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The migrations of wild geese in France*

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Summary

FRANCE is only a secondary wintering place for grey geese (*Anser* sp.). No more than 3000 stay, except during severe winters.

Population of *A. anser* which winter in south-west Spain, about 10,000 birds, migrate through France on a line approximately NE-SW. The geese may stop temporarily during this journey, especially at the end of winter.

A.a.albifrons winters locally in the north-west, near the Channel and Atlantic coasts; *A.fabalis* subsp. in the north-east; and *A. anser* between the estuaries of the Loire and Gironde.

6,000 to 6,500 *Branta b. bernicla* winter on the French coast from Cotentin to the Arcachon Gulf, concentrated especially in the Morbihan Gulf. Their migrations are strictly maritime.

When cold weather strikes mid-Europe and the coastal areas around the North Sea, it brings to France large populations of the species mentioned (mainly the *Anser* group) and some *A.brachyrhynchus*. The other European geese only occur exceptionally.

Because wild geese offer fewer attractions to shooters in France than to those in other European countries, their migrations in France are still imperfectly known and researches in this field are less advanced than they are in Great Britain, the Netherlands or the Scandinavian countries. In the present state of our knowledge, it is difficult to give more than a rough sketch of the situation. It must be emphasised, above all things, that France is on the margin

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of the regular wintering areas of the majority of European species of wild geese and that although some of them occur here regularly they do so only in small numbers, except in spells of very cold weather.

Making use of the information scattered in the ornithological and sporting literature, bag records, reports of French correspondents of the I.W.R.B. and personal observations, it is possible to outline the major features of goose migration in France.

There are three distinct types of movement: 1) seasonal passages of those birds which cross the country, stopping more or less, either on the way to their regular winter quarters in SW Europe or North Africa (post-breeding migration), or to their breeding places (pre-breeding migration); 2) movements of populations regularly wintering in France; 3) occasional "invasions" due to spells of severe cold in mid-Europe and the countries around the North Sea.

1. The first type is exemplified by the movements of the populations of Greylag Geese *Anser anser* wintering in the southwest of the Iberian Peninsula and the north of Morocco (Tangier). These birds, for the most part coming from Scandinavia and northeastern continental Europe, cross our country on each migration, and especially in autumn, following a diagonal NE-SW. Their passage is apparent on a small scale in September and regularly in October-November, in Picardie as well as further to the east in the Ardennes and the Argonne. It becomes more obvious in the maritime regions, from Poitou to the Pays Basque, the flights being concentrated near the coastline. Flocks of geese stay temporarily in these places when feeding conditions and their security seem favourable to them. Such stopping-places are reported in the plain lying between the rivers Scarpe and Escaut, in the middle valley of the Somme, and those of the Oise, Aisne and Marne; further south, up to the confluence of the valleys of the Loire and Allier, in the marshy region of Berry (Brenne), and the valleys of the Vienne and Charente. These migrants reach the Atlantic coast between the Baie de l'Aiguillon and the estuary of the Gironde, where the vast extent of the polders and saltings, close to the sea, invite them to remain for some time. But it is rare, at the present time, for the Greylags to remain at one place for more than a week. Their onward migration seems to be carried out speedily and at a great height.

Some actually follow a less direct route which leads them along the coasts of the Manche as far as Contentin where they turn away SSW over Haute Bretagne. Their passage is noticed in the estuary of the Loire in October.

The left wing of the post-breeding migration streams, probably involving birds of less northerly origin, reaches France by the valleys of the Moselle and Rhine, rejoins those of the Saone and Doubs, at the confluence of which concentrations are sometimes seen. The birds then fly rapidly over the Massif Central in a south-westerly direction to reach the basin of the Garonne and from there cross the Pyrenees.

