

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

---

Faculty Publications: Department of Entomology

Entomology, Department of

---

10-1908

## A Plea for the Protection of our Birds

Lawrence Bruner  
*University of Nebraska*

Follow this and additional works at: <http://digitalcommons.unl.edu/entomologyfacpub>

 Part of the [Entomology Commons](#), [Ornithology Commons](#), [Poultry or Avian Science Commons](#), and the [Zoology Commons](#)

---

Bruner, Lawrence, "A Plea for the Protection of our Birds" (1908). *Faculty Publications: Department of Entomology*. 622.  
<http://digitalcommons.unl.edu/entomologyfacpub/622>

This Article is brought to you for free and open access by the Entomology, Department of at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Faculty Publications: Department of Entomology by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.



"To appreciate the beauty of form and plumage of birds, their grace of motion and musical powers, we must know them." "The ease with which we may become familiar with the feathered neighbors robs ignorance of all excuses." "Once aware of their existence, and we shall see a bird in every bush and find the heavens their pathway. One moment we may admire their beauty of plumage, the next marvel at the ease and grace with which they dash by us or circle high overhead." The comings and goings of our migratory birds in springtime and fall, their nest-building and rearing of young, their many regular and beautiful ways as exhibited in their daily lives, stir within us impulses for kindness toward the various creatures which share the world with us. "But birds will appeal to us most strongly through their song. When your ears are attuned to the music of birds, your world will be transformed. Birds' songs are the most eloquent of Nature's voices: the gay carol of the grosbeak in the morning, the dreamy, mid-day call of the pewee, the vesper hymn of the thrush, the clanging of geese in springtime, the farewell of the bluebird in the fall—how clearly each one expresses the sentiment of the hour or season!"<sup>1</sup>

But if we can not take up the subject of bird protection from the humane standpoint, if we have no chord of sympathy or sense of honor remaining, are we willing to adopt business principles in our dealings with the birds?

Quoting from a paper by Professor S. A. Forbes, who has done much in the line of bird study in their direct relations to man, we have the following: "Excluding the inhabitants of the great seas, birds are the most abundant of the vertebrata, occupying in this great sub-kingdom the same prominent position that insects do among invertebrate animals." This position of the two groups in their respective divisions of the animal life of the globe can not be due simply to chance. There must be some connection between them. What is it?

It is needless here for me to state that the insect life about us is plentiful and varied. We all know this to be too true. Nearly, if not quite, nine-tenths of all animal forms belong here, while the individuals of many kinds are incalculable. We know also that their powers of reproduction are simply wonderful, being limited only by the amount of food available, etc. Now, the disproportionate number of birds on the other hand, with their "universal distribution, the remarkable locomotive power which enables them readily to escape unfavorable conditions, and their higher rate of life, requiring for their maintenance an amount of food relatively enormous," gives to them a significance which few seem ever to have realized.

Briefly told, the economic relation of birds to man lies in the services which they render in checking the undue increase of insects, the devouring of small rodents, in destroying the seeds of noxious weeds, and by acting as scavengers on land and water.

Those who have studied the subject carefully have estimated that a loss of nearly \$400,000,000 is sustained annually by the cultivators of the soil from insect ravages in the United States and Canada. This does not include the

---

<sup>1</sup> Frank M. Chapman in "Bird Life."—D. Appleton & Co.

damage done to ornamental shrubbery, shade, and forest trees, nor to the grasses growing on our prairies. "But if insects are the natural enemies of vegetation, birds are the natural enemies of insects."

"In the air swallows and swifts are coursing rapidly to and fro, ever in pursuit of the insects which constitute their sole food. When they retire, the nighthawks and whip-poor-wills will take up the chase, catching moths and other nocturnal insects which would escape day-flying birds. Fly-catchers lie in wait, darting from ambush at passing prey, and with a suggestive click of the bill returning to their post. The warblers, light, active creatures, flutter about the terminal foliage, and with almost the skill of a hummingbird, pick insects from the leaf or blossom. The vireos patiently explore the under sides of leaves and odd nooks and corners to see that no skulker escapes. The woodpeckers, nuthatches, and creepers attend to the trunks and limbs, examining carefully each inch of bark for insects' eggs and larvae, or excavating for the ants and borers they hear within. On the ground the hunt is continued by the thrushes, sparrows, and other birds that feed upon the innumerable forms of terrestrial insects. Few places in which insects exist are neglected; even some species which pass their earlier stages or entire lives in the water are preyed upon by aquatic birds."

In nearly every case where the food habits of our birds have been carefully studied, do we find that the good done far exceeds the possible harm that might be inflicted by our birds. Allowing twenty-five insects per day as an average diet for each individual bird, and estimating that we have about one and one-half birds to the acre, or in round numbers 75,000,000 birds in Nebraska, there would be required 1,875,000,000 insects for each day's rations.

Again, estimating the number of insects required to fill a bushel at 120,000, it would take 15,625 bushels of insects to feed our birds for a single day, or 937,500 bushels for 60 days, or 2,343,750 bushels for 150 days. These estimates are very low when we take into consideration the number of insects that various of our birds have been known to destroy in a single day. For example, the stomachs of four chickadees contained 1,028 eggs of canker-worms. Four others contained about 600 eggs and 105 mature females of the same insect. The stomach of a single quail contained 101 potato beetles; and that of another upwards of 500 chinch-bugs. A yellow-billed cuckoo shot at six o'clock in the morning contained forty-three tent caterpillars. A robin had eaten 175 larvae of *Bibio*, which feed on the roots of grasses, etc., etc.

Birds, like all other animals, feed upon that food which is most readily obtained, hence the insectivorous kinds destroy those insects which are most numerous—the injurious species.

Estimating that there is a single grasshopper, katydid, or cricket to each square yard of surface, it would require at least 650,000 bushels of these insects to cover the state. Not taking into account any of the myriads of other insect forms nor the rapid rate of reproduction which is going on among them, these alone would be nearly one-third enough insect food for our birds

---

<sup>1</sup> Chapman in "Bird Life."

during the year. This being true it is plain that at least twice as many birds could find the proper insect food in our state each year.

A perusal of the various works that have been written on the economic relation of birds to man will support the statement that, if we were deprived of the services of birds, the earth would soon become uninhabitable.

In addition to the actual good that birds do in the destruction of noxious insects, as recorded above, many of them are engaged for at least one-half of the year in hunting out and devouring the seeds of various troublesome weeds and other, to us, useless plants. Such is the mission of the various sparrows, snowbirds, finches, and long-spurs which often occupy our fields in flocks of thousands during the winter months.

If, after ascertaining such truths as the above regarding birds, we continue to slaughter them, it is not due to thoughtlessness on our part. We do it wilfully and maliciously. The schoolboy may thoughtlessly rob a bird's nest or kill a bird or two. It is the duty of teacher and parent alike to teach him better, to show him how wrong it is to destroy life uselessly. It is especially their duty to prevent the destruction of birds. If each schoolboy in the State of Nebraska were to rob a nest of say five bird's eggs, what would be the result? Yet the making of bird-egg collections is getting to be such a "fad" that almost every boy enters into it more or less zealously at some time or other. Some single collectors in a single season take 500 or more eggs. This should be stopped. We can study birds and their nests without destroying either. A live bird is more interesting than a dead one. An egg left in a nest where it will in due time become a live creature is of more interest than an empty egg-shell.

We, as citizens of the United States, pride ourselves on being highly civilized and humane. We are in some directions, in others not. We also claim to be intensely practical and business-like in everything. Are we?

LAWRENCE BRUNER,  
Professor of Entomology,  
University of Nebraska.