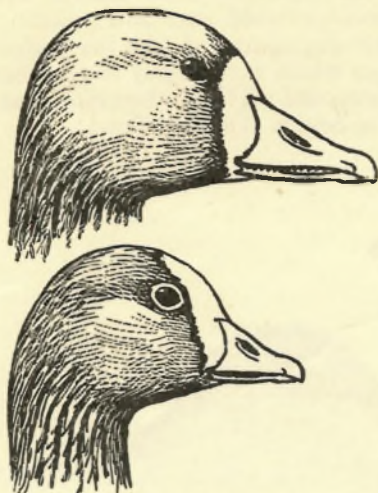


## THE BIRD REPORT



*Whitefront and Lesser Whitefront.*

### THE WILD GEESE

The headquarters of the Trust is at the New Grounds, Slimbridge, Gloucestershire, on the south bank of the River Severn, just above Sharpness Railway Bridge. Here two cottages and about 20 acres of land, including the duck decoy, have been rented from the Berkeley Estate. This is in the centre of the "goose grounds" over which the Trust has been granted watching rights in return for keeping duties.

For those who have not been able to visit the New Grounds it must be explained that the principal feeding ground of the wild geese which winter on the Severn Estuary is a stretch of 200 acres of grassy saltmarsh known as the Dumbles, and the adjacent grass fields which are protected from the high spring tides by a sea-wall. Four pillboxes were built on this wall in 1940, and from their embrasures the wild geese can be watched at very close range. The pillboxes have been modified and improved for their new purpose and a number of observation huts made of straw thatch have been spaced between them along the bank. The watchers can move freely behind the bank so as to be opposite the geese wherever they are on the marsh and can watch them through special adjustable shutters without disturbing them even when they are no more than five yards away.

#### Early History

Geese have probably visited this part of the estuary every winter for centuries under the admirable protection afforded by the Berkeley family, but there is very little record of them until just over 100 years ago. Since 1843 the dates of their arrival from their breeding grounds in the Arctic have been carefully recorded in a special book held at Berkeley Castle. From 1930 onwards detailed notes of the geese seen on the New Grounds have been made by our Council member Mr. H. H. Davis and other observers. The 16th of December, 1945, was an important day. Among 2,000 geese on the Dumbles, seven species were identified by Mr. Davis, two observers (now Members), Mr. John Winter and Mr. Clive Wilson, and the Director. The seven included the very rare Lesser Whitefronted Goose (*Anser erythropus*) which had previously been recorded only twice in Britain—in 1886 and in 1942. Two Lesser Whitefronts were seen that day, and it was also the first time that all five of the British Grey Geese had been seen together—Whitefront (*Anser albifrons albifrons*),

Lesser Whitefront, Pinkfoot (*Anser arvensis brachyrhynchus*), Bean (*Anser arvensis arvensis*), and Greylag (*Anser anser anser*). Barnacle (*Branta leucopsis*) and Brent (*Branta bernicla bernicla*) were also present.

It was this red-letter day combined with the presence of the old decoy and two uninhabited cottages which were largely responsible for the selection of the New Grounds for the proposed wildfowl observatory, and for the establishment, nearly a year later, of the Severn Wildfowl Trust.



#### Season 1946-47. The Arrival of the Geese

Six thatched observation huts were built during the summer, and, indeed, they had not all been completed by the time that the first geese arrived on the New Grounds on 21st September—a flock of eleven. By 30th September there were 41 geese and they were, as the earliest arrivals usually are, Pinkfooted Geese, except for one Light-bellied Brent (*Branta bernicla hrota*) which came with them. This western race of the Brent Goose shares part of the breeding range of the Pinkfoot in Greenland and Spitzbergen.

Throughout the winter, as had been noted in previous years, odd single birds of different species of geese appeared among the flocks. In many cases these were young birds. The reason for this seems to be that a goose lost from its own flock will take up with a flock of another species rather than be alone. Young birds seem most frequently to get lost. Thus it came about that ten of the thirteen British species and sub-species of geese were recorded on the New Grounds (they are placed in order of numbers seen).