Towards the end of the winter, often starting from early January, the pre-breeding movement begins to become visible. It spreads from the neighbourhood of the Atlantic up to the estuary of the Loire, into the interior of the country and even, for a minority, into the Bas-Languedoc. It is most often in February that Greylags are reported in the western Mediterranean regions, as far as the Camargue: but they do not stay there much. On the other hand

more or less lengthy stays are made regularly around the estuary of the Gironde, in Charente-Maritime and the Marais Poitevin, as well as in certain spots in the Massif Central (Puy de Dôme). In February-March the Greylags, having moved through the west turn their flight north-eastwards, beginning from the Loire estuary and passing through the coastal regions of the Manche, while other units move on a broad front, without a definite route, towards Belgium and Germany. Bretagne and the Massif Alpin remain outside these movements in autumn as at the end of winter.

No one knows exactly the numbers of Greylags which pass through the country. Since these migrations do not take place along one particular route but develop simultaneously on several wide fronts, censuses prove impossible. But we know from another source (J. A. Valverde) that 8000 geese spend the winter in the Marismas of the Guadalquivir, and that these must represent much the largest part of the population wintering in Spain. Thus it seems reasonable to put the minimum number of Greylags crossing France at 10-12,000.

Bean Geese *Anser fabalis* subsp. are likewise known to winter, though in much smaller numbers and less regularly, in the same places as the Greylags—the Marismas and Tangier. These birds cross France and no doubt do so by the same routes. But they are, most often, not distinguished from the Greylags with which they associate. It seems, however, that their movements occur in a more easterly zone, involving also the south-east of the country, for they are reported in October-November in Savoie and the Dauphine, and even in Corsica. Perhaps they move, in this case, as parts of the populations wintering in Italy, or of those which reach Algeria.

2. Among the species normally wintering in France the White-fronted Goose *Anser a. albifrons* must be given first place. Flocks of Whitefronts, varying considerably in size from one year to another, visit from November to February-March several well-defined localities in the north-western quarter of the country. Unlike the other species of grey geese, these birds show a marked attachment to their feeding-grounds and, if the ecological conditions remain unchanged, return faithfully to them. Their haunts are distributed around Cotentin and the Bretonne Peninsula. These are, in the north, the Carentan Marshes and the polders of the Baie des Veys as well as the polders of the Baie du Mont-St. Michel and, in the south, the marshes of Redon (on the borders of the departments of Ille-et-Vilaine, Morbihan and Loire-Atlantique) and the Loire estuary.

Another haunt formerly existed at the mouth of the Seine, but drainage and cultivation of most of the wetlands of this region, as well as increased shooting pressure, have forced the Whitefronts to abandon it: they now stop there only very briefly. The same danger threatens the Redon marshes where it is probable that the geese will not stay for much longer.

The various contingents of Whitefronts come to their wintering grounds along the coast of the North Sea and the Manche. They may stop on the way at the mouths of the valleys of the rivers Canche, Authie and Somme, in the estuary of the Seine and at the mouth of the Orne. Arriving at Cotentin, the migrants head SSW towards the Baie de Mont-St. Michel, where they aggregate with other groups, to proceed south, flying over Haute Bretagne to reach the Loire estuary. The Redon marshes are exactly on their path. They do not pass round the point of Bretagne.

Up to the present few connected observations have been made in the various haunts named and it is difficult to estimate their respective populations. It is though, nevertheless, that the total number of Whitefronts having wintered in France during the past five years has been less than 1000.

The Bean Goose *Anser fabalis* subsp. is also a regular winter visitor and several flocks are found locally in the north-east of the country. More unstable than the Whitefront their winter stay in France is characterised by erratic wanderings more or less affected by food supplies and the relative security of their surroundings. Two regular haunts are known: the upper valley of the Sarre near the lakes of Stock and Gondrexange, in Lorraine (300-600 birds) and the Der lakes region in Champagne (very variable numbers). There are some other places which the geese visit each winter without staying any length of time: the valley of the Aisne between Rethel and Vouziers, the Ried to the north of Strasbourg, the Langres plateau, the valleys of the Saône and Allier. But some small groups range widely all over the Rhine valley, Champagne and as far as the Massif Central.

Some Greylags *Anser anser* are likewise seen in December, January and February in the west of France in small numbers (generally less than 500). The only important zones for these winter residents are the Loire estuary and the Aunis coast, from the Bay de l'Aiguillon to the Gironde estuary, between which they come and go continually.

