

WWT/JNCC/NatureScot Goose & Swan Monitoring Programme survey results 2020/21

Taiga Bean Goose *Anser fabalis fabalis*

1. Abundance

The two regular flocks of Taiga Bean Goose wintering in Britain continued to be monitored during winter 2020/21. Counts were undertaken at the Slamannan Plateau, Falkirk, by the Bean Goose Action Group and at the Yare Valley, Norfolk, by RSPB reserve wardens.

At the Yare Valley, where the number of wintering Bean Geese has been declining for the past 25 years, the peak count in 2020/21 was of only six birds, one fewer than the previous winter and well below the previous ten-year mean (47 birds \pm 12.9 SE, 2010/11–2019/20). The first confirmed sighting was on 25 December 2020 and the six birds were last seen at Cantley on 18 January 2021, emphasising the remarkably short duration in which the birds winter in Norfolk. The presumed same six birds were seen at Calton Marshes, Suffolk on 24 January. The duration the birds spend in Norfolk has shortened, with birds now only recorded in December and January. The long and slow decline in numbers wintering in England continues (there have been fewer than 30 birds at this site since 2015/16) and one wonders when the last birds will spend the winter there.

A peak count of 210 birds was recorded at Slamannan on 28 November 2020, three more birds than the maximum recorded in the previous winter (207) and lower than the previous ten-year mean (238 \pm 5.4 SE, 2010/11–2019/20) (Figure 1). Two Global Positioning System (GPS) tagged birds (see Discussion) left as early as 25 January, whilst others remained until what are now more typical dates of early/mid-February. The number of Bean Geese wintering at Slamannan has declined from a peak of 300 birds counted as recently as 2007/08.

The total count for the two sites in 2020/21 (216 birds) was well below the previous ten-year mean which has declined to 285 birds (\pm 16.5 SE, 2010/11–2019/20) and continues the long and slow decline in numbers wintering in the UK which probably reflects the decline in the overall flyway population or short stopping, or a combination of both.

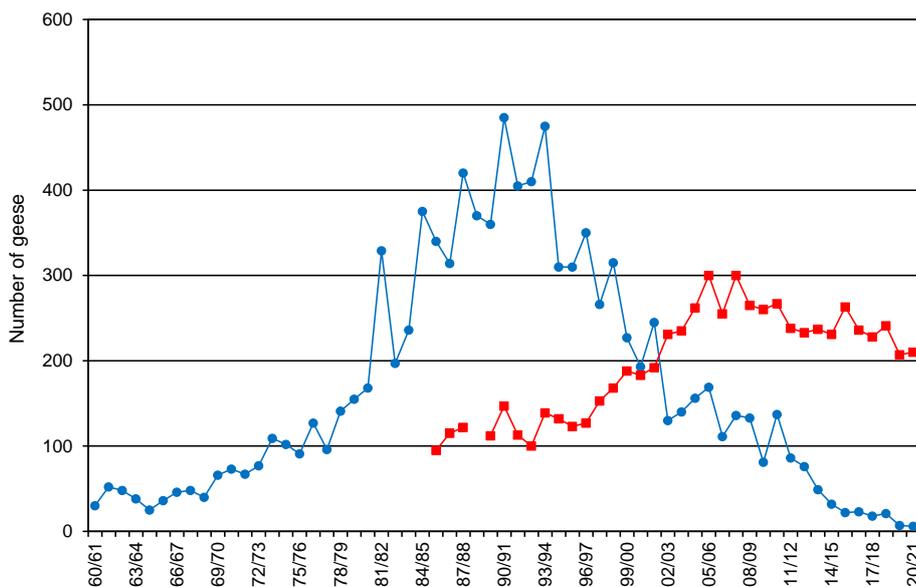


Figure 1. Winter peak counts of Taiga Bean Geese at Slamannan Plateau, Falkirk (red squares) and at Yare Valley, Norfolk (blue circles) from 1960/61–2020/21.

2. Breeding success

Breeding success was estimated from a sample of 167 birds at Slamannan in mid-December 2020: 20 birds were aged as first-winter (12% young), a value slightly lower than the ten-year mean (14.9 ± 3.6 SE, 2010/11–2019/20) and the mean brood size was 1.5 young per successful pair (Figure 2). Breeding success, measured as the percentage of young birds in sample flocks, has been below 10% young in four out of the last seven years, but was over 10% in each of the years from 2004 to 2013.

