

WWT/JNCC/NatureScot Goose & Swan Monitoring Programme survey results 2019/20

East Atlantic Light-bellied Brent Goose *Branta bernicla hrota*

1. Abundance

The abundance of East Atlantic Light-bellied Brent Geese in the UK during 2019/20 was monitored through the Wetland Bird Survey (WeBS). Results are presented on WeBS Report Online.

2. Breeding success

Age assessments of East Atlantic Light-bellied Brent Geese are regularly undertaken at Lindisfarne (Northumberland), the key site for these geese in Britain. In 2019/20, a number of assessments were carried out of flocks located at the site between October 2019 and January 2020, with the resulting breeding success ranging from 27.8% and 61.6% young.

One assessment made in October 2019 comprised a particularly good sample of 2,040 geese of which 37.5% were young birds. Because of the large sample size, this age assessment has been selected as the estimate of breeding success for the birds wintering in Britain during the 2019/20 winter. The result is significantly higher than that of the previous winter (5.9% in 2018/19) and is the highest recorded since records began for Lindisfarne in the early 1990s (Figure 1). A brood size assessment was also made of the same flock, which yielded an average brood size of 3.18 young per successful pair for the 239 families assessed, this also being higher than the previous year (2.50).

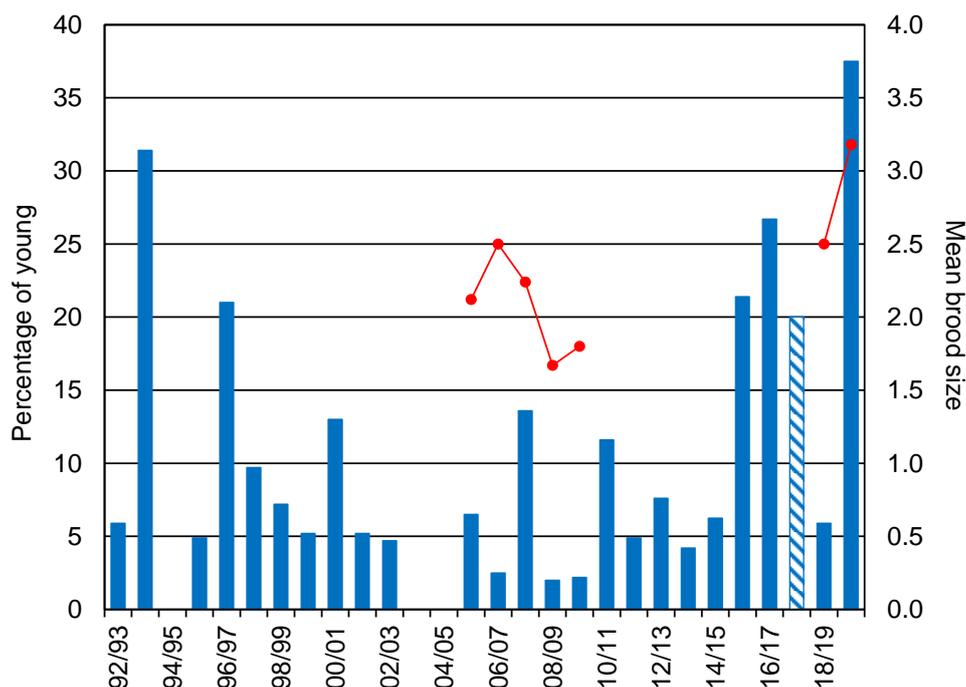


Figure 1. Percentage of young (columns) and mean brood size (line) of East Atlantic Light-bellied Brent Geese made in Britain, 1992/93–2019/20. Note: only a small sample size was assessed in 2017/18 and the data in that year were not thought to be representative; no data were available for 2003/04 or 2004/05; mean brood size data were not available for every year.

3. Discussion

Results from age assessments made of the East Atlantic Light-bellied Brent Goose population suggest that 2019 was the best breeding year on record, for both the birds wintering in Britain (Figure 1) and for the population as a whole (Figure 2).

Combined age assessments from Denmark and Britain resulted in an overall breeding success of 40.1% young and a mean brood size of 3.12 young per successful pair. Across the 40 years of data collation for the whole population, there have only been two other seasons when 30% or more young was recorded: 30.0% in 1985/86 and 33.9% in 1993/94. Similarly, only two other years have seen a mean brood size of over 3.0 young: 3.3 young in 1996/97 and 3.6 young in 2010/11 (Figure 2): the higher percentage of young recorded in 2019 compared with these two earlier years, suggest that more pairs bred successfully in 2019, but with slightly fewer young produced per pair than in 1996 and 2010.

