



NUMBERS OF DARK-BELLIED BRENT GEESE IN BRITAIN, JANUARY/FEBRUARY 1992

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SUMMARY

Counts of Dark-bellied Brent Geese were undertaken in January and February 1992 at 42 coastal sites in Britain. Peak numbers occurred in January when an estimated 132,000 geese were present, the highest total yet recorded. Many sites held larger numbers in 1992 compared with previous winters. Predictably, the principal concentration was present on the Wash (22,114 in January) and a peak of 17,209 was recorded on the Thames.

INTRODUCTION

The coastline of Britain supports a large wintering population of Dark-bellied Brent Geese *Branta bernicla bernicla* and their numbers have been monitored on a site-by-site basis through the National Waterfowl Counts programme since the late 1940s. To supplement these counts, extra effort has been expended during the last six winters to ensure that as many of the geese are located as is practicable. This has become increasingly necessary as the British population has expanded dramatically over recent decades. Also, as a result of this population growth, flocks now feed regularly inland of the sea-wall, on grasslands and arable crops, thus presenting further difficulties with regards to censusing them.

Preliminary results of counts made in January and February 1992 are presented here, together with data from the previous three winters. The data for the principal sites will be updated when the annual report of the National Waterfowl Counts (NWC) scheme (*e.g.* Kirby *et al.* 1991) is produced at the end of the year. The data are provided by the regular network of volunteers who undertake counts at coastal sites for the NWC and the Birds of Estuaries Enquiry, on behalf of The Wildfowl & Wetlands Trust (WWT) and the British Trust for Ornithology (BTO), respectively.

METHODS

The sites included in this census are the principal sites for Dark-bellied Brent Geese in Britain (see Kirby & Salmon 1990). Most of the 42 included sites are estuaries as listed by Kirby *et al.* (1991). All areas within each site were searched for geese on the specified dates in January (19th) and February (22nd) 1992, or on alternative dates close to these, and adjacent inland areas known to support geese were also checked. At the larger sites, several counters are involved, each visiting pre-defined sectors of the site. Some sectors of the Medway were counted from a boat. The numbers and precise localities of flocks are recorded, together with habitat details and notes on the activity and behaviour of the geese.

WEATHER CONDITIONS

In all four winters, the vast majority of sites were counted on the suggested dates or on alternative dates close to them. Visibility and weather conditions were generally good during these counts, though the counts made in February 1990 were hampered in some areas, by fog and strong winds respectively. The count weekend of February 1991 was particularly cold.

RESULTS

Table 1 shows the numbers of Dark-bellied Brent Geese recorded at each site in January and February 1989-1992, and gives total numbers for Britain in each month/year. The peak count recorded in 1992 was *ca.* 130,000 in January but, due to the incompleteness of the figures from a number of sites (notably Southampton Water), the true total number of geese in Britain was probably around 132,000. This represents the highest total yet recorded during this census. The total number in February 1992 was lower, probably around 123,000.

Major concentrations in 1992 were recorded on the Wash (22,114, January), as expected from previous years, and on the Thames (17,209, January), where the count was unusually high (Table 1). The counts made at numerous sites in 1992 were relatively high compared with previous winters. Of particular note were the totals from the Thames (17,209, January, a 189% increase on the average count for 1989-91), Deben (3,000, February, +189%), NW Solent (4,868, January, +125%), Pagham Harbour (4,750, January, +125%), Burry Inlet (1,360, January, +115%), Taw/Torridge (258, February, +89%), Stour (1,979, February, +88%), Portsmouth Harbour (3,580, February, +74%), Chichester Harbour (11,582, February, +64%), Exe (1,944, February, +61%) and Blackwater (10,137, January, +48%). Conversely, at some estuaries, a reduction in numbers was evident in 1992, for example at the Orwell and The Fleet/Wey in February, and at Brading Harbour in both January and February. On the Crouch/Roach, a marked increase was noted in the January (7,974, +86%) but a decrease in February (2,527, -55%).

Most of the records received were of geese foraging in the intertidal zone, but there was extensive and widespread usage of freshwater marshes, pastures, cereal crops and oilseed rape in some areas.

There are currently 17 British sites that regularly hold Dark-bellied Brents in numbers exceeding the level required for international importance (1,700; see Kirby *et al.* 1991). All apart from the Exe appear in Table 2 under internationally important sites. Five additional sites, including the tiny Newtown Estuary, hold numbers which would make them of national importance for this sub-species.

DISCUSSION

In autumn 1991, 63,030 Dark-bellied Brent Geese were aged at various localities on the British coast and 31.2% were juveniles, thus revealing a high level of breeding success for the population in summer 1991 (Kirby 1992). Thus, the numbers counted in midwinter were expected to be high. The January total, of around 132,000, represents 43-50% of the current estimate for the world population of the sub-species (260-300,000, A. St. Joseph & J. Madsen, in litt.).

Disturbance, both deliberate and incidental, was reported on some intertidal feeding sites, and this appears to have forced the birds to feed inland. In contrast, scaring on the coast at Chichester Harbour did not cause the birds to move inland. On pastures close to the Swale, model aircraft were reported to be causing disturbance to roosting birds, a technique which has been adopted to move Light Bellied Brent Geese *B. b. hrota* off farmland and onto areas managed for geese at the Wexford Slobs in Ireland.

There is continuing conflict between geese and local farmers. Farmers in the vicinity of Chichester Harbour and the Yar (Isle of Wight) claimed that the geese were competing with livestock for grazing pastures. A variety of scaring techniques are being adopted, but these are not without problems. For example, gas-guns are widely used around Hamford Water, but there are reports that these are causing excessive disturbance to other waterfowl species using the site. These scaring regimes increase the mobility of the geese, and this in turn presumably influences our ability to obtain accurate counts at some sites.

