

NATIONAL WILDFOWL COUNTS

SPRING COUNTS OF PINK-FOOTED AND GREYLAG GEESE IN BRITAIN, 1990

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SUMMARY

The ninth in the current phase of spring counts of Pink-footed and Greylag Geese in Britain took place over the weekend of 31 March/1 April 1990. The total numbers of both Pink-feet (ca. 122,000) and Greylags (ca. 64,000) recorded were the highest on record for any spring census, and represented 67% and 77%, respectively, of the numbers that had been counted in the previous November. The majority of the Pink-feet were in north-east, central and south-west Scotland, with the proportion of the count in most regions being relatively consistent with that recorded in previous spring surveys. Greylags were widely spread and the highest numbers occurred in Orkney, throughout most of north-east, central and south-west Scotland, and in Northumberland. Their gross distribution across the country appeared more variable from year to year than that of Pink-feet. The Slains Lochs/Ythan Estuary site is of outstanding importance for Pink-feet in the spring.

INTRODUCTION AND METHODS

National spring censuses of Pink-footed Anser brachyrhynchus and Greylag Geese Anser anser were first attempted in Britain in the early 1960s, organized by The Wildfowl & Wetlands Trust (WWT). The principal objective was to assess how each population had fared during the previous winter months. However, it proved too difficult to achieve adequate coverage of all spring goose resorts, and consequently these censuses were abandoned in 1967. Fifteen years later, in 1982, the spring goose census was revitalised, fuelled by a requirement for detailed information on the distribution of geese and their likely impact on agriculture at this time. Here we summarise the results of the ninth in the current phase of spring counts of Pink-footed and Greylag Geese in Britain, and make some comparisons with counts made during recent springs. A more comprehensive analysis of spring goose counts is underway and will be reported at a later date.

As in all previous censuses, the majority of the counts were undertaken by volunteers, mainly over the weekend of 31 March/1 April. These were supplemented with our own counts, made over the first week of April, throughout parts of northern and eastern Scotland. These supplementary observations were useful: they provided repeat counts of roosting flocks and numerous records of birds at feeding sites. However, relatively few geese were located that had not already been counted by the volunteer network. Where this was in fact the case, we have included these counts to ensure that the census reported here is as complete as possible.

The weather over the count weekend was dull, overcast, cold and windy throughout most of the country. There was patchy fog in places which hampered the counts made in the Western Isles, and in parts of north-east, central and south-west Scotland.

RESULTS AND DISCUSSION

Total numbers

The total number of each species recorded in 1990 is shown in Tables 1 & 2, together with the totals from the 1988 and 1989. Only the two most recent counts are directly comparable in view of census dates. The mid-March census of 1988 was incomplete, especially for Pink-feet, and the mid-April count was considered to be too late for Greylags as many had departed for Iceland by that time (Salmon 1988). The timing of the last two counts, in late March/early April, would seem to be about right, producing sufficient numbers of both species for the census to be worthwhile.

The total numbers of both Pink-feet (ca. 122,000) and Greylags (ca. 64,000) recorded in 1990 were the highest on record for the spring censuses, despite a relatively poor count of the Moray Basin and the Solway. For the Pink-footed Goose, the total was approximately 67% of the numbers counted in November 1989. The equivalent figures were 66% for 1988/89 and 67% for 1987/88 (using the mid-April count in this season). Thus approximately one-third fewer Pink-feet were counted in all three of the recent spring censuses than in the preceding November; a remarkably consistent pattern given the difficulties in achieving a comprehensive spring census at all! For the Greylag, the spring count of 1990 represents 77% of the numbers counted in the preceding November, though that census was known to be particularly incomplete for this species (Kirby & Salmon 1990). The equivalent values for 1988/89 and 1987/88 (using the March count in that season) were 48% and 50%, respectively, and are again consistent for these two springs. These results suggest that approximately 30% of the Pink-footed Goose population, and perhaps 50% of the Greylag population, is missed by the spring census. The "missing" birds may be frequenting sites that are not currently counted or may have left the country by the date of the April census. The fact that a higher proportion of Greylags than Pink-feet are "missing" could be consistent with either hypothesis, since the Greylag population is thought to fragment the most in spring, and also to depart for the breeding grounds earlier.

