

## Our Wild Birds and their Economic Value

By Manlius Bull, President Audubon Society, Winnipeg

Very few people, excepting those who have given the matter some attention, have the remotest idea of the value of birds in their relation to agriculture, notwithstanding the fact that both the Canadian and United States Governments are trying to educate the farmers along this line. When I mention our own government I refer particularly to that of the Province of Ontario, which has published a Bulletin—No. 218—"Birds of Ontario in Relation to Agriculture," by Charles W. Nash. This can be had for the asking, and should be in the hands of every farmer, gardener and fruit grower, as it would without doubt be of great benefit to them.

My interest in birds from the economic point of view is quite recent. Its study was a revelation to me, and for the past year I have been doing all I can to induce the school board, parks board and individuals to erect nesting houses for these delightful friends. I had the pleasure of feeding several varieties of birds during the past winter at 95 St. Paul, on the east side of the Red River, and they showed their appreciation by staying there.

To give an idea of the economic worth of birds to the agriculturist I copy a few extracts from the Ontario Bulletin:—

"The economic value of birds to man lies in the service the birds render in keeping within proper limits the various form of insects which are injurious to our crops or animals; in preying upon rats, mice and other destroyers of our grain and fruit trees; in devouring weed seeds, in acting as scavengers and in the case of game birds, furnishing sport and food."

"No reliable estimate has ever been made of the annual loss to the farmers of Ontario by the depredation of insects. In the United States much careful attention has been given to the subject, and in a report to the Department of Agriculture at Washington issued in 1912, Dr. Henshaw estimated the loss to the agricultural interests of the country at upwards of seven hundred millions of dollars (\$700,000,000). Our losses will certainly be as large proportionately. The loss is caused chiefly by an insufficiency of bird life on the cultivated lands. Experience the world over has shown that as bird life decreases, insects increase; also that birds are more efficient in keeping down insect pests than all other agencies natural and artificial combined."

"Experience has shown that laws are of but little use in accomplishing reforms unless sustained by an intelligent, sympathetic public opinion, and this is what we require to cultivate on behalf of our birds. We have a protection law which is amply sufficient if properly enforced. Every person can protect the birds on his own lands, and if he would only do so the benefits to be derived from his efforts would soon be apparent."

Beautiful little pocket books—"Bird Guide"—(part 1 Game Birds) (part 2 Land Birds East of the Rockies) in natural colors, by Chester A. Reid, Worcester, Mass., may be procured at the book stores for 75c. each in cloth, or at \$1.00 in leather covers. These will be found most interesting both to adults and children, and help to create a love for our beautiful birds. (I might mention that another pocket book by the same author is "Wild Flowers East of the Rockies," also in natural colors). Mr. Reid in his preface states:—

"It has been found by observation and dissection that a cuckoo consumes daily 50 to 400 caterpillars or their equivalent, while a chickadee will eat 200 to 500 insects or up to 4,000 insect or worm eggs. 100 insects is a conservative estimate of the quantity consumed by each individual insectivorous bird. By carefully estimating the birds in several areas, I find that in Massachusetts there are not less than five insect eating birds per acre. Thus this State with its 8,000 square miles has a useful bird population of not less than 25,600,000, which for each day's fare requires the enormous total of 2,560,000,000 insects. That such figures

can be expressed in terms better understood it has been computed that about 120,000 average insects fill a bushel measure. This means that the daily consumption of chiefly obnoxious insects in Massachusetts is 21,000 bushels. This estimate is good for about five months of the year, May to September inclusive. During the remainder of the year the insects' eggs and larvae destroyed by our winter, late fall and early spring migrants will be equivalent to nearly half this quantity."

A useful and instructive book "How to Attract and Protect Wild Birds," can be procured from the National Audubon Society, New York (price 40c.), and in this book will be found evidence of the value of protecting birds as practiced by Germany under Government supervision.

In "Plants Useful to Attract Birds and Protect Fruit East of the Rocky Mountains," W. L. McAtee, Assistant Biological Survey, United States, makes the following statement:—

"Evidently there need be no season without its fruit if judicious selection of shrubs and trees is made by those desiring to attract birds. Thus a thicket of raspberry or dewberry, elder and dogwood grouped about some taller sumach, Juneberry and Juniper would supply fruit throughout the year."



Nighthawk

"Bird Lore," the official organ of the National Audubon Society, published by D. Appleton and Co., New York, at \$1 per year, should be in every home.

I have quoted enough to prove the immense value to the community of our wild birds, and it is surely the duty of everyone to do what he can to protect and encourage them by putting up nesting houses and feeding them in the spring and fall and those that remain with us in winter also. A little suet and grain will go a long way.

I should like to see our public schools take a few minutes a week to teach the children this subject in connection with our wild flowers, as I am sure they would be intensely interested, and their natures would be materially improved.

I had the pleasure for several months of listening while one of our city ministers gave the children of the church a ten minute talk each Sunday morning on our wild birds, and they as well as adults were both interested and profited by these short talks. I venture to say the children will never forget them.

