

# WWT/JNCC/SNH Goose & Swan Monitoring Programme

## survey results 2009/10

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

#### 1. Abundance

The abundance of European White-fronted Geese during 2009/10 was monitored through the Wetland Bird Survey (WeBS); the results are expected to become available in 2011.

#### 2. Breeding success

European White-fronted Geese were aged at two localities during winter 2009/10, WWT Slimbridge, Gloucestershire, and North Warren, Suffolk. A total of 684 geese were aged, of which 26.2% were young birds. No brood size data were collected.

Data were collected on one single count during January at both sites. At North Warren the proportion of young was 36.1% from 288 birds aged, while at WWT Slimbridge, 18.9% of 389 birds aged were young.

#### 3. Discussion

The breeding success of European White-fronted Geese wintering in the UK was higher in 2009/10 compared with the three previous years. This is the third highest recorded since 2004/05, when counts were first routinely undertaken at other sites in addition to WWT Slimbridge.

At WWT Slimbridge the proportion of young was also higher than the last three years, although still remained below the ten-year mean (1999/00-2008/09; 20.6%  $\pm$  2.40 SE).

The proportion of young and mean brood size of European White-fronted Geese in Britain, 2004/05-2009/10.

	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	-	-

One of the main influences on the breeding success of tundra-nesting geese is the cyclic pattern of lemming populations. Breeding success generally decreases in years of low lemming abundance as a result of predators switching from lemmings to birds (Blomqvist *et al.* 2002). Reports from monitoring stations in the Arctic indicated that numbers of lemmings were variable during summer 2009, but that overall bird breeding success was generally reported as average (Soloviev & Tomkovich 2010), which may explain the more average percentage of young recorded in Britain during winter 2009/10. However, this is a small sample at the population scale, as so few European White-fronted Geese now winter in the UK, and contrasts with, for example, Dark-bellied Brent Geese, which experienced a poor breeding season.

#### 4. References

Blomqvist, S, N Holmgren, S Åkesson, A Hedenström & J Pettersson. 2002. Indirect effects of lemming cycles on sandpiper dynamics: 50 years of counts from southern Sweden. *Oecologia* 133: 146-158.

Soloviev, M & P Tomkovich. (Eds.) 2010. *ARCTIC BIRDS: an international breeding conditions survey*. Online database: <http://www.arcticbirds.ru/> Accessed 18 May 2010.

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## Goose & Swan Monitoring