WWT/JNCC/SNH Goose & Swan Monitoring Programme survey results 2017/18

Iceland Greylag Goose *Anser anser*

1. Abundance

The 58th consecutive Icelandic-breeding Goose Census (IGC) took place during late autumn 2017, providing information on the abundance and distribution of Iceland Greylag Geese. A full account of the census can be found in Brides *et al.* (2018).

Counts were conducted by a network of volunteer observers and professional conservation staff over the weekend of 18/19 November with an additional spring census being carried out on 10/11 March (see Brides *et al.* (2018) for results of the latter). Coverage in Britain was average, with 106 sites checked (compared with 102 sites checked in 2016). Outside of Britain, counts were made at several sites in Iceland and southwest Norway. Counts in Norway took place in January rather than November, and the total from these counts was used as an estimated count for the November period, since guidance from local counters in Southwest Norway suggests that the winter influx of Iceland migrants occurs in Late October or early November and they remain there throughout the winter (A Follestad pers comm.).

The total count was 89,874 Greylag Geese (Table 1). Following adjustments for the presence of British/Irish Greylag Geese, which is significant in some areas, a population estimate of 60,962 was derived. This represented a decrease of 32.6% compared to 2016 (Figure 1), when a population size of 90,471 individuals was estimated.

Table 1. Regional distribution of Iceland Greylag Geese during November 2017 (nc = not counted or no count received).

Region	November
Iceland	9,313
Southwest Norway	750*
Faroe Islands	nc
Ireland	2,212
North Scotland	71,062
Northeast Scotland	2,031
East Central Scotland	2,754
Southeast Scotland/Northeast England	1,721
Southwest Scotland/Northwest England	31

Total counted	89,874
Adjusted counts	-28,912
Population estimate	60,962

*Count made in January 2018 (see Brides *et al.* 2018)

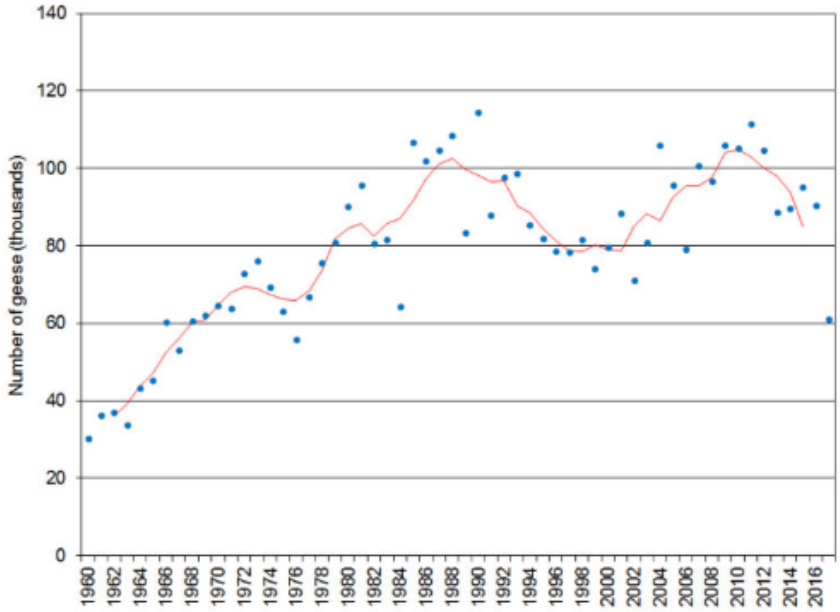

*Figure 1. Annual census-derived estimates of Iceland Greylag Goose population size, 1960-2017. Five-year running mean shown as red line (*e.g. *mean for 2014 is from population estimates for 2012–2016).*

2. Breeding success

During mid-November, 1,650 Greylag Geese from ten flocks were aged in Caithness, north Scotland, which represents 2.7% of the 2017 census-derived population estimate. The brood size of 30 families was also determined during this period.

Breeding success was lower than in 2016 (23.5%), with flocks containing 19.9% young and slightly lower than the recent mean (mean 2007–2016: 22.1% ± 0.47) (Figure 2). The mean brood size of 1.97 goslings per successful pair was lower than that of the recent ten-year mean (mean 2007–2017: 2.31 ± 0.08).

