

MOLOTHRUS ATER AND HIS HOSTESSES.

NOTICING the article by Charles W. Hargitt, Ph. D., in *Science* for Dec. 1, in regard to the cowbird, I am prompted to relate my experience, since what seems to be with him a rare occurrence, is, in my locality at least, a very common one. I refer to the appropriation of the chipping sparrow's nest by this parasite as a receptacle for its eggs.

It has been my experience with the chipping sparrow, as it has Mr. Hargitt's, that it is exceedingly sensitive about having its nest disturbed, and will desert it upon the least provocation, even though the full complement of eggs may have been deposited. It has seemed to me sometimes that merely a sudden discovery of the nest, with the bird upon it, was all the ground the bird needed as a cause for a hasty removal from those parts, even though not a twig or portion of the tree or bush be touched. This I have particularly noticed, and as I have been making this species a special study the past Summer, I have had occasion to note many times the exceeding sensitiveness of the bird in this regard.

But much as *Spizella socialis* dislikes to have her nest disturbed, my observations have been to the effect that her likes and dislikes are not at all regarded by the cowbird. The evidence which my observations have produced along this line is quite to the contrary of that which Mr. Hargitt's observations find. I well remember that the first egg of the cowbird ever found by myself, in those days of fond recollections when I first began the delightful pursuit now so dear to me, rested snugly in a nest of the chipping sparrow. Since that time I have never dreamed of this being a rare occurrence, for I have so found them times without number; and in several instances have known the hostess so imposed upon, contrary to her exceeding wariness of being disturbed, to accept the situation forced upon her and rear the alien vagabond. I have also found that, in cases where the cowbird found *Spizella's* nest to contain but one egg of its owner, it will sometimes deposit more than one of its own; in one case, I found three. In such instances, the chipping sparrow, of course, does not accept the situation,—the situation is doubtless too large for such a small bird to accept. I can only say in conclusion of this part of my subject that my observations lead me in quite the opposite direction from Mr. Hargitt's conclusion, for I certainly have found *Spizella socialis* a very commonly imposed-upon hostess of the cowbird.

I have at different times found eggs of *Molothrus* in what seemed to me to be out-of-the-way places for them. Among these "out-of-the-way places" I would mention the nests of the meadowlark, robin and kingbird, for I have found them there, and apparently no attempts had been made to remove them from the nest, for in the cases of the meadowlark and kingbird they were equally advanced in incubation with the rightful occupants.

And now, if I may be pardoned for deviating somewhat from my subject, and since the chipping sparrow's sensitive nature is before us for consideration, I would like to ask for enlightenment from more experienced heads than mine in regard to a matter that has puzzled me. The past summer I found a nest of the chipping sparrow containing four eggs. Meaning to test the bird's sensitive nature in this case, I did not so much as touch any portion of the evergreen tree containing the nest, but hastily removed from the locality. Returning two days later to learn if, perchance, the bird had deigned to still occupy her well-hidden home, I found that in place of the four eggs only two remained. Re-

turning again the next day, I found but one egg in the nest, and coming again the following day, I found an empty nest. The eggs must have been removed from the nest without being broken, for not a trace of an egg-shell was anywhere about.

This in and of itself would not necessarily be a very remarkable occurrence, but this is only one instance. I have several times observed the same things in cases where a nest of the chipping sparrow had been discovered containing eggs.

Can the editor of *Science* or any of its readers offer a solution of this problem? I should be interested to hear.

The chipping sparrow is well worthy the study of everyone. Many excellent traits of character will be discovered.

NEIL F. POSSON.

Batavia, N. Y.

PROTECTION OF BIRDS FROM THE BOYS.

IN *Science*, Nov. 10, Dr. Shufeldt charges the "small boys" with being the most destructive of all the agencies that are operating to exterminate our beautiful and useful birds. Teachers in urban schools who conscientiously study the daily conduct of their pupils and inquire of them as to their daily associations know that the Doctor's statements are sadly near the truth. The accusation would better be made without limitation in the size of the boys. In every city and town, and in many villages, there is a considerable population living in homes entirely destitute of humanizing influences. The children of this class run at large, exercising their brutal and vicious instincts, and the unlimited slaughter of innocent birds is one of the results.

The evil being defined and located, the remedy is indicated. We look to the public schools for the redemption of Young America. The rapidly broadening scope which is being permitted in the work of the schools opens the way for a campaign of education.

Several lines of attack will at once suggest themselves to teachers and others who are interested. Some of these I will mention.