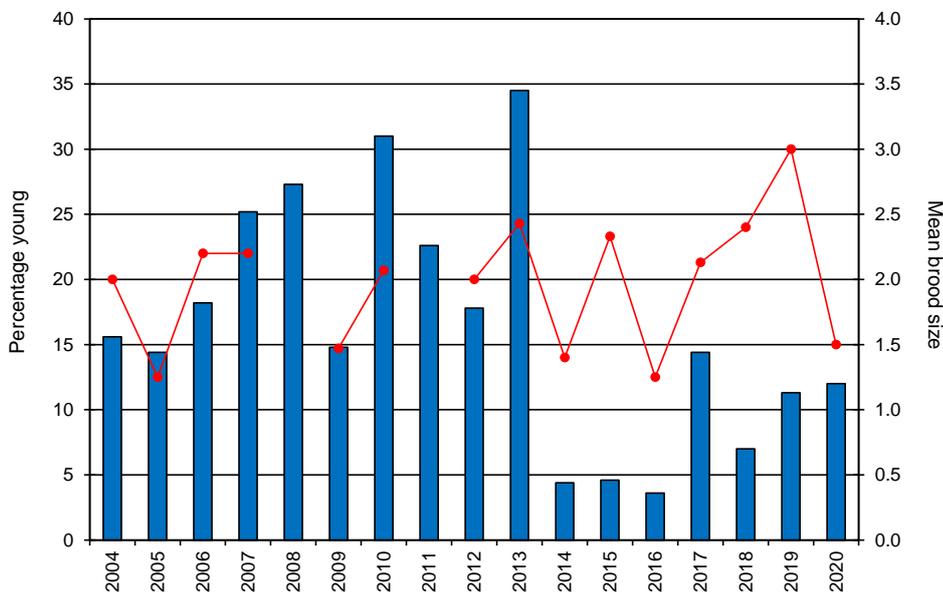


Figure 2. The percentage of young (blue columns) and mean brood size (red line) of Taiga Bean Geese recorded at Slamannan Plateau, 2004–2020.

3. Discussion

Since the peak counts of 300 Bean Geese in 2005/06 and 2007/08, numbers at Slamannan have declined, and the peak count in 2020/21 (210 birds) continues this slow decrease. Breeding success in 2020, as recorded at Slamannan, was just below the ten-year mean.

Numbers at the Yare Valley were, once again, very low in winter 2020/21. The decline has been remarkable, almost 500 birds were recorded there as recently as 1993/94. It is likely that rather than crossing the North Sea to winter in Norfolk, Bean Geese are also 'short-stopping' and wintering in Denmark instead.

Since 2011, a number of Bean Geese from the Slamannan flock have been caught and fitted with GPS tracking devices to help map out their winter quarters, reveal their migration routes and breeding quarters and shed light on the timing of their movements. Six tagged individuals continued to provide location data throughout winter 2020/21 and revealed that two birds, originally caught in Scotland in October 2019, did not return to Slamannan. Instead, they wintered in northwest Denmark. This could be one of two strategies; in winter 2019/20, the pair may have chosen to winter in Scotland for the first time and got caught and tagged, with the pair returning to their normal habit of wintering in Denmark, however, it is more likely that the pair were regular Scottish wintering birds, but in 2020/21 "short-stopped" on the Continent. Links with wintering flocks in Denmark have been hard to determine, but "short-stopping" could offer clues as to why numbers are declining at both sites in Britain.

4. Acknowledgements

Thanks are extended to the Angus Maciver and the RSPB for providing the information above.

This report should be cited as:

WWT. 2021. *Goose & Swan Monitoring Programme: survey results 2020/21 Taiga Bean Goose Anser fabalis fabalis*. WWT/JNCC/NatureScot, Slimbridge.

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This report was produced under the Goose & Swan Monitoring Programme (GSMP). This programme monitors numbers and breeding success of geese and swans in the UK during the non-breeding season. GSMP is organised by the Wildfowl & Wetlands Trust in partnership with the Joint Nature Conservation Committee and NatureScot.



Goose & Swan Monitoring