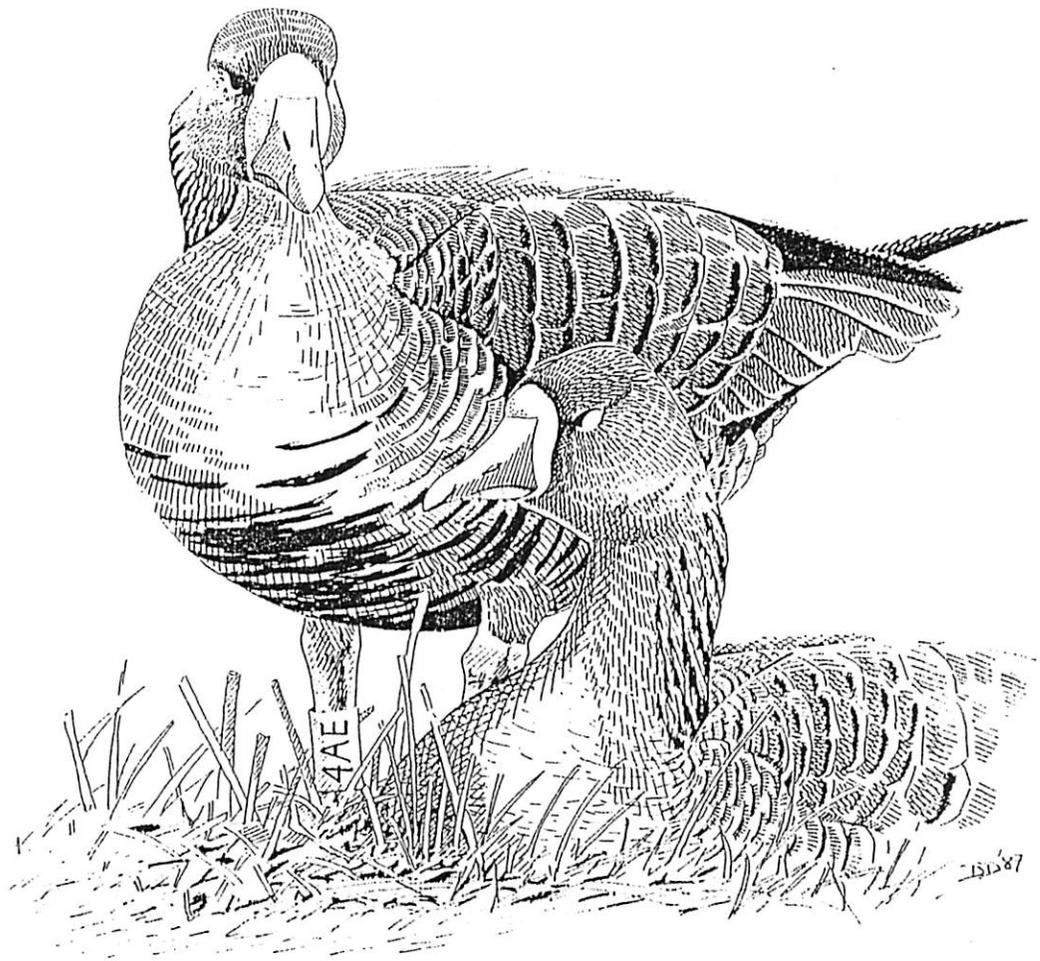


GREENLAND WHITEFRONTED GEESE  
IN IRELAND 1987-88



Wildlife Service  
Office of Public Works

**GREENLAND WHITE-FRONTED GEESE IN IRELAND 1987/88**

**A PROGRESS REPORT**

**D.W. NORRISS AND H.J. WILSON**

**WILDLIFE SERVICE  
OFFICE OF PUBLIC WORKS**

**1988**

It has been clear recently that most count errors in Wexford result from flocks being missed, either because they were overlooked when feeding outside the Slobs or because they were obscured by terrain. Flocks are seldom double-counted since counts during severe disturbances are abandoned or repeated. We have therefore calculated a winter mean from the higher of replicate counts (see Table 1). This is a more useful figure than a mean number calculated from all counts.

