

WWT/JNCC/SNH Goose & Swan Monitoring Programme

survey results 2016/17

European White-fronted Goose *Anser albifrons albifrons*

1. Abundance

The abundance of European White-fronted Geese in the UK during 2016/17 was monitored through the Wetland Bird Survey (WeBS). Results are presented on WeBS Report Online.

2. Breeding success

The breeding success of European White-fronted Geese in the UK was assessed at WWT Slimbridge (Gloucestershire), North Warren (Suffolk) and Middle Marsh Farm and Huttoft (Lincolnshire). Overall, of the 476 birds aged, 19.1% were young birds, this being 2.8% higher than the previous year.

At WWT Slimbridge, 164 birds were aged with 40 juveniles (24.4%) present, 5.6% higher than in 2015/16 (Figure 1). Brood size counts were also carried out at the site, with 40 juveniles counted among 16 broods, giving a mean brood size of 2.50 goslings per successful pair, only slightly higher than the previous season.

At North Warren, 250 birds were aged of which 42 were juveniles (16.8%), at Middle Marsh Farm 41 birds were aged, including four juveniles (9.8%) and 21 birds were aged at Huttoft of which five were juveniles (23.8%). No brood counts were carried out at these sites.

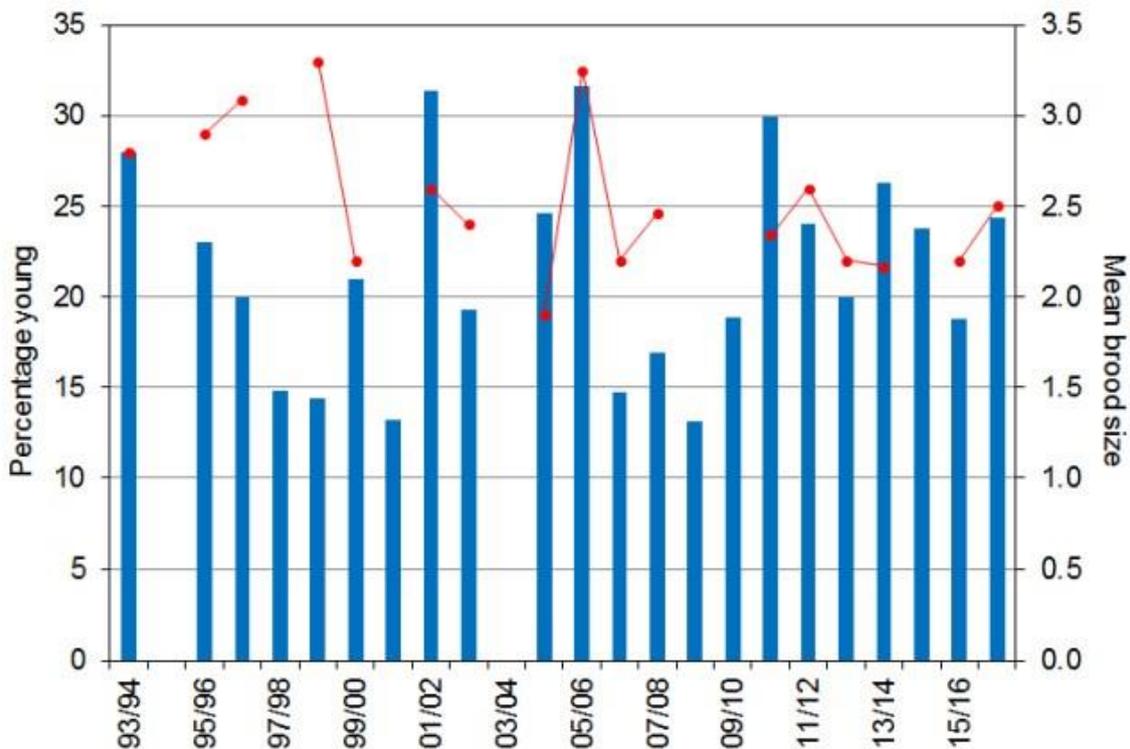


Figure 1. The percentage of young (blue columns) and mean brood size (red line) of European White-fronted Geese recorded at WWT Slimbridge (where data have been collected regularly), 1993/94–2016/17. No data were collected during 1994/95 or 2003/04.

3. Discussion

Results from age assessments made in the UK indicate that the breeding success of European White-fronted Geese wintering there in 2016/17 was slightly higher than the previous season (16.3%); however, it remained lower than the previous five-year average ($25.9\% \pm 3.57$ SE). Similar results were also found in other Russian Arctic breeding species wintering in the UK, such as Dark-bellied Brent Geese and Bewick's Swan, with both populations showing an improvement in breeding success in 2016/17 compared with the previous season.