Mr. W. G. Scott, for many years our city treasurer, who is a great friend of all wild birds and game, was the inspiration that caused a meeting to be called recently in the Industrial Bureau to form a provincial branch of the Audubon Society, and it was very gratifying to find that the board room was crowded with friends of the wild birds. I hope that you, dear reader, will show your interest in your province by joining this society. The secretary is Mr. J. B. Wallis, of 316 Boyd Avenue, Winnipeg.

National Association of Audubon Societies

Special Leaflet No. 22

### Announcement to Manitoba Teachers

Through the generosity of a friend of the birds, the National Association of Audubon Societies is at present able to make the following offer of assistance to those teachers in Manitoba who are interested in giving instruction to pupils on the subject of bird study.

#### Junior Audubon Classes

To form a Junior Audubon Class for bird study, a teacher should explain to the pupils of her grade (and others if desired) that their object will be to learn all they can about the wild birds, and that everyone who becomes a member will be expected to be kind to the birds and protect them. Each pupil will be required to pay a fee of 10c. each year. When ten or more have paid their fees, the teachers will send their money to the Audubon Society of Manitoba, and give the name of the Audubon Class and her own name and address. The society will then forward to the teacher for each pupil whose fee has been paid the beautiful mocking-bird "Audubon Button," and a set of ten colored pictures, together with outline drawings and leaflets, list of which is given herein. The teacher will also receive, free of cost, the splendid magazine, "Bird Lore," which contains many suggestions for teachers. It will be expected that the teacher



Robin

hair; examine the mud cup of the Robin's nest, the soft lining of the Loggerhead Shrike's nest, etc.

**FEEDING BIRDS**—In winter arrange "Bird tables" in the trees and by the windows, and place suet, cheese, and seeds on them; in summer put out bathing and drinking pans, and note what birds come and how frequently, and report in detail to the class.

**NESTING BOXES**—In early spring put up bird boxes for Bluebirds, Wrens, Chickadees, Nuthatches, Martins and others.

The leaflets will be found to contain many suggestions about bird feeding and nesting boxes.

The children may use their crayons and fill in the natural colors of the birds in the outline drawings, using the colored pictures for comparison. This will help fasten in their minds the correct colorings of the birds, thus helping to identify them in the field.

List of leaflets, colored plates and outline drawings supplied pupils under the plan as outlined in this announcement: Nighthawk, Mourning Dove, Meadowlark, Flicker, Sparrow hawk, Screech owl, Purple Martin, Hummingbird, Cuckoo, Robin.

Teachers may find the following books of value in their work: "First Book of Birds," by Olive Thorne Miller. Price \$1 (contains many valuable suggestions). "Stories of Bird Life," by T. Gilbert Pearson. Price 60c. (written specially for school work).

"Bird Guide," by C. K. Reed. Land birds, price 75c. Water birds, price \$1. (Contains colored pictures of birds, very useful for field work).

#### Correspondence

All teachers and others interested in bird study are invited to correspond freely with the society.

#### Form for Reporting the Organization of A Junior Audubon Class

Mrs. C. Percy Anderson,  
Treasurer, Manitoba Audubon Society,  
238 Oxford Street,  
Winnipeg, Man.

Dear Madam,  
With this I enclose \$..... in payment for the fees of ..... members of the ..... Junior Audubon Class, which was formed at ..... on ..... 191.....

You may send Audubon Buttons, leaflets and "Bird Lore" to the following address:

..... Teacher.

P.O. Address.....  
Express Office.....

Have you previously formed a class under this plan? Yes. No.

give at least one lesson a month on the subject of birds, for which purpose she will find the leaflets of great value as a basis for the lessons.

#### Bylaws for Audubon Class

If the teacher wishes, the Audubon Class may have a regular organization and a pupil can preside upon the occasions when the class is discussing a lesson. For this purpose the following simple set of by-laws is suggested:

Article I.—This organization shall be known as the (Webster Fifth Grade) Junior Audubon Class.

Article II.—The object of its members shall be to learn all they can about the wild birds, and try to protect them from being wantonly killed.

Article III.—The officers shall consist of a president, secretary and treasurer.

Article IV.—The annual fees of the class shall consist of 10c. for each member, and the money shall be sent to the Audubon Society of Manitoba, in exchange for Educational Leaflets and Audubon Buttons.

Article V.—The Junior Audubon Class shall have at least one meeting every month.

#### Subjects to Study

Besides the study of the particular birds treated of in the leaflets, with colored pictures, the following subjects may be discussed with profit:

**BIRDS' NESTS**—In the fall, after the birds have all left their nests, these may be collected and brought to the school room. Study them and learn that the Chipping sparrow's nest is made of fine twigs, grasses, and is lined with horse

Joy is for all men. It does not depend on circumstances or condition; if it did, it could only be for the few. It is not the fruit of good luck, or of fortune, or even of outward success, which all men cannot have. It is of the soul, or the soul's character; it is the wealth of the soul's own being, when it is filled with the spirit of Jesus, which is the spirit of eternal love.—Horace Bushnell.