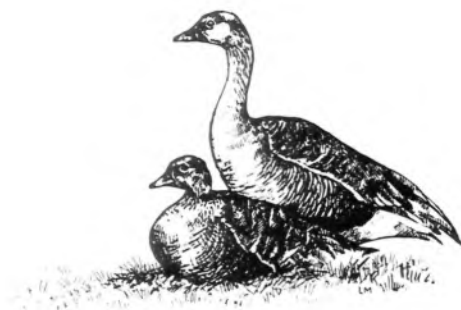


## Wildfowl Counts in the U.K. 1989-1990

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The National Wildfowl Counts programme (NWC) is organised by The Wildfowl & Wetlands Trust and involves the monitoring of the numbers, distribution and trends of swans, geese, ducks, grebes, Cormorant and Coot throughout the United Kingdom. Many thousands of volunteer ornithologists take part, and the success of the scheme to date accurately reflects their enthusiasm and dedication. The core activity in the counts programme is the once-monthly wildfowl count, which takes place on a wide variety of wetland habitats including estuaries and coastal bays, reservoirs, lochs/loughs, gravel pits, freshwater marshes, rivers, canals and ponds. Most counts take place during the autumn and winter period, from September until March, although valuable information from other times of the year is also received. To complement the monthly counts, additional surveys of certain swans and geese are organised in most years, as most of the species in these groups tend to feed away from wetlands during the day and/or to occupy remote areas which are visited only irregularly. Special surveys of breeding and moulting waterfowl are also carried out. The NWC programme receives financial support from the Joint Nature Conservancy Council, the Royal Society for the Protection of Birds (since 1991) and the Department of the Environment for Northern Ireland.

Monthly counts were made during 1989-90, the 43rd consecutive season, at a total of 1910 wetlands in Britain and Northern Ireland. Coverage was considerably improved, though whilst excellent in many regions, data from Clwyd, Dorset, Glamorgan, Greater Manchester, Gwent, Hereford & Worcester, Skye, Suffolk, SW Highland, Western Isles, and parts of Northern Ireland, were sadly relatively few. Goose surveys, each involving assessments of total numbers, distribution and breeding success, were organised for most species/subspecies: for Pink-footed Geese *Anser brachyrhynchus* in Britain; Greenland White-fronted Geese *A. albifrons albifrons*

in Britain and Ireland; Icelandic Greylag Geese *A. anser* in Britain and native Greylag Geese in the Western Isles; Greenlandic Barnacle Geese *Branta leucopsis* on Islay and Svalbard breeding Barnacle Geese on the Solway Firth; and, Dark-bellied Brent Geese *B. bernicla bernicla* in Britain. In addition, a full breeding survey of Mute Swans *Cygnus olor* in Britain was undertaken, in collaboration with both the British Trust for Ornithology and the Scottish Ornithologists' Club.

The Table shows the highest counts for all species in Great Britain and Northern Ireland, with the months in which these peaks occurred. The totals give a good idea of the true population sizes of most species, but are less reliable for the grebes, Mute Swan, Canada Goose *B. canadensis*, Mallard *Anas platyrhynchos* and Coot *Fulica atra*, which are particularly widespread. Also, the counts of seaducks must be treated cautiously as they are very hard to survey.

Though common in the U.K. in winter, the Little Grebe *Tachybaptus ruficollis* is recorded only in small numbers, due at least in part to its secretive habits and liking for small streams, ponds, canals and rivers, most of which are not well represented amongst the habitats of count sites. By far the largest flocks were recorded at Loughs Neagh and Beg (480) and at Strangford Lough (103). The former also held the greatest number of Great Crested Grebes *Podiceps cristatus* (1188), with Belfast Lough (886), the Forth Estuary (849) and Rutland Water (544) also supporting large flocks. There were considerable increases in the numbers of Cormorants *Phalacrocorax carbo* occupying several sites in 1989-90, the species perhaps benefitting from increased winter food supplies, through fish stocking schemes, and reduced human persecution. Morecambe Bay (1497) supported the most, whilst 951 occurred at Loughs Neagh and Beg, 920 on the Medway, 766 on the Forth and 663 on the Inner Clyde.

