

# Birds of Prey in Relation to Agriculture.

By J. P. Turner, Winnipeg.

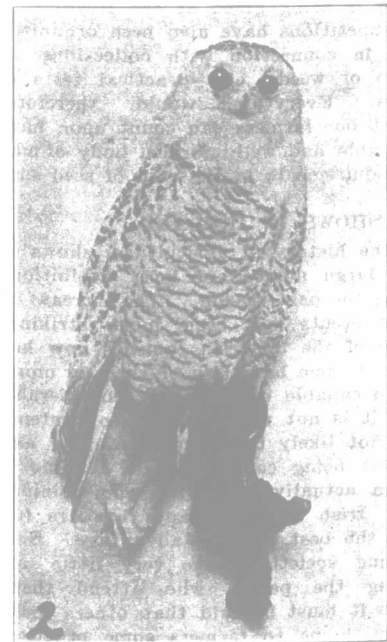
The agriculturist in the Province of Manitoba annually suffers great loss from the depredations of two classes of natural enemies. Individually, they are insignificant, but most formidable by reason of their numbers. These are small rodents (gophers, mice, etc.) and insects. It would be impossible to estimate correctly the amount of damage done by these small pests each season, but anyone who is at all familiar with them, and every man engaged in farming knows—and often by sad experience—the extent of the damage resulting from their work. Owing to many of them being nocturnal in habits, and all living most secretive lives, they are seldom seen by the ordinary observer, but the great amount of grain destroyed, the girdled fruit trees, and the continual havoc wrought in the vegetable gardens, show all too plainly the source of damage.



Great Horned Owl.

ly in numbers, and, consequently, their capacity for serious damage is also increasing. Man himself is powerless to check their ravages to any extent, and we can alone look to nature to maintain the correct balance between the rodents and insects and the vegetable kingdom. For this means Nature has provided the birds of prey and the insectivorous birds, and were these two classes allowed, with but a few exceptions, to carry on unmolested the work for which they are intended, they would so keep down the numbers of these pests that the plundering done by them would be hardly noticeable. Man has thoughtlessly and unknowingly intervened in killing off the natural enemies of these grain and vegetable destroyers, and so has increased materially the annual loss to his crops.

Most men look upon any hawk or bird of prey as a thing worthy of a bad name, and the shotgun is often called into use to end the good work of one of the farmer's most beneficial friends. Again, the smaller birds, most of them insect-eaters, are rarely shown any protection, and are annually killed in large numbers for really no apparent purpose. It is the object of this article to briefly distinguish between the birds of prey which are beneficial to agriculture and those that are injurious. The birds of prey may be roughly divided into two classes—the hawks and owls.



Snowy Owl.

the first feeding by day, and the other by night. The eagles need not be discussed, as they are now so seldom seen in the settled portions of the country that their influence for good or ill is very small. Of the hawks there are twelve species which occur regularly in Manitoba in more or less abundance. These are the Marsh Hawk, Sharp-shinned Hawk, Cooper's Hawk, Goshawk, Red-tailed Hawk, Red-shouldered Hawk, Swainson's Hawk, Broad-winged Hawk, Rough-legged Hawk,

Duck Hawk, Pigeon Hawk and Sparrow Hawk. There are a few others, which may be called only rare visitors. The most harmful of the twelve species above enumerated are the Sharp-shinned Hawk, Cooper's Hawk, Goshawk, Duck Hawk and Pigeon Hawk. All of these occasionally raid the poultry yard, and seem to prefer feathered fare instead of small animals and insects. They attack many of our beneficial insect-eating birds, as well as game, and should therefore be shot whenever they appear. The Sharp-shinned Hawk and Cooper's Hawk are the most harmful. Neither are very big birds, but they show a dexterity surpassed only by the Duck Hawk or Peregrine Falcon, as it is sometimes called. When young fowl are procurable they will visit a poultry yard with a persistency and regularity that only the shotgun can stop. The mischief done by these two is mainly responsible for the prejudice existing in the farmer's mind against all the hawk tribe, and is usually given as the excuse for destroying all hawks that put in an appearance on the farm. The Duck Hawk and Pigeon Hawk only rarely visit the farmyards in search of food, but resort to open stretches of marsh land and meadows, where they destroy a large number of birds, the Duck Hawk deriving its name from its fondness for wild duck, which it seems to delight in swooping upon and killing while in full flight. The Pigeon Hawk is so named from its resemblance to a pigeon when flying, and not by any damage done by it among the domestic flocks.

