

WWT/JNCC/SNH Goose & Swan Monitoring Programme

survey results 2009/10

Greenland/Iceland Pink-footed Goose *Anser brachyrhynchus*

1. Abundance

The 50th consecutive Icelandic-breeding Goose Census took place during autumn and winter 2009, providing information on the abundance and distribution of Greenland/Iceland Pink-footed Geese. In addition to the two usual counts undertaken in October and November, a third count in December (introduced in 2005) was also conducted, although this is primarily targeted at Iceland Greylag Geese.

Counts were conducted by a network of volunteer observers and professional conservation staff over the weekends of 17/18 October, 14/15 November and 12/13 December 2009. Coverage in Britain and Ireland was good and similar to the preceding year, with 104 sites visited in October, 120 in November, and 114 in December. Outside Britain, counts were made at several sites in the Faroe Islands, southwest Norway, Ireland and Iceland.

Totals of 358,177 and 284,108 Pink-footed Geese were counted in October and November, respectively. The total numbers counted in October and November were 5.1% higher and 9.3% lower than the respective counts in the previous year. After the addition of estimated counts (for definitions see full report, Mitchell 2010.), the peak winter total in October was used to derive a population estimate of 364,212 geese. This represents a modest increase of 3.7% since 2008/09, when a population size of 351,188 individuals was estimated.

The distribution varied over the counts reflecting passage of birds through sites notably in East Scotland to more southerly wintering haunts. East Central Scotland held the greatest numbers of birds in October with high proportions also present in Southeast Scotland/Northeast England and West England at this time. By November, numbers had decreased in East Central Scotland but had increased substantially in East England. The decline in numbers in Southeast Scotland/Northeast England between October and November, from over 71,000 birds to *c* 15,000 birds was notable.

Regional distribution of Pink-footed Geese during October, November and December 2009 (nc = not counted). Regional counts do not include estimated counts for sites where no data were received.

Region	October	November	December
Iceland	3,000	nc	nc
Faroe Islands	6	0	0
Southwest Norway	0	0	0
Ireland	0	0	0
North Scotland	16,176	22,712	11,891
Northeast Scotland	43,051	35,448	62,312
East Central Scotland	104,947	76,952	43,552
Southeast Scotland/Northeast England	71,378	14,924	5,322
Southwest Scotland/Northwest England	9,257	10,410	10,364
West England	69,790	60,020	54,665
East England	40,572	63,642	89,546
Total counted	358,177	284,108	277,652
Estimated counts	6,035	3,000	-
Adjusted total	364,212	287,108	277,652
Population estimate	364,212		

2. Breeding success

Between mid-September and mid-November, a total of 9,403 Pink-footed Geese, in 17 flocks, was aged at various localities throughout Scotland. This sample, expressed as a proportion of the 2009/10 population estimate, was 2.6%. The brood size of 55 families was also determined during this period.

Breeding success was slightly below the mean for the previous decade, with 17.3% young (mean 1999-2008: $19.3\% \pm 0.5$ SE). The mean brood size of successful pairs was 1.87 goslings, which was also lower than the mean recorded during the previous ten years (mean 1999-2008: 2.16 ± 0.05 SE).

There was evidence of modest regional variation in the percentage of young Pink-footed Geese, which varied from 14.2% in East Central Scotland to 22.8% in Southeast England. Similarly, mean brood size varied from 1.69 goslings in East Central Scotland to 1.92 recorded in Northeast Scotland.

The percentage of young and mean brood size of Pink-footed Goose flocks in autumn 2009.

	Total aged	% young	No. of broods	Mean brood size
North Scotland	3,000	18.6	42	1.92
East Central Scotland	4,524	14.2	13	1.69
Southeast Scotland	1,879	22.8	0	na
Overall	9,403	17.3	55	1.87

3. Discussion

The 2009 Pink-footed Goose population estimate represents a 3.7% increase since 2008 and appears reasonable since coverage, particularly of the main sites, was good. Despite recent fluctuations in numbers, partly caused by fluctuations in coverage, notably so in 1995 and 2006, the long term population trend is one of continued increase. Breeding success remains fairly stable at *c* 15-20% and is, presumably, more than compensating for annual deaths. Bag statistics from Iceland for autumn 2009 are not yet available, but it is not expected that these were significantly greater than other recent years (*c* 10,000-15,000 geese). Unfortunately, meaningful bag statistics remain unavailable from Britain and Ireland, making the interpretation of changes in population dynamics all the more complicated.

Pink-footed Geese were reasonably early in reaching Britain in autumn 2009 with rapid a increase in numbers witnessed at several important sites the top five sites alone, accounting for 48.7% of the population estimate, although this is somewhat lower than the comparable figure of 63.6% recorded in 2008. Few Pink-footed Geese were recorded in central Iceland in October (Arnór Sigfússon pers. comm.), however, the species sometimes remains dispersed at inaccessible areas at this time. Peak counts of Pink-footed Geese have occurred in November in one of the previous five years (in 2006), so the departure of the species from Iceland clearly varies year to year. It is possible, therefore, that in years when an underestimate occurs (notably so in autumn 2006) large numbers may still be residing at inaccessible areas of Iceland. It would appear prudent that coverage of sites holding Pink-footed Geese needs to be maintained in both October and November due to the varying time of arrival from the breeding grounds.

4. References

Mitchell, C. 2010. *Status and distribution of Icelandic-breeding geese: results of the 2009 international census*. Wildfowl & Wetlands Trust Report, Slimbridge.

This report should be cited as:

WWT. 2010. *Goose & Swan Monitoring Programme: survey results 2009/10 Greenland/Iceland Pink-footed Goose Anser brachyrhynchus*. WWT/JNCC/SNH, Slimbridge.

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Goose & Swan Monitoring