British Index values for Mute Swans reached the highest levels yet recorded, revealing a continued recovery from the days when the ingestion of discarded fishing weights resulted in many birds dying from lead poisoning. This upward trend is in agreement with early results from the 1990 breeding survey which indicate considerable increases in most regions of Britain since the 1983 census. Numbers at Loughs Neagh and Beg continue to increase, with 1465 in September, some 67% of all those counted in Northern Ireland at this time. The Fleet/Wey held 891 and the Loch of Harray held 683, numbers at the latter site having risen steeply over recent years. Bewick's Swans *C. columbianus bewickii* were also recorded in good numbers, almost certainly a reflection of an exceptionally good breeding season for them (with 21.8% young recorded at Slimbridge and 18.6% young at the Ouse Washes). The numbers reported from the Martin Mere/Ribble Estuary flock continue to increase, placing this site firmly in third position in the U.K. for this species. Breeding Whooper Swans *C. cygnus* fared less well in 1989, with just 13.3% young on the Ouse Washes and 10.2% young in Ireland, probably attributable to a late spring thaw in the highlands of Iceland. The previous breeding season was also relatively poor for this species, and it is hardly surprising therefore that the overall numbers recorded in the U.K. in 1989-90 were relatively low. Loughs Neagh and Beg held the highest number (1088), followed by the Loch of Harray (817), Upper Lough Erne (726) and the Ouse Washes (686). The latter count represented the largest concentration of Whoopers ever recorded in England or Wales.

Bean Geese *A. fabalis* in the Yare Valley, Norfolk, reached 315 in December and 344 in January, whilst the Carron Valley flock was 116 strong in December. The number of Bean Geese in Britain is tiny in comparison with that of the massive and expanding wintering stock of Icelandic Pink-footed Geese. The number counted in the November 1989 census was almost 183,000 birds and, despite being the highest annual total yet, certainly underestimates the true population size. The 1989 breeding season was relatively poor for Pinkfeet, with only 13.0% young in autumn flocks compared to 25-40% young in a good season. Very large numbers were present at a number of sites in October, especially at Westwater Reservoir (36,250), Dupplin Loch (31,000) and Hule Moss (27,735). In southwest Lancashire (37,550) and at the Loch of Strathbeg (32,150), maxima occurred in November, and in spring at the Slains Lochs

(30,300). The Lancashire count represents the second largest ever made in the county, exceeded only by a count of 38,445 in December 1988.

European White-fronted Geese *A. albifrons albifrons* reached 5803 in February, just three birds more than the peak count of 1988-89, which also occurred in February. Slimbridge (3200) and two sites on the Swale (1660) held the majority. Numbers of the closely related Greenland White-fronted Goose *A. albifrons flavirostris* are censused annually in Britain and Ireland by the Greenland White-fronted Goose Study (GWGS) and the Wildlife Service of the Office of Public Works in the Irish Republic. A total of 26,716 birds was recorded in 1989-90, which compares with 27,341 in 1988 and 24,455 in 1987. The majority (59.3%) of those in Britain were on Islay, the most important British winter resort for them. There were 19.3% young amongst British wintering flocks in 1989, a level similar to that of the two previous years, but fewer young were found in Ireland, with 15.9% at their main resort in Wexford and 15.1% elsewhere.

