## PODICEPS CRISTATUS.

Great-crested Grebe.

Colymbus cristatus, Linn. Syst. Nat., tom. i. p. 222.

—— urinator, Linn. ibid., p. 223.

Podiceps cristatus, Lath. Ind. Orn., tom. ii. p. 780.

Lophaithyia cristata, Kaup.

THE flat countries of Norfolk very closely resemble those of Holland, and are especially suited to this Grebe; and here, if unmolested, it would, after arriving in March, construct its great floating weedy nest among the reeds which fringe the sides of the little inland seas called broads. There might be seen the mated pairs sailing about in the open, with uplifted necks, coquetting and swimming round each other, displaying their silvery breasts, ear-tufts, and tippets to the best advantage. It will be observed that ornamentation is carried to the fullest extent, among the Grebes, in this species; for there is not one that is more conspicuously decorated,—the decoration being equally borne by both sexes, that they may vie with each other in the display they make during the season of love. This is no gay dress of the male to attract the female; for the crest and tippets is the nuptial costume of both. In the Norfolk broads (the place of waters and reed-beds) this elegant Grebe is a denizen. Surely it would cause regret to all if this truly indigenous bird should be utterly destroyed; a protest may reasonably be urged, that the remnant may, in future, receive the protection that will frustrate such an end. Norfolk has already lost several of its elegant birds; that the Grebe is not yet enumerated among those which are extinct is a matter of some congratulation, but at the same time of apprehension for its speedy destruction. Independently of Norfolk, Suffolk, and the fens of Lincolnshire, there are other parts of England where the Crested Grebes take up their summer residence. The extensive sheets of water in Cheshire, in Staffordshire, and Shropshire are yearly tenanted by them; and one, two, or more pairs generally rear their young in such localities.

I have now spoken of some of the places in the British Islands which form a summer home for the Crested Grebe. Independently of these there are many others, particularly in our midland counties; and from Cornwall to the Hebrides it occurs at one or other season of the year. As a matter of course, in the Emerald Isle, with its extensive waters, this bird is also found, but in much less abundance than in England.

In Holland, Germany, and Switzerland it is extremely numerous. Northward it at least extends to Sweden and Norway, spreads over the countries of Europe generally, occurs in Africa from north to south, and is also found in India (probably throughout the peninsula), and eastwardly from the Caucasus to China and Japan. Dr. Richardson states that it breeds in the North American fur-countries, and we have evidence that it is also found throughout the whole of the United States. In Australia it is represented by the very nearly allied but distinct species to which I have given the name of *Podiceps australis*.

Sufficient, I think, has been said to show that the Crested Grebe is a regular resident of the British Islands. During winter it lives at the mouths of rivers and estuaries of the sea, seeking inland waters in March or beginning of April for the purpose of breeding: it is then that the ornamental appendages of the head and neck are assumed; after the breeding-time, they are thrown off and the parts assimilate in colour with the rest of the body. Its powers of flight are limited. It is truly a bird of the waters, where it dives for fish, insects, Mollusca, and other animals, both freshwater and marine. Its nest is a large heaped-up mass of weeds, which float on the surface of the mere; and its eggs are five or six in number, of an elongated form and of a stone-white colour. When newly hatched, these little creatures of a day old present a truly singular appearance, with their painted faces and striped bodies; at this early period of their existence, their instinct and agility are astonishing. On the day they emerge from the shell, they swim and breast the gentle ripple, or dive beneath the surface, if any danger should warn them to do so. When wishing to repose, they, like young Cygnets, scramble on the back of the mother, who sails about in the sunshine with her progeny, and, if necessary to avoid danger, will dive with them beneath the surface, as I have also known the Little Grebe to do.

"Since 1851," says Mr. Stevenson, "up to which time the bird was always numerous on the Hickley, Hornsea, and other broads, scarcely more than a single pair have been known to breed there. On the other hand, at Rooworth, Hoveton, where every care is taken to prevent molestation, they are met with during the summer months." This gentleman adds, "I have had many opportunities of watching their habits on their first arrival in spring, when they occasionally rise on the wing and fly round and round with a strong steady flight, before settling again over some distant part of the water. At the approach of a boat, they usually dive off their nests with the least possible motion of the reeds, leaving their eggs lightly covered with loose