Maximum counts in 1987/88 recorded at the autumn (7988) and spring (8781) censuses (Table 1) were similar to the maximum count in 1986/87 (8769). The winter mean (mean of higher figure from replicate counts) of 7745 (7 counts) also varied little from the 1986/87 figure (7836, n = 7) (Norriss and Wilson 1987).

The Wexford flock has been stable now for the past three winters so any growth in numbers is evidently being accommodated elsewhere. Geese may be "shortstopping" on Islay where recent increases have been faster than elsewhere, from 5669 in spring 1986 to 7314 in spring 1988. We will shortly be in a position to review the information to date on movement of marked birds out of Wexford as the Wildfowl Trust at Slimbridge have nearly finished the huge task of storing the resighting data of all marked Greenland White-fronted geese on computer.

In May 1988 the major landowners at the North Slob, Wexford put the entire estate up for sale. This is the second time in three years this particular farm has been on the market. At the time of writing the sale of the farm has been concluded, but further details are not yet available.

### Rest of Ireland

The spring census total was 4249 (Table 2), up very slightly (2.9%) on the figure for spring 1987. 15.6% of the spring total was estimated, mainly due to some flocks not being found during the census period. However, no counts were received for three flocks and counts from the 1986/87 winter have been used. Together they total 123 and so are unlikely to contribute a significant error.

Two flocks have shown dramatic changes recently. Geese are reported to have deserted the traditional winter range on the Blaskets and the western tip of the Dingle peninsula. A flock of 28 was seen on Beginish Island in November, but no geese were counted on subsequent visits and local reports were negative. Over 90 geese were present in 1983/84. This is the second flock in the South-West region to have deserted since the start of the survey. Two of the remaining three have also suffered major declines during the same period. The South-Western decrease can be satisfactorily explained by a continuing decline in the quality of feeding ranges, particularly because of the adverse impact of small-scale agricultural improvement and the consequent increase in disturbance rates from agriculture. The decrease is unlikely to be the result of other factors operating regionally. However, trying to reverse the declines and stem a trend to fewer, larger flocks is likely to be a difficult process.

On the positive side, a previously-unknown flock of Greenland White-fronts was reported from Stabannon on the R. Glyde, Co.

Louth. In fact White-fronts were first recorded here in 1983/84 and a maximum of 42 were counted last winter. Internationally-important numbers of Whooper swans and nationally-important numbers of Greylag have also built up during the past ten years. Some White-front counts from previous winters are available and minor retrospective corrections to the totals have been made (Table 3).

### **Britain**

The spring census (11991) showed a continuing increase of 5.6% over spring 1987 (Table 3). However, numbers in two regions (N.W. & N.E. Scotland) are currently declining and two flocks (at Loch Eye and in mid Wales) appear to have become extinct during 1987/88 (data from Greenland White-fronted Goose Study (GWGS)). In contrast numbers on Islay have increased disproportionately, from 47% of the British total in spring 1983 to 61% in spring 1988.

Thus both Irish and British segments of the wintering population have become markedly less dispersed since 1982/83. At the same time the overall wintering population now totals 25,000, more than the previously highest estimate of 17,500 - 23,000 by Rutledge and Ogilvie (1979) for the 1950's.

### **Protection Status**

The Greenland White-front remained protected throughout Ireland in 1987/88. Elsewhere protection status also remained unchanged

except on Islay where the Secretary for State for Scotland issued 16 licences to shoot White-fronts because of alleged serious agricultural damage. Under the National Manpower Scheme a number of people were employed to scare White-fronts from farms where complaints of damage were received. The Nature Conservancy Council opposed these licences, but their issue went ahead and about 72 geese were shot. White-fronts on Islay are now nearly as numerous as in Wexford (7,300 were counted in autumn 1987 and spring 1988). However, to put claims of agricultural damage in perspective geese are widely dispersed on an island approximately the size of Co. Dublin and prefer to feed in rough, rushy fields on the agricultural fringe.

## **HABITAT PROTECTION**

### **Ireland**

Existing Areas of Scientific Interest (ASI's) were modified in 1987 to include all known areas of blanket bog containing important Greenland White-front feeding sites. Their designation only identifies an area as being of scientific interest and confers no legal protection. However, within EEC grant schemes there has been a recent trend to include clauses for environmental protection, allowing objections to grant-aided developments within or adjacent to ASI's.  $\frac{1}{2}$ " O.S. maps of ASI's will be circulated to County Councils and other planning and development offices, drawing attention to these areas.