The proposed Essex Coast Environmentally Sensitive Area could go a long way to solving the problems in the main area of conflict, provided the ESA prescriptions are drawn up for the benefit of the geese and are reasonably flexible.

REFERENCES

- Kirby, J.S. 1992. An assessment of breeding success in the Dark-bellied Brent Goose in 1991. Report to JNCC, The Wildfowl & Wetlands Trust, Slimbridge, 7pp.
- Kirby, J.S. & Salmon, D.G. 1990. Numbers of Dark-bellied Brent Geese in Britain, midwinter 1989/90. Report to NCC, The Wildfowl & Wetlands Trust, Slimbridge, 7pp.
- Kirby, J.S., Ferns, J.R., Waters, R.J. & Prys-Jones, R.P. 1991. *Wildfowl and Wader Counts 1990-91*. The Wildfowl & Wetlands Trust, Slimbridge.

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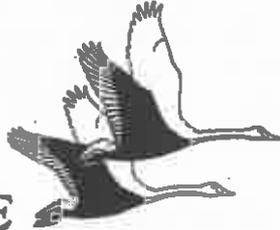
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Table 1. Numbers of Dark-bellied Brent Geese at coastal sites in Britain in January/February 1989-1992. Sites are presented in geographical order starting in North Devon and working anti-clockwise around the coast. A cross indicates that there was no count available in that month. Counts considered to be very incomplete are given in brackets.

COUNT DATES	JANUARY				FEBRUARY			
	1989	1990	1991	1992	1989	1990	1991	1992
	15	14	20	19	12	11	17	22
Taw/Torridge	208	160	203	286	190	86	133	258
Kingsbridge	27	24	29	65	17	20	29	65
Exe	1166	867	1297	1304	1147	944	1526	1944
Otter	15	0	6	3	3	9	0	0
The Fleet/Wey	685	850	942	979	17	105	735	232
Poole Hbr	533	x	1512	1381	636	(291)	868	1099
Christchurch Hbr	188	137	231	259	209	172	253	291
NW Solent	1680	2127	2662	4868	2400	1645	3335	3240
Beaulieu	1140	680	650	915	980	920	740	1030
Southampton	2486	(2150)	(795)	(423)	1449	(2183)	(905)	(774)
Yar	305	134	75	236	190	105	1200	98
Newtown	1238	1117	1218	1213	1289	940	1125	1163
Medina	57	51	33	45	57	31	67	42
Brading Hbr	68	189	1215	214	20	200	1245	260
Foreland	86	x	x	x	84	x	x	x
Portsmouth Hbr	1748	2567	2659	3427	1741	2063	2350	3580
Langstone Hbr	7113	7821	4977	7360	5040	5046	4455	7860
Chichester Hbr	10473	9484	6685	11355	9660	4664	6849	11582
Pagham Hbr	2476	2755	1081	4750	2965	476	2370	3669
Rye/Pett	17	6	x	x	0	0	x	x
Pegwell Bay	49	x	x	6	80	x	x	0
Thanet	x	x	x	x	x	x	x	x
Swale	(1578)	2339	(1132)	1890	(1184)	775	1415	2101
Medway	(1921)	2610	(1071)	2925	(3093)	2805	(1130)	(1956)
Thames	5728	6062	6028	17209	7302	5400	12419	14815
Crouch/Roach	3755	2870	6186	7974	5333	3109	8388	2527
Dengle	2455	1540	1280	1630	1500	1900	1830	2050
Blackwater	6605	5726	8114	10137	6172	6370	6212	8067
Colne	5494	2993	3507	4591	5348	2745	4924	6705
Hamford Water	3942	x	3479	3750	1265	x	6889	4008
Stour	1351	961	1228	1840	946	1252	948	1979
Orwell	224	20	309	900	610	117	1090	312
Deben	797	900	2051	1600	1002	1500	605	3000
Alde complex	457	79	217	299	103	65	826	367
Breydon Water	0	5	0	28	10	5	30	1
N Norfolk	12711	6187	10685	10214	10300	8350	11889	12502
Wash	24396	19309	19842	22114	22197	18218	20150	20425
Humber	236	1631	2724	2607	478	1278	1810	1927
Tees	0	1	0	0	0	1	1	0
Lindisfarne	0	40	x	20	0	12	x	1
Burry Inlet	885	394	617	1360	785	661	630	1017
Bridgwater Bay	x	x	x	0	0	x	x	7
TOTALS	104293	84786	94440	130177	95802	74463	109371	120954

Table 2. Principal sites for Dark-bellied Brent Geese in Britain. The sites are ranked according to average January/February maxima, 1989-1992. For information concerning national and international importance see Kirby *et al.* (1991). Note that in calculating average maxima for each site, incomplete counts were only used if they exceeded an initial average based on complete counts only, thus making maximum use of the available data.

Internationally Important numbers		Nationally Important numbers	
Wash	21,492	Stour	1,452
N Norfolk	11,363	Exe	1,395
Thames	10,748	Newtown	1,209
Chichester Hbr	9,597	Poole Harbour	1,176
Blackwater	7,806	Burry Inlet	884
Langstone Hbr	6,943		
Crouch	6,201		
Colne	5,029	Best of the remaining sites	
Hamford Water	4,946	Beaulieu	957
Pagham Hbr	3,210	The Fleet/Wey	864
NW Solent	3,182	Orwell	679
Medway	2,941	Yar	469
Portsmouth Hbr	2,638	Brading Harbour	443
Southampton	2,486	Alde complex	432
Dengie	2,058	Christchurch Harbour	231
Swale	1,951		
Deben	1,888		
Humber	1,860		



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