

WWT/JNCC/SNH Goose & Swan Monitoring Programme

survey results 2014/15

Taiga Bean Goose *Anser fabalis fabalis*

1. Abundance

During winter 2014/15, monitoring of Taiga Bean Goose, was again undertaken at the Slamannan Plateau, Falkirk, by members of the Bean Goose Action Group and at the Yare Valley, Norfolk, by RSPB reserve wardens. A peak count of 231 birds was recorded at Slamannan, lower than the previous ten-year mean (262 ± 7.5 SE) (Figure 1) and continuing the decline in numbers since the peak there of 300 birds in winters 2005/06 and 2007/08. At the Yare Valley, where the number of wintering Bean Geese has been declining since 1993/94, the peak count of 32 geese was lower than in 2013/14, when 49 geese were recorded. The slow decline of this important flock continues and the previous ten year mean has declined to 114 birds (± 12.2 SE).

Arrival at Slamannan was later than normal, with the first three birds arriving on 16 October and the peak count of 231 birds was made on 7 November. Migration back to the spring stop over sites in Denmark took place from mid February. At the Yare Valley, the geese again arrived slightly later than usual. No geese were recorded in October and November and the first birds (32 individuals) were seen on 4 December – the highest count of the winter. The same number was seen on several occasions up to 5 January. Numbers declined thereafter, with two birds remaining until 8 February. The duration of stay of the Yare Valley flock appears to be getting shorter each year. No neck collared birds ringed in Sweden were recorded at the Yare Valley during winter 2014/15.

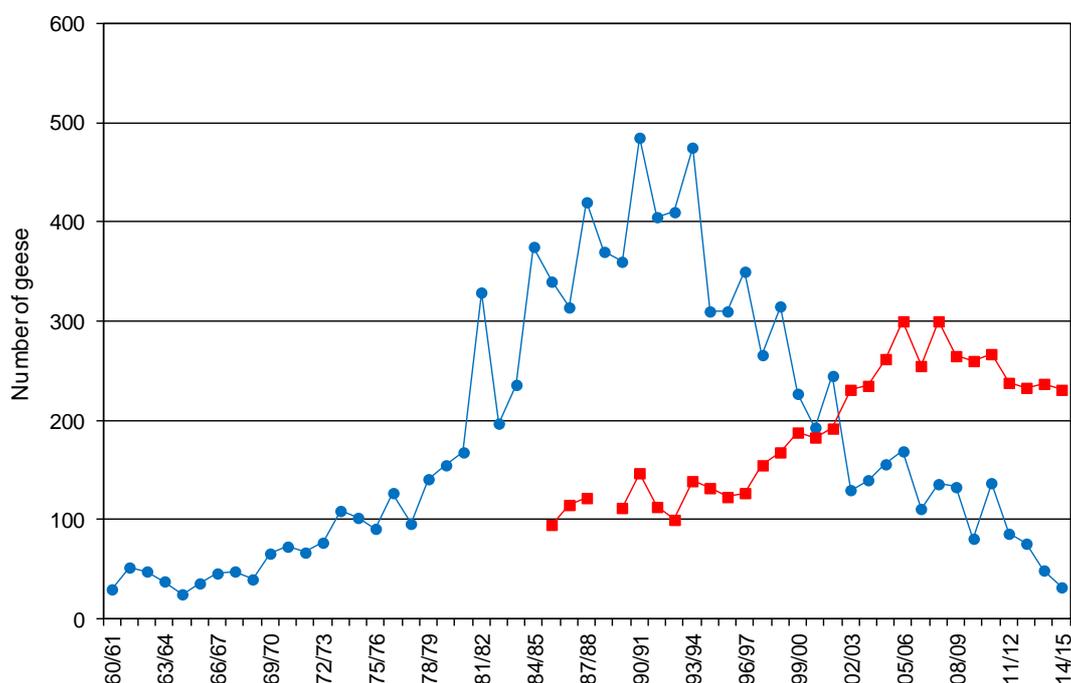


Figure 1. Winter peak counts of Taiga Bean Geese at Slamannan Plateau, Falkirk (red circles) and at Yare Valley, Norfolk (blue line) from 1960/61-2014/15.

Total population counts of Svalbard Barnacle Geese built up rapidly on the Solway Firth with nearly 20,000 present by the start of October 2014. The first arrivals of Barnacle Geese thought to be genuine migrants were recorded at the WWT Caerlaverock reserve on 21 September and there were nearly 8,000 geese present by 25 September.

2. Breeding success

Age assessments at Slamannan indicated that 2014 was a poor breeding year for Taiga Bean Geese wintering in Scotland. A flock of 158 birds was aged on 29 October, of which seven (4.4%) were young birds (Figure 2). Five families were identified with a mean brood size of 1.4 goslings per successful pair. The same seven first winter birds had been identified in an earlier sample of 58 birds aged a week earlier. Had the early count been the only age count carried out at Slamannan, breeding success would have been over-estimated (at 13.2%) and indicates the value of trying to obtain as large a sample of birds aged as possible. Breeding success data were not collected at the Yare Valley.