Two bogland National Nature Reserves were declared in 1987. Mongan bog (119 ha), beside Clonmacnoise, Co. Offaly which is owned by An Taisce, is one of the few remaining raised bogs still used by Greenland White-fronts. Further north, on L. Barra bog in Co. Donegal two separate blocks totalling about 400 ha have been acquired by the Wildlife Service. Geese from the Sheskinmore flock range widely over blanket bog from the Glencolumkille peninsula north to L. Barra bog. Bogland feeding areas are smaller and more dispersed at the periphery of this flock's range than in the centre so numbers using L. Barra bog are correspondingly quite small. Nevertheless this acquisition is a welcome start to habitat protection in this area. Further wetland areas have been acquired around Sheskinmore Lough, Co. Donegal.

### **Greenland**

Greenland has recently designated a number of very large areas for conservation under the Ramsar Convention. The purpose of this Convention is the conservation of wetlands of international importance.

GWGS gave advice on the selection of Greenland White-front sites to the Greenland authorities and five of the ten newly-designated Ramsar sites, protect important White-front staging, nesting and moulting areas on the west coast. Included on the list is Egalummiut nunaat - Nassuttuup nunaa, which totals 5000 km<sup>2</sup> in extent. It is regarded as the most important area in Greenland for the White-front, holding at least 10% of the breeding

population. The GWGS expeditions in 1979 and 1984 were located within this particular area.

### **Management needs**

The past six seasons work have provided considerable amounts of new information about White-front sites, flock sizes and population trends in addition to that published by Rutledge and Ogilvie (1979). The counts themselves have been incorporated into a recently compiled five year review of winter distribution and status entitled 'Greenland White-fronted Geese in Ireland and Britain 1982-1987: Population monitoring and conservation' written jointly with D. Stroud and T. Fox of GWGS.

Last year we analysed disturbance data from survey cards which showed that changes in flock size were correlated with disturbance levels and the degree to which feeding ranges protected flocks from disturbance effects (Norriss and Wilson 1987). We subsequently extended this analysis to the period (1950's to 1979) covered by Rutledge and Ogilvie (1979). The findings 'Disturbance and flock size changes in Greenland White-fronted Geese wintering in Ireland' are due to be published in the forthcoming edition of Wildfowl. Copies of both publications will be forwarded to survey participants when available.

The information on disturbance highlights the plight of flocks with poor quality feeding ranges. Seven flocks with the poorest disturbance indices have shown net declines since 1982/83. These are Bunduff, Co. Sligo, L. Macnean, Co. Fermanagh, W. bog of

Erris, Co. Mayo, Tullagher, Co. Clare and Doo Lough, Killarney valley and Ventry/Blaskets, all in Co. Kerry. Some of these flocks are now very small and the Ventry/Blaskets birds appeared to have deserted last winter. It is remarkable how swift their decline has been (see Census Results) and the continued existence of the other flocks appears equally precarious. Current threats have generally come from recreation and small scale agricultural development causing increased disturbance. All of these flocks are slowly declining because of the poor quality of their existing feeding ranges. At this stage quite minor increases in disturbance levels can cause desertion. Where practical we hope to develop management plans early this winter in consultation with local members of the survey team and Wildlife Management staff. There is evidently an urgent need for protection management. Indeed it is a sobering thought that despite an increase in this segment of the population, twelve out of thirty-three flocks declined in the five years following protection.

#### **TRAPPING AND RESIGHTING OF MARKED GEESE IN 1987/88**

During the winter 108 Greenland White-fronted geese were trapped and marked. Ninety four were caught in Wexford, the only retrap having been first caught in November 1986 on L. Owel in Co. Westmeath. The remainder were trapped at Sheskinmore, near Ardara, Co. Donegal. This brings to 560 the total ringed in Ireland since winter 1983/84.

