

# WWT/JNCC/SNH Goose & Swan Monitoring Programme

## survey results 2007/08

### Greenland/Iceland Pink-footed Goose *Anser brachyrhynchus*

#### 1. Abundance

The 48th consecutive Icelandic-breeding Goose Census took place during autumn and winter 2007, providing information on the abundance and distribution of Greenland/Iceland Pink-footed Geese. In addition to the two usual counts undertaken in October and November, a third count in December (introduced in 2005) was also conducted, although this is primarily as part of a three year trial to re-assess the most suitable time for a complete census of Iceland Greylag Geese.

Counts were conducted by a network of volunteer observers and professional conservation staff over the weekends of 13/14 October, 10/11 November and 8/9 December 2006. Coverage in Britain and Ireland was higher than the preceding year, with 127 sites visited in October, 140 in November, and 138 in December. Outside Britain and Ireland, counts were made at several sites in the Faroe Islands in all three months and an estimate of the maximum number in Iceland in October was also provided. Data were also received from Norway.

Totals of 282,948 Pink-footed Geese were counted in October, 261,504 in November and 196,658 in December. The total numbers counted in October, November and December were 75.3%, 28.7%, and 3.6%, respectively, higher than the counts in the preceding year. After the addition of estimated counts, the peak winter total in October was used to derive a population estimate of 287,563. This represents an increase of 25.0% since 2006/07, when a population size of 230,123 individuals<sup>1</sup> was estimated.

The distribution varied considerably over the three counts (Table 1). East Central Scotland held the greatest numbers of birds in October with higher than average proportions also present in West and East England at this time. Lower concentrations were found in North Scotland and Southwest Scotland/Northwest England. The proportion of birds in Northeast Scotland during October was also lower than usual, with particularly low numbers at the Loch of Strathbeg, although more typical numbers for the region were present during November (22.0%). By November, numbers had decreased in East Central Scotland but had increased substantially in East England. Over half of the population (53.8%) was present in East England in December, whilst numbers in Northeast Scotland and East Central Scotland declined.

<sup>1</sup>Revised population estimate following receipt of additional data since Newth (2007) (IGC reports).

Regional distribution of Pink-footed Geese during October, November and December 2007 (nc = not counted). Regional counts do not include estimated counts for sites where no data were received.

Region	October	November	December
Iceland	2,000	nc	nc
Faroe Islands	7	8	1
Southwest Norway	700	910	nc
Ireland	nc	0	0
North Scotland	977	12,578	4,839
Northeast Scotland	76,520	47,713	26,994
East central Scotland	63,357	42,922	25,307
Southeast Scotland/Northeast England	59,376	37,561	20,059
Southwest Scotland/Northwest England	6,045	1,887	2,822
West England	46,025	38,478	27,908
North Wales	15	31	30
East England	27,926	79,416	88,698
<b>Total counted</b>	<b>282,948</b>	<b>261,504</b>	<b>196,658</b>
Estimated counts	4,615	n/a	n/a
<b>Adjusted total</b>	<b>287,563</b>	<b>261,504</b>	<b>196,658</b>
<b>Population estimate</b>	<b>287,563</b>		

## 2. Breeding success

Between mid September and mid November, a total of 18,835 Pink-footed Geese, in 44 flocks, was aged at various localities throughout Scotland and England. The proportion of the 2007/08 population estimate was 6.6%. The brood size of 263 families was also determined during this period.

Breeding success was slightly above average for the previous decade, with 20.0% young (mean proportion of young 1997-2006: 18.6%,  $\pm$  0.5 s.e.). The mean brood size of successful pairs was 2.27 goslings, which was similar to the mean recorded during the preceding ten years (mean brood size 1997-2006: 2.2,  $\pm$  0.06 s.e.).

There was evidence of modest regional variation in the percentage of young Pink-footed Geese, which varied from 18.9% in East England to 23.6% in West England although the latter was based on a small sample size. Similarly, mean brood size varied from 2.16 goslings in Southeast Scotland to 2.67 recorded in East Central Scotland.

The percentage of young and mean brood size of Pink-footed Goose flocks in autumn 2007.

	Total aged	% young	No. of broods	Mean brood size
North Scotland	96	15.6	na	na
Northeast Scotland	5,055	22.8	60	2.05
East Central Scotland	3,759	20.7	23	2.47
Southeast Scotland	1,217	25.6	na	na
Southwest Scotland	621	23.5	na	na
East England	1,277	24.4	24	1.79
West England	2,453	24.1	na	na
<b>Overall</b>	<b>14,478</b>	<b>22.8</b>	<b>107</b>	<b>2.08</b>

### 3. Discussion

The 2007 Pink-footed Goose population estimate represents a 25.0% increase in the population estimate of Pink-footed Goose since 2006 and appears reasonable since coverage, particularly of the main sites, was good. Despite recent fluctuations in numbers, partly caused by fluctuations in coverage, notably so in 1995 and 2006, the long term population trend is one of continued increase. Breeding success remains fairly stable at c 15-20% (Fig 4a) and is, presumably, more than compensating for annual deaths. Bag statistics from Iceland for autumn 2007 are not yet available, but it is not expected that these were significantly greater than other recent years (c 10,000-15,000 geese). Unfortunately, meaningful bag statistics remain unavailable from Britain and Ireland. This makes interpreting changes in population dynamics all the more complicated.

Pink-footed Geese were early in reaching British shores in autumn 2007. In southwest Lancashire, Derek Forshaw reported an unprecedented early arrival of geese with the first arrivals being recorded on 1st September, 2007. There was a rapid increase in numbers with 10,000 birds roosting at WWT Martin Mere, Lancashire, on 17th September and probably as high as 20,000 geese in the area on 18th September. Despite the early arrivals, up to 2,000 were recorded still in Iceland during the October count. However it is still possible that the count there was likely to underestimate the number present at that time. Coverage remains patchy and this species often remains dispersed in inaccessible areas at this time.

Late departures from Iceland were a feature of the previous year (2006) and peak counts of Pink-footed Geese have occurred in November in three of the past five years (2003, 2005 and 2006), whereas prior to this period, the peak count had only occurred in November on two occasions (in 1990 and 1999). It would appear prudent that coverage of sites for Pink-footed Geese need to be maintained in both October and November due to the varying time of arrival from the breeding grounds.

### 4. References

Newth, JN. 2007. *Status and distribution of Icelandic-breeding geese: results of the 2006 international census*. Wildfowl & Wetlands Trust Report, Slimbridge.

This report should be cited as:

WWT. 2008. *Goose & Swan Monitoring Programme: survey results 2007/08 Greenland/Iceland Pink-footed Goose Anser brachyrhynchus*. WWT/JNCC/SNH, Slimbridge.

© The 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 Council for Nature Conservation and the Countryside) and Scottish Natural Heritage.



## Goose & Swan Monitoring