The Baltic/North Sea population of European White-fronted Geese, of which birds in the UK are a part, has shown a considerable decline in reproductive output since the early 1990s, and age assessments made elsewhere along the flyway, together with those from the UK, suggest little improvement in 2016 (Figure 2). A total of 228,501 geese was aged (including 79,583 in The Netherlands and 148,442 in Germany) of which 12.4% were juveniles. This figure sits at the lower end of the range when compared with previous results (Figure 2).

There was little difference in the percentage young recorded amongst flocks in The Netherlands (12.8 %) and Germany (12.4 %), but it was larger in the small sample from the UK (19.1 %). Although the UK sample was rather small, the larger proportion of first-winter birds may very well reflect a tendency for successful pairs to winter towards the western edge of the wintering range. This includes both UK and Belgium (for which data have yet to be received).

The mean brood size recorded in UK was also larger than that recorded in The Netherlands (1.61; 1,000 families) and Germany (1.64; 3,600 families). The overall brood size (in the data received so far) was 1.65 goslings per successful pair, which is also in the lower part of the range compared with previous results. The majority of successful Whitefront pairs (57%) were accompanied by only one gosling. Brood sizes of more than five goslings were very rare (1.2%), with the one brood of 13 goslings was a major exception.

Given the series of years with low reproduction in the past two decades and an estimated average annual survival rate of 0.82, the flyway population is likely to have slightly decreased recently. It may now even be lower than the current population estimate of 1,000,000 (Wetlands International 2017) individuals.

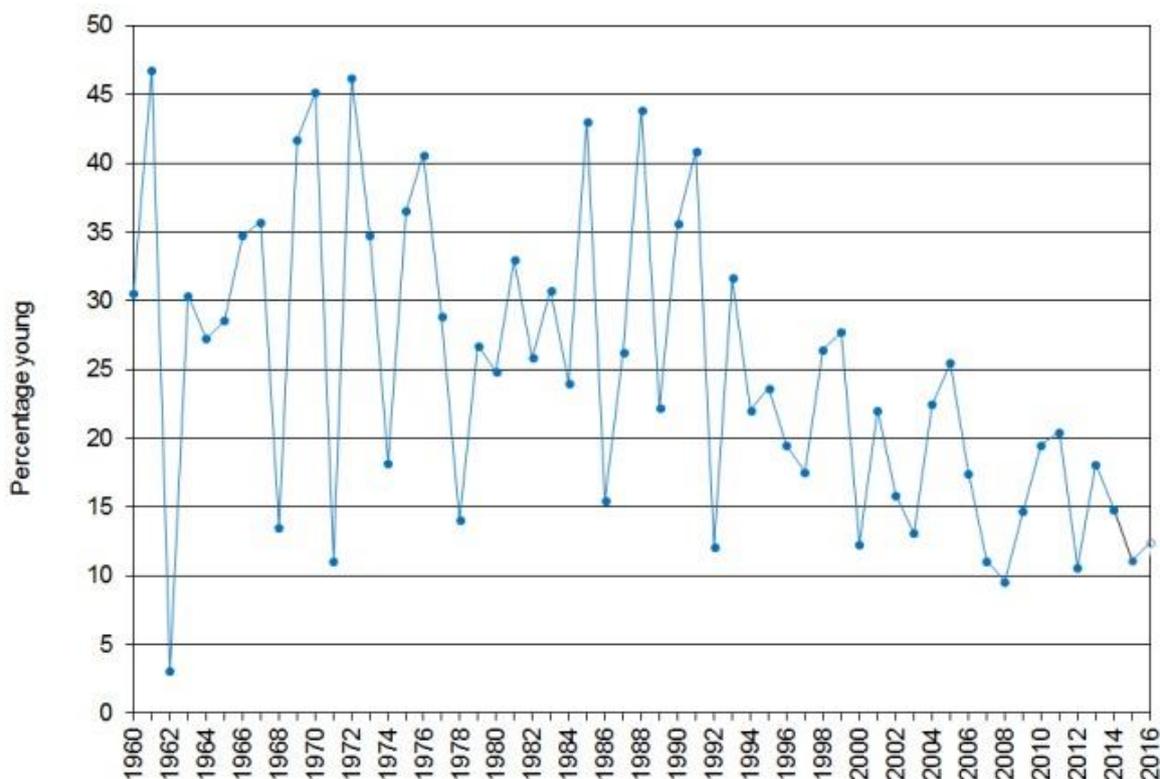


Figure 2. *The percentage young of the Baltic/North Sea European White-fronted Goose population, 1960–2016 (the open circles represent incomplete data). Mainly data from the Netherlands and Germany. Data provided by Sovon Vogelonderzoek Nederland.*

4. Acknowledgements

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5. References

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Goose & Swan Monitoring