Year of ringing	1983/84	1984/85	1985/86	1986/87	1987/88
No. marked	45	162	137	109	108
No. seen in 1987/88	12	57	61	59	104
No. dead in 1987/88	9	20	16	9	1

Eighteen Irish-marked geese were reported shot in Iceland, sixteen on passage in autumn 1987. This is an unusually high number compared to the totals of one, five and three reported for autumns 1984, 1985 and 1986 respectively and out of all proportion to the increase in numbers of marked geese. Obviously a significant annual drain of marked geese would be of concern not only to the marking programme but would also raise questions about total numbers being shot on passage. No accurate estimates of numbers shot in Iceland are currently available, though autumn shooting is legal but subject to some voluntary restraint (Francis and Fox 1987). However, the bulk of the collared geese shot in autumn 1987 were returned from one locality so approaches are being made by the GWGS, who have contacts with both hunting and conservation organisations in Iceland, at the request of the Wildlife Service.

Only three (3/104) of the geese marked in 1987/88 moved between flocks. The bulk of birds ringed in earlier years have also remained faithful to one flock over a number of years but small numbers of collars and leg-bands have now been observed in fourteen flocks from Donegal to Cork. Resightings for all winters to date in Irish flocks outside Wexford are summarized in Table 5. Illegal shooting of marked birds is known to have taken place in the Clare River and Kilcolman flocks and is indicated by

circumstantial evidence in the bog of Erris. Despite this most marked birds, having once moved from Wexford, have subsequently become 'regulars' in one flock (Table 5). In this context the R. Suck and Little Brosna flocks have adjacent ranges and there is evidently occasional movement between the two.

Details of resightings outside Wexford and of the more interesting movements of marked birds last winter are given in Table 6. Information on the identity of social relations are recorded in column 3 (mate, if paired), column 5 (number and identity of juveniles) and column 6 (other geese in adult plumage - young from previous years or siblings). The large majority of collared geese, marked in Wexford and resighted there, are not included, so this list must not be regarded as typical of Greenland White-fronted goose movements. In the west and midlands of Ireland the proportion of collars that were read last winter (15 read out of an estimated 21 present) is better than in 1986/87 but the proportion of leg-bands that were read (both Greenland-ringed and Wexford birds that have lost collars) is unchanged (3 out of 8). We have already addressed these problems with a short workshop on the use of telescopes, hides and related matters on the Wexford Slobs this autumn.

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TABLE 1: Counts of Greenland White-fronted Geese in Co. Wexford  
1987/88

DATE	WEXFORD SLOBS	CAHORE	TOTAL
30.11.87	7775	0	7775
30.11.87	7988	0	<u>7988</u>
14.12.87	7375	-	7375
15.12.87	7522	-	7522
18. 1.88	7242	0	7242
18. 1.88	7266	0	7266
26.1 1.88	7221	0	7221
17. 2.88	7578	75	7653
8. 3.88	7657	130	7787
8. 3.88	7131	130	7261
9. 3.88	7723	-	7723
26. 3.88	8415	366	<u>8781</u>
26. 3.88	8172	366	8538
26. 3.88	8207	366	8573

Mean of higher figure from replicate counts 1987/88: 7745,  
(1986/87 : 7836 (n = 7)).

TABLE 2: Regional summary of peak monthly counts and censuses,  
'Rest of Ireland', 1987/88.

	November	February	April
Donegal/Derry	678	549	884
N. Central	260	74	249
Mayo	234	227	296
Connemara	285	202	287
Corrib/Galway	255	265	279
Clare/Limerick	161	84	142
Shannon Head	623	409	666
Midlands	365	365	355
Middle Shannon	942	729	928
South Midlands	55	85	83
South West	94	24	80
<b>TOTAL</b>	<b>3952</b>	<b>3013</b>	<b>4249</b>

TABLE 3: Autumn and spring census totals of Greenland White-fronted geese, 1984/85 to 1987/88. (Totals for Rest of Ireland segment were revised slightly for spring 1985 in the light of recent additional information). British data for Tables 3 & 4 from Stroud (1984, 1985, 1986, 1987 and in prep.).

	Autumn Spring		Autumn Spring		Autumn Spring		Autumn Spring	
	1984/85		1985/86		1986/87		1987/88	
Wexford	6097	7590	7930	7940	7033	7780	7988	8781
Rest of Ireland	3030	3337	3565	3928	3200	4131	3952	4249
Britain	9490	8952	11026	10015	10952	11357	12404	11991
<b>TOTAL</b>	<b>18617</b>	<b>19879</b>	<b>22521</b>	<b>21883</b>	<b>21170</b>	<b>23243</b>	<b>24344</b>	<b>25021</b>

Totals for autumn 1986 (3200) and spring 1987 (4131) have been adjusted slightly following information of a newly-established flock at Stabannan, Co. Louth (N. Central region).

