BEWICK'S SWAN.

Cygnus Bewickii, *Yarr.*

Le Cygne de Bewick.

This fine addition to the ornithology of Europe and Great Britain was made known at the commencement of the winter of 1829, although, as has since appeared, various specimens were before that time preserved in different collections; but the characters, principally internal, by which this new species is distinguished from the Hooper had not been ascertained. In a paper by Mr. Yarrell, read at the Linnean Society, the specific peculiarities belonging to the bony structure of this Swan proved satisfactorily that it was distinct from the Hooper, and the name of *Cygnus Bewickii* was proposed for it.

The appearance of this species in England seems to depend on the degree of severity of the winter, and, comparatively, but few have been seen here since the season of 1829–30. It is probably an inhabitant of the northern portions of the continents of Europe, Asia, and America.

Dr. Richardson in his 'Fauna Boreali-Americana' says, "This swan breeds on the sea-coast within the arctic circle, and is seen in the interior of the fur-countries on its passage only. It makes its appearance amongst the latest of the migratory birds in the spring, while the Trumpeter Swans are, with the exception of the Eagles, the earliest. It winters, according to Lewis and Clarke, near the mouth of the Columbia." Captain Franklin, in the Journal of his second expedition to the Arctic regions, when residing at the station on the Great Bear Lake during the winter of 1827, remarks: "We welcomed the appearance of two large-sized swans (Trumpeters) on the 15th of April as the harbingers of spring; and on the 20th of May, the small-sized swans (*C. Bewickii*) were seen, which the traders considered the last of the migratory birds." Captain Lyon describes the nest of Bewick's Swan as built of moss-peat, nearly six feet long, by four and three-quarters wide, and two feet high exteriorly; the cavity a foot and a half in diameter. The eggs were brownish white, slightly clouded with a darker tint.

In size Bewick's Swan is one third smaller than the Hooper at the same age. The plumage is first grey, afterwards white tinged with rust colour on the top of the head and on the under surface of the belly, and ultimately pure white. The beak is black at the point, and orange yellow at the base in the males; this last colour appears first on the sides of the upper mandible, and afterwards covers the upper surface in front of the forehead to the extent of three quarters of an inch, receding from thence by a convex line to the lower edge of the mandible at the gape; the nostrils are oblong; the irides orange yellow; the wings have the second and third primaries the longest and equal, the first and fourth half an inch shorter than the second and third, and also equal; the tail consists of twenty feathers, graduated, cuneiform; the legs, toes, and claws black. The base of the beak in females is lemon yellow. The food of this species is similar to that of the Hooper.

The internal characters which distinguish the two Wild Swans found occasionally in England are as follows:

In the Hooper the tube of the trachea, or windpipe, is not uniform in size throughout its length, and that portion of it which is confined within the keel of the breastbone never departs from a vertical position at any age, nor is there any excavation in the sternum itself. The bronchial tubes are invariably long.

In Bewick's Swan the tube of the windpipe is of equal diameter throughout its length, and when arrived at the end of the keel of the sternum it inclines upward, and passes into a horizontal cavity destined to receive it, caused by the separation of the two horizontal plates of bone forming the posterior flattened portion of the breastbone. The bronchial tubes are short. Descriptions and figures of the organs of voice of the Wild Swans will be found in the Linnean Transactions already referred to.

The whole length of Bewick's Swan is three feet ten inches.

We have figured a male about one third of the natural size.