



Protecting Small Poultry Flocks from Predators

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Poultry producers should be aware of the possibility of losses to predators. Owners of small flocks usually have more difficulty with predators than those with large flocks, primarily due to differences in housing. Small flocks are sometimes housed in buildings in need of repair or are not specifically designed for poultry. As a result, predators have less difficulty gaining access to the birds. However, large flocks housed in new buildings in good repair also can suffer predation if proper precautions are not taken. Anticipating problems and taking necessary preventative action is the best defense against predators.

Housing

Properly constructed houses go a long way discouraging predators. Deep solid foundations without gaps or holes keep animals from tunneling or gaining entry below the poultry house.

Most urban or suburban ordinances require poultry to be confined in runs or pens. Fences not only keep the birds in a desired location, but when properly constructed, they keep out most predators. Proper fence construction around the run is essential but cover over the run will keep birds of prey out and prevent snakes, raccoons and feral cats from climbing into the run. When building a cover over the run, producers should consider something that also provides shade as this may be necessary during the summer months. Burying fencing with the lower 12 inches set straight down further prevents tunneling into the run. A convenient method of burying the lower part of the fence is to plow a furrow of soil over the portion that will be buried. Tight-fitting windows and doors screened with poultry netting or hardware cloth keep unwanted visitors out. Hardware cloth or screen should have holes smaller than 1 inch.

Further predator prevention can be provided by simply cleaning around the poultry house. Keep grass and weeds cut short and remove shrubs and debris to minimize cover for predators. If possible, reduce the number of trees in the area to cut down on roosting areas for hawks and owls and other birds of prey. However, if there is a top to the run, tree removal would not be necessary. Habitat modification is costly, but very effective long term.

Some small poultry flock owners on larger acreages or in rural areas have more room to allow poultry to free-range or have access to a larger area with a moveable poultry house. There are a variety of benefits of free-range birds, such as insect control for poultry owners, but also a more expansive environment and diet for the birds. While a free-range system

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may lend to the natural behavior of poultry, the main downfall to a free-range system is higher risk of predation. One option with more protection would be a modified environment using some type of moveable enclosure. Moveable floorless pens or "chicken-tractors" can provide protection while having the ability to move the pen. These systems can be very large, but also work well on small acreages. Temporary electrified fences can be used for pasture pens and are effective at deterring larger mammalian ground predators, but they don't protect from raptors, snakes or small mammals such as rodents. At a minimum, free range birds would benefit from the safety of locked enclosures at night when predation risk is the highest. Most poultry can be trained to move into a poultry house at night by feeding and watering at dusk.

Guardian dogs are an excellent predator control option for free-range birds with the ability to provide protection both during the day and at night. Specific dog breeds such as the Great Pyrenees (Jacob et. al, 2017) are great for controlling larger mammalian predators such as coyote, domestic dog, domestic cat, bobcat, raccoon and skunk. These dogs do a decent job regulating raptors, but are not known to be successful with snake and rodent species. Producers should keep in mind the expense of purchase, training, care and liability of these types of dogs.

Trapping predators is often a method of control that initially comes to many producers' minds, however trapping or shooting animals should be preceded by prevention measures. When a predation event has occurred, consider the situation. Were poultry penned up and confined properly? Is the poultry house sound without places for predators to enter? Could the time of day be a factor of the predator attack? Consider all facets of the situation before predator removal is instituted. With predator issues, detective work may be necessary to identify the predator species in question. In a small number of instances, an individual animal is identified as the sole problem and removal resolves the issue. For most situations, predator removal will be recurrent as other predators take the place of those previously removed. Prevention is the key.

Determining the Predator

In many instances, predators leave clues to their identity when they have visited a poultry house. From these clues, poultry producers may be able to identify the culprit and take the necessary steps to prevent a reoccurrence (Table 1).

Table 1. Identifying a predator by signs or clues.

<i>Signs or Clues</i>	<i>Possible predator</i>
1. Several birds have been killed	
a. Birds mauled, but not eaten	Dogs
b. Birds killed by small bites on body, neatly piled, some heads eaten	Mink or Weasel
c. Heads and crops eaten on several birds or missing limbs	Raccoon
2. One or two birds killed	
a. Birds mauled; abdomen eaten	Opossum
b. Deep marks on head and neck, some meat eaten	Owl
3. One bird gone, feathers remain	Fox or Coyote
4. Chicks killed; abdomen eaten, lingering smell	Skunk
5. Chicks missing; no other signs	Snake, rat, raccoon, or domestic cat
6. Eggs missing; Egg damage	Snake, small rodents, opossum, woodpecker
7. Several birds gone; no clues	Fox or human

Adapted from Berry, 2003.