Autumn and spring censuses were held on 28th November - 2nd December 1987 and 26-30th April 1988.

TABLE 4: Age counts and frequency distribution of brood sizes for Wexford, Rest of Ireland and Britain.

Date and Location	Total Aged	% Juvs.	Mean Brood Size (n)	Brood Size						
				1	2	3	4	5	6	7
Wexford 14.1.88	5659	18.5	3.69 (216)	8	26	62	66	40	10	4
Rest of Ireland	1742	21.7	3.16 ( 74)	17	13	13	13	10	6	2
Britain	5819	17.7	2.45 (292)	82	89	62	37	12	8	2

TABLE 5: Observed occurrences of Darvic-ringed geese in Irish flocks up to 1987/88

Foyle and Swilly:

1986/87: A minimum of 2 neck-collars (2 unread)

1987/88: 2 neck-collars (8JE, 4JM)

Sheskinmore:

1985/86: 2 neck-collars (3JT, 9JP)

1987/88: 14 geese trapped and marked 30.10.87 (1-OMM, 1-4MP); one additional neck-collar (7TE) and one, possibly, two leg-bands (unread). 1-OMM and 1-4MP remained at Sheskinmore and its environs for the duration of the season.

L. Macnean:

1987/88: 1 neck-collar (5MC)

Caledon:

1986/87: 1 leg-band (unread)

Stabannon:

1987/88: 1 neck-collar (unread)

W. bog of Erris:

1985/86: 3 leg-bands (A10, K07, K56)

1986/87: 3 leg-bands (A10, K56, 1 unread)

1987/88: 3 leg-bands (A10, K56, 1 unread)

Clare R:

1985/86: 1 neck-collar (8KC)

Carran and Turkenagh:

1985/86: 5 neck-collars (4RJ, 4 unread)

L. Gara:

1985/86: 1 neck-collar, 1, possibly 2 leg-bands (unread)

1986/87: 2 neck-collars, (unread)

Kilglass and L. Forbes:

1987/88: 1 neck-collar (9PM)

Midland lakes:

1986/87: 13 geese trapped and marked (3-OMA, 1-5MC): one additional leg-band (unread)

1987/88: 1 neck-collar (4KM)

Glenamaddy and R. Suck:

1985/86: 3 neck-collars, (3AA, 3JT, 9JP), 1 leg-band (unread)

1986/87: 7 neck-collars (3JT, 9JP, 5 unread)

1987/88: 9 neck-collars, (7RK, 8RM, 2RP, 4RT, ?RU, 3PC, 6PJ, 4PU, 4RJ), 2 leg-bands, (K07, one unread)

L. Brosna and Up. L. Derg:

1985/86: 8+ neck-collars (9KT, 4KU, 8KR, 6KY, 4RJ, 7RK, 8RM, ?RP)

1986/87: 9+ neck-collars, (4RJ, 7RK, 8RM, 6 unread). 2 leg-bands (2 unread)

1987/88: 9 neck-collars, (8KR, 4KU, 1PP, 4RT, 5 unread), 1 leg-band (unread).

Kilcolman:

1985/86: 4 leg-bands (T11, T26, T27, ??8)

1986/87: 8 neck-collars, (1MA, 6-8MA, OMA, 1MC, 3-4MC), 1 leg-band (T26).

1987/88: 1 leg-band (unread)

