

NUMBERS OF DARK-BELLIED BRENT GEESE IN BRITAIN, JANUARY/FEBRUARY 1993

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SUMMARY

Counts of Dark-bellied Brent Geese were undertaken in January and February 1993 at 42 coastal sites in Britain. Peak numbers were recorded in January, with just under 103,000 birds. This is a considerable decrease compared with 1992, and was to be expected following the breeding failure in 1992. The January total represents 41% of the world population. Numbers at individual sites were generally lower than in 1992, although several exceeded their respective five year averages due to local shifts in distribution.

INTRODUCTION

The coastline of Britain supports a large number of wintering Dark-bellied Brent Geese *Branta bernicla bernicla*. Numbers have been monitored on a site-by-site basis by the National Waterfowl Counts programme since the late 1940s. However, as the population has grown in recent years, geese have also ventured inland to feed on arable crops and grass. Since the winter of 1986-87, extra effort has been expended to locate these birds during the months of January and February in each year, corresponding with the peak numbers of Dark-bellied Brents in Britain. Consequently, supplementary counts of birds away from the principal coastal resorts have been made, and it is thought that the survey represents a relatively complete count for Britain.

This report presents the preliminary results of counts made in January and February 1993, although the figures will be updated when the annual report of the National Waterfowl Counts (NWC) scheme is published at the end of the year. Data are provided by the network of regular volunteers who undertake counts at coastal sites for the NWC and the Birds of Estuaries Enquiry (BoEE), on behalf of The Wildfowl & Wetlands Trust (WWT) and the British Trust for Ornithology (BTO), respectively.

METHODS

This census focuses on the principal sites for Dark-bellied Brent Geese in Britain, and nearly all of the 43 sites included are classified as estuaries in Cranswick *et al.* (1992). Most counts are conducted at the same time as the monthly BoEE/NWC counts for January and February. However, at some sites, coverage is extended to include additional areas to those searched during the regular monthly counts with the aim of recording birds feeding inland. Observations made at large sites, which require more than one counter, are generally made synchronously to avoid birds being missed or double-counted. However, the date of the count may vary between sites to coincide with the optimum local tidal conditions for recording waterfowl. All counts are made within one week of the recommended dates. In addition, habitat and behavioural data are also collected for each count area. The population size was calculated by summing site totals in each month. Possible duplication as a result of counts made on different dates is thought to be negligible.

WEATHER AND CONDITIONS

As with the last four winters, count conditions in 1993 were generally good and there were no reports of factors having adversely affected counts.

RESULTS

The numbers of Dark-bellied Brents at each of the principal British sites are given in Table 1. The peak total count was 102,645 birds in January, although, because of incomplete counts at two sites and missing data from a third, it is probable that the real number was at least 104,000. The count in February was lower (97,397), although the true figure is likely to be nearer 99,000.

The highest site count, as last year, was made on the Wash (19,147 in Jan). The Blackwater, Chichester Harbour and the North Norfolk Marshes also all held in excess of 10,000 birds in January. Numbers on the Thames in January were much reduced compared with 1992, although the February count was about average.

Despite the relatively low national total, numbers at several sites greatly exceeded their respective five-year averages. Excluding sites which hold fewer than 200 birds, the largest increases were on the Swale (+111% in Jan), the Orwell (+104% in Jan), the Beaulieu (+101% in Feb), the Blackwater (+45% in Jan), the Colne (+40% in Jan), Newtown (+35% in Feb) and the Medway (+34% in Jan). A larger number of sites showed marked decreases compared with their five-year means, namely Brading Harbour (-94%), the Fleet/Wey (-90% in Jan), Pagham Harbour (-89% in Jan), the Dengie (-78% in Jan), the Humber (-55% in Feb), the Yar (-55% in Feb), the Deben (-50% in Feb) and the Crouch/Roach (-44% in Feb). The January count on the Thames was 60% lower than average. Although the count at this site is an underestimate, data were received from the majority of the principal areas within the estuary and it appears likely that there was a real decrease in the number of birds in comparison with previous years.

Based solely on the five year-means from either January or February, 16 sites support internationally important concentrations of Dark-bellied Brent Geese (1,700 birds). However, more sites may qualify as internationally important when counts from all months are taken into consideration and these will be given in *Wildfowl and Wader Counts* at the end of the year.

Table 1. Numbers of Dark-bellied Brent Geese at principal sites in Britain in January and February 1993. Counts made in 1991 and 1992 are also given, as well as the five-year mean (FYM) for each month. Sites are presented in geographical order, starting in North Devon and working anti-clockwise around the coast. A cross (x) indicates that no data are available. Counts considered to be very incomplete are given in brackets. Channel Isles birds have not been included in the totals.

