

## **VERIFICATION OF DARK-BELLIED BRENT GOOSE BREEDING SUCCESS, 1988**

A report to the Nature Conservancy Council

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### **SUMMARY**

Sample age counts throughout Britain in November 1988 resulted in an estimate of 34.4% for the proportion of juveniles in the flocks. The prediction for the 1988-89 population size is revised to 240-245,000 in Europe with 109-147,000 in Britain.

### **INTRODUCTION**

This report follows the Preliminary Assessment circulated in November, and gives the results of age counts carried out by volunteer National Wildfowl Count observers and NCC and Wildfowl Trust staff in November 1988.

### **RESULTS AND DISCUSSION**

Table 1 (overleaf) summarises the aged samples for each site. A total of 28,625 birds were aged, containing 9,836 first-winter birds, or 34.4%. This compares with a return of 23.1% (revised in the light of data received late) from the October samples reviewed in the Preliminary Assessment. Such an increase was predicted, and reflects the pattern shown in previous years of families reaching Britain relatively later than non-breeding birds. The regional variation (Table 2) was much less marked than earlier in the autumn, although the south coast (chiefly the Sussex/Hampshire harbours) still had the highest proportion of juveniles. The increase in the percentage of first-winter birds was particularly marked in the Wash, Norfolk and Foulness.

The feeding habitat was specified for a total of 16,615 birds (of which 32.1% were young). The breakdown between habitats was 17.31 Juveniles on intertidal land (n = 1,436), 30.6% on saltings (n = 5,627), 41.0% on grass (n = 6,151) and 24.8% on arable (n = 3,401). The sample on arable land came from just one area (north Kent), so may not be typical of the country as whole. The overall tendency for families to make greater use of inland habitats has been noted in previous years.

The brood size samples showed the same result as in the early autumn, namely an overall mean size of 3.2 (n = 219). The size of families does not therefore appear to have influenced the timing of migration.

The figure of 34.4% lies in the middle of the range of 30-40% estimated in the Preliminary Assessment and compares well with recent undocumented and approximate estimates of 35-40% young in France (R.Maheo) and 40% in the Netherlands (B.Ebbing per A.St.Joseph). The predictions for the total population this winter are narrowed down for Europe as a whole to 240-245,000 (from 220-260,000), and for Britain (where the relative numbers are variable) to 109-147,000 (from 100-155,000)

Table. 1. Aqe counts of Dark-bellied Brent Geese in Britain. November 1988.

PLACE	DATE OF LAST SAMPLE	HABITAT (IF NOTED)	TOTAL AGED	NO. YOUNG	%	AV. BROOD SIZE*	OBSERVER
Humberstone Fitties	28th	S	174	55	31.6		DG
Horseshoe Pt, lines	24th	S	617	238	38.6		"
Donna Nook, Lines	23rd	S	454	126	27.8		JW/EM/CM
Saltfleet, lincs	26th	S	1170	282	24.1		"
Gibraltar Point, Wash	27th	I	46	29	63.0	2.9	RW
Friskney, Wash	19th	S	174	55	31.6		JW/EM/C:M
Wrangle, Wash	19th	S	2880	895	31.1		"
Witham/The Haven, Wash	22nd	S	318	95	29.9	2.5	KH/RH/RSPB
Frampton, Wash	19th		26	12	46.2		JWh
Kirton, Wash	19th		2490	817	32.8	3.2	RL
Holbeach St Matthew, Wash	13th	S	40	7	17.5	2.3	KH/RH
Scolt Head, Norfolk	28th		733	247	33.7	3.4	CC
Holkham/Wells, Norfolk	30th	G	2552	1055	41.3		DH
Ore, Suffolk	24th		16	7	43.8		MW
Orwell, Suffolk	29th		61	33	54.1		"
Hamford Water, Essex	29th		2100	438	20.9	3.4	MH
Nth Blackwater, Essex	13th		5829	2332	40.0		JM
Sth Blackwater, Essex	8th	G	700	316	45.1		RK
Foulness, Essex	27th	G/I	646	189	29.3		"
Hotney Hill, Medway	30th	I	623	261	41.9	2.9	NS
Chetney, Medway	21st	A	580	180	31.0		PH
Swale NNR, Kent	28th	A	2821	663	23.5		"
Chichester Hr, Sussex	26th	G/I	557	167	50.S	3.5	CT/ JT
Langstone Hr, Hants	26th	G/I	1640	778	47.4	3.1	DB
Lepe, Hants	23rd	I	87	24	27.6		JM
Beaulieu Est, Hants	19th	G	238	131	55.0		CT/JT
Lymington Est, Hants	23rd	I/S	208	113	54.3		EW
Oxey Creek, Hants	30th	I	237	90	38.0		"
Keyhaven, Hants	26th	G	440	150	34.0		"
Exe Estuary, Devon	20th		168	51	30.4		DP
TOTAL			28625	9836	34.4	3.2	

I = intertidal; S = saltings; G = grass; A = arable

\* where available

OBSERVERS- D.Billett et al., C.R.Campbell, D.George, K. Heath, D.Henshilwood, P.Holms, M.Hutchings, P. Hyde, R.King, R. Lord, J.Maskey, E. Mackrill, J. Mee et al., C. Morrison, D. Price, N. Symes, C.R.Tubbs, J.M.Tubbs, J. Walker, J. Wheldon, E.Wiseman, M.Wright.

Table 2. Regional breakdown of aged samples, November, 1988.

	TOTAL AGED	NO. YOUNG	% (Oct.)	
Humberside/Lincs	2415	701	29.0 (36.8)	excl. Wash
Wash	5974	1910	32.0 (18.7)	
Norfolk	3285	1302	39.6 (13.2)	excl. Wash
Suffolk/Essex	8706	3126	35.9 (34.0)	excl. Foulness
Foulness	646	1871	29.3 (10.5)	
Kent	4024	1104	27.4 (22.7)	
South coast	3575	1504	42.1 (43.1)	