XV. THE STATUS OF THE PINK-FOOTED GOOSE *ANSER BRACHYRHYNCHUS*

M. A. Ogilvie

Introduction

There are two completely separate populations of the Pink-footed Goose in the world (*Ogilvie*, 1978).

1. Breeds in Iceland and East Greenland and winters entirely within Britain.

2. Breeds in Svalbard (Spitsbergen) and winters in Denmark, West Germany, Netherlands and Belgium.

This contribution reviews the past and current status of both populations.

Icelandic—British population

This population has been censused in Britain since 1960, and earlier estimates are available going back to 1950. The censuses are carried out on the first or second weekend in November each year. An earlier census date would be possible for this species because the entire population has usually arrived by the middle of October. However the early November date is convenient for simultaneously censusing the Greylag Goose *Anser anser*, and these do not arrive in Britain until towards the end of October. The Pinkfeet are still very concentrated in early November, though dispersing more widely as the winter progresses.

The census is organised by me and involves up to 100 amateur bird-watchers counting the birds, mainly at the night-time roosts, on the designated weekend. In addition I take part in the actual census, working in areas where there are not sufficient bird-watchers. Much of my time is also spent in gathering large samples of age-ratios and brood sizes in order to assess annual breeding success. Few bird-watchers can be bothered to make such detailed observations.

Table 1 sets out the population totals found in Britain each November since 1950, together with the percentage of young birds. There has been a three-fold increase in the thirty-year period, from around 30 000 in 1950 to the present 95 000. *Boyd and Ogilvie* (1969) and *Ogilvie and Boyd* (1975) have reviewed in detail the population dynamics, status and distribution of the Pinkfeet in Britain, so I will merely summarise some of their conclusions here and bring the story up to date.

The reasons for the large increase through the 1950s and 1960s can be explained partly by a generally good level of breeding success, but probably more by improving conditions for the geese on their wintering areas in Britain. The birds have experienced a steady reduction in the amount of shooting to which they are exposed. At the same time the feeding for them has been

Table XV/1.

Numbers and breeding success of Pink-footed Geese in Britain, censused each November 1950 – 1980

Winter	Total	% young	5-year mean	Winter	Total	% young	5-year mean
1950 – 1	30 000	48.8		1966 – 7	76 500	21.6	
1951 – 2	34 000	24.9		1967 – 8	65 500	10.8	
1952 – 3	35 500	23.4		1968 – 9	65 000	11.7	
1953 – 4	32 500	33.3		1969 – 70	74 000	24.4	17.9
1954 – 5	37 000	34.9	33.1	1970 – 1	72 000	23.1	
1955 – 6	42 000	17.0		1971 – 2	65 000	23.2	
1956 – 7	49 500	18.4		1972 – 3	72 500	11.4	
1957 – 8	36 500	33.6		1973 – 4	82 500	30.5	
1958 – 9	54 000	25.9		1974 – 5	89 000	17.6	21.1
1959 – 60	54 000	20.0	23.0	1975 – 6	73 000	5.6	
1960 – 1	57 700	27.6		1976 – 7	71 000	11.3	
1961 – 2	59 000	37.4		1977 – 8	69 000	8.5	
1962 – 3	56 000	20.9		1978 – 9	78 000	18.4	
1963 – 4	57 000	20.2		1979 – 80	80 000	14.7	11.7
1964 – 5	65 600	26.6	26.1	1980 – 1	95 000	20.6	
1965 – 6	69 000	21.0					

getting better. Over the years a number of the more important goose roosts have received statutory protection leading to a total cessation or a reduction of shooting. Elsewhere the geese have helped themselves by deserting their formerly traditional roosts on estuaries, where there is virtually unrestricted shooting in favour of inland reservoirs and lakes, nearly all of which are in private hands, with either very limited or no shooting. Over the same period the amount of barley and potatoes being grown, particularly in Scotland, has greatly increased, as has the area of improved and fertilised grassland. The geese rely heavily on barley stubbles and harvested potato fields after their arrival in autumn, while grass becomes the preferred food later in the winter, and in the period prior to spring departure.

One of the more striking facts to emerge from this long-term population study has been the decline in breeding success. Also shown in Table 1. are five-year means of the percentage of young showing how it has dropped, particularly in the late 1960s and again in the late 1970s. This decline has been exacerbated by some very low production of young in recent years which can be attributed to very poor weather both in spring and during the breeding season. The overall trend downwards may be related to some long-term climatic deterioration but may equally reflect a shortage of nesting sites. It has been shown, for example, that the principal breeding area in central Iceland may already be overcrowded (*Gardarsson*, 1972).

Boyd and Ogilvie (1969) made predictions, based on counts up to 1968, that the population was quite likely to carry on increasing towards around 90 000 birds by the mid-1970s, though there was a possibility of a sharp

downturn. In the event their prediction was fulfilled, which encouraged *Ogilvie and Boyd* (1975) to make further predictions covering the period up to 1980. While they did not accurately predict the quite steep downturn which occurred, they did indicate that the population would not be much above the mid-1970s level by the end of the decade, which has turned out substantially correct.

Conditions on the wintering grounds remain quite favourable for the geese, though there have been increasing complaints of agricultural damage in a few areas. This may lead to the issuing of special licences permitting the shooting of birds in these areas between the end of the normal shooting season and their departure in late April. Overall this probably will not make a great difference to mortality.

Further upward movement seems probable in the long-term, though at a slower rate than in the past. The population remains at the mercy of successive poor breeding seasons, as was seen quite recently.

