

Lowering Livestock Losses from Predation

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Livestock predation costs. Predation costs the farmer time, money and emotional stress when production animals are destroyed. Predation costs the government time, money and emotional stress as staff investigate livestock kills, and compensate producers for their losses.

In 2009, the Ontario government paid out over \$1.4 million to producers as compensation for their livestock losses. Early 2010 claims suggest this year will be about the same. These payments have more than doubled in the last 5 years.

Neither government nor producers wish to see livestock killed by predators. However, communication to predators that farm animals are “friends not food,” remains a challenge. Mitigating losses would seem to be the only course of action in living in a world with both predators and preyed animals, i.e. livestock.

Several animals will attack and consume sheep. Bears, wolves, and coyotes are the most frequent diners. In the last few years, coyotes are harvesting more and more sheep.

How do you know if your sheep are the victims of predation? Bleeding and bruising only occurs in live animals, or, for a brief time after death. Quick investigation after an animal's death can determine if the animal was killed by a predator, or died from other causes and was scavenged by a predator. Telltale signs include punctures, cuts and tears from teeth or claws, broken and flattened vegetation, drag marks, blood or trails of blood. Some other visible indications of predators include: alert, nervous livestock, injured livestock, mother calling and searching for her young, predator hair on fences, digholes under fences, fresh predator tracks near a carcass, or predator feces near a carcass.

Once you have determined you have a predator problem, what can you do to help mitigate further losses? The first step is to make sure you dispose of any dead livestock, stillborns, or afterbirth. These tissues, if left around, will attract predators. OMAFRA has information on its website on how to dispose of carcasses by burial or composting.

Confinement and fencing:

Farms with brush and forest are subject to more attacks than unforested, open areas. Attacks tend to occur more at dawn and dusk. One option with smaller flocks is to bring the sheep in at night to a confinement area. Costs for predator-proof fencing can be prohibitive when large numbers of sheep are involved. Plus the labour involved can be overwhelming. A recent study that has been profiled previously put costs in 2001 at \$2.37 per foot of predator exclusion fencing. Other costs of confining sheep include

increased coccidiosis load, mis-mothering, and reduced growth. Consider confinement for very young lambs and orphaned lambs.

Electric fencing can be an important component of any predator control program. Perimeter fences should be at least 5 strands, alternating live and ground wires. Anything less is not effective in deterring coyote predation, especially if predation has already occurred on that farm.

Spacing of wires is also important. Make sure the lower three wires are 6 inches apart to ensure that coyotes will come in contact with both live and ground wires when attempting to pass through the fence. Wires in the top part of the fence can be further apart to increase the total height of the fence. For more information on fencing see the OMAFRA fact sheet by Anita O'Brien, *Sheep Fencing options for Predator Control*, on OMAFRA's website.

Livestock guardian animals:

Donkeys, llamas, dogs and horses have all been used as livestock guardian animals. Most large producers rely on dogs. Dogs raised with sheep have in-bred protective instincts. They are expensive, but effective. A recent cost study indicated that it costs roughly \$5.40 per ewe per year for protection. As the coyotes adapt to guardian dogs, more dog power per sheep is required. The dogs act as a deterrent by living with the sheep and attacking all intruders including stray dogs, coyotes or humans. The dog patrols the area around the sheep, scent-marks its territory and barks. These three activities alert coyotes or wolves to the presence of dogs. Generally the coyotes will either try to draw the dogs away from the sheep, sending in pack members from behind, or will determine that it is not worth trying to attack a guarded flock. Recently there have been instances of dogs being attacked by coyotes. This remains very rare, as the dogs are usually bigger than the predators.

Donkeys will also work to protect sheep. The concept seems to be that donkeys have an inherent dislike of dogs and will bray, bare their teeth, kick or bite dogs and coyotes. One thing to watch for with donkeys is the female's willingness to mother new born lambs and kick the ewe away from its young.

Scaring devices may work for awhile with wolves and coyotes. Scientists in Wisconsin and Michigan have used electronic signal motion detectors which can set off either sirens or strobe lights to frighten the predators away. While these are costly, they are a very effective short-term deterrent. Eventually the coyotes determine that these are not life threatening and will adapt to the sound or light show.

Removal of problem predators has been effective in the past. Coyotes or wolves which identify lambs as food need to be killed as soon as possible, so they don't train their fellow pack members to hunt sheep as well. A pilot removal program in 1997 and 1998 saw trappers hired to remove suspect coyotes. During the trial, harmed livestock dropped

from around 4000 to below 3200 by the year 2000. Shortly after the pilot removal program ended, livestock claims started rising again, and have never ceased rising to current levels at near 6000 coyote and wolf kill claims per year.

Neck snares are a proven method of catching coyotes, through identifying trails and setting the snares at travel or fence hole locations. Newer snares are more humane and reduce the incidence of dog deaths from snaring. Please note that neck snares are a legal option only in northern Ontario.

There is divided research on whether a total coyote hunt will reduce overall livestock predation. In the short term, kill numbers would likely go down. In the long term, there is a suggestion that coyote numbers would increase to fill a vacuum. The species is very adaptable to its environment. Depending on where your farm is located, hunting can be socially acceptable, or could cause problems with your neighbours. A coyote drive can provide an excellent opportunity to reduce the numbers of coyotes. By using hunting dogs, planes, and hunters spotted around a block of land, coyotes can be driven out and shot fairly easily. Drives can greatly reduce coyote numbers, but would have to be repeated every year.

Another hunt option would be den hunting. Finding the coyote dens in spring/early summer and destroying the pups will lower population as well.

The Ministry of Agriculture, Food and Rural Affairs and Ministry of Natural Resources are working with industry groups on aspects of livestock predation compensation and education later in 2010. This may provide more tools for dealing with predation. We can all do our part to attempt to lower livestock claims, which end up costing us all in the long run.

Literature cited:

Coyote Predation of Livestock
Livestock Valuation Guide for Ontario Municipalities