Three groups of Greylag Geese are present in Great Britain in winter: the non-migratory native population occupies the far north and west of Scotland; the Icelandic-breeding population winters largely in Scotland, with a few entering the far north of England and Ireland; and the feral, introduced population which resides mainly in England and Wales, but also in parts of southwest, central and eastern Scotland. The number of native Greylags in the Western Isles has apparently more than doubled since the 1960s to a post-breeding population of 1971 in November 1989, when 32% juveniles were present. Autumn age counts of Icelandic Greylags revealed 12.3% juveniles overall, suggesting that they bred moderately well, and the numbers counted in November revealed just over 83,500 birds, the lowest census return for over six years. Most were present at the Dinnet Lochs (15,800), the Loch of Skene (13,305) and at Loch Eye/Cromarty Firth (11,193). The feral population, which is likely to number in excess of 20,000, will be censused along with Canada Geese in 1991. The Canada Goose population continues to rise steeply in many areas. Flocks of 1000 or over were found at four places in 1989-90: Stratfield Saye (1350), Abberton Reservoir (1240), Kedleston Park (1080) and Bewl Water (1000).

The Scottish component of the Greenland breeding Barnacle Goose winters mainly on Islay where there were 25,279 in December,

23,826 in February and 23,020 in April. The numbers of juveniles present in the Islay flocks, averaging just over 18%, indicated that the birds had bred well, probably leading to the relatively high numbers recorded in 1989-90. Almost daily counts of Barnacle Geese at the Trust's refuge at Caerlaverock, which are from the population that breeds in Svalbard, resulted in a maximum count of 11,700 birds in October, fewer than in the previous year. The presence of only 8% young in the flocks would explain the relatively low recorded numbers.

The British population of the Dark-bellied Brent Goose has expanded dramatically over recent years, and there is little evidence to suggest that population growth in this species is yet limited. In 1989, breeding performance was poor with only 22 juveniles recorded from a total of 17-39,000 geese aged. Mid-winter surveys resulted in an estimated maximum of 90,000 geese, low in comparison to counts made in the previous two winters. The Wash (19,309) and the Thames (12,555) were the only sites holding more than 10,000 birds. The principal sites for Light-bellied Brent Geese *B. bernicla hrota* are Strangford Lough (12,423), Lough Foyle (4105) and Lindsfarne (3000). Those at the latter site breed in Svalbard whilst the other sites hold birds from the Canadian/Greenlandic population. The maximum count in Northern Ireland as a whole (15,459 in October) was close to double that recorded in 1988-89.

The Wash held an amazing 19,460 Shelduck *Tadorna tadorna* in November, considerably more than the 15-16,000 recorded at this site in the last two seasons. Elsewhere, the Dee Estuary held 6924, Morecambe Bay had 5208 and the Medway supported 5092. A steady increase in the numbers of breeding/moulting Shelducks on the Severn (up to 3332 in 1989) and on the Forth (up to 2670) was also apparent. British indices for Wigeon *Anas penelope* reached levels lower than those of the previous year, presumably indicating the lack of any major influxes from the Continent during the mild conditions of the 1989-90 winter. In Northern Ireland, peak numbers (12,569) were much lower than in 1988-89 (24,100), perhaps partly for the same reason and possibly also reflecting a reduction in the Icelandic breeding population. The Ouse Washes held by far the largest concentration recorded (53,615), this count representing the highest reported at this site for over 10 years. Numbers on the Ribble Estuary continued to increase (reaching 43,541) and the count of 13,480 at Abberton represents the maximum recorded there since the cold weather