Whitefront, Pinkfoot, Canada (*Branta canadensis canadensis*), Bean, Lesser Whitefront, Barnacle, Greylag, Greenland Whitefront (*Anser albifrons flavirostris*), Light-bellied and Dark-bellied Brent. Only the Greater and Lesser Snow Goose (*Anser hyperboreus atlanticus* and *Anser hyperboreus hyperboreus*) and the Redbreasted Goose (*Branta ruficollis*) were not seen, but these have all been recorded from the New Grounds at one time or another in previous years.

The first Whitefronts arrived on 6th October, 1946—a flock of 19. By 13th October, 295 Whitefronts had come and there were 79 Pinkfeet and the Light-bellied Brent, which was an adult gander.

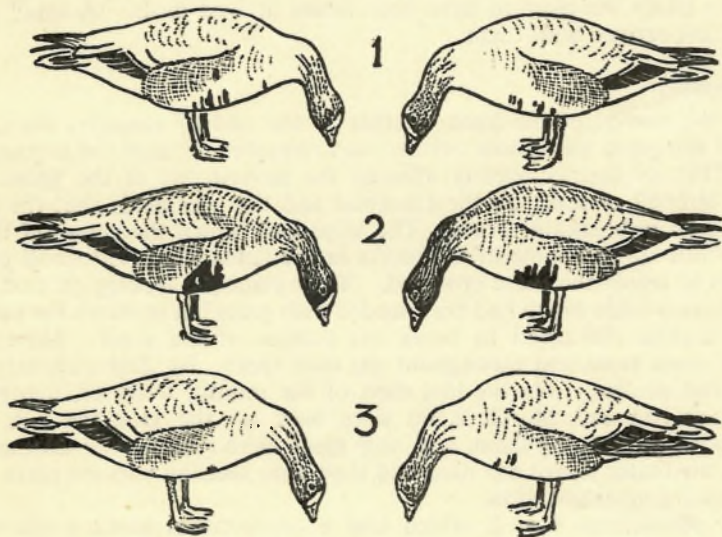
The Whitefronts had evidently had a successful breeding season as 60 per cent. were young birds. For a month the numbers of the geese scarcely increased. The Pinkfeet reached a peak of 97, and an immature Greenland Whitefront (*Anser albifrons flavirostris*) was recorded. This is a sub-species described for science by the Director and Mr. C. T. Dalgety in March, 1948. At the beginning of December, the Pinkfeet left, taking the little Brent with them. This is their usual practice and their destination is one of the mysteries



yet unsolved. Perhaps they go farther south to Northern France or perhaps they join the Pinkfoot concentrations in Norfolk and Lincolnshire—or in Lancashire. We hope to discover this by ringing in due course.

A single Bean Goose arrived on 8th December, and on that date 444 geese were present on the Dumbles. A week later came a large and exciting influx of geese. By Saturday 14th, 1,000 had assembled and during the following day many flocks of between 15 and 40 geese were seen arriving, planing down from a height to settle on the Dumbles. Each new flock was eagerly scanned in the hope that it might contain something unusual.

An immature Greylag, an immature Dark-bellied Brent and a new Bean Goose arrived that day and by the following weekend two Barnacles had also appeared—young birds which always kept together. The total was now 3,000 and two days later it was over 4,000. Many non-breeding adults arrived and the percentage of young birds was greatly reduced from the previous figure of 60. Unfortunately, however, accurate counts of the ratio were not made at this period.



### Lesser Whitefronts

On 28th December, the first Lesser Whitefront was seen. The second was discovered on 3rd January, and on 18th January the presence of a third was established, and it was realised that it had been seen earlier and confused with No. 1. These three geese had nothing to do with each other, were always in different parts of the flock and could be distinguished one from another by the black markings on the belly. No. 1 and No. 3 were rather similar, which caused the early confusion. No. 3 had been wounded and his left wing sometimes drooped. At one time he separated himself from the main flock and was clearly ailing, but he recovered.

