



THE VALUE OF RAPTORS: A FARMER'S PERSPECTIVE

Prepared by Lei Masson and Bob Walton

As most farmers' know, the value of a cash crop depends on the ability to get the produce to market. The more you can put on the market, the more cash you get in return. What if there were a way to increase your profit margin without paying extra for pesticides and herbicides? Further, what if this method would, in fact, reduce the money you would have to pay for pest control?

Raptors in Indiana, i.e. hawks, owls and falcons, can be seen in such varied places as open fields, especially those bordered by fencerows or scattered with large perching trees; forested country lots of any size; and even wooded residential areas. Raptors provide an invaluable service for farmers

that generally goes unnoticed and unwarded. Raptors are master hunters. Their prey includes many of the rodent pests that destroy crops and, therefore, reduce profit margins.

One example of a "profit reducing" rodent is the white-footed mouse, often called the field mouse. Mice are extraordinary breeders, putting their close rabbit relatives to shame. A female mouse will begin to breed at 10 weeks of age. During each season of the year, she will produce an average of 3 litters, each having as many as 4 offspring. All told, a female mouse, living the expected 3 years in the wild, will produce 144 offspring.

We can then assume that at least half of this female's offspring will

also be female. These females will also start breeding at 10 weeks of age. Therefore, if unimpeded, at the end of one year, the population resulting from one pair of mice that had moved into a barn in January would be 65,128!

A mouse can eat up to 1 ounce of corn a day. This may not seem to be much, but the mouse only eats the center of each kernel, disposing of nearly two-thirds of the kernel as waste. This means that each mouse will destroy approximately $\frac{1}{2}$ an ear of corn a day or over a bushel a year! A pair of mice and their offspring can destroy an average of 7.8 bushels of corn a day over an entire year. This waste will reduce the total profit of the crop by nearly \$9,000 at year's end.

Is there a solution to this seemingly overwhelming problem, other than harmful pesticides and bait that is poisonous to children and pets? Actually, the answer lies as close as your nearest raptor family! A single pair of raptors, be it Screech Owls, American Kestrels, Red-tailed Hawks, or Great-horned Owls, will each kill and eat three to twelve mice

a day. Factor into this equation the young they will feed during the early seasons of the year, and kills increase to 7 to 20 or more mice a day. In three short years, a pair of Kestrels and their offspring, for example, will eat $\frac{1}{4}$ million mice, for a potential saving to farmers of \$300,000!

Another raptor food base is the rat. Just one of these larger rodents can cause \$28 of damage to a crop in a year. However, one pair of Red-tailed Hawks, for example, can catch and dispatch 500 rats during a season of raising their young, thus preventing \$14,000 in crop damage.

How may a farmer attract these valuable rodent killers to their farm? Raptors can be encouraged to frequent a farmer's property by providing a few large trees for nesting or perching, as well as stretches of dense hedgerow cover. Artificial perches and nest boxes may be easily and inexpensively placed about the farm.

A few resident raptors, as seen above, can reduce lost profits by eliminating rodent pests, as well as eliminating the need for harmful, messy, expensive pesticides and bait.

Soarin' Hawk Avian Rescue will gladly assist farmers to develop raptor attracting strategies. We may be contacted at 219-637-3018.