Regional distribution

Tables 1 & 2 provide a regional breakdown of the census results, and Table 3 shows the proportion of the total count present in each of six larger regions. Only small numbers of Pink-feet frequent the far north of Scotland or south-east/eastern England at this time, and only 1,000 or so remain in Lancashire (Table 1). The majority are found in north-east, central and south-west Scotland (Table 3), with the numbers in Moray, Banff & Buchan, Gordon, Perth & Kinross and Wigtown being consistently high, and relatively stable, in the last two or three springs. Numbers on the Solway and the Moray Basin (Ross & Cromarty, Inverness and Nairn) were relatively low in 1990 (Table 1), where the counts were badly affected by mist and fog. Counts in the Borders, though incomplete, revealed much higher numbers in 1990 than in the April censuses of 1988 and 1989. The proportion of the total number of Pink-feet counted in spring that is found in each of northern and north-eastern Scotland, south-

west Scotland/north-west England and eastern England has been remarkably constant for the last three April censuses (Table 3). In contrast, the proportion found in east central Scotland and south-east Scotland has varied somewhat between years.

In most regions the number of Greylags counted in 1990 was similar to that counted in the previous year, and relatively high counts were made in Orkney, throughout most of the north-east, central and south-west Scotland, and in Northumberland (Table 2). The counts made in Gordon and Perth & Kinross were very much higher in 1990 than in previous years. The gross distribution of Greylags appears to be more variable from year to year than is the case for Pink-feet, even when comparing only the last two censuses (Table 3). A very high proportion of the remaining Greylags in mid-April 1988 (totalling just over 19,000) were situated in northern Scotland.

Principal sites

Any site regularly supporting over 1,100 Pink-feet or Greylags can be regarded as Internationally Important. All sites exceeding this level in the spring are shown in Tables 4 & 5, for Pink-feet and Greylags respectively. The number of Pink-feet counted at the Slains Lochs/Ythan Estuary site on 31 March 1990 was remarkable (representing about 25% of the total number counted in Britain), and further counts on 2 and 6 April produced totals of 28,800 and 16,800 at Meikle Loch alone (pers. obs.). The Slains Lochs/Ythan Estuary site and the Loch of Strathbeg, Westwater Reservoir and Wigtown Bay represent key areas for Pink-feet in the spring. Greylags are more evenly distributed between the key sites (Table 5) than are Pink-feet with Findhorn Bay representing the most important spring site for them.

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Table 1. Numbers of Pink-footed Geese counted in each region of Britain in March/April 1988-1990.

	mid- March 1988	mid- April 1988	early April 1989	early April 1990
Shetland	0	0	0	1
Orkney	0	0	0	15
Western Isles	0	0	0	0
Caithness	10	60	16	407
Ross & Cromarty	429	8,954	7,049	2,060
Inverness	0	5,950	2,552	3,260
Nairn	0	0	0	429
Badenoch & Strathspey	0	0	0	5
Moray	60	3,461	10,590	6,359
Banff & Buchan	8,500	22,300	15,400	17,100
Gordon	10,400	21,700	21,000	30,300
Kincardine & Dee	750	650	4,500	400
Angus	4,500	6,100	12,500	5,757
Perth & Kinross	15,700	11,600	16,300	17,370
Central Fife	2,100 4,000	3,600 54	6,100 280	1,885 3,000
Argyll & Bute	3	0	2	7
Cunninghame	-	-	0	0
Glasgow area	0	0	-	0
Clydesdale	800	160	400	1,360
Wigtown	7,000	7,000	10,700	9,000
Stewartry	6	0	9	22
Nithsdale	1,625	786	1,775	2,276
Annandale/Eskdale*	10,700	4,861	-	500
Lothians	2,900	9,300	3,500	8,211
Borders	10,900	6,900	210	11,000
Northumberland	1	0	7	1
Cumbria	4	0	0	56
Lancashire	4,600	1,100	1,300	1,000
Humberside	435	0	0	-
Lincolnshire	0	0	0	0
Norfolk	475	0	0	10
GRAND TOTALS:	85,898	114,536	114,190	121,791

* includes the Solway Firth.

Table 2. Numbers of Greylag Geese counted in each region of Britain in March/April 1988-1990.

	mid- March 1988	mid- April 1988	early April 1989	early April 1990
Shetland	0	0	55	11
Orkney	2,100	300	2,100	2,676
Western Isles	0	0	175	188
Caithness	5,000	4,100	2,800	2,958
Ross & Cromarty	1,554	2,605	4,622	1,012
Inverness	0	739	1,786	1,880
Nairn	0	0	0	1,190
Badenoch & Strathspey	418	3	1,286	1,247
Moray	6,200	5,806	11,848	7,594
Banff & Buchan	2,800	400	6,600	4,450
Gordon	3,500	240	2,300	12,658
Kincardine & Dee	2,600	950	650	1,000
Angus	470	490	1,700	1,181
Perth & Kinross	7,900	1,500	5,100	10,281
Central Fife	200 320	1 30	0 1,700	90 3,020
Argyll & Bute	3,859	562	2,642	1,665
Cunninghame	-	-	220	407
Glasgow area	1,237	55	1,455	1,119
Clydesdale	830	0	0	634
Wigtown	3,878	1,228	654	2,618
Stewartry	1,493	15	1,277	2,689
Nithsdale	3,829	69	525	97
Annandale/Eskdale*	0	0	-	7
Lothians	540	50	700	734
Borders	3	0	850	-
Northumberland	3,500	2	1,800+	2,196
Cumbria	600	300	566	748
Lancashire	0	0	0	0
Humberside	0	0	0	-
Lincolnshire	0	0	0	0
Norfolk	0	0	0	24
GRAND TOTALS:	52,831	19,445	53,411	64,374