Dogs: A dog has the tendency to chase prey and usually kills chickens for the sport. Dogs in a group or pack will have a greater tendency to do this. Domestic dogs allowed to run free in a neighborhood can result in packing behavior and become a real problem for poultry flocks (Jacob et al, 2017). Several dead birds with mauled carcasses is usually evidence of a dog. Dogs usually visit the chicken pen during the daylight hours rather than at night.

Mink and Weasel: Birds show signs of attack on the sides of the head and/or neck if a mink or weasel has visited the poultry house. Often, only tiny teeth marks are present on neck or head. Weasels sometimes kill for sport and just leave the carcass intact. With these predators, several birds could be killed and piled neatly together.

Snakes: Snakes are a difficult predator to keep out of poultry houses due to their ability to gain access in small areas. Most snakes will not be predators of adult birds but of their eggs. Snakes can swallow one or more eggs whole at a time.

Raccoon: If a predator visits only once each five to seven days and eats the head, crop and the breast of the dead birds, a raccoon is the likely culprit. Raccoons also are attracted to eggs and may steal and carry them a distance from the poultry house to eat them. If they cannot gain access into the poultry house or pen, raccoons may attempt to grab birds through the fence and end up eating only what they can get through the holes in the fence, which is typically the head. Sometimes more than one bird will be killed at each visit. Raccoons also defecate a lot where they feed and their droppings may give them away.

Opossum: The opossum generally attacks only one bird at each visit. Usually, the bird's abdomen has been eaten. An opossum also will consume chicks and young poultry completely. Eggs also may be the object of the opossum's raid on the poultry house. A few feathers or eggshell pieces may be the signs left behind.

Owl: The great horned owl is the most likely culprit of bird species that will sometimes attack poultry. These birds are large enough to carry off adult poultry birds. One or two

birds are usually killed, with the talons being used to pierce the head of its prey. The owl will usually eat only the head and neck. Feathers found on a fence post near the poultry house or pen will be a good sign.

Fox and Coyote: The fox and the coyote are very smart and difficult to catch in the act of raiding the flock. Since birds are frequently carried away with little evidence left behind, the only way of determining losses may be a head count. Visits from these predators will usually be very early in the morning or late in the evening. Foxes often carry poultry away or kill very cleanly. Coyote on the other hand may leave pieces of their prey scattered in the area. Keeping birds in a secure pen or poultry house during these times is good insurance against losses from a fox or coyote.

Skunks: Contrary to what is usually believed, odor is not the only sign of a skunk. Unless skunks have been scared or attacked by birds, they may not spray. Skunks do not usually attack adult birds, but if skunks can gain access to the pen, eggs may be target. A sign of a skunk will be missing eggs or dead chicks whose abdomen has been eaten.

Small Rodents: Mice and rats encourage entry of other predatory animals by causing damage to structures or by burrowing around buildings. Although they are not a predator to adult birds, rats and mice can damage eggs by chewing or rolling them from the nest. A good rodent control program is necessary for maintenance of structures and proper predator control.

Woodpeckers: While not a common predator of poultry, woodpeckers can be a predator of eggs. If given access, woodpeckers will make small holes and lick the eggs contents. Poultry owners should know woodpeckers leave most of the egg intact, making the damage inconspicuous.

Predator deterrence has a great deal to do with best management practices for the poultry flock. Remove everything that could attract predators. All poultry flocks will have deaths at one time or another. Remove all dead or dying birds promptly. Disposal and/or carcass composting should take place far away from the poultry house. Some predators also are scavengers and can be attracted to trash, compost

or spoiled feed. Remove trash receptacles and minimize open feed bins in proximity of the poultry house. Keeping things neat and clean will be an effective step in minimizing predators.

A big part of predator control for small flocks of poultry is prevention. Some poultry owners may employ the use of repellants and scare devices (sound, light, streamers, etc.), but they are not effective long term. Properly constructing or retrofitting a poultry coop and managing the facilities with prevention in mind will be the best action. It is much easier to prevent predation from the outset than play catch up after predators have gained entry to an existing flock.

References

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