

# WWT/JNCC/SNH Goose & Swan Monitoring Programme

## survey results 2010/11

### European White-fronted Goose *Anser albifrons albifrons*

#### 1. Abundance

The abundance of European White-fronted Geese during 2010/11 was monitored through the Wetland Bird Survey (WeBS); the results are expected to become available in 2011. The latest results, for 2009/10, have been published in Holt *et al.* 2011.

#### 2. Breeding success

During the winter of 2010/11, European White-fronted Geese were aged at two localities, WWT Slimbridge, Gloucestershire, and North Warren, Suffolk. In total, 841 geese were aged, the highest number since 2007/08. Overall, the percentage of young present in winter flocks was 25.9%. This represents a 0.3% drop from the previous winter but remained above the mean for UK wintering European White-fronted Geese (2004/05-2010/11; 24.0%  $\pm$  2.66 SE).

The percentage of young differed between the two sites. At North Warren, 414 geese were aged of which 21.7% were first winter birds, while at Slimbridge, 30.0% of the 427 birds aged were young. This was the third highest level of breeding success recorded at Slimbridge; only in 2001/02 (31.4%) and 2005/06 (31.6%) was there a higher proportion of young. The previous 10 year mean for WWT Slimbridge is 20.4%  $\pm$  2.4 SE.

Brood size data were only collected at WWT Slimbridge, and was recorded for a total of 44 families, ranging from one to five goslings. The mean brood size per successful pair was 2.3 goslings, just 0.1 below the previous 10 year mean (2.4  $\pm$  0.2 SE)

The proportion of young and mean brood size of European White-fronted Geese in Britain, 2004/05-2010/11

	No. sites	Total aged	% young	No. broods	Mean brood size
2004/05	10	1,377	27.45	60	2.42
2005/06	6	1,779	34.3	93	3.01
2006/07	4	1,210	16.7	49	1.9
2007/08	8	1,634	24.3	104	1.9
2008/09	2	748	13.2	-	-
2009/10	2	684	26.2	-	-
2010/11	2	841	25.9	44	2.34

### 3. Discussion

One of the main influences on the breeding success of tundra-nesting geese is the cyclical pattern of lemming abundance. Breeding success generally decreases in years of low lemming abundance as a result of predators switching from lemmings to birds. During summer 2010, reports from monitoring stations in the Arctic indicated that numbers of lemmings were low (Soloviev & Tomkovich 2011), yet the percentage of young European White-fronted Geese recorded in the UK was high. However, predator abundance was also low at many Arctic monitoring stations and overall bird breeding success was reported as average for the Arctic region (Soloviev & Tomkovich 2011). Information on the breeding success of European White-fronted Geese wintering outside the UK is not yet available, so it is unclear how the UK data compare with areas supporting a much larger proportion of the population.

### 4. References

- Holt, CA, GE Austin, NA Calbrade, HJ Mellan, C Mitchell, DA Stroud, SR Wotton & AJ Musgrove. 2011. *Waterbirds in the UK 2009/10: The Wetland Bird Survey*. BTO/RSPB/JNCC. Thetford.
- Soloviev, M & P Tomkovich. (Eds.) 2011. *ARCTIC BIRDS: an international breeding conditions survey*. Online database: <http://www.arcticbirds.ru/> Accessed June 2011.

This report should be cited as:

WWT. 2011. *Goose & Swan Monitoring Programme: survey results 2010/11 European White-fronted Goose* *Anser albifrons albifrons*. WWT/JNCC/SNH, 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 (on behalf of Natural Resources Wales, Natural England and the Council for Nature Conservation and the Countryside) and Scottish Natural Heritage.



## Goose & Swan Monitoring