotland, only 57 sites were covered in December. Outside Britain, counts were made at several sites in Ireland, southwest Norway and Iceland.

Totals of 120,980 and 100,494 Greylag Geese were counted in November and December, respectively. Following adjustments for the presence of British Greylag Geese and the addition of estimated counts (for definitions and methods see full report, Mitchell 2011), a population estimate of 110,662 was derived from the November total, and represented an increase of 1.1% compared to 2009/10, when a population size of 109,496 individuals was estimated.

The autumn distribution was typical; by November, 80.1% of the population was present in North Scotland, with most of the remainder in Iceland (11.8%). Distribution was similar in December although most Greylag Geese had left Iceland by this month and the cold weather had pushed a large number of geese to Bute in southwest Scotland.

Regional distribution of Greylag Geese during November and December 2010 (nc = not counted). Regional counts do not include estimated counts for sites where no data were received.

	November	December
Iceland	16,000	2,250
Southwest Norway	530	166
Ireland	2,944	0
North Scotland	95,918	89,481
Northeast Scotland	1,154	37
East Central Scotland	1,360	899
Southeast Scotland/Northeast England	917	1,125
Southwest Scotland/Northwest England	2,157	6,536
Total counted	120,980	100,494
Adjusted counts	-14,117	-13,232
Estimated counts	3,799	7,563
Adjusted total	110,662	94,825
Population estimate	110,662	

2. Breeding success

During early November, 2,521 Greylag Geese from 43 flocks were aged at various localities on Orkney and in southern Iceland. The sample, expressed as a proportion of the 2010/11 population estimate, was 2.3%. The brood size of 27 families was also determined during this period.

Breeding success was similar to the recent mean, with flocks containing 22.4% young (mean 2000-2009: $21.7\% \pm 1.0$ SE). The mean brood size of 2.11 goslings per successful pair was slightly lower than that of the recent ten year mean (mean 2000-2009: 2.49 ± 0.09 SE).

3. Discussion

The 2010 Icelandic-breeding Goose Census revealed a 1.1% increase in the population estimate of Iceland Greylag Goose compared to 2009. This estimate has thus returned to the high numbers found in 2004 and 2007 (both over 105,000 birds), though the 2006 survey was, almost certainly, an undercount.

The November count of Greylag Geese was comprehensive, with sites being covered in most of the winter range. It was particularly good to get coverage in Iceland and southwest Norway. Although no counts were received from the Faroe Islands in 2010, the archipelago tends to support less than 1,000 birds on passage. The increasing concentration of the population on Orkney continues with a record count of 80,744 Greylag Geese counted in December 2010 (although that total includes an estimated 10,000 summering birds from the British population). Peak counts have occurred in November each year since 2005. However, it would appear prudent that coverage of sites for Greylag Geese needs to be maintained in both November and December due to the varying time of arrival from the breeding grounds.

The November counts in Iceland are based on a mixture of dedicated ground survey undertaken by the Icelandic Institute of Natural History in two of three important areas for Greylag Geese in the southern lowlands, together with non-systematic information provided by hunters and local birdwatchers around the country. The suggested that *c.* 16,000 birds were present (Arnór Sigfússon pers. comm.). Approximately 2,000-3,500 Greylag Geese were also thought to have overwintered in southern Iceland the third winter in succession that such high numbers have been present (Arnór Sigfússon, pers. comm).

Trinder *et al.* (2010) analysed the IGC data from the last 15 years, the time in which the majority of Iceland Greylag Geese began wintering on Orkney. This shift in winter distribution has probably meant that fewer Greylag Geese are being shot in Britain, as there are fewer wildfowlers on Orkney than in East and East Central Scotland. Despite the annual harvest in Iceland of *c.* 30,000-40,000 Greylag Geese (data from Wildlife Management Institute, Akureyri, Iceland), a presumed reduction in the number shot in other parts of the winter range and breeding success at over 20% young in eight out of the last nine years was thought sufficient to reverse the decline noted in this population during the 1990s.

There is an increasing number of British Greylag Geese in Scotland. Mitchell *et al.* (2011) estimated there to be *c.* 47,400 Greylag Geese in Scotland in 2008 and 2009. With large concentrations in Orkney (*c.* 10,000) and Shetland (*c.* 5,000), where Iceland Greylag Geese are known to winter, separating the two populations for status monitoring is becoming increasingly difficult.

4. References

- Mitchell, C. 2011. *Status and distribution of Icelandic-breeding geese: results of the 2010 international census*. Wildfowl & Wetlands Trust Report, Slimbridge.
- Mitchell, C, L Griffin, M Trinder, J Newth & C Urquhart. 2011. The status and distribution of summering Greylag Geese in Scotland, 2008/09. *Bird Study* 58: 338-348.
- Trinder, M, C Mitchell, RL Swann & C Urquhart. 2010. Status and population viability of Icelandic Greylag Geese *Anser anser* in Scotland. *Wildfowl* 60: 64-84.

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Goose & Swan Monitoring