of 1984-85. Peak counts from Lindsfarne (7500) and Lough Foyle (7797) were disappointingly low, as is a steady deterioration in numbers on the Mersey Estuary (only 4000 compared to around 12,000 just three seasons ago). Gadwall *A. strepera* increased yet again with the total numbers for Britain and for Northern Ireland reaching their highest ever levels. The largest numbers were found at Rutland Water (1606). The British index for Teal *A. crecca* increased dramatically during 1989-90 (by 130%) reaching its highest level since the cold winter of 1984-85, which is somewhat surprising given the mildness of the winter. However, perhaps cold weather is not the only important factor causing large numbers of Teal to resort to the British Isles, as the species shows very marked variations in wintering distributions between all winters, be they mild or cold (Ridgill & Fox 1990). Very large numbers of Teal were present at sites in northwest England in 1989-90, with the Mersey (12,300 in December), Ribble (9709 in November), Dee (9825 in November) and Woolston Eyes (4000 in December) together supporting a very large proportion of the total British population. The Lough Neagh Basin was the only site with more than 5000 Mallard, with 6438 in September. However, no U.K. site comes anywhere near the 20,000 required for international recognition for this species. In Northern Ireland as a whole, there was a steady and consistent decline, such that only 50% of the Mallard counted in September were present in December. A similar pattern was apparent in 1988-89 also (Salmon *et al.* 1989) and could perhaps be explained both by dispersal from large, well counted, waters to smaller ponds and marshes in late autumn and early winter, and by emigration into the Republic and beyond (see Hutchinson 1989). Pintail *A. acuta* occur in large numbers at just a few U.K. sites, notably the Dee (11,945) and Mersey (8000) estuaries. The number on the former site represented almost 50% of all the Pintail counted in Britain at that time. Both the British indices and total counts of Shoveler *A. clypeata* in Britain and in Northern Ireland revealed a large increase for this species. Very large numbers (829) were present at Abberton Reservoir in October which, together with the Ouse Washes (696) and Wraybury Reservoir (601) held the major concentrations.

Loughs Neagh and Beg held spectacular concentrations of diving ducks in 1989-90, as has been the case for the last three or more seasons. Pochard *Aythya ferina* peaked at 36,380 in December, slightly lower than in 1988-89, but

nevertheless exceeding the appropriate qualifying level for international importance for this species by 766%. Tufted Ducks *A. fuligula* reached a staggering 29,393, appreciably higher than the peak count of 16,642 recorded in 1988-89 (Salmon *et al.* 1989), and Scaup *A. marila* and Goldeneye *Bucephala clangula* peaked at 1215 and 11,408 respectively. Elsewhere, Abberton Reservoir (4387) and Rutland Water (3709) were the British sites holding over 3000 Tufted Ducks, while Carse Bay on the Solway Firth supported the largest gathering of Scaup, with 1562 in February.

An estimated 30,000 Eiders *Somateria mollissima* were recorded at their main resort, the Outer Firth of Tay. Elsewhere, records of over 4000 came from the Forth Estuary (10,798), Morecambe Bay (7604) and the Inner Clyde (4674). RSPB surveys of the Moray Firth produced 6270 Long-tailed Ducks *Clangula hyemalis*, considerably fewer than the 10,500 recorded in 1988-89, and only 465 were found on the Forth. At the same time, a maximum of 1607 scoters was recorded on the Moray Firth, which compares with an average of around 10,000 in the early 1980s. Of those close enough to identify species, an average of 63% were Common Scoters *Melanitta nigra*. At other sites, 4100 Common Scoters were recorded between Towyn and Llanddulas Bay, North Wales, and 200 in Carmarthen Bay. St Andrews Bay held 2400 Velvet Scoters *M. fusca* in January. Away from Loughs Neagh and Beg, the

biggest gatherings of Goldeneyes were on the Forth Estuary (991) and at Kilconquhar Loch (644).

Smew *Mergus albellus* were relatively scarce in 1989-90, with no site supporting more than seven birds at any one time. Regarding the more numerous saw-bills, the Moray Firth census revealed 1548 Red-breasted Mergansers *M. serrator* in December, and maximum counts of 259 and 240 were recorded at The Fleet/Wey and Loch Indaal, respectively. The Beaulieu Firth, the main resort of the Goosander *M. merganser* supported only 273, compared to as many as 1900 in recent seasons, but Hirsell Lake (202), Hay-a-Park Gravel Pits (195), Corby Loch (115) and the River Eden at Armathwaite (111) held relatively large flocks.

The British peak count of Ruddy Ducks *Oxyura jamaicensis* (2829) exceeded that of the previous year by some 429 birds, confirming a continuation of the national increase. Blithfield Reservoir (508), Chew Valley Lake (470), Rutland Water (398) and Belvide Reservoir (348) held the majority. The count of 16,790 Coot at Abberton Reservoir represents an all-time record and 7696 frequented Loughs Neagh and Beg in October.