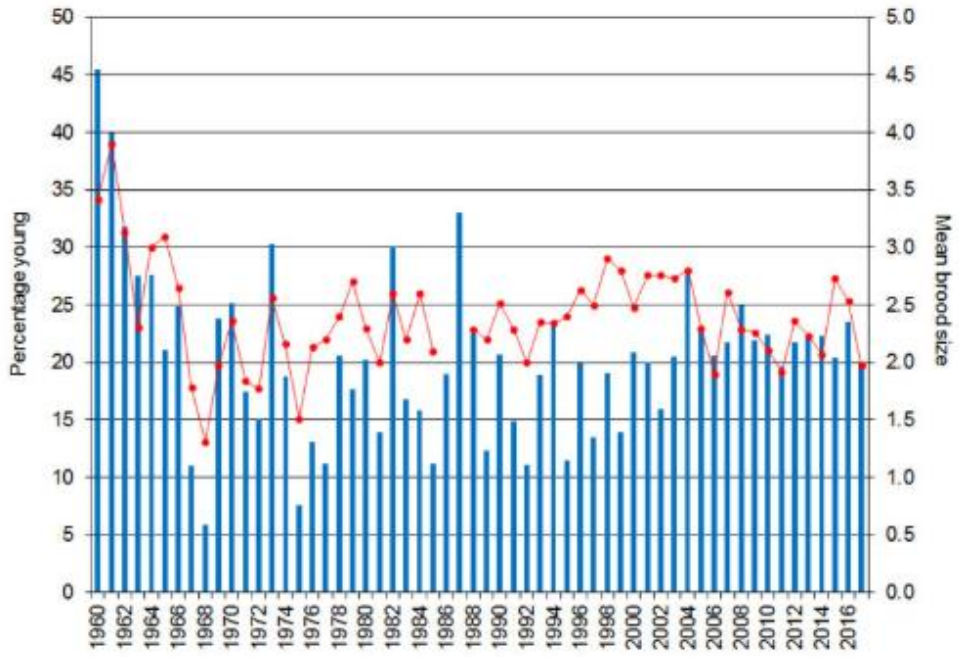

Figure 2. The percentage of young (blue columns) and mean brood size (red circles) of Iceland Greylag Geese, 1960–2017.

3. Discussion

The population estimate of 61,809 geese is lower than that in 2016 and whilst suggestions of a recent population decline have been given in previous accounts (see species account 2016) it is likely that possible undercounting in some areas may have affected the overall 2017 population estimate and therefore shadowing the true estimate.

Greylag Goose remains a favoured quarry species in Iceland, with 30,000 to 60,000 birds shot there annually with 43,376 shot in 2016 (Statistics Iceland 2018) and, as reported in the 2015 Icelandic-breeding Goose Census Report (Mitchell 2016), there has been a marked increase in the number of Greylag Geese shot in Orkney to reduce the British Greylag Goose population on the archipelago, and it is therefore likely that more Icelandic geese are being shot there too. Obtaining information on the number of Icelandic geese being shot on Orkney would be very difficult, as it is impossible to differentiate between geese from the two populations. It is also possible that disturbance from shooting could be causing dispersal to new locations that are not being covered by the census.

The departure of Greylag Geese from Iceland can be highly changeable from year to year due to the influence of weather conditions. In November 2016, counts identified 50,000 Greylag Geese present in Iceland during the census, which is markedly higher than the total counted there in November 2017. Given that the aerial and ground counts in Iceland were conducted under the most favourable conditions during November 2017, the observers are confident that the results are representative of the number of birds present at the time.

Orkney continued to hold the main proportion of birds. As geese from both the Icelandic and British populations of Greylags are present at the site at the time of the autumn census, an estimated number for the latter is deducted from the census count in order to estimate the number of Icelandic birds. Since no

summer survey was undertaken in Orkney during 2017, the total number of birds counted in summer 2016 (21,000 birds) was deducted from the overall November 2017 total, which resulted in an estimated 42,045 Icelandic birds thought to be present.

As previously reported, increasing numbers of British/Irish Greylag Geese in core wintering areas for the Icelandic geese, such as Shetland, Orkney, the Moray Firth, Bute and other parts of Scotland and Ireland means that assessing the abundance of the Iceland population remains very difficult. Up to date information on the abundance of British Greylag south and east of an arbitrary line from Bute east to Aberdeen is largely lacking and, therefore, simply as a precaution, any counts obtained through the IGC from this area are subtracted from the overall totals, making the assumption that the majority of birds counted there are British.

The percentage of young in those flocks assessed indicated slightly lower breeding success in 2017 than the recent mean for this species (see breeding success above). The monitoring of annual breeding success for this population is becoming more difficult because the main wintering areas (Orkney and around the Moray Firth) hold ever larger numbers of British Greylag Geese and separating birds from each population is impossible in the field. However, the results from summer counts suggest that the bulk of the birds found in Caithness in winter are from Iceland and it is in this county that age counts were undertaken.

4. Acknowledgements

Many thanks go to the many IGC counters and Local Organisers who provided the basis of the population assessments. Thanks also go to those who contributed age assessment data.

5. References

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