These birds were on the New Grounds on and off from mid-January until mid-March. No. 1 was seen on 17 different days, No. 2 on 10 days and No. 3 on 6 days. All three were seen on 18th January and 1st March. It is estimated that some 200 ornithologists saw one or other of these very rare British birds from the Trust's observation huts.

Other records of particular interest concern some wild hybrids between the Bean and the Whitefront. The first of these was to be seen for several days always with its parents—a large Bean gander and a female Whitefront. There were also two other immature birds for whose general appearance such parentage appeared to be the only explanation, and a fourth young bird which might have been an extreme of individual variation or a Whitefront- $\frac{1}{4}$  Bean Goose.

Several adult and immature Bean Geese were present for varying periods during the winter. It was not always possible to determine whether they were birds which had been seen earlier or not. Thus there may have been nine Bean Geese but there cannot have been less than five individuals present at one time or another. All these appeared to belong to the same race of the Bean Goose—the *segetum* type.

On 3rd January a third Barnacle Goose appeared. It did not associate with the other two.

By 7th January there were only 2,000 geese on the New Grounds. At about this date a large influx had been noted on the Sedgemoor in Somersetshire. But on 12th January there were again 4,000 geese present. These did not include the Barnacles or the Brent or Lesser Whitefront No. 2, and many of them are likely therefore to have been newly arrived birds. A small gaggle of 20 Pinkfeet arrived with them.

#### Severe Weather

With the arrival of the hard weather at the end of January, the feeding grounds of the geese were snow covered and remained so until the beginning of March. This, of course, greatly affected the movements of the geese. The grass was already so short on the Dumbles and the grassfields that the frozen snow made an unbreakable crust. The wind had blown the snow off the top of the sea-wall and off some of the banks in the fields which left small patches of grass on to which the geese crowded. Their principal feeding ground, however, was in two fields which had been seeded with grass but in which the previous summer's stubble still stood to break the surface of the snow. Here a fair number of geese remained throughout the cold spell. By 21st February only 500 were still present. On the last days of the month, however, many geese returned, and on 3rd March 2,500 were back on the Dumbles. A single Canada goose was among them, and nine more were seen farther up the river. The single bird later joined the nine and they were seen on various parts of the New Grounds for several days.

Lesser Whitefront No. 2, which had a conspicuous black patch on its belly, was seen on several occasions displaying with a female Whitefront.

With the thaw the fields behind the sea-wall became flooded, while snow drifts lingered on the side of the bank itself, which made access to the observation huts difficult, but it was still possible to reach them by careful stalking.

#### The Departure of the Geese

The geese normally leave during the second week in March, but so late and cold was the season that on 21st March 600 geese were still on the Dumbles. By 29th, eight Whitefronts were left—one adult and seven immatures—sitting placidly in the sun. Next day they too had gone.

Wild Geese had been on the New Grounds for just over six months and during that time, without disturbance to them, several hundred ornithologists had watched them from the Trust's huts—feeding, sleeping, preening, fighting, living their lives, often within a few yards of their most feared enemy but quite unaware of his proximity.

In the building of the huts various aspects had not been foreseen. We had not expected busloads of members of other Societies to come to watch the geese with only an hour and a half at their disposal. Some huts would hold



five people only and the visitors had to be hustled in in relays. We had not expected the geese to be frequently less than ten yards away, and we had built our huts a little too low. When the geese were really close they went out of sight under the bank in front of us. We found also that the pitch of the roof had not left space enough for a long telescope to be used in some sectors in some huts. And so on.

During the summer of 1947 some new and superior huts were built and a second storey was added to the central pillbox—a special vantage point in which to site a large binocular telescope which had lately been acquired for the Trust.



All was now in readiness for the much greater number of visitors who came to see the geese during the autumn and winter—by car before the basic petrol ration was abolished and in busloads afterwards.

