

A PRELIMINARY ASSESSMENT OF DARK-BELLIED BRENT GOOSE BREEDING SUCCESS, 1988

A report to the Nature Conservancy Council.

By D.G.Salmon, The Wildfowl Trust, Slimbridge, Gloucester, GL2 7BT

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SUMMARY

After two near failures the 1988 breeding season for Dark-bellied Brent Geese appears to have been a success. The early season flocks in Britain contained 25.6% young, and the true figure for the whole population is expected to be 30-40%. The likely numbers in 1988-89 are predicted at 220-260,000 in Europe, based on a total count of 182,000 last winter, and 100-155,000 in Britain.

INTRODUCTION

For the fourth year co-ordinated early autumn age counts of Dark-bellied Brent Geese in Britain were carried out, using volunteer National Wildfowl Count observers and Nature Conservancy Council and Wildfowl Trust staff, under the NCC's contract with the Wildfowl Trust. As usual, observers were asked to note the date, time, locality and habitat for all observations and the sizes of flocks, number aged, total of juveniles and brood sizes.

For ease of analysis the autumn was divided into two distinct periods: up to October 26th and November 19th-30th. This report gives the results for the first period.

RESULTS

The aged samples are summarised overleaf on a site by site basis. For sites with multiple records, allowance has been made for possible repeat counting of individuals, and in most cases the latest representative sample has been taken. A total of 11,127 birds were aged, containing 2,844 young, a proportion of 25.6%. As in the last successful season, 1985, there was enormous regional variation but the Foulness/Leigh area had the lowest proportion of juveniles (only 10.5% in a large sample). As also noted before, the first arrivals at Foulness had even fewer young, with none at all in 183 on September 25th and 111 (7.1%) in 1,563 aged on October 2nd. (Only 113 had been aged elsewhere by the latter date, containing 11.5% young. On October 4th 230 Brent at Scolt Head included 9.6% juveniles.)

Mean brood sizes were more consistent, ranging from 2.1 at Leigh (Essex) to 3.5 at Scolt Head (Norfolk), with an overall mean brood size of 3.2 from 191 families. This compares with a figure of 2.6 in 1985.

The great majority of birds at this early stage of the season were on mudflats, so it has not been possible yet to gauge the usage of different habitats by the geese.

DISCUSSION

Verbal reports from the Continent so far estimating "up to 50%" juveniles in West Germany, 30-35% in the Netherlands and 30% in France (A.St Joseph), together with evidence from previous seasons, suggests that the proportion of young in the whole population is probably appreciably higher than that found in Britain in October. The second period of age counts will provide a better indication, but it seems reasonable to conjecture at this stage that 30-40% of the population comprises juveniles. The total count of Dark-bellied Brent Geese in Europe in January 1988 was 182,000 (A.St Joseph). If average annual mortality of 15% has been experienced and the proportion of young is indeed within the range 30-40%, the likely peak figure for the 1988-89 winter would be 220-260,000, compared with the highest level to date of 205,000 in 1983-84.

The peak number in Britain last season was estimated at 93,000, slightly above the range predicted, but below the 1986-87 level of 97,000. Between 45 and 60% of the European population have reached Britain in recent winters. The likely numbers this season are therefore forecast at 100-155,000, depending on the actual proportion of young and the severity of the Continental winter.

The total count of 182,000 in Europe in January 1988 compares with a prediction of 150,000, based on last year's near breeding failure. This prediction was based on an estimate of 169,000 in Europe in 1986-87. An increase from 169,000 to 182,000 is incompatible with the breeding results and suggests either undercounting in 1986-87 or overcounting in 1987-88, or a combination of the two. The prediction for 1988-89 should be considered against this background.

A report will be produced next month, as usual, reviewing the above estimates in the light of the later age counts.

Age counts of Dark-bellied Brent Geese in Britain up to 26th October 1988

PLACE	DATE OF LAST SAMPLE	TOTAL AGED	NO. YOUNG	%	MEAN BROOD SIZE*	OBSERVER
Humberston Fitties, H'side	17th	139	25	18.0	2.5	DG
Horseshoe Pt, Humberside	22nd	347	154	44.4	2.6	DG, EM
Friskney, Lincs	23rd	483	83	17.2		EM, JW
Wrangle, Lincs	23rd	1,520	367	24.1	3.4	EM, JW
Scolt Head, Norfolk	19th	404	66	16.3	3.5	CC
Wells Harbour, Norfolk	21st	1,050	126	12.0		DH
Orwell, Suffolk	26th	783	321	41.0		MW
Hamford Water, Essex	23rd	886	247	27.9		MH
Foulness/Wakering, Essex	16th	1,746	175	10.0	2.4	RK
Leigh, Essex	16th	1,000	112	11.2	2.1	RK
Medway, Kent	23rd	470	201	42.8		NS
Chichester Hr, Sussex	23rd	795	404	50.8	3.4	CT, JT
Langstone Hr, Hants	23rd	987	422	42.8	3.0	DB, CT, JT
Pennington, Hants	20th	88	22	25.0	2.3	EW
Exe, Devon	15th	362	115	31.8	3.2	AF
OVERALL		11,127	2,844	25.6	3.2	

* where available

OBSERVERS: D.Billett, C.Campbell, A.Fox, D.George, D.Henshilwood, M.Hutchings, R.King, E.Mackrill, N.Symes, C.Tubbs, J.Tubbs, J.Walker, E.Wiseman, M.Wright.