

WWT/JNCC/SNH Goose & Swan Monitoring Programme

survey results 2014/15

Pink-footed Goose *Anser brachyrhyncus*

1. Abundance

The 55th consecutive Icelandic-breeding Goose Census took place during autumn and winter 2014, providing information on the abundance and distribution of Greenland/Iceland Pink-footed Geese. A full account of the census can be found in Mitchell (2015). Counts were conducted by a network of volunteer observers and professional conservation staff over the weekends of 18/19 October and 15/16 November 2014. Coverage in the UK was good and similar to the preceding year, with 124 sites visited in October and 122 in November. Outside the UK, counts were made at several sites in Iceland during October, when some birds had yet to leave breeding areas.

Totals of 387,260 and 332,971 Pink-footed Geese were counted in October and November, respectively (Table 1). The total numbers counted in these months were 4.1% higher and 22.7% higher than the respective counts in the previous year. Coverage was good and only one estimated count needed to be added to the unadjusted total. The peak winter total in October was used to derive a population estimate of 393,170 geese. This represents an increase of 5.7% since 2013/14 (Figure 1), when a population size of 372,074 individuals was estimated.

A mass arrival of Pink-footed Geese into Britain occurred just before the October 2014 count weekend. Nearly one third of the population had arrived in East Central Scotland and just under a fifth in Southwest Lancashire and Southeast Scotland/Northeast England by the middle of the month. By November, there had been a re-distribution with the number of geese notably increasing in North and Northeast Scotland.

Table 1. Regional distribution of Pink-footed Geese during October and November 2014 (nc = not counted).

Region	October	November
Iceland	3,500	nc
Faroe Islands	nc	11
Ireland	nc	112
North Scotland	31,916	46,155
Northeast Scotland	32,855	76,315
East Central Scotland	122,158	65,998
Southeast Scotland/northeast England	70,708	22,029
Southwest Scotland/northwest England	15,868	17,195
West England	66,760	43,076
East England	43,495	64,080
<i>Total Counted</i>	387,260	334,971
<i>Estimated counts</i>	5,910	–
<i>Adjusted total</i>	–	–
Population estimate	393,170	

2. Breeding success

Between late September and early November, a total of 11,756 Pink-footed Geese, in 27 flocks, was aged at various localities throughout Scotland and west England. This sample, expressed as a percentage of the 2014/15 census-derived population estimate, was 3.0%. The brood size of 268 families was also determined during this period.

Breeding success was similar to the mean for the previous decade, with 19.4% young (mean 2004-2013: 18.4% \pm 1.22 SE) (Figure 2). The mean brood size of successful pairs was 2.01 goslings, which was also similar to the mean recorded during the previous ten years (mean 2004-2013: 2.08 \pm 0.07 SE).

Age counts were taken in several regions, but at different times during the autumn. This leads to differences in the percentage young and mean brood sizes recorded both spatially and temporally. Traditionally, all age counts have been collated and overall figure calculated, but the results from autumn 2014 suggest that there is some variation in age assessments both geographically and temporally and collating all the figures masks these differences.

Table 2. The percentage of young and mean brood size of Pink-footed Geese in autumn 2014.

Region	Time period	Total aged	Percentage of young (%)	Number of broods	Mean brood size
North Scotland	Late Oct	1,065	21.5	1	2.00
Northeast Scotland	Late Sep	1,000	17.0	6	1.80
	Early Oct	1,400	19.2	5	1.63
	Late Oct	600	18.7	3	1.25
East Central Scotland	Late Oct	2,941	20.2	11	2.09
Southeast Scotland	Late Oct	910	20.2	4	2.75
West England	Late Sep	935	23.0	111	2.15
	Early Oct	576	18.6	19	1.68
	Late Oct	1,114	16.3	52	1.85
East England	Late Oct	1,125	18.4	43	2.09
Overall		11,756	19.4	168	