The results of the National Wildfowl Counts programme is provided in much greater detail, along with the British Trust for Ornithology's Birds of Estuaries Enquiry, in the booklet "*Wildfowl and Wader Counts 1989-90*" (Kirby *et al.* 1990), available (price £1.50 inc. p & p) from the Research Department at Slimbridge.

## References

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Table 1. Maximum total counts of wildfowl in the U.K., September 1989 to March 1990.

	Great Britain	Northern Ireland
Little Grebe <i>Tachybaptus ruficollis</i>	2516 (Oct)	881 (Nov)
Great Crested Grebe <i>Podiceps cristatus</i>	8197 (Sep)	1955 (Oct)
Cormorant <i>Phalacrocorax carbo</i>	11401 (Oct)	2333 (Oct)
Mute Swan <i>Cygnus olor</i>	12616 (Jan)	2517 (Oct)
Bewick's Swan <i>C. columbianus bewickii</i>	8444 (Jan)	504 (Jan)
Whooper Swan <i>C. cygnus</i>	4149 (Jan)	2429 (Feb)
Bean Goose <i>Anser fabalis</i>	380 (Jan)	0
Pink-footed Goose <i>A. brachyrhynchus</i>	182969 (Nov)	0
Eur. White-fronted Goose <i>A. a. albifrons</i>	5803 (Feb)	0
Gd. White-fronted Goose <i>A. a. flavirostris</i>	14434 (Nov)	77 (Feb)
Greylag Goose <i>A. anser</i> (Icelandic)	83577 (Nov)	456 (Feb)
(feral)	13443 (Sep)	
Canada Goose <i>Branta canadensis</i>	34015 (Jan)	335 (Jan)
Barnacle Goose <i>Branta leucopsis</i>	17229 (Mar)	91 (Oct)
Dark-bellied Brent Goose <i>B. b. bernicla</i>	83749 (Jan)	0
Light-bellied Brent Goose <i>B. b. hrota</i>	3008 (Dec)	15459 (Oct)
Shelduck <i>Tadorna tadorna</i>	74059 (Jan)	2844 (Feb)
Mandarin Aix <i>galericulata</i>	226 (Dec)	0
Wigeon <i>Anas penelope</i>	261264 (Dec)	12569 (Oct)
Gadwall <i>A. strepera</i>	7581 (Jan)	286 (Jan)
Teal <i>A. crecca</i>	135135 (Dec)	6285 (Dec)
Mallard <i>A. platyrhynchos</i>	181062 (Jan)	11090 (Oct)
Pintail <i>A. acuta</i>	26383 (Dec)	167 (Dec)
Garganey <i>A. querquedula</i>	20 (Sep)	0
Shoveler <i>A. clypeata</i>	8157 (Oct)	287 (Oct)
Pochard <i>Aythya ferina</i>	41329 (Jan)	36946 (Dec)
Tufted Duck <i>A. fuligula</i>	48453 (Jan)	30402 (Dec)
Scaup <i>A. marila</i>	3680 (Feb)	1217 (Dec)
Eider <i>Somateria mollissima</i>	50403 (Nov)	752 (Feb)
Common/Velvet Scoter <i>Melanitta</i> sp.	9745 (Feb)	1150 (Nov)
Long-tailed Duck <i>Clangula hyemalis</i>	1101 (Nov)	95 (Mar)
Goldeneye <i>Bucephala clangula</i>	12702 (Jan)	12169 (Dec)
Smew <i>Mergus albellus</i>	57 (Jan)	2 (Dec)
Red-breasted Merganser <i>Mergus serrator</i>	2855 (Jan)	887 (Nov)
Goosander <i>M. merganser</i>	2733 (Jan)	2 (Jan)
Ruddy Duck <i>Oxyura jamaicensis</i>	2829 (Jan)	23 (Sep)
Coot <i>Fulica atra</i>	98760 (Oct)	9810 (Oct)