

numbers, corresponding to the amount of snow to be found north of us. They frequent the stacks and outhouses about the farm, and often remain for days about the one locality, unless shot down by the farmer, who immediately concludes that the owl must die because he is on the barn or stack, without any consideration as to what he is there for. I will not go extensively into this species, as I have already in two papers dealt with its economic value, simply quoting figures from the last article, which appeared in a recent issue of *The Nor'-West Farmer*.

In the season of 1896-7, I received some 70 snowy and 20 horned owls. The stomachs of the former failed to reveal the trace of poultry, but contained from four to ten mice, the result of the previous night's hunt about the stacks and barns, where they were killed. From this revelation and the result of an experiment with living specimens, it will be seen that the birds required at least seven mice or their equal in other flesh daily to keep them in good condition. The first birds were received about November 15 and the last about March 15, so that in 120 days they would have fed, if not disturbed, in the locality, and in which time they would have consumed over 840 mice each.

The amount of grain destroyed by mice is so great that the service rendered by the owls in their destruction will be readily seen. Dr. Fisher's record of stomachs of this species shows two in 29 full stomachs (7 per cent.) contained poultry or game, while 20 contained mice and other mammals, the balance other small birds.

This is one of the few species of owls which hunts by day as well as by night, but it is always most active at twilight and early dawn.

*Syrnium nebulosum*, the Barred Owl, comes next in size, but it is considered rare in Manitoba. I have never secured it, and have only seen one specimen in two and a half years. They frequent the deeper woods, seldom showing themselves in daylight. Regarding the defective vision of this species, Audubon speaks of seeing one alight on the back of a cow, which it left so hurriedly on a movement of the animal, as to show it had mistaken it for a more stationary perch. Another record is made of a collector having one alight suddenly upon the barrel of his gun, which it left as suddenly, but not soon enough to save its life. This is authenticated by Mr. Girard, in his "Birds of Long Island."

The stomach record of the species shows that in 80 full stomachs five contained poultry or game and 13 other birds, while all contained remains of mice, injurious mammals, reptiles and insects.

This owl is usually resident wherever found.

*U. cinerea* (Gmel.) The great gray owl is at first appearances a large and ferocious bird, but upon examination is found to be nearly all feathers, the body and limbs being much smaller than the barred owl. It is the most northern of any in its range, and inhabits the wooded countries, and is nowhere common, save in seasons when the great amount of snow and ice in its compels it to move south in search of food, which consists almost entirely of mice and small mammals. In nine stomachs examined only one contained trace of feathers, while all had mice or other mammals. This certainly proves the great gray owl as the most beneficial of his class, but his small numbers render his services less effective than many commoner species.

*Asio Wilsonianus*. The Long-Eared Owl and the Short-Eared Owl (*Asio accipitrinus*) are two species of much the same size, the former inhabiting the bush and small bluffs, while the latter lives in the open marshes and fields. Both are quiet and inoffensive birds and are constant enemies of the mice and other small mammals. The long-eared species is the more nocturnal of the two, while neither species are wild and permit of a close approach, making them excellent targets for the ruthless sportsman out to kill. The record for *Wilsonianus* is in 92 full stomachs 90 contained remains of mice and other mammals, insects, etc., while only one revealed a trace of a game bird and 13 contained traces of other birds.

The short-eared owl hunts frequently by day, and during migrations they move about in flocks in the twilight in search of prey. This bird is frequently dropped by the wanton sportsman for practice as it rises suddenly in front of him in the field or marsh, and is usually left to rot or die from wounds.

Their stomach record shows in 87 full stomach all contained mice, small mammals or insects, and only 11 showed any trace of small birds, thus proving him exceedingly beneficial.

*Syrnium ulula caparoch*. (The Hawk Owl) is a winter visitant with us, and while here hunts during the day as much as by night, much more so than any of the owls from which characteristic it derives its name. While with us it feeds upon mice and small mammals almost entirely, with an occasional small bird, but as I have no stomach records, I can say nothing more than that all cases which have come under my notice have proven the bird to be entirely beneficial. In the vicinity of the Riding Mountains the bird is very numerous during the winter. It never moves