Fortunately, the Goshawk is not plentiful enough to visit the farms regularly, and is a winter visitor only, usually leaving us for the north before the first broods of young chickens are hatched. Were it more plentiful, we could unhesitatingly pronounce it the most destructive of the whole hawk tribe. Whenever a large hawk is seen loafing about in winter it is safe to say it is this species, and that it is visiting the farm for no good purpose, and where poultry or pigeons are kept it is a most expensive guest to entertain. It is unlikely to be mistaken for any of the other varieties, as all the other hawks, including the beneficial ones, migrate to the south in winter,



Short-eared Owl.

and the farmer need not hesitate to "fix him" when the opportunity affords. The bird is about two feet long and of a dark, slaty-blue color above, and pale slate with sharp black streaks beneath. Of all our hawks these five are the only ones which can be called harmful, and, perhaps, were they allowed to live unharmed, (except when found raiding the poultry yard), the results of their work would be less harmful than that of the gun in the hands of one unable to distinguish between the injurious and beneficial species. Far better that one mischief-maker be let off than that two or more good birds be killed in an attempt to rid the farm of his kind. Of course, it is almost impossible for one who has not given the study of birds much attention to distinguish between the different varieties of hawks, and the farmer rarely has an opportunity through the summer months to give the matter serious thought. For one who does not know the different species, and yet would spare the beneficial ones and destroy the harmful, the safest plan is to kill the medium-sized swift-flying hawks—not forgetting the large grey Goshawk, which is only found in the colder months—and spare the large-wing slow flying varieties.

We now turn to the remaining seven species of Hawks before us—all true, industrious and beneficial workers whose time is mostly spent in working the destruction of the thousands of small rodents and insect pests with which the farmer has to contend. These are the Marsh Hawk, Red-tailed Hawk, Red-shouldered Hawk, Swainson's Hawk, Broad-winged Hawk, Rough-legged Hawk and Sparrow Hawk.

Nearly everyone knows the Marsh Hawk, with its slow, graceful flight and conspicuous white patch above the tail. Any day from early spring to late autumn it may be seen skimming low over the fields and meadows, hovering here and there above the grass to survey likely cover for its small fare—the little field mouse. Occasionally it is seen to pounce down among the grass, and death is meted out to another small pillager. No time is wasted, and little rest is taken in the long day's work. Soon we see the bird arise and float away upon the breeze, and patiently resume his quest. Up and down and across the fields he quietly drifts, always on the alert, and woe betide any furry "varmint" who recklessly rustles in the grass or scampers away from the

approaching shadow. While mice and frogs are procurable he is quite content to limit his fare to these, and although he will at times take a meal off a dead duck or other bird found about the marshes or meadows, it is doubtful if he can be accused of ever killing other birds on his own account.

Of all the farmer's friends, this bird can easily claim first place among the birds. He is easily distinguished from the other species with his slow, graceful, skimming flight, as he drifts along just above the grass. He is seen in two phases of plumage, one a rich, reddish brown, lighter beneath; and the other a slaty-blue or gray. Both old and young always show a patch of white at the base of the tail on the back when in flight. Of course, it is impossible to state how many mice and gophers a single Marsh Hawk will kill in a season, but the amount must be something enormous. It is safe to say that at least five a day would be required, for as many as eight have been found in the stomach of one of these birds. Now, assuming that the bird remains with us throughout the months of May, June, July and Aug., or a period of about 125 days, we can safely credit it with the



Hawk Owl.

destruction of over six hundred small rodents. This is a very conservative estimate, and were the real number known, it would probably be nearer double this amount. Multiply this by the vast number of Marsh Hawks which annually visit us, and the result would be amazing. And, on the other hand, no damage is done by this bird. Certainly game birds are not attacked by it. Occasionally it might take a small bird, which, in view of the vast amount of good it does, can be easily spared, and I doubt if any record exists of it having attacked domestic poultry. Therefore, every farmer and every sportsman should do his best to protect this bird. Many are killed annually by thoughtless people who, when out with a gun, seem to want to end the life of everything with wings, without concerning themselves about what they are shooting. The farmer can do a deal of good by keeping his eye on this species, as well as on the hawk tribe.

The Red-tailed Hawk, Red-shouldered Hawk, Swainson's Hawk and Broad-winged Hawk may be classed together. All these are large, slow-flying birds whose food consists of mice, gophers, frogs, snakes, etc., and very rarely do they attack birds of any kind. For some unaccountable reason these birds have acquired the name of "Hen Hawks." Perhaps their large size has suggested to the minds of many that their prey



Marsh Hawk.

must be correspondingly large, and the conclusion is at once adopted that when seen about the place they are sizing up the poultry supply. Fortunately, however, this is a mistaken idea, and even if pressed by the lack of other food, it is most doubtful if they would resort to the farmyards to procure it. The good they do will repay many times for what little mischief they might do among the small birds. The Rough-legged Hawk is one of the largest of our hawks, and probably one of the least understood. As a destroyer of mice and gophers it is unsurpassed by even the Marsh Hawk, though it does not visit us in as large numbers as the latter. It may be safely said that this so-called "Big Hen Hawk" has never killed a single head of poultry, as its characteristics and habits show it to be as unlikely of doing so as a Night Hawk would be (which, by the way, is not a hawk at all). The Rough-leg is a big, dark-colored bird, sometimes almost black. It has feathers on its legs to the feet, which are proportionately small. It visits us on migrations only, breeding to the northward, but while passing through the Province in the spring and fall it seems to want