Svalbard-western European population

This population is present on passage in Denmark in autumn and spring, but winters largely further south, in West Germany, the Netherlands and Belgium. The only complete counts have been made in Denmark, from as early as 1931. Since 1961 the counts have been organised by the Game Biology Station at Kalø (see, e.g. *Fog*, 1980), and in the last few years also by J. Madsen of the Goose Study Group of the Dansk Ornithologisk Forening, who presents a detailed paper on the population at this symposium.

In view of Madsen's paper I will confine myself here to a brief summary of status and draw attention to one or two questions which are raised.

The Svalbard-western European population has trebled since 1931 (see Table 2, based on Madsen's paper), from under 10 000 to the present 27 000 – 29 000. Much of this increase has taken place in two quite short periods, in the late 1950s and in the last four or five years. The former increase is attributed by Madsen to the cessation of spring shooting in Denmark in 1955, while he suggests that the latter is related to increased protection in the wintering areas south of Denmark, and to a run of mild winters reducing mortality.

Age ratio counts have not been made regularly for this population, though in 1980 – 1 Madsen found 24.2% young birds. Paradoxically, after this quite good success, the population fell back slightly from its 1979 – 80 peak of 28 500 to 26 500. In the absence of Pinkfoot age ratios *Ogilvie* (1978) compared the numbers of the Pinkfeet with the breeding success of the Svalbard population of the Barnacle Goose *Branta leucopsis* and showed that there was reasonably good agreement beetwen them. The Barnacle Goose breeding success figures since 1966 – 7 are added to Table 2. After many years of quite good production of young, which fits quite well with movements in the totals of Pinkfeet, the Barnacle Geese experienced two very poor years, in 1977 and 1979. It is therefore somewhat surprising that these are not reflected in the Pinkfoot counts. Indeed in both years the latter increased, slightly in 1977 but by a staggering 42.5% in 1979. There is a considerable, but certainly not total, overlap in the breeding range of the two species in Svalbard and personal observations in 1977 and also in 1981, which has been another breeding disaster

Table XV/2.

Numbers of Pink-footed Geese counted in Denmark since 1931, summarised from Madsen (this symposium).

Also shown are breeding success data for Svalbard Barnacle Geese since 1966 – 1967

Winter or period	Total	Winter	Total	% young Barnacles not recorded
1931 – 32 to		1965 – 66	14 500	
1940 – 41	mean 5 550	1966 – 67	15 000	13.3
1941 – 42 to				
1950 – 51	mean 7 700	1967 – 68	15 000	27.1
1951 – 52	5 000	1968 – 69	12 300	23.2
1952 – 53	10 000	1969 – 70	12 000	27.0
1953 – 54	4 000	1970 – 71	18 800	47.2
1954 – 55	4 000	1971 – 72	12 000	15.0
1955 – 56	5 000	1972 – 73	17 700	28.9
1956 – 57	6 000	1973 – 74	18 000	21.0
1957 – 58	9 000	1974 – 75	12 500	15.0
1958 – 59	no count	1975 – 76	14 000	20.0
1959 – 60	9 000	1976 – 77	16 600	23.0
1960 – 61	16 000	1977 – 78	18 000	2.5
1961 – 62	14 500	1978 – 79	20 000	26.0
1962 – 63 to		1979 – 80	28 500	3.5
1964 – 65	no count	1980 – 81	26 500	27.0

Note that in 1980 – 81 the Pink-footed Geese had 24.2 % young

for the Barnacle Geese, showed there to be very few young Pinkfeet reared in the area visited. This contained some hundreds of Pinkfeet. They seemed to be suffering from the same conditions of very cold, late spring and bad summers which so adversely affected the Barnacles.

Another problem which is raised by the striking increase in the numbers of Pinkfeet passing through Denmark is where are they wintering? Very few geese remain in Denmark after November (see table in Madsen). Counts from the Netherlands over the last six years have produced a mid-winter peak of between 6500 and 12 500 (*Rooth et al.*, 1981, and this symposium). No more than some hundreds winter in Belgium, plus a few in northern France. It would be interesting to learn whether there had been a great increase in the numbers wintering in West Germany where up to 1974 a peak of 8000 was exceptional (*Timmerman*, 1977). There would seem to be a strong case for co-ordinated mid-winter censuses of the Pink-footed Goose throughout these countries, in order to locate the current most important wintering areas and to make sure that they are safeguarded.

Author's address:
M. A. Ogilvie
Slimbridge/Glos
GL2 7BX, England

References

Boyd, H. and Ogilvie, M. A.: (1969) Changes in the British-wintering population of the Pink-footed Goose from 1950 to 1975. Wildfowl 20: 33 – 46.

Fog, M.: (1980) Gasetaellinger 1979 – 80. Dansk Vildtforskning 1980: 56 – 7.

Madsen, J.: Observations on the Svalbard population of the Pinkfooted Geese in Denmark. This symposium.

Ogilvie, M. A. and Boyd, H.: (1975) The numbers of Pink-footed and Greylag Geese wintering in Britain: observations 1969 – 1975 and predictions 1976 – 1980. Wildfowl 27: 63 – 76.

Ogilvie, M. A.: (1978) Wild Geese. Berkhamsted: Poyser Ltd.

Rooth, J. et al.: (1981) Numbers and distribution of wild geese in the Netherlands, 1974 – 1979. Wildfowl 32: 146 – 55.

Timmerman, A.: (1977): Het wintervoorkomen van de kleine rietgans *Anser Brachyrhynchus*. Limosa 50: 71 – 91.