* includes the Solway Firth

Table 3. Regional distribution of Pink-footed and Greylag Geese counted in the springs of 1988, 1989 and 1990. Values represent proportions (%) of the grand totals counted. The regions used follow those of Salmon (1989).

	PINK-FEET				GREYLAG			
	Mar. 1988	Apr. 1988	Apr. 1989	Apr. 1990	Mar. 1988	Apr. 1988	Apr. 1989	Apr. 1990
N. Scotland	0.6	16.1	17.7	10.3	13.7	69.7	48.7	29.1
N.E. Scotland	22.7	39.0	35.8	39.3	32.8	8.2	18.9	28.1
E. central Scotland	30.9	18.5	30.8	23.0	17.1	10.2	16.8	22.6
S.E. Scotland	16.2	14.1	3.2	15.7	0.1	0.3	3.1	1.2
N.W. Eng./S.W. Scot.	28.9	12.2	12.4	11.7	28.8	11.4	9.1	15.5
E. England	0.6	0.0	0.0	0.0	6.7	0.0	3.6	3.5

Table 4. Sites with more than 2,000 Pink-feet in the springs of 1988-90. Counts for 1988 represent March/April maxima.

SITE	1988	1989	1990	AVERAGE
Slains Lochs/Ythan	21,700	21,000	30,300	24,333
Loch of Strathbeg	20,900	16,500	17,100	18,167
Westwater Reservoir	9,100	19,300	11,000	13,133
Wigtown Bay	7,000	14,000	9,000	10,000
Solway Estuary	10,700	9,000	(500)	9,850
Carsebreck	6,300	7,200	7,000	6,833
Bankfoot/Tullybelton/Dupplin	5,700	4,400	10,250	6,783
Findhorn Bay	2,200	9,800	5,276	5,759
Loch Eye/Cromarty Firth	6,400	7,000	2,060	5,153
Inverness/Beaully Firth	8,100	2,600	3,260	4,653
Fala Flow	6,800	3,000	2,950	4,250
Loch Leven	3,200	5,100	-	4,150
Lake of Menteith	2,100	6,000	-	4,050
Montrose Basin	4,200	4,500	2,407	3,702
Cameron Reservoir	4,000	3,700	3,000	3,567
Lour/Crombie Reservoir	2,100	6,200	450	2,917
Gladhouse Reservoir	2,500	0	5,000	2,500
Lancashire mosses	4,600	1,300	1,000	2,300
Mid-Deeside (Dinnet Lochs)	750	4,500	400	1,883

N.B. The 1990 count of the Solway Estuary was incomplete.

Table 5. Sites with more than 1,000 Greylags in the springs of 1988-90. Counts for 1988 represent March/April maxima.

SITE	1988	1989	1990	AVERAGE
Findhorn Bay	3,100	8,300	4,032	5,144
Caithness	5,000	2,800	2,958	3,586
Haddo Country Park	2,400	2,300	4,700	3,133
Loch Spynie	3,800	3,000	1,962	2,921
Loch of Strathbeg	1,800	4,300	1,750	2,617
Loch Eye/Cromarty Firth	1,800	4,100	1,012	2,304
Orkney (Mainland)	2,000	2,100	2,676	2,259
Fedderate Reservoir	1,000	2,400	2,700	2,033
Bute	1,900	1,900	-	1,900
Lake of Menteith	3,600	0	-	1,800
Drummond Pond	2,500	1,100	1,800	1,800
Bogrotten Ponds	-	-	1,600	(1,600)
Kilconquhar Loch	320	1,700	2,500	1,507
Loch Ken	1,400	1,100	1,900	1,467
Inverness/Beaully Firth	670	1,800	1,880	1,450
Mid-Deeside (Dinnet Lochs)	2,600	650	1,000	1,417
Stranraer Lochs	1,100	250	2,150	1,167
Lindisfarne	1,200	-	1,050	1,125
Caistron Quarry	1,500	1,250	600	1,117

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