

THE ORNITHOLOGY OF DOWNSIDE.

PRIZE ESSAY BY CHARLES KUYPERS.

LOOKING through the animal world, no class of Vertebrates stands in so favourable a light as that of *Aves* or Birds. And the reason is apparent. Birds as a class are very attractive in plumage, many of them possess great powers of song, while, with few exceptions, they are of clean and active habits. Unlike insects, especially those of the dreaded kinds (though this dread only arises from prejudice or ignorance) they are, with the exception perhaps of the birds of prey, protected and encouraged, though there is unfortunately much unnecessary cruelty perpetrated, and war waged against birds which, were their habits better known, would be found to be deserving of protection. But our object in writing is not to explain how this may be remedied, nor to expatiate upon the beauty and attraction observable among birds in comparison with other classes of Vertebrates, but to refer more particularly to those which are found about Downside, and which have come under our own observation.

On the whole it may be said that there are a great many species of birds found in the neighbourhood, though they are becoming scarcer every year, partly on account of the unnecessary amount of eggs taken, and partly on account of the cutting down of many of the woods and trees which afforded shelter and breeding places to so many birds.¹ But the first seems to be the principal reason for the disappearance of the species once found here, and it is not surprising when we consider that all the country people about here are encouraged to look for nests and eggs, for which they are often paid twice as much as the eggs are worth, by those of the students who are egg-collectors. Perhaps the chief cause for many of our common birds becoming rather scarce this year was the severity of the past winter, when scores of birds died from cold and want of food, caused by the deep snow which covered the ground for a considerable period. Whatever may be the reason, certain it is that there have been very few blackbirds and thrushes here, still fewer robins and starlings, and other birds which last year were so

*During the past year a large quantity has been felled on the property of H.R.H. the Prince of Wales near Downside.

common, though, on the other hand, some eggs which were not found last year have been taken this year.

During the present summer we have not seen ten blackbird's nests, and only two robin's.

But there seem to be more jays than last year, and five nests of this bird were found a short distance from the college. Nests of the kestrel and sparrow-hawk also were found this year. A good many cuckoos have been observed, and one egg was found in a hedge-sparrow's nest. Last year another was found in a willow-wren's nest, and two more were taken in the neighbourhood by the country people. During the present summer we saw three cuckoos flying together, though we never heard of more than two being seen together before. Early in the season we watched chaffinches building their nests, but when they were about two thirds finished, they left off, and we saw them at the nests no more. We do not know if this is because the weather was not favourable for the rearing of their broods, or if something which we did not see caused them to forsake their nests. In another chaffinch's nest, after all the eggs had been abstracted from it, the hen bird began to lay again, not seeming to notice the theft. Starlings were comparatively scarce this season. The only cause we can assign for this is the severity of the past winter, for in the autumn immense flocks of these birds were seen, and we do not know what else could have become of them unless they left this part of the country.

In the summer of 1880, a number of redstart's eggs were taken, but we did not see more than two of these beautiful little birds this year, and not a single nest. A good many blackcaps were observed, and fortunately none of their eggs were taken. Blue tits, cole tits, great tits, and long tailed tits are now much scarcer here than formerly. Not one missel thrush's nest has been found this year, and coots and moor hens are also scarcer. Seeing these birds are becoming rarer every year, it is to be regretted that people will persist in wantonly taking every egg which they find, although they may have specimens of them in their collection, thus destroying numbers of birds which if left in peace would have filled the air with their pleasant notes, and have proved true benefactors to man by their destruction of injurious insects. Thus, far from benefitting science by this course, they do harm to it.

It seems a not impertinent question to ask "could not something be done to remedy this?" But, as we have already observed, this is not the special object of our remarks.

All the game-keepers in the neighbourhood make a point of shooting a hawk or owl whenever they find it, and even though the hen bird may be sitting on her eggs or young, they fire into the nest, thus destroying not only the bird but the young as well. After this, does it seem strange that hawks and owls are becoming scarcer every year? And is it not to be regretted that men who only take into consideration the little harm, and entirely omit to notice the amount of good effected by these beautiful and interesting birds, should thus ruthlessly exterminate them?

Would it not be sufficient to keep their numbers within limits, instead of destroying every one which they can approach? It is not as if they were so numerous as to become a pest to man. On the contrary, they are of infinite use to him, as they destroy a large number of rats, mice, moles, and other vermin which cause him much more annoyance than they do. In the same way many other birds are destroyed by farmers who are ignorant of the good done by them, and are conscious of the harm which they effect when helping themselves to a little ripe grain. With regard to the hawks and owls, something ought to be done to put a stop to this wanton destruction of them which seems to prevail throughout England.

In our observations on birds we have occasionally noticed that one bird will lay in the nest of another, even though the nest has not been deserted. Thus at one time we found a hedge-sparrow's nest in which, besides two of the hedge-sparrow's eggs, were two eggs of the brown linnet's. On another occasion, when the egg had been taken from a chaffinch's nest, a hedge-sparrow laid her eggs in it. Rooks seem to be the most cunning of birds. One day we climbed up a tree a few feet to get a sparrow's nest, and after looking at it came down. The tree was in the middle of the rookery in the shrubbery here, and at the top of it there was a nest not quite finished. The next day we found that the nest was gone, and, on looking about, found it built on a tree a short distance from the one in which it was built before. Thither the rooks, on seeing that the first tree was accessible, had carried it.

We have noticed that a bird may be induced to lay a large number of eggs, by taking some of those already layed, and leaving some in the nest. But a starling upon which we experimented did more than this. There were at first three eggs in the nest, and we took all of them. This bird layed again, and again we took all the eggs. This went on until we had removed no less than fourteen eggs from this one nest. At last we took pity on the persevering starling, and allowed her to hatch her brood in peace.

But time and space will not allow us to pursue this subject further, and we conclude with expressing a hope that people may learn to realise the fact that everything was made for some good, while they realise also some of the wonderful and interesting truths which are made apparent by a study of Nature.

NATURAL SCIENCE PRIZES.

MIDSUMMER, 1881.

MR. HARTING'S REPORT.

IN continuation of the scheme proposed last year, and with a view to encourage the study of Natural History, and more particularly original research in zoology, two prizes have again been offered for competition; namely, one for the best essay on a subject to be selected by each candidate in any branch of zoology, and another for the best collection of natural history objects (zoological or botanical at the option of each candidate) systematically arranged and named, and collected within a radius of ten miles from the college.

Four essays have been sent in. Two of these treat of the Avifauna of Downside and the neighbourhood; the other two deal with the Lepidoptera of the district.

Considering the ages of the writers, which vary from 13 to 15, it is gratifying to find in these essays evidence not only of the interest taken in the competition, but also of the exercise of original observation, and of an attempt to reduce such observation to writing in a methodical manner.

This is really the object of the competition; to induce boys to acquire a habit of using their eyes, to learn facts in natural history by personal observation, and to exercise their memory, and at the same time to test the value of their observations, by writing down the information thus acquired in their own way.

The advantage of such a system is not, or need not be confined to natural history. It is a pleasant mode of learning how to gather a large series of useful and interesting facts, no matter on what subject, and how to store these facts in the memory by methodically grouping and arranging them. Work thus undertaken upon a