#### Season 1947-48

The first geese arrived on 24th September—three days after the first appearance the year before. It was a gaggle of 20 Pinkfeet. The numbers increased until on 6th October there were 121—all Pinkfeet except one Whitefront. At that time we had four full-winged Pinkfeet and one Whitefront which had been caught the previous winter, feather cut, and had lived in the enclosure with the other tame geese. After the moult when their pinions had grown again these five used to fly out to the Dumbles to feed. The tame Whitefront—a female—took up with the new Whitefront—a gander—on the day of his arrival and brought him into the pen in the afternoon. We could walk within ten yards of him in the pen and he showed no signs of alarm whatever, so great was the confidence given by the nonchalant behaviour of his new friends in the presence of mankind.

The first Whitefronts to arrive in any numbers were some 60 on 13th October (by which date in the previous year there were already 295 Whitefronts).

The Pinkfeet remained steady at 120 from 6th October until 20th November, when their numbers began to decrease. By 1st December, 29 were left and by 11th December, ten. By 13th only one Pinkfoot was left—a stray one firmly attached to the Whitefronts. It arrived with them and did not ever consort with the rest of the Pinkfeet while they were still there. (This bird subsequently joined up with the tame Pinkfeet in the New Pen and remained for some weeks. Later it returned to the Dumbles, and two other Pinkfeet also appeared. One of these three was caught in the rocket net.) The numbers of the Whitefronts increased much more steadily than in the previous year as is shown in the following comparative table :—

					Pinkfooted Geese		Whitefronted Geese	
					1946-47	1947-48	1946-47	1947-48
September	21st	..	..	..	11	..	..	..
"	24th	..	..	..	..	20	..	..
"	28th	..	..	..	..	42	..	..
"	30th	..	..	..	40	89	..	..
October	6th	..	..	..	50	120	19	1
"	13th	..	..	..	79	120	295	60
"	14th	..	..	..	..	120	..	110
"	19th	..	..	..	..	119	..	107
"	20th	..	..	..	83	..	293	..
"	25th	..	..	..	..	119	..	253
"	26th	..	..	..	..	123	..	530
"	31st	..	..	..	..	119	..	704
November	10th	..	..	..	97	..	302	..
"	16th	..	..	..	..	117	..	754
"	23rd	..	..	..	..	67	..	757
"	24th	..	..	..	72	..	364	..
"	30th	..	..	..	..	29	..	787
December	6th	..	..	..	..	29	..	1085
"	8th	..	..	..	0	..	443	..
"	11th	..	..	..	..	10	..	1260
"	14th	..	..	..	0	1	1000	1314
"	15th	..	..	..	..	..	2800	..
"	19th	..	..	..	0	1	..	1986
"	20th	..	..	..	..	..	3000	..
"	22nd	..	..	..	4	..	4000	..
"	26th	..	..	..	..	1	..	2500
"	27th	..	..	..	..	1	..	3000
"	30th	..	..	..	3	..	4200	..
January	1st	..	..	..	..	1	..	2800
"	4th	..	..	..	1	..	..	..
"	5th	..	..	..	..	..	2000	..
"	7th	..	..	..	..	..	2000	..
"	8th	..	..	..	..	3	..	2800
"	11th	..	..	..	..	1	2800	..
"	12th	..	..	..	20	..	4000	..
"	16th	..	..	..	0	..	3300	..
"	20th	..	..	..	..	1	..	..
"	25th	..	..	..	..	..	1700	2300
"	26th	..	..	..	..	..	..	2000
February	1st	..	..	..	..	..	1912	1300
"	7th	..	..	..	..	..	1700	500
"	8th	..	..	..	..	..	..	1050
"	10th	..	..	..	1	..	..	..
"	16th	..	..	..	..	..	900	1240
"	17th	..	..	..	..	..	..	1300
"	18th	..	..	..	..	1	..	1300
"	21st	..	..	..	..	..	500	900
"	22nd	..	..	..	..	..	..	600
"	29th	..	..	..	..	2	..	1411
March	1st	..	..	..	..	..	2000	..
"	2nd	..	..	..	..	..	2500	..
"	6th	..	..	..	..	2	..	1600
"	8th	..	..	..	..	..	..	1500
"	9th	..	..	..	..	..	1000	900
"	11th	..	..	..	..	..	..	200
"	12th	..	..	..	..	..	..	60
"	13th	..	..	..	..	2	..	20
"	15th	..	..	..	..	1	1400	21
"	16th	..	..	..	..	..	1800	..
"	17th	..	..	..	..	1	..	21
"	18th	..	..	..	..	..	..	0
"	21st	..	..	..	..	..	600	..
"	24th	..	..	..	..	..	50	..
"	29th	..	..	..	..	..	8	..
"	30th	..	..	..	..	..	0	..