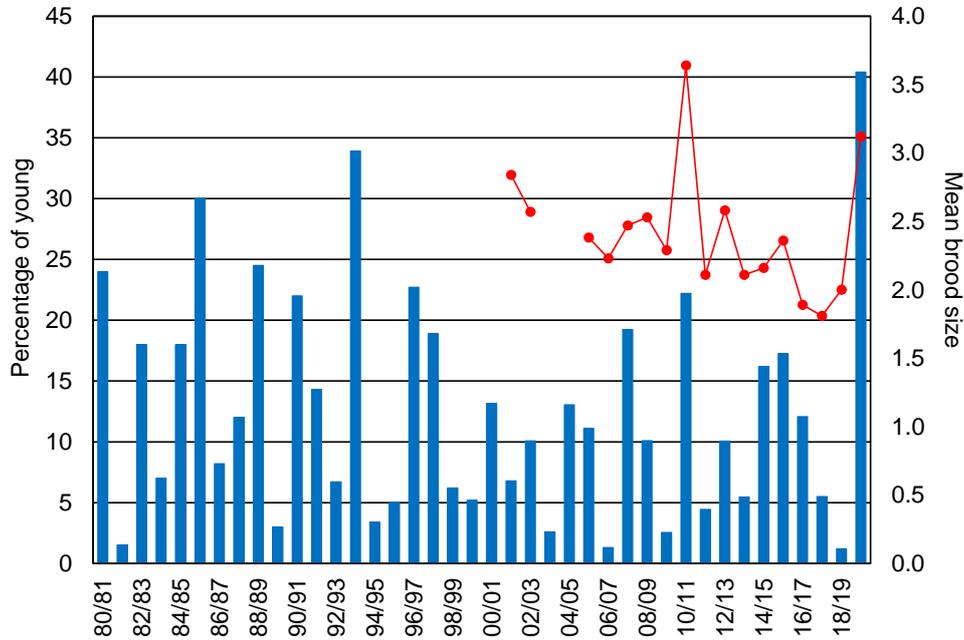


Figure 2. Percentage young (columns) and mean brood size (line) for the East Atlantic Light-bellied Brent Goose population, 1980/81–2019/20 (data provided by Aarhus University).

Whilst data from censuses carried out in winter 2019/2020 are still being processed, early indications suggest that the good breeding success of 2019 has significantly increased the population size. An overall estimate of 13,800 was recorded in the autumn, representing a 42% increase compared to the previous year (9,700) and the highest estimate to date (Figure 3).

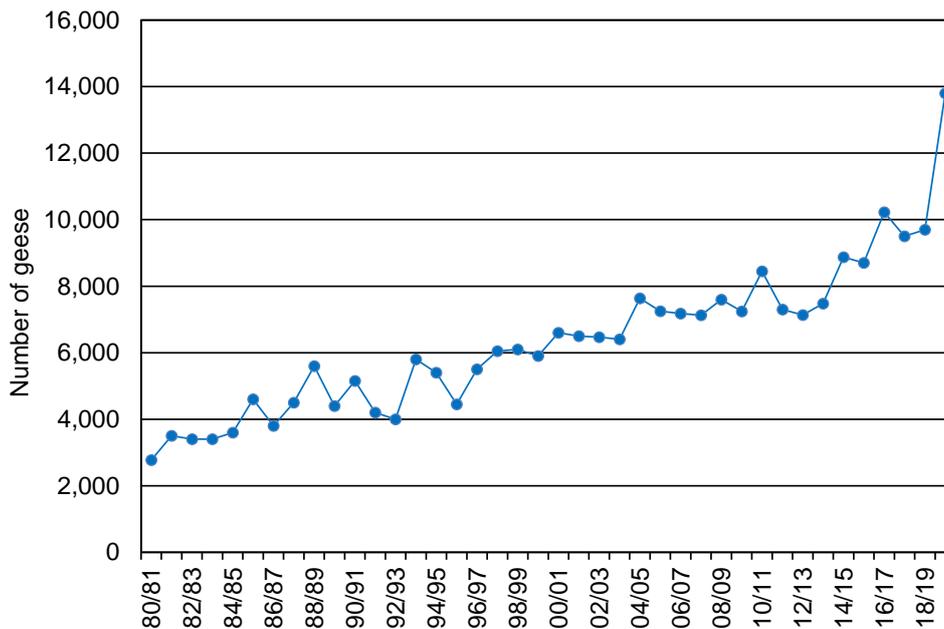


Figure 3. Population estimates for the East Atlantic Light-bellied Brent Goose, 1980/81–2019/20 (Clausen et al. 1998; Clausen & Craggs 2018; unpublished data courtesy of P. Clausen & A. Craggs).

4. Acknowledgements

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5. References

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Goose & Swan Monitoring