1. *Punishment of the guilty under such laws as exist for the protection of birds.* No teacher is likely to use this means except in extreme cases.

2. *Teaching beautiful sentiments about birds and bird life.* This is good so far as it goes. Kindly feelings are aroused and strengthened. But many hardened ones refuse to be touched and seize the first opportunity to show their defiance in a practical manner. At the best this course gives little real knowledge of the birds and the children remain strangers to them while they should have most intimate daily acquaintance. The proper place for such teaching is supplemental to the following.

3. *Close, accurate, continued study of birds, their ways, and their works.* By this procedure the work is given an intellectual basis. This method rests on a sound psychological principle. Any student of birds who can recall the impressions of his early studies knows that every new perception of beauty and adaptation in the structures of his specimens increased his regard for the living forms and restrained him from needless destruction of their lives even for legitimate purposes of study. The same key will open the way to the feelings of most boys. The glittering plumage in the bush excites the savage instinct to possess it. This interest is only momentary, and when the coveted object has been brought down by stone or shot it is soon flung aside. It would be a hundred times better if the boy shot birds to study them, but that is not necessary. Plenty of material may be collected without intentionally taking the life of a single bird, and we may hope to

make the oodies of birds objects of sacred regard to most boys so that they shall not wish to deprive them of life.

In every city a considerable number of birds meet accidental death every year, especially during the seasons of migrations. Many of these are picked up by the children while fresh and fit to handle. These unfortunate birds will become the source of most of our material. In any corps of teachers we would expect to find at least one with sufficient knowledge of taxidermy to prepare the skins suitably for preservation and study. Some of the older boys will gladly learn to do this work, and a few will become quite efficient, so that the labor will not only be taken off the hands of the teacher but will become of educational value to the pupils.

The deserted nests should be freely taken for study. After studying, in winter, the nests of last season, most pupils will be early on watch to see the new nests built. This will lead them to observe the more touching actions of the birds. At all times the teacher should be on the watch for opportunities to make direct appeal to the moral nature, but it should be done unobtrusively.

4. *Organize pupils into bird-protecting societies.* By this means unite all pupils, who are sufficiently awakened, in an effort to protect the birds and their nests, to provide nesting places for those species that come near human habitations, and to exert a restraining and educating influence on the thoughtless and vicious. By this means the few children who never enter the public schools could be watched and possibly influenced.

In an attempt to carry out the plan outlined above some difficulties and dangers must be met. Considerable knowledge of birds is necessary to the one who directs the undertaking. Details of method in the school room would occupy pages and would not be in place here. It is sufficient for the present to state that the writer knows where this plan is being tried with encouraging progress.

C. D. McLouth.

Muskegon, Mich., Dec. 16, 1893.

BIRD NOTES.

THE notes published in a recent issue of *Science* on "Birds Which Sing on the Nest" recalls an interesting instance of this kind that came to my notice last summer. It shows that the black-billed cuckoo is not always as quiet and retiring as we generally consider him. A pair of these birds built their nest in my friend's door-yard, so close to the house that it afforded a good opportunity to observe them. This pair were unusually loquacious, and throughout the period of incubation the bird on the nest was often heard holding a conversation with its mate lurking in the trees about the premises. When one bird flew to its perch on a certain tree, preparatory to flying to the nest, there was likely to be considerable chatter before it approached nearer. It is interesting to note that while some birds are quiet when incubating, as if to escape observation, their young often make considerable noise while yet in the nest. The flicker is a case in point. To merely hammer on the tree in which the nest is located is often enough to set the whole family going. I have also heard young bluebirds calling "*we-a-ry*" from their nest in a hollow stub. And, as for the young crow, his "*gobble, gobble, gobble*," when being fed, is a well-known sound in the woods in spring, and often betrays the nest to the young bird's-nester.

WILLARD N. CLUTE.

Binghamton, N. Y., Dec. 13, 1893.

POSTAGE ON NATURAL HISTORY SPECIMENS.

In your issue of Nov. 17, with reference to a ruling that natural history specimens cannot be transmitted through the mails as "samples" it is suggested that the various scientific bodies of the United States should use their influence to induce the governments of certain enumerated countries to consent to such material passing by sample post. It is sought to throw the blame upon the countries in question, whereas the trouble arises solely from the fact that the United States have not yet advanced far enough to have a *parcel post* as is in operation among these other countries. There is no difficulty in transmitting specimens from Canada to the most remote coun-

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