

of his 'History of the Birds of Norfolk,' a work of great interest from the obvious truthfulness of his observations and remarks, I here annex his account of the differences by which Bewick's Swan is especially distinguished:—

"This species, besides its smaller size (being one third less than the Whooper at the same age), exhibits the following external differences, as given by Yarrell. 'The head is shorter and the elevation of the cranium greater in proportion to the size of the head, the beak narrow at the middle and dilated towards the point. The wings when closed do not extend quite so far beyond the roots of the tail-feathers; the tail itself is somewhat cuneiform; and the toes appear shorter in proportion to the length of the tarsi.' To these I may add, from the examination of several specimens, both adult and immature, since the year 1855, that the proportion of yellow to black in the bill of the adult Bewick's Swan is much less than in the Whooper, never extending so far along the sides of the upper mandible, but rounding off behind the nostrils. The colour itself in some freshly killed birds is decidedly more of a lemon-yellow than orange. The membrane beneath the lower mandible also, which in the Whooper is yellow, is black in the adult Bewick's Swan, and light grey in the young, a distinction apparently overlooked by Yarrell. The distribution of black and yellow on the upper mandible varies, however, in different specimens; and I am somewhat inclined to believe that the broad band of black upon the ridge of the bill extends nearer, by age, to the forehead, as in one or two examples in pure white plumage, I have seen traces of the black extending quite up to the base of the bill, the usual yellow band across the upper part showing faint indications of black mixed with the yellow colour. This is not the case with birds showing the slightest remains of grey in their plumage; and in such immature examples the tints of the bill, both black and yellow, are less vivid. An adult bird, purchased in Norwich Market on the 1st of February, 1865, weighed thirteen pounds; and of two killed in the winter of 1870-71, a male weighed twelve pounds and a quarter, and a female nine pounds. In many adult birds of this species that I have seen, the feathers of the upper part of the head, especially, have been more or less tinged with rust-colour. Internally the convolutions of the trachea present as marked a difference between this species and the Whooper, as between the latter and the domestic Swan; but a reference to Yarrell's illustrations will render it unnecessary for me to give here any further description."

I have long been aware that the extent of yellow and black markings of the bill are very variable; and Professor H. Schlegel, of Leyden, is of opinion that in England we only see young birds or females which have more yellow on their bills than fully adult birds; but we certainly do get old birds also, as is shown by the well-developed convolutions of the trachea. It is probable, I think, that specimens sometimes occur in which the bill is almost wholly black; otherwise why has the term *melanorhinus* been given to a bird of this form by Naumann?

Of the flesh of the Wild Swans as a viand, St. John says, that of those which feed inland is perfectly free from any strong and unpleasant flavour, their food consisting almost wholly of a kind of water-grass with a bulbous root, of which there is a plentiful supply in the lochs of Sutherlandshire, and doubtless other parts of Scotland; and the birds become very fat, so much so as to make it exceedingly difficult to preserve the skins, the only part of them which he put to any use. "When the feathers are picked out, there remains a great thickness of very beautiful snow-white down, which, when properly dressed by a London furrier, makes boas and other articles of ladies' dress of unrivalled beauty."

Speaking of the bird on Loch Spynie, St. John says, "It usually comes in smaller companies than the Whooper; I never saw above eight together, usually only four or five. They are easily distinguished, being shorter and more compact-looking birds. They also swim rather higher in the water, and are much tamer. Until they have been shot at and frightened, it is easy to approach them. Their plumage is of a pure and snow-like whiteness. The Wild Swan, on the water, is by no means so picturesque a bird as the tame Swan, as it seldom arches its neck or spreads out its wings to act as sails as the latter bird does. On wing, however, the Wild Swan is unrivalled."

The egg, as figured by Mr. Hewitson, is creamy white, three inches and three quarters in length, by two inches and seven eighths in breadth.

The sexes are similar in plumage; but the male is smaller than the female, its weight being from nine to fourteen pounds, or about half that of the Whooper.

The principal figure is about half the natural size.