

afforded by even the mainland portion of the estate; it was sufficiently extensive to allow of portions being devoted to absolute seclusion, for those birds which are naturally disposed to avoid the haunts of man. "Two thirds of the lake, with its adjacent wood and pasture land, were kept free from all intrusion whatever for six successive months every year; even visitors at the house, of whatever rank, being 'warned off' those portions set apart for natural history purposes. Even the marsh occupied by the herons was forbidden ground throughout the whole breeding season, unless in case of accident to a young heron by falling from its nest; in which case aid was afforded with all the promptitude exhibited by the fire-escape conductors for the safety of human life."

The surroundings of the mansion itself were quaint and exceptional, exhibiting the eccentric character of their proprietor. Item, a magnificent sun dial—constructed, however, by a common mason in the neighborhood—composed of twenty individual dials, ten of which, whenever the sun shone, and whatever its altitude, were faithful timekeepers. On these dials were engraved the names of cities in all parts of the globe, placed in accordance with their different degrees of longitude, so that the solar time of each could be simultaneously ascertained. Near this sun dial was a subterraneous passage leading to two boat houses, entirely concealed under the island, furnished with arched roofs lined with zinc plate, and arrangements for slinging the boats out of water when they required painting or repair.

Four sycamores with roosting branches for peahens, and a fifth, whose decayed trunk was always occupied by jackdaws, screened the house from the north winds. Close to the cast iron bridge was a ruin, on the top of whose gable, at the foot of a stone cross twenty-four feet above the lake, a wild duck built her nest, and hatched her young for years. A great yew fence enclosed this ruin on one side, so that within its barrier birds might find a secure place for building their nests and incubation. For the special encouragement and protection of the starling and jackdaw, there was erected within this fence a thirteen feet high stone and mortar built tower, pierced with about sixty nesting berths. To each berth, there was an aperture of about five inches square. A few, near the top, were set apart for the jackdaw and the white owl. The remaining number were each supplied at the entrance with a square loose stone, having one of its inferior angles cut away, so that the starling could enter, but the jackdaw and owl were excluded. The landlord of these convenient tenements only reserved to himself the privilege of inspection, which he could always effect by removing the loose stone.

The lake had an artificial underground sluice, which issuing out at a little distance into sight, furnished the means of cultivating a knowledge of the mysterious habits of the water rat; this stream then passed through one of the loveliest grottos in England. Near this place were two pheasantries, the central portion of each consisting of a clump of yew trees, while the whole mass was surrounded by an impenetrable holly fence; the stable yard was not far off; and hence the squire had infinite opportunities of establishing

the important fact, as he considered it, that the game cock always claps his wings and crows, whereas the cock pheasant always crows and claps his wings. Mr. Waterton's interest in natural history was, however, by no means confined to the animal creation. He concerned himself greatly with the culture of trees (though by no means of land), and hailed any *lusus naturæ* that occurred in his grounds as other men welcome the birth of a son and heir. Walton Hall had at one time its own corn mill, and when that inconvenient necessity no longer existed, the millstone was laid by, and forgotten. The diameter of this circular stone measured five feet and a-half, while its depth averaged seven inches throughout, and its central hole had a diameter of eleven inches. By mere accident, some bird or squirrel had dropped the fruit of the filbert tree through this hole to the earth, and in 1812 the seedling was seen rising up through that unwonted channel. As its trunk gradually grew through this aperture and increased, its power to raise the ponderous mass of stone was speculated upon by many. Would the filbert tree die in the attempt? Would it burst the millstone? Or would it lift it? In the end, the little filbert tree lifted the millstone, and in 1863 wore it like a crinoline about its trunk, and Mr. Waterton used to sit upon it under the branching shade. This extraordinary combination it was the great naturalist's humor to liken to John Bull and the national debt.

In no tree fancier's grounds were there ever one tenth of the hollow trunks which were to be found at Walton Hall; the fact being, that the owner encouraged and fostered decay for the sake of his birds' paradise. These trees were protected by artificial roofs in order to keep their hollows dry, and fitted thus for the reception of any feathered couple inclined to marry and settle. Holes were also pierced in the stems, to afford ingress and egress; and one really would scarcely be surprised if they had been furnished with bells for "servants" and "visitors." In an ash tree trunk thus artificially prepared, and set apart for owls (the squire's favorite bird), an ox-eyed titmouse took the liberty of nesting, hatching and maturing her young. Mr. Waterton attached a door, hung on hinges, to exactly fit the opening in the trunk, having a hole in its inferior portion for the passage of the titmouse. The squire would daily visit his little tenant, and opening the door, delicately drew his hand over the back of the sitting bird, as though to assure it of his protection. But unfortunately, after the bird had flown, one year, a squirrel took possession of this eligible tenement, and although every vestige of the lining of its nest was carefully removed, no titmouse or any other bird ever occupied it again.

In May, 1862, the squire pointed out to the author no less than three bird's nests in one cavity—a jackdaw's with five eggs; a barn owl's with three young ones, close to which lay several dead mice and a half grown rat, as in a larder; and, eighteen inches above the owl's nest, a redstart's containing six eggs! Our author deduces from this circumstance, that in an unreclaimed state, birds, although of different species, are not disposed to quarrel; and the fact that near this "happy family" a pair of water hens hatched