TABLE 6: Resightings of Darvic marked Greenland White-fronts 1987/88

UPD = unpaired

UNR = unringed goose

??? = marked goose, code not read

Geese neck-collared in Wexford and sighted elsewhere in Ireland

Darvic Site	1 Date	2 Mate	3 Flock	4 Juv	5 Associating	6 Observer
8JE Myroe, L. Foyle	15.11.87	4JM	130			E.M.
4JM Myroe, L. Foyle	15.11.87	8JE	130			E.M.
4KM Mt. Murray, L. Owel	31.10.87		11			A.W.
4KM N. Slob, Wexford	1.12.87	UPD	750			A.W./P.O's
8KR L. Avan, L. Derg	16. 2.88	UNR	52			J.W.
8KR L. Avan, L. Derg	16. 3.88		65			J.W.
4KU L. Avan, L. Derg	16. 2.88		35			J.W.
4KU Dagg's Callow, L. Derg	28. 3.88		65			J.W.
3PC Cloonagh, R. Suck	18. 2.88		105			J.W.
3PC Derycahill, R. Suck	31. 3.88		150			J.W.
6PJ Glenamaddy, R. Suck	19. 2.88		84			J.W.
6PJ Muckanagh, R. Suck	30. 3.88	UNR	175			J.W.
6PJ Cloonlaughlan, R. Suck	31. 3.88		240			J.W.
9PM Kilglass L, R. Shannon	18. 2.88	UNR	85	6UNR		D.N.
1PP L. Avan, L. Derg	16. 2.88		52			J.W.
1PP L. Avan, L. Derg	16. 3.88		65			J.W.
1PP Dagg's Callow, L. Derg	28. 3.88		35			J.W.
4PU Derrycahill, R. Suck	30. 3.88		75		4UNR	J.W.
4PU Derrycahill, R. Suck	31. 3.88		150			J.W.
7RK Pollboy, R. Suck	18. 2.88		30		4RJ 2RP	J.W.
7RK Pollboy, R. Suck	15. 3.88		34		4RJ 2RP	J.W.
4RJ Pollboy, R. Suck	1.12.87		47			J.W.
4RJ Pollboy, R. Suck	18. 2.88		30		7RK 2RP	J.W.
4RJ Pollboy, R. Suck	15. 3.88		34		7RK 2RP	J.W.
8RM Cloonagh, R. Suck	18. 2.88	?	105	6+		J.W.
8RM Castlestrange, R. Suck	7. 3.88		350			D.S.
2RP Pollboy, R. Suck	18. 2.88		30		4RJ 7RK	J.W.
2RP Pollboy, R. Suck	15. 3.88		34		4RJ 7RK	J.W.
4RT Little Brosna, R. Shannon	3.12.87				UNR	J.W.
4RT Little Brosna, R. Shannon	5. 2.88		322			M.F.

Darvic Site	Date	Mate	Flock	Juv	Associating	Observer
4RT Pollboy, R. Suck	15. 3.88		34			J.W.
7TE Sheskinmore, Ardara	5.11.87		41			J.H.
7TE Sheskinmore, Ardara	21.11.87	UPD	33			J.H.
7TE Sheskinmore, Ardara	25.11.87	UNR	82			J.H.

Geese neck-collared in L. Owel, Co. Westmeath in 1986/87

4MA Coul, Islay	28.11.87		79		7PA	S.B./E.M.B.
6MA North Slob, Wexford	20. 1.88		200	7UF 3UNR	7MA8MA3MC	A.W./P.O'S
7MA North Slob, Wexford	20. 1.88		200	7UF3UNR	6MA8MA3MC	A.W./P.O'S
8MA North Slob, Wexford	20. 1.88		200	7UF 3UNR	6MA7MA3MC	A.W./P.O'S
3MC North Slob, Wexford	20. 1.88		200	7UF 3UNR	6MA7MA8MA	A.W./P.O'S
5MC Cushrush Is., Lr. L. Macnean	16.12.87		62			C.M.

Geese leg-ringed in Greenland and resighted in Ireland

A10 Carrowmore L, Bog of Erris	3.12.87	K56	34			B.H.
K07 Cloonagh, R. Suck	18. 2.88		105			J.W.
K27 North Slob, Wexford	15. 2.88	UNR	250			A.W./P.O'S
K27 North Slob, Wexford	20. 3.88	?UPD	350			A.W./P.O'S
K27 North Slob, Wexford	23. 3.88		35		2UNR	A.W./P.O'S
K34 North Slob, Wexford	11.10.87		300		4UNR	A.W./P.O'S
K56 Carrowmore L, Bog of Erris	3.12.87	A10	34			B.H.

Observers

EMB Eric Bignal, SB Sue Bignall, MF Michael Feehan, B.H. Brian Haran, JH John Hennigan, CM Chris Murphy, EM E. Manthorpe, DN David Norriss, PO'S Paddy O'Sullivan, DS David Silke, AW Alyn Walsh, JW John Wilson.