

PINKFEET IN EUROPE

The Effect of the Cold Weather of February 1956 on the Distribution of Pink-footed Geese in North-West Europe.¹

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IN the latter half of January 1954 severe winter weather—with frost and snowstorms—burst in over a wide area reaching from West England and eastwards, including at least Northern Germany and Denmark. As a direct consequence, a great many Scandinavian migrants, having arrived in the autumn in the British Isles, either starved or froze to death (instinct birds), or were forced to undertake a second emigration within a few months (weather birds), an exodus which brought large numbers of birds far southwards and out of reach of the threatening weather. This was clearly demonstrated, not only by direct field observations in Western France, in Spain and Portugal, but also by numerous recoveries of ringed birds in most of Western Europe, from England to Gibraltar. The birds involved included many Norwegian Lapwing, Fieldfare, Redwing, Common Gull, Black-headed Gull and others (Holgersen 1954).

A parallel situation was created when in February 1956 another sudden and unusually severe spell of winter weather covered the northern parts of Central Europe. Denmark, Northern Germany and Holland were greatly affected. As expected, this weather situation soon gave a good many recoveries of ringed birds, individuals found starving or frozen to death. But other recoveries were made in places and at times which clearly showed that the birds had been trying to escape and—with or without success—find areas with more favourable conditions.

One of the most interesting species in this connection, since the number of recoveries is high enough to permit some conclusions, is the Pink-footed Goose (*Anser brachyrhynchus* Baillon). Mr Russell Webbe, of the Cambridge-Sherborne Spitzbergen Expeditions, ringed 43 individuals of this northern species in 1952 and 525 in 1954, a total of 568 birds, most of which were adults.

In the following we do not consider recoveries from the winter 1956–57 or later, only those reported up to the spring of 1956. The material on which this paper is based thus consists of 113 recoveries.

So far we know nothing of the route along which the geese travel in fall when they have left Spitzbergen, until they reach Denmark, where the flocks arrive in October, a few as early as September. In November also flocks pass through the country, but they do not stop to winter there. From October they are found in Germany in an area reaching from the island of Föhr to Ostfriesland, and this seems to be the principal winter quarters of the Spitzbergen Pinkfeet. Some of them, however, go farther west to the northern part of Holland (Friesland), which is a natural continuation of the North German coastal plains. Very few go past the Zuiderzee (IJsselmeer), as single ringed birds have been reported from Zeeland, from Belgium and one even in Northern France. These are the conclusions drawn from our recoveries in the winter of 1954–55 (and a few in 1952–53) which, as far as the weather is concerned, has been considered a normal year. In the table these recoveries are indicated by open circles.

¹ Condensed from an original paper in the *Stavanger Museum Year-book*, 1956, Vol. 66.

	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Total
DENMARK	○	○○○ ○○○ **	○○						11
GERMANY Föhr		○○○ ***	○○* *** *	○○○ ○○○	○○○ ○		○○○		26
Oldbg./East Friesland		○○*	○** *** ***	○○○ ○○○ *** **	○○○ ***		○○*	○	33
NETHERLANDS Friesland		○	*	○** *	○○○ ○**	*	*	*	15
Zeeland					○*		○		3
BELGIUM						○**	**		5
FRANCE					○*	*** *** *** *** ***	***		20
	1	18	19	21	20	19	13	2	113

○ = Recoveries up to and including 1954/55. * = Recoveries up to and including 1955/56.

As far as the period September-January is concerned, the picture may be supposed to agree with the actual situation, but the very few recoveries in February (one in Belgium) March and April are hardly representative. Of possible reasons we mention the decrease in size of the goose flocks during the season, the close of the hunting season in certain districts, and no doubt the birds become gradually more cautious and wary.

The regional distribution of the recoveries is presented in the map, Fig. 1. Open circles show recoveries in September-January, black dots recoveries in February-April, i.e. after the culmination of the winter. We notice the recoveries in Denmark during the autumn passage, we find the wintering area from Föhr to the Zuiderzee with an offshoot reaching Zeeland and the Belgian coast, and we notice also the single recovery on the French Channel coast, apparently a pure exception.

Quite another picture is given by the recoveries made during the winter 1955-56, as will be seen both from the table—where the recoveries in this season are given as black dots—and from the map, Fig. 2 (symbols as in Fig 1).

The fall emigration apparently went normally. The geese turned up both in Denmark, on Föhr, and even as far west as in Oldenburg in October. In November numbers increased, and in the same month the majority shifted westwards to the area Oldenburg-Ostfriesland, where the birds were found also in December. Some few birds invaded Friesland, too, in November-December. Recoveries from January are scarcer, but they show the same distribution, with the addition that some individuals appear as far west as in

Zeeland, Belgium and Northern France. This last recovery, which is outside the normal winter area for the bulk of the geese, Mayaud (1956) explains by a short period of frost in the first part of January.