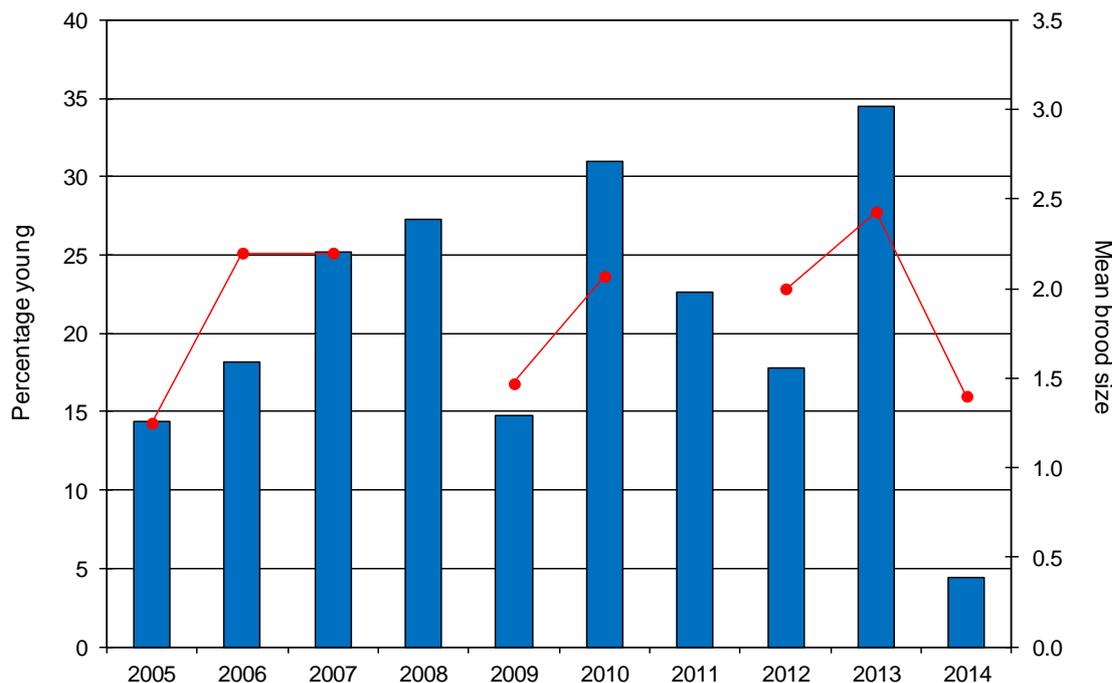


Figure 2. The percentage of young (blue columns) and mean brood size (red line) of Taiga Bean Geese recorded at Slamannan Plateau, 2005-2014.

Migration and site use

One of the five Bean Geese caught in October 2013 at Slamannan and fitted with telemetry equipment enabling the birds' feeding and roosting habits to be studied in detail, continued to collect data during winter 2014/15. This allowed detailed feeding distribution data to be collected for another winter in addition to providing valuable data on roost use. The migration route and stop over sites in northwest Jutland, Denmark and, in the case of this individual, in southern Sweden, were also tracked. We know from the movements of previously marked individuals, the geese move to Dalarna County in west Sweden where it is believed they spent the summer and probably breed.

3. Discussion

Since the peak count of 300 Bean Geese in 2005/06 and 2007/08, numbers at Slamannan have declined to approximately at 200-250 birds, although the peak count in 2014/15 (231 birds) was the lowest since 2002/03. Breeding success in 2014, as recorded at Slamannan, was poor, however, because this flock is <1% of the whole population, this estimate may not be representative of overall breeding success in the population. Bean Geese are not legal quarry in

Scotland and few are probably shot in Sweden, Norway or Denmark. With average or good breeding success recorded at Slamannan in most years since 2004 (Figure 2), it is therefore surprising that the number of geese recorded there has fallen from a peak of 300 in 2007/08 to 200-250 birds currently. There may be unknown sources of mortality affecting this small group, or there may be connectivity between the Scottish winter flock and those wintering on the continent. Based on sightings of colour ringed birds, we know that one of the 33 Bean Geese marked at Slamannan since 2011 has over-wintered on the continent.

Numbers at the Yare Valley continue to decline and the winter 2014/15 count of 32 birds is the lowest since 1964/65. The decline has been remarkable, since over 400 birds were recorded there as recently as 1993/94. We know through sightings of neck collared individuals that the Norfolk flock is separate from the Slamannan flock in Scotland and is linked to wintering flocks in west Denmark. It is likely, therefore that rather than crossing the North Sea to winter in Norfolk, Bean Geese are 'short-stopping' and wintering in Denmark instead. This phenomenon might also help explain why the Slamannan flock is not increasing (see above).

4. Acknowledgements

Thanks are extended to Angus Maciver (Bean Goose Action Group) and Ben Lewis (RSPB) for providing additional information above.

This report should be cited as:

WWT. 2015. Goose & Swan Monitoring Programme: survey results 2014/15 Taiga Bean Goose Anser fabalis fabalis. WWT/JNCC/SNH, Slimbridge.

© Wildfowl & Wetlands Trust

All rights reserved. No part of this document may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without the prior permission of the copyright holder.

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 (on behalf of Natural Resources Wales, Natural England and the Department of Agriculture, Environment and Rural Affairs, Northern Ireland.) and Scottish Natural Heritage.



Goose & Swan Monitoring