

Melanistic White-fronted and other Grey Geese

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On 28th January, 1966, a shepherd, John Dockwrey, reported to Michael Hudson that there was a black goose grazing among the European White-fronted Geese *Anser albifrons albifrons* on the Thames fresh marshes at High Halstow, Kent. Next day Michael Hudson found it grazing in the same area with Whitefronts and we found it again on 2nd February, when we attempted to stalk it for a closer inspection and for photography, but the geese in whose company it was proved to be extremely shy. The bird was similar in size to the other Whitefronts, and fed with them. It was extremely conspicuous on account of its overall blackness, but when carefully inspected there was no doubt about its identity for the small white forehead marking was definitely visible. The rest of the head, neck, breast, belly, flanks, upper and under tail-feathers and primaries were uniformly black. The feathers of the mantle, wing-coverts and secondaries were slightly paler and those of the mantle showed paler edges giving the upper-parts the normal barred effect, although far less conspicuous than usual. The beak was pinkish-orange and legs a dark orange.

At first we wondered whether the bird could have been oiled, but quickly ruled this out, for it was quite obviously extremely fit. Furthermore, the white forehead would not have been clean, had the bird been oiled.

The bird was last seen on 15th Feb-

ruary, 1966, when a flock of 468 White-fronted Geese was present at High Halstow.

In conversation with Count Léon Lip-pens and M. Thierry Robyns de Schneid-auer, we learnt that a melanistic White-fronted Goose had been seen at Zwin, Belgium, between 10th and 15th March, 1965. It was in company with 13 other European White-fronted Geese. This bird was the same size as the other geese and was a beautiful brownish-black, without any trace of black bars on the breast or flanks. The white forehead mark was pale grey rather than white and the bill orange instead of pink. The feet and tarsi were a darker orange than normal.

The fact that the under tail-coverts of the Belgian bird were white would appear to distinguish it from the Kentish bird in which they were black, unless there was a colour change in the intervening moult.

The behaviour of the Belgian bird was normal as was the behaviour of the other geese towards the melanistic one. This was also true of the Kentish bird.

It is of considerable interest that two melanistic European White-fronted Geese were reported in 1967 at Walmsley Sanctuary, Wadebridge, Cornwall, by R. J. Salmon of the Cornwall Bird Watching and Preservation Society. They arrived in mid-January and remained for several weeks in company with other European Whitefronts.

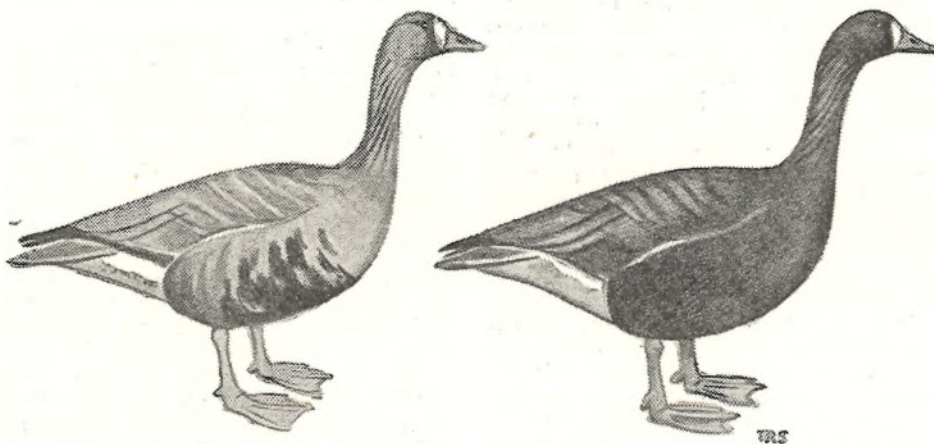


Figure 1. The Belgian melanistic White-fronted Goose (right) beside a normal adult Russian bird. Drawing by Thierry Robyns de Schneidauer.

