



## NATIONAL WILDFOWL COUNTS

THE NUMBERS OF DARK-BELLIED BRENT GEESE IN BRITAIN, DECEMBER 1986 AND JANUARY 1987

A report to the Nature Conservancy Council.

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### *Summary*

*Totals of 83,200 and 82,300 Dark-bellied Brent Geese were counted in Britain in December 1986 and January 1987 respectively. Allowing for unrecorded areas, conditions in January having been particularly difficult, the actual numbers present are estimated at 86,500 and 89,200 respectively. Despite a breeding failure in 1986 these figures show only a slight reduction on those for 1985-86, revised in the light of extra data to 90,500 and 89,700 respectively. It has not been possible to obtain figures for the whole European range, and a method of overcoming this in future is suggested.*

### *Introduction*

For the second year running censuses of Dark-bellied Brent Geese were organised by the Wildfowl Trust, under contract to the Nature Conservancy Council, in December and January of 1986-87. The set dates were December 14th and January 18th, to coincide with the monthly National Wildfowl Counts and Birds of Estuaries Enquiry, in which the great majority of observers take part. On some estuaries, tidal conditions for other species were unsuitable on those dates, so the counts were done at other times. Special postcards were used, requesting, as well as the basic numbers, details of the exact limits of the count area, the feeding habitat, weather and any young seen.

### *Weather*

In December it was cold but fine with good visibility in nearly all areas on and around the count date. The heavy snowfall around 13th January disrupted that month's count nearly everywhere, however (except on the Wash, where tidal patterns dictated a 4th January date). Unfortunately conditions were particularly severe in south-east England and East Anglia. The count had to be undertaken about a week later than 18th at many sites, and was not possible at all at Foulness, Goldhanger on the Blackwater or Fingringhoe on the Colne. In many places the foreshore was frozen, neap tides having failed to clear it, but in some areas the snow had partially blown off the fields. On all dates it was dull but visibility was satisfactory.

Table 1 gives the results of the 1986-87 censuses, with the 1985-86 totals, including the previously unavailable data, in brackets. Comparison between sites counted in both 1985-86 and 1986-87, covering c.85% of the birds, suggests reductions of 9% in December and 4% in January. Based on this it is estimated that the uncounted sectors would have held a total of 3,300 Brents in December and 6,900 in January. The actual numbers present in those months are therefore estimated at 86,500 and 89,200 respectively. All known Brent resorts have been allowed for in this calculation, and it is considered highly unlikely that a significant number of extra birds will be revealed by subsequent analyses of the regular monthly data.

A heavy southward movement of Brents was reported in Suffolk and Essex from 9th-11th January, with the onset of very cold weather on the Continent, yet the British total showed only a small increase in the January count. The numbers in Suffolk and north Essex had, however, increased substantially, while those on the south coast had declined, so it appears that birds were "moving through" the south-east, with those leaving the south coast being replaced by slightly more new arrivals in Suffolk and north Essex. It can also be assumed that the usual winter dispersal from Foulness was taking place. In Norfolk the December and January numbers were very similar, although the January count had to be postponed until the 25th because of impassable roads, and it was not possible to trace any movements of Brents in the interim.

A similar regional pattern was shown last year, and appears to be a normal feature of all but the mildest winters. Movements across the North Sea into Britain are not necessarily revealed by the counts. An extra count of all wildfowl arranged on and around 1st February at c.80 sites around the country, including 14 within the Dark-bellied Brent's normal range, provided no evidence of significant movements of that species after mid-January, apart from the presence of small numbers far inland in eastern England in late January and early February. Analysis of the monthly data will show whether a further "net" influx had occurred by mid-February, as last year. If so, thought should perhaps be given to the possibility of a census in February in future.