Then came February, with frost and snow and extremely difficult conditions for the birds. From correspondents in Northern Germany I learned that the goose flocks had disappeared; everything was covered with ice and snow and it was hopeless for geese in any numbers to find enough food. But where did they go? It isn't difficult to give an answer to that question, for in February 1956 flocks of geese poured in over Belgium and Northern France as seldom or never before. As the table and the map, Fig. 2, demonstrate, our Spitzbergen Pinkfeet were taking their part in the invasion, and the vanguards reached as far west as the Loire Estuary.

It is no wonder that French sportsmen got the impression that geese must be extremely numerous this winter and that they took the opportunity to chase them.

There were also great numbers of geese (and swans and ducks as well) in Holland at the same time, but here the hunting season closed from 1 February, so that reports on recoveries of ringed birds after this date must naturally be scarce. The three birds reported in February–April were found frozen or starved to death. As known from other sources, the Dutch people made admirable attempts to save the thousands of waterfowl gathered where there was still open water, and their efforts were crowned with the most glorious success. Counts and estimates showed that more than 430,000 swans, geese and ducks were within the borders of the country in February, and in addition more than 100,000 grebes, divers and rails.

From the table, it may look as if the Pinkfeet desert their quarters in Northern



Fig. 1. Normal winter distribution of recoveries of Pink-footed Geese. Circles Sept.-Jan.; dots Feb.-April.

Fig. 2. Distribution of recoveries of Pink-footed Geese in winter of 1955-56. Circles Sept.-Jan.; dots Feb.-April.



Germany in the late winter—but before the spring migration—in normal years and not only in 1956. But this is not the case, as we learn from people living there. The lack of recoveries in February 1955, for instance, may be due to the decreased numbers of geese after the hunting season or to the survivors having become more shy. But one must also be aware that the material, in spite of the 113 recoveries, is not so large that it can be considered wholly representative. Ringing took place in 1952 and 1954 only, and the distribution of recoveries in time and space may thus easily become somewhat fortuitous.

That the flocks of geese within this wide area do move about during the winter is confirmed by observers on Föhr, at the Dollart and the Jadebusen, the principal winter quarters. In the limited area of Föhr (7×4 miles), as many as 8000-10,000 Pinkfeet (or at least mostly this species) may be seen simultaneously on the uninhabited northern and central part of the island. Thus it seems natural that the pastures may be so depleted that the geese have to go away for some time. They have to move also when deep snow covers the fields, as it did at the end of January 1955. But when the snow melts and the pastures are accessible again, the geese return. Similar reports have been received also from Oldenburg and Ostfriesland. Fortunately, the geese are capable of making rather extensive movements within their wintering area in response to the varying conditions, but nothing indicates that in normal years they definitely go away from this area (Schleswig-Friesland), at least not in any numbers.

For the present we may concede that our material is not sufficient, particularly as regards recoveries from the later winter, February-March. But we have every reason to believe that the normal wintering grounds for our Spitzbergen Pinkfeet reach from Föhr to the Zuiderzee. As far as the season 1955-56 is concerned, we have convincing proofs that severe winter weather in February

caused most of the geese to fly away from this area and into Belgium and Northern France, occasionally even over the French Atlantic coast. Three recoveries in Friesland in February–April show that some birds stayed behind here, but as counts gave only 1200 Pinkfeet for February (Over and Mörzer Bruins unpublished information), it is clear that the majority had left. We have no proofs that any of our geese stayed and survived in their German winter territories; on the contrary, both recoveries and reports from local observers indicate that these areas were deserted by the geese.

Great caution should be observed in the use of the totals of recoveries within the different areas, as given in the table. They should be considered in close connection with the actual numbers of birds wintering within the same areas, and these figures are so far unknown. Also, differing legislation in the various countries concerned may cause an uneven distribution of recoveries, at least in the latter half of the season.

REFERENCES

- GOODHART, H. J., WEBBE, R., and WRIGHT, G. T. (1955). Goose-ringing in West-Spitzbergen, 1954. *Wildfowl Trust Seventh Annual Report*: 170–176.
- HOLGERSEN, Holger (1953–56). Bird-banding in Norway 1952–55. *Sterna*, Nos. 11, 21, 26.
- HOLGERSEN, Holger (1954). Unormalt vintertrekk av fiskemake (*Larus canus* L.). *Fauna*, 7: 63–68.
- HOLGERSEN, Holger (1957). Kortnebbgjess (*Anser arvensis brachyrhynchus*) i den kalde ettervinteren 1956. *Stavanger Museums Aarbok*, 1956: 151–158.
- MAYAUD, NOËL (1956). La migration de l'Oie à bec court, *Anser fabalis brachyrhynchus* Baillon et sa présence en France l'hiver. *Alauda*, 24: 245–249.