They were described as being "far darker than any of the usual variations. They were all dark except for the tip of the tail—a dark grey-brown that in poor light looked black. The under tail-coverts and vent area were as dark as the rest of the body . . . the 'white front' was limited to an area above the bill and was not as bright as it should be . . . the legs and feet were orange."

It is tempting to speculate as to whether these two geese were the Belgian and the Kentish birds in company together, in which case, the former would have developed dark under tail-coverts in the interval, but this is quite possible.

The presence of these melanistic geese led us to collate some of our views on the melanistic patterning which many of the grey geese exhibit. The most characteristic feature is the black barring of the breast and belly, which is most highly developed in adults of the White-fronted and Lesser White-fronted Goose *Anser erythropus*. The extreme is shown by the Greenland White-fronted Goose *Anser albifrons flavirostris*, in which the under-parts may be almost entirely black. Black barring is not confined to these two species, for it is also a common feature in adult Greylag Geese *Anser anser*. In these, the bars are much smaller and narrower, but may be widespread over the breast and belly. Much more rarely, minimal black barring may be seen in geese of the Bean/Pink-foot complex, *Anser fabilis/brachyrhynchus* for an adult Pink-footed Goose, which was shot by James Harrison in Angus in January, 1950, had an unmistakable black bar upon the upper breast.

Although first year geese lack any black barring, some 10-20 per cent of European White-fronted Geese, *Anser albifrons albifrons*, show a general flecking with individual dark feathers, which is much more marked in juvenile Greenland White-fronted Geese, a high percentage of which have almost uniformly dark under-parts. A similar condition, although much less obvious, can be seen in some juvenile Greylags and Pink-footed Geese. Juvenile White-fronted Geese also have a black facial band, which is a characteristic identification feature for this species.

The darkest upper-parts are also seen in the Greenland White-fronted Goose and this includes a marked diminution in the amount of white bordering on the tail-feathers. The Greenland White-fronted Goose may also show dark barring in the mantle-feathers, a character which has not been previously recorded. A particularly

good example of this feature was found in a female which was shot at Loch Ken in January, 1966. It is obviously only a short stage from a bird such as this to one exhibiting almost complete melanism, such as the one described from Kent.

Melanism has also been recorded in the Greylag Goose. A bird seen on 6th March, 1964, at Newburgh, Aberdeenshire, by Dr. G. E. Dunnet (*Scottish Birds* 3 : 92) had a black belly and under-parts, while the upper-parts including the head and neck, were dark brown with individual black feathers, appearing to have lighter edges. The outer tail-feathers were the only white plumage on the bird. The legs were very much darker than normal, but the bill appeared normal in colour.

Two other melanistic Greylags are recorded in the same issue of *Scottish Birds*. Both were seen at Maybole, Ayrshire, on 15th March, 1964, by G. A. Richards. One was dark brown on the back, breast and belly, with slightly lighter feather edges giving a normal pattern on the back. There was some white on the under tail-coverts. The grey leading edges of the wings were freckled with brown.

The second bird was black-brown on the head, neck, back, breast and belly, with a nigger-brown back pattern. There was a little white on the upper tail-coverts.

It seems that all the adult grey geese mentioned have a tendency to produce a melanistic pattern, which reaches its normal extreme in the Greenland White-fronted Goose. Exceptionally, the melanism may be so extensive as to be almost total. There is a similar tendency for the juveniles to produce dark mottled under-parts.

It seems highly unlikely that any external factor could be found to explain the development of this melanistic pattern. The controlling mechanism is almost certainly genetic. This suggests that the grey geese of the genus *Anser* were preceded in the evolutionary tree by the black geese of the genus *Branta*.

We are most grateful to Colin Willock for the specimen of the adult Greenland White-fronted Goose, showing the black mantle bar; to Bryan Sage for checking his records of melanism and to Count Léon Lippens and M. Thierry de Schneidaur for telling us of the melanistic Whitefront in Belgium, and the latter for allowing us to reproduce his excellent sketch of this bird.