

So general is the dispersion of the Kingfisher in all parts of England, that there are few situations, of which water forms a part, where it may not be found; even the waters in Kensington Gardens and Hyde Park are seldom without a solitary example sitting motionless in some nook or corner: yet how few of the busy denizens of our over-crowded metropolis have ever seen it there!

To find a Kingfisher on the Thames, or indeed on any other river, some knowledge of the habits of the bird must have been previously acquired. If the water be clear, it may be seen over the main stream; but if turbid and heavy, and its favourite food not visible, the bird instinctively resorts to a neighbouring ditch or some backwater: there he patiently sits on an overhanging bush, and drops upon any aquatic insect, stickleback, or other small fish. There are times, particularly in autumn, when a partial migration takes place, and the young at least leave the river altogether for the salt marshes near the sea; here every ditch crossed by a rail forms a perch, whence it keeps a sharp look-out for crustaceous or other aquatic creatures, in the choice of which it is not over-nice or particular. Voracity, in fact, is one of the characteristics, not only of our bird, but of the whole race. The Australian Kingfisher will attack a small rat; the English bird a bullhead or a gudgeon the length of its own body, by which means it is not unfrequently choked. No greater proof can be given of the immense number of fish destroyed by these birds than the fact that, of the bones cast up in the shape of lengthened pellets from the stomach of a single pair, a large dry nest was formed in a few days. That such a quantity of bones should be cast up in so short a period may seem strange; but facts are stubborn things, and I will now relate an incident of this kind which came under my own observation.

On the 18th of April 1859, during one of my fishing-excursions on the Thames, I saw a hole in a precipitous bank, which I felt assured was the nesting-place of a Kingfisher; and on passing a spare top of my fly-rod to the extremity, a distance of nearly three feet, I brought out some freshly cast bones of fish, convincing me that I was right in my surmise. The day following I again visited the spot with a spade; and after removing nearly two feet square of the turf, dug down to the nest without disturbing the passage which led to it. Here I found four eggs, placed on the usual layer of fish-bones. These I removed with care, and then replaced the earth, beating it down as hard as the bank itself, and restored the turfy sod. A fortnight after, the bird was seen to leave the hole again, and my suspicion was awakened that she had taken to her old breeding-quarters a second time. I again visited the place on the twenty-first day from the date of my former exploration, and upon passing the top of my fly-rod up the hole, found not only that it was of the former length, but that the female was within. I then took a large mass of cotton-wool from my collecting-box, and stuffed it to the extremity, in order to preserve the eggs from damage during my again laying it open from above. On removing the sod and digging down as before, I came to the cotton-wool, and beneath it a well-formed nest of fish-bones, the size of a small saucer, the walls of which were fully half an inch thick, together with eight beautiful, translucent, pale pinky-white eggs, and the old female herself. This nest I removed with the greatest care; and it is now deposited in the proper resting-place for so interesting an object, the British Museum. This mass of bones, then weighing 700 grains, had been cast up and deposited by the bird and its mate in the short space of twenty-one days. Ornithologists are divided in opinion as to whether the fish-bones are to be considered in the light of a nest. Some are disposed to believe them to be the castings and fæces of the young brood of the year, and that the same hole being frequented for a succession of years, a great mass is at length formed; while others suppose that they are deposited by the parents as a platform for the eggs, constituting, in fact, a nest; and I think, from what I have adduced, we may fairly conclude that this is the case; in fact nothing could be better adapted to defend the eggs from the damp earth.

The great *Dacelonæ* of Australia deposit their eggs in cavernous hollows in the boles of the *Eucalypti*; the *Halcyonæ* in the spouts of the branches of the same trees; both on the bare wood. Our Kingfisher, and probably all the true *Alcedinæ*, on the other hand, like the Sand-Martin, drills a circular, upward-slanting hole in an upright bank, to the depth of two or three feet, at the end of which it excavates an oven-like chamber, large enough for its seven or eight young to sit upright on the nest of bones, the slanting direction of the entrance serving as a drain for the excrement; and hence the fœtid odour from this cloaca often leads to the detection of the breeding-place. It is also detectable by means of another sense; for if the ear be placed to the opening, the shrill voices of the young, resembling the noise produced by a spinning-wheel, or the pea in a child's rattle, may be heard. When the young quit the hole, they sit about on the neighbouring branches, and greet the old birds as they arrive and supply by turns the ravenous brood. These young fliers generally resemble the adults in colour; they are therefore gaily dressed from the beginning. The adult of both sexes are much alike; the male, however, is smaller than his mate in size, but brighter in colour.

Independently of the British Islands, the Kingfisher inhabits every part of Europe, except the extreme north; it is also distributed over the African border of the Mediterranean; in India it is replaced by a nearly allied species, the *Alcedo Bengalensis*.

The Plate represents the two sexes, of the natural size, on the *Carex riparia*.