

A Plea for the Protection of Birds.

The fact that insect depredations are increasing in extent each succeeding year makes it plain to us that something must be done to prevent it, and that quickly. We have found to our sorrow, that although we are continually making increased efforts to destroy these pests, our efforts avail but little and the destruction of our crops goes on. What, then, is to be done? How can we be released from this ever increasing struggle for existence?

The answer is plain. Heed the advice of the naturalist who has made a study of the life-histories of the various other living creatures in the world about us. Do not condemn what he says without at least examining into it a little.

In his desire for bird protection the naturalist is not prompted by sentiment alone—far from it! Although from the sentimental standpoint solely the friend of birds would have sufficient grounds for making such a request.

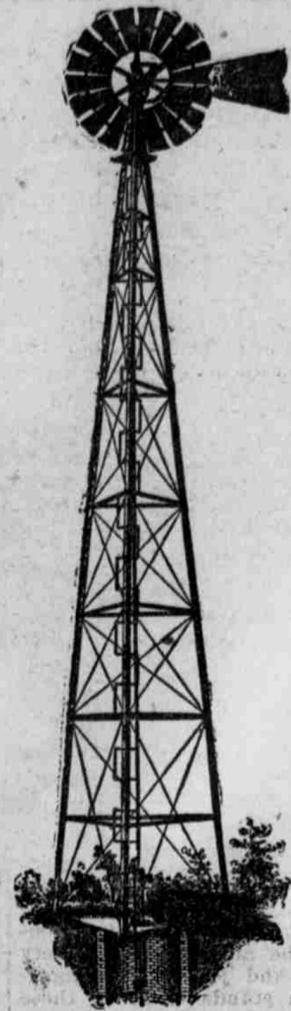
"To appreciate the beauty of form and plumage of birds, their grace of motion and musical powers, we must know them." "The ease with which we may become familiar with the feathered neighbors robs ignorance of all excuses." "Once aware of their existence, and we shall see a bird in every bush and find 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, midday call of the pewee, the vesper hymn of the thrush, the clanging of geese in springtime, the farewell of the blue-bird in the fall—how clearly each one expresses the sentiment of the hour or season!"

But if we cannot 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 cannot 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 numerous 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," give to them a significance which few seem ever to have realized.

Briefly told, the economic relation of birds to man lies in the services



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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 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 blossoms. The vireos patiently explore the undersides 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 re-