Note.—Although the figures for 1948 do not properly belong to this report they have been included for completeness.



A careful study of these flocks was made and detailed counts of families and immature birds were recorded. For instance, when there were 2,000 geese on the marsh it was found that 520 were young birds of the year—26 per cent. The average size of family appeared to be 3.6, which meant that 144 families were present. If both parents still survived, as in most cases they seemed to have done, only 288 of the 1,480 adults were accounted for. The remaining 1,192 were either non-breeding birds or had lost all their young.

Supposing this to be an average season with 520 grown young, then the flocks should contain 520 1946 birds and 520 1945 birds, less losses. As geese do not breed till they are three years old these 1,040 birds (less losses) would form the bulk of the 1,192. The remainder are presumably barren pairs or pairs which have lost all young. Of course, this may not have been an average season, and in any event it probably differed in its breeding results from 1945 and 1946.

These and many other similar figures are not of very much use by themselves, but over a period of years might lead to most interesting conclusions. The addition of ringing on a large scale which it is hoped to develop at the New Grounds will greatly increase our understanding of the influences governing the annual fluctuations in numbers and the general decline amongst most species of wildfowl.

### THE ROCKET NET

One of the objects of the Trust as laid down in the Rules is "the ringing of the wild geese on the marshes."

Although this Report is primarily concerned with the activities of the Trust during the year 1947, it seems that such an important development as the first attempt with the Trust's new rocket nets for ringing the wild geese should be included although it took place early in 1948, so that Members can be informed of the latest developments at the New Grounds. The following account of the first trial has therefore been prepared by the Director. It proved that great possibilities lie ahead in the field of ringing wild geese.

#### Preparation

We have never been able to settle who thought of it first.<sup>1</sup> We had tried, with only moderate success, to catch geese with a net propelled by springs. We had found that the springs did not propel it far enough. We thought that rockets would propel it farther. And so during the summer we approached the old-established firm of Messrs. Schermuly Brothers, the inventors of the Schermuly Pistol Rocket Apparatus for saving life at sea. The nets, of various sizes, some made of flax and some of cotton, were netted to order, some by another old-established firm, Messrs. Gassons of Rye, and some by Mr. Baines, an elderly net-maker who has for many years made all the nets for Borough Fen Decoy.

On a sunny summer day the first tests were carried out in a grassy meadow at the proofing grounds of Messrs. Schermuly Brothers at Newdigate in Sussex, and we found that a net could be thrown to cover an area of 25 yards square. We found also that if any grass or thistles got into the net, it would not throw nearly so well; and this turned out to be our most serious problem. But, all the same, if the net could be carefully furled in a suitable place frequented by the geese, and the rockets, satisfactorily hidden, could be fired electrically with a length of flex leading to a hide, we believed that we had some chance of success.

When the first opportunity came to try the net in practice, the winter flock of Whitefronts on the estuary was smaller than usual. Only about 1,300 geese

<sup>1</sup>The Director and our Council Member Mr. James Robertson Justice have both staked claims for their inventive genius. The idea seems to have had its origin during the war years; perhaps two simultaneous origins.