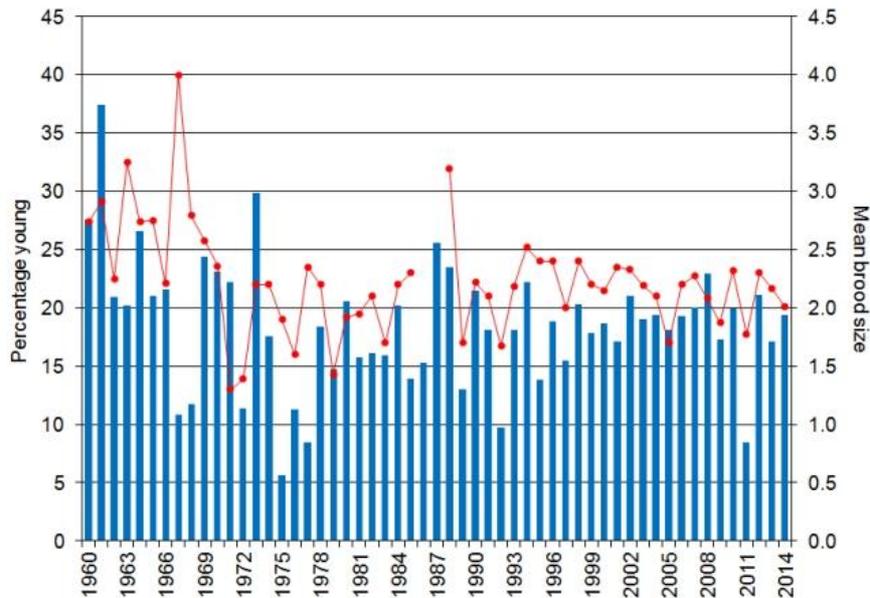


Figure 2. The percentage of young (blue columns) and mean brood size (red circles) of Pink-footed Geese, 1960-2014.

3. Discussion

Large counts at some of the principal resorts in mid October 2014 suggested that there had been a mass arrival of Pink-footed Geese into Britain in the weeks prior to the count weekend. The count of 78,970 Pink-footed Geese at Montrose Basin, Angus, was the largest IGC count ever recorded at a single site and accounted for a fifth of the entire population. A total of 22 sites held over 5,000 geese at the time of the October census. It is well established that some key wetland sites support higher numbers of geese soon after they arrive in northern Britain, and numbers decline as geese move south within Scotland or onto Lancashire and Norfolk.

The 2014 population estimate of 393,170 was 5.7% higher than the figure for October 2013 (372,074) and the highest population estimate ever recorded. Breeding success in 2014 was about average and appears to be easily compensating for annual mortality. The most recent population estimates (from 2012, 2013 and 2014) confirm that the counts of autumn 2011, and probably in 2010 too, underestimated the total number of geese in the population in those years. Despite the year on year variation in counts, the long term trend is one of continued increase, although, if the undercounts in 2010 and 2011 are not considered, the population has been between c.351,000 and c.393,000 since 2008 (an increase of 11% in six years), and may have reached another plateau of growth.

Pink-footed Goose breeding success in summer 2014, at 19.4%, was slightly higher than the long term average of 18.4%. Reports from Iceland suggest reasonable weather during the spring and summer months. The average productivity was also confirmed by the proportion of young in the Iceland bag; at 27.0%, this was just lower than the recent average (29.8% for the ten year period 2004 to 2013) (A. Sigfússon *in litt.*). Hunting of Pink-footed Geese in Iceland appears stable with 15,291 shot in 2012 (the year for which the most recent data are available). Unfortunately, no comparable data exist for the number shot in the UK.

Surveys undertaken in northern Greenland in 2008 and 2009 revealed a large increase in the number of Pink-footed Geese present, but also a dramatic increase in the geographic range of the species in that country with, for example, over 20,000 geese present in Peary Land (north of 82°N); the northern most land in Greenland (Boertmann & Nielsen 2010).

4. Acknowledgments

As ever, thanks are extended to the many IGC counters who provided the basis of the population assessments. Of particular importance is the role of the Local Organisers. Goose count information was also provided by G. Gudmundsson and A. Sigfússon from Iceland, Helen Boland from Birdwatch Ireland from Ireland and Helga Bára Mohr Vang from the Faroes. Ian Patterson, Kane Brides and Graham Clarkson kindly provided additional age counts.

5. References

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