We have more precise information about Brent Geese. Only the Dark-bellied form *Branta b. bernicla* winters on the French coast. They rarely appear before the end of October or the beginning of November, although small migrating groups can be seen in the Pas-de-Calais as early as the first week in September. As is normal for this shore-dwelling species migration is strictly over the sea and all the birds wintering on the Atlantic seaboard pass round Finistere. Their winter haunts are for the most part around the Bretonne peninsula, from Contentin to the Loire estuary, the main ones being the Iles Chausey archipelago and the Baie de Paimpol to the north and the Morbihan Gulf in the south. South of the Loire only four other places are known: the Baie de Bourgneuf, the Baie de l'Aiguillon, the eastern shore of the Ile d'Oléron and the Arcachon Basin. No other places are known along the whole coast between Dunkerque and the Cotentin.

The numbers of these species, which had diminished disturbingly between 1930 and 1950 have since increased appreciably, especially last winter (1960-61). At the present time there is an average of 1000 Brent in the various haunts on the north Bretagne coast, several hundred between Brest and Lorient, nearly 3000 in the Golfe du Morbihan, 300 in the Baie de Bourgneuf, some hundred along the Charente Maritime coast and 1000-1500 in the Bassin d'Arcachon. in all 6,000 to 7,000 birds.

3. Each drop in temperature coming unexpectedly in winter in the British Isles, Belgium, the Netherlands or north Germany leads to the arrival in France of flocks of wild geese driven from their normal wintering places. If the cold spell is prolonged and accompanied by heavy snowfall in those countries, these movements may assume the character of a massive exodus: France then acts as an emergency wintering area for the birds. This was the case in February, 1956, when there were exceptional numbers of geese in many parts of the country: probably over ten thousand.

The Pink-footed Goose *Anser brachyrhynchus* is certain to appear in such circumstances in Picardie, Normandie and as far as the Loire estuary. In February-March, 1956 there were 19 recoveries of birds ringed in Spitzbergen (H. Holgersen, 1956). It seems likely that the Pinkfeet which reach as far as the Manche and Atlantic coasts all belong to the population normally wintering on the Danish and Friesian coasts, not to the British stock: no birds ringed in Scotland (or in Iceland) have yet been recovered in France.

Greylag, Bean and White-fronted Geese also come with the Pinkfeet, their distribution being determined by their ecological preferences and food requirements. But it is always the places habitually used by wintering birds which have the greatest concentrations: the Carentan marshes, the Baie de Mont-St. Michel and the Loire estuary have notably larger flocks of White-fronts, while the Greylags increase in the Vendee and Charente-Maritime and the Beans in the east and centre of the country.

It goes without saying that in these large movements some mixing takes place and the different species flock together. Thus it is not possible to assign to each a dispersion zone or a strictly defined line of passage.

Other European species of geese appear in France in hard winters, though only rarely, if not accidentally: the Lesser Whitefront *Anser erythropus*, Barnacle *Branta leucopsis* and, even less often, the Red-breasted Goose *Branta ruficollis*.

Protection

For most shooting men in France geese are, in normal times, an exceptional quarry and very few of them can pride themselves on having killed many. At the regular wintering places, some shooters harry the birds hard without, very often, doing anything other than increasing their wildness and keeping them on the move. But in this way they are helping the gradual desertion of strongholds already very few in number.

Shooting pressure becomes much more dangerous for the geese in cold spells such as that of February, 1956. The birds, dispersed and urged on by hunger, lose their caution and become extremely vulnerable. The losses inflicted in such circumstances will seriously reduce the stocks if they are repeated frequently. Fortunately in 1957 the hunting authorities in France had a law promulgated which allows shooting to be suspended in each department in the event of any natural disasters: fires, floods, prolonged frosts, etc. Thanks to this measure the regrettable massacres of the winter of 1956 ought never to recur.

However, to ensure the continued wintering of geese in France specific reserves need to be created. At present there are only coastal reserves: that of the Golfe du Morbihan holds about 3000 Brent Geese, say half the population of the French coast. Increase of such reserves grows more urgent as the vast tracts favouring the stay of wildfowl are rapidly reduced by drainage and cultivation of large marshy grasslands and saltings formerly used for raising cattle.