

COLYMBUS GLACIALIS, Linn.

Great Northern Diver.

Colymbus glacialis, Linn. Syst. Nat., tom. i. p. 221.

——— *Immer*, Linn. ibid., p. 222.

——— *torquatus*, Brünn., no. 134.

——— *glacialis, maximus et hiemalis*, Brehm, Handb. der Naturg. Vög. Deutschl., pp. 970, 971, 972.

Mergus major, Briss. Orn., tom. vi. p. 105, pl. 10. fig. 1.

——— *navius*, Briss. ibid., p. 120, pl. 11. fig. 2 (adult).

Eudytes glacialis et *Immer*, Ill. Prod. Syst. Mamm. et Av., p. 283.

Cephus Imber et *Lomvia*, Pall. Zoogr. Ross.-Asiat., tom. ii. pp. 344, 345.

THE *Colymbus glacialis* stands at the head of a genus, the members of which are so strictly confined to the northern hemisphere that none are found south of the line, neither do any of them proceed nearer the equatorial region than the latitudes of Madeira or Teneriffe; but to the northward of these they abound. In all the seas surrounding the British Islands, and especially in the firths and salt-water lochs of the eastern and western parts of Scotland, they may be seen, courageously breasting the waves, or making lengthened dives in search of the fish, crustaceans, and mollusks upon which they principally live; and there seems little reason to doubt that the bottom of the seas round our coasts and the beds of our tidal rivers are as closely searched for these kinds of food as the fields or furzy commons are by the Harrier for small quadrupeds and birds, or the ploughed lands by the Peewit for worms and insects.

The bony structure and the dense adpressed plumage of the Great Northern Diver especially adapting it for an aquatic life, it seldom resorts to the land except at the season of reproduction, when it becomes necessary for it to seek the shore for the purpose of depositing and hatching its eggs. This duty performed, the parents conduct their little brood, as soon as they have acquired sufficient strength to battle with the waves and resist the dashing of the breakers, to that element on which they are destined to dwell, and where they remain until, like their progenitors, they are prompted to reproduce their kind, for which purpose they retire to countries further north, such as Iceland, Greenland, Newfoundland, Nova Scotia, the inland waters of Davis's Straits and Baffin's Bay, and the fur-countries of America. In all these localities it is known to breed in greater or smaller numbers. From Mr. Alfred Newton's Notes on the Ornithology of Iceland we learn that a pair or two breed on nearly every lake in that country; they arrive about the first week in May, and towards the end of August begin to show themselves on the sea, where, it appears, they remain all the winter. When the shores of the boreal regions become ice-bound, and the straits entirely frozen over, the Great Northern Diver is of necessity obliged to migrate to more genial latitudes, where a supply of its natural food is still procurable; and hence it is that such numbers are seen around our islands in the seasons of autumn and winter. That the birds here found do come from the far north, I think we have convincing evidence in the circumstance of an example killed on the Irish coast having an Esquimaux's arrow sticking through its neck.

There is, probably, no genus of birds which has so puzzled the ornithologist with regard to the changes in their plumage as the Divers, and of them none more than the present species. We are all aware that the Grebes are subject to a seasonal change, and that their fine tippets and ear-plumes are characteristic of the birds in summer. Ducks and Cormorants undergo the like decorations and changes; and I am certain that the Divers are similarly influenced, and that those parts of the birds which are adorned with markings of black and white are thrown off and replaced by a totally different dress in winter; but we frequently find, at that season, individuals which are as beautifully decorated as in spring and summer. Can these be birds which have not yet bred, and have anticipated the time in which the nuptial dress is ordinarily assumed? I think it likely this is the case; and I believe that Mr. Gatcombe, of Plymouth, who has paid considerable attention to the subject, is of the same opinion as myself; it would be well, however, if those who may be favourably situated for observation would endeavour to throw some additional light upon it. That the bird never attains its fine spotted plumage during the first autumn of its existence, and that it carries its grey dress until at least the second year, is, in my opinion, more than probable; and hence it is that so large a number occur in a costume characteristic both of winter and of immaturity.

The food of this voracious feeder appears to be of a varied character; for while it is said to feed upon herrings, sprats, and all the other kinds of fish of a similar size the sea affords, it also eats crustaceans and shelled mollusks. When it visits the fresh waters, few birds, I presume, are more destructive; Mr. Bond informs me that one, procured on the reservoir at Naseby in Northamptonshire, vomited thirty-one roach when taken into the boat. Its diving-powers are wonderful, and it is with the greatest difficulty the bird can be