	JANUARY				FEBRUARY			
	1991	1992	1993	FYM	1991	1992	1993	FYM
Taw/Torridge	203	304	87	192	133	264	183	171
Kingsbridge	29	65	43	38	29	65	43	35
Exe	1297	1304	1533	1233	1526	1944	1582	1429
Otter	6	3	10	7	0	0	10	4
The Fleet/Wey	942	979	69	705	735	232	174	253
Poole Hbr	1512	1381	1273	1175	868	1711	949	1041
Christchurch Hbr	231	310	270	227	253	278	282	239
NW Solent	2662	4868	3054	2878	3335	3240	2000	2524
Beaulieu	650	915	1780	1033	740	1030	2478	1230
Southampton	(795)	(2033)	(660)	2486	(905)	(2752)	(670)	2100
Yar	75	240	178	186	1200	93	156	349
Newtown	1218	1213	1742	1306	1125	1163	1664	1236
Medina	33	48	83	54	67	42	94	58
Brading Hbr	1215	214	21	341	1245	260	315	408
Foreland	x	x	100	93	x	x	100	92
Portsmouth Hbr	2659	3427	2557	2592	2350	3580	2544	2456
Langstone Hbr	4977	7357	5210	6496	4455	7860	5140	5508
Chichester Hbr	6685	10655	11099	9679	6849	11582	10096	8570
Pagham Hbr	1081	4750	243	2261	2370	3669	1209	2138
Rye/Pett	x	0	6	8	x	10	4	4
Pegwell Bay	x	6	7	21	x	0	0	27
Thanet	x	x	440	440	x	x	280	280
Swale	(1132)	1787	5008	2369	1415	2101	3027	1700
Medway	(1071)	4484	3706	2758	(1130)	(3092)	3050	2634
Thames	6028	17211	(3050)	7616	12419	8606	8500	8445
Crouch/Roach	6186	7978	2667	4691	8388	2527	2444	4360
Dengie	1280	1630	320	1445	1830	2050	2032	1862
Blackwater	8114	10137	12500	8616	6212	11130	7111	7399
Colne	3507	4591	6453	4608	4924	6705	4866	4918
Hamford Water	3479	3750	3695	3717	6889	4008	3061	3806
Stour	1228	1840	1351	1346	948	1980	1501	1325
Orwell	309	900	1001	491	1090	312	1169	660
Deben	2051	1600	1259	1321	605	3000	673	1356
Alde complex	217	299	x	263	826	367	x	340
Breydon Water	0	7	37	10	30	1	12	12
North Norfolk	10685	9990	10142	9943	11889	11128	9391	10212
Wash	19842	27742	19147	22087	20150	27239	19113	21383
Humber	2724	2626	1081	1660	1810	2027	566	1232
Tees	0	0	1	<1	1	0	1	<1
Lindisfarne	x	20	25	28	x	0	18	8
Burry Inlet	617	1525	835	851	630	1017	989	816
Bridgwater Bay	x	0	2	1	x	7	-	4
Channel Islands	x	x	2421	2421	x	x	7833	7833
TOTALS	94440	138189	102645	105432	109371	127072	97397	101205

DISCUSSION

Following an almost complete breeding failure in 1992 (Cranswick 1993), a low total count of Dark-bellied Brents was expected in the following winter. This was indeed the case, with 35,544 fewer birds recorded in 1993 compared with the 1992 peak. The January total represents 41% of the estimated 260,000 world population, falling just within the normal range of the proportion that visits Britain (40% to 60%, Salmon & Fox 1991), and is only slightly less than the proportion in Britain in the previous winter (45%). Since a larger proportion of the population might be expected to visit Britain when the population is high, having spilled over from continental feeding areas, these figures suggest that there were less favourable conditions for Dark-bellied Brents in Europe in 1992-93 than in 1991-92.

Although numbers at individual sites were generally lower than in 1992, counts at several sites greatly exceeded their five year average. In most cases, these appear to relate to local shifts in distribution. Although probably an underestimate, the low number on the Thames in January was mirrored by low counts on the adjacent Crouch/Roach and Dengie estuaries. Conversely, numbers on the outer part of the "Greater Thames" were much higher than normal, with large increases on the Swale, the Medway, the Blackwater and the Colne. Similarly, decreases at Pagham and Langstone Harbours were compensated by the increase at Chichester. However, despite the numbers at the last site, far fewer birds were located on adjacent inland, arable feeding areas.

REFERENCES

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