The estimate of 89,200 in Britain in January 1987 is within the range of 64-96,000 predicted following the breeding failure of last summer, but well above the 77,000 expected given average conditions (Salmon 1986). Westerlies had prevailed for some weeks up to the middle of December yet 86,500 were present even then. Despite the breeding failure the December 1986 and January 1987 numbers in Britain show only a small reduction on those of 1985-86 - below the estimated annual mortality of 15%. The December and January totals in France (per R.Mahéo) were 67,000 and 64,000 respectively, compared with 73,000 and 74,000 in 1985-86 - reductions of 8.2% and 13.5% respectively. The former decrease is similar to that in Britain, but the latter is much greater, supporting the evidence that there was at least a small "net" influx to Britain in the New Year. Unfortunately, however, due to various communication problems it has not yet been possible to obtain counts from other Continental countries for 1986-87, which makes it impossible to comment further on this aspect. It is suggested that, as previously considered, national count

87-9  
76,200 J  
56,800 J  
41,100 J

## Results

In addition to the 82,100 and 83,100 respectively shown in the report of the December 1985 and January 1986 census (Ogilvie 1986), analysis of the regular monthly count data has now revealed a further 8,400 birds in December and 6,600 in January missed by the census. This brings the peak count for 1985-86 to 90,500, in December, only 2,000 below the record of 92,600 in 1982-83. It appears that even more may have been present in mid-February 1986, following several weeks of cold north-easterlies: the total recorded in that month was 75,520, but no count was possible on the Wash, where 12,160 were present in January and 23,070 in March. Sites counted in every month held 15% more in February than in January and 11% more than in March.

Table 1. Numbers of Dark-bellied Brent Geese in Britain, December 1986 and January 1987 (and in brackets December 1985 and January 1986).

	D E C E M B E R		J A N U A R Y	
	1986	(1985)	1987	(1986)
Humber	579+	(2251)	298+	(1500)
The Wash	17619	(14575)	17142	(14538)
Norfolk (excl Wash)	9520	(12592)	9800	(12160)
Minsmere/Alde/Ore	99	(358)	1149	(26)
Deben	691	(325)	801	(392)
Orwell	500	(700)	840	(260)
Stour	824	(583)	2371	(1220)
Hamford Water	2740	(4300)	8000	(4500)
Blackwater/Colne	10835	(7114)	12610+	(11910)
Dengie	980	(505+)	450	(2000)
Crouch	1406	(1696)	5600	(3210)
Foulness-Canvey	7496	(6913)	34+	(1963)
S.Thames	228	(487)	199	(375)
Medway	1817	(2501)	2117	(2659)
Swale	817+	(1517)	876+	(1675)
Rest of Kent	12	(26)	0	(99)
Pagham	1830	(3188)	424	(1735)
Chichester	9229	(11764)	5379	(10361)
Langstone	7753	(7650)	7600	(8646)
Portsmouth	1708	(521)	1966+	(370)
Solent-Isle of Wight	3358+	(4447)	3389+	(5994)
Dorset	1528	(2143)	269	(2176)
Exe	1629	(3729)	874	(968+)
Rest of Devon/Cornwall	15+	(107)	43+	(141)
S.Wales	1+	(511)	1+	(868)
<b>TOTAL (rounded)</b>	<b>83200*</b>	<b>(90500)</b>	<b>82300*</b>	<b>(89700)</b>

+ incomplete count

\* see text for estimate of actual numbers present

organisers in the countries concerned be sent, in conjunction with the IWRB, forms to record their January Brent totals as from 1988.

In Norfolk, 45% of the Brents were on cereal in both months, but the great majority of these were at one site. Elsewhere, counters at 24 sites spread throughout the range recorded the feeding habitat. These encompassed 14,000 birds in December and 26,000 in January, of which 55% and 50% respectively were on cereals. Overall, 51% of the sample were on cereals in December and 49% in January. Field feeding was again reported up to 8km inland. The possibility remains that birds may have been missed inland, particularly as in some areas the foreshore was frozen but the snow had blown off many of the fields, and further efforts will be made to minimise this problem next season.

Only 44 young were found among 40,800 aged in December and eight among 26,300 in January.

#### *Acknowledgments*

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Nearly a hundred observers made the counts on which this report is based, braving extremely difficult conditions to do so. The local organisers also undertook much of the administrative work.

#### *References*

Ogilvie, M.A. 1986. Dark-bellied Brent Goose 1985-6. Numbers in Britain, mid-December 1985 and mid-January 1986. Wildfowl Trust report to NCC.

Salmon, D.G. 1986. Verification of Dark-bellied Brent Goose breeding success, 1986. Wildfowl Trust report to NCC.