

Problem 1: Predators are attacking calves and lambs in the first days and weeks of life.

The Livestock Predation Prevention Pilot Project (2020-23) tested various different ways to prevent predator attacks on Manitoba cattle and sheep operations. This document provides a high-level overview of what we learned after initiating 10 different risk mitigation practices (RMPs) involving more than 109 projects on 46 farms and ranches.

For more in-depth information on each of the individual practices listed below (including photos) you can find them on Manitoba Beef Producers' website at <https://mbbeef.ca/producers/>

Predation loss at birthing time was one of the major focal points of the pilot project, as producers usually have more control of their animals and are closer to the animals during the calving and lambing seasons. The following practices were found to be the most useful by the project participants.

Predator Resistant Livestock Pens

The project built several pens with seven wire high tensile electric fences with electrified wires close to the ground, and predator proof gates. Producers widely reported that this method was very effective at keeping all animals away from predators. The cost of materials for these 5 acre pens totalled under \$4,000 (2022 prices) and 86% of cooperators agreed that the pens save livestock from predators. As well, 86% of producers would recommend other producers build these pens if they are having problems at calving time.

Apron wire penning with predator proof gates were also tested. Stay-Tuff 868 apron wire is a predator resistant page wire with very small openings that is 73 inches tall, and has a 22 inch horizontal wire apron that extends outwards along the ground from the base of the fence. This method was more labour intensive to build and as of 2023 the wire is only available in the United States, but the results were very positive for predator exclusion.

Solar Foxlights

These are small solar-powered flashing light devices that emit a light show at night that consists of multi-colored lights flashing at random times. Surprisingly these simple little gadgets are enough to throw off coyotes, wolves and foxes for a few weeks to a month or two. They are simple to set up, and actually allows calves which are suffering from scours, cocci or pneumonia to recover without predators approaching them. Note: this practice works well for the September to April calving seasons, but there are so few hours of darkness in the May through August calving period that this would not help much. An investment of four solar foxlights adds up to under \$800 and will help many farms. Of producers trying them, 85% said they would repurchase them at full retail cost if they lost the use of them.

Fladry Wire

This is a poly wire electric fence wire that has red nylon streamers, and is intended to temporarily encircle an existing pen or small paddock to prevent coyotes or wolves from entering your pen. Producers were initially hesitant to spend half a day setting up a fladry wire temporary pen for 50-60 days of use. Little red streamers do not appear very scary to humans. Through this project it was found that little red streamers do disorient canine predators for a temporary need, so if you have calves that are recovering from stresses, fladry wire can slow or stop predator stalking. Of producers who used fladry 80% reported that they would recommend it to others. Fladry is not inexpensive as it costs about \$1,000 per 1,320-foot roll plus temporary posts and an electric fencer, and it needs to be rolled up and stored indoors 10 months a year. Note: this product is a special order item that needs to be ordered from a US sewing company so advance planning is a must.

Deadstock Composting Pens

These pens were installed and rated by cooperating farms, and all involved agreed that better management of deadstock is important. Reducing food sources for predators to dine on is a positive move and did not cost as much as you might expect. While this RMP does not directly keep predators out of pens, a combination of this practice and a predator resistant pen or solar foxlights can dramatically reduce losses. The deadstock composting pens built for the project were made with chain link fence and predator proof gates and cost about \$2,500 for a 64 x 64-foot pen. Of producers using them, 78% claimed that the smell was either minimal or no smell, and 91% of producers who used them would recommend them to all producers.

Veterinary Assessments

Vet assessments were used by a number of producers. Cooperators requested a vet attend the farm for a visual assessment and an in-depth conversation about herd health practices. The aim was to have minimal numbers of livestock on pasture with a health issue, be it lameness, pneumonia or scours and cocci or other. Recommendations were provided related to improved vaccination and nutritional care to using summer safe pens. Producers who used the assessments agreed that having an extra set of eyes on the herd was positive. And now that producers need a veterinary client patient relationship (VCPR) visit annually, having a vet out during late calving season, or early pasture season is an ideal time to have this evaluation.

Livestock Guardian Dogs

These dogs can be a valid predator reduction strategy for calving and lambing seasons. While this project did not test this strategy, we had reports from many cooperators that their dogs are an ideal supplementary protection for their herds and flocks. Guardian breeds of dogs carry a scouting instinct that leads to them to patrol their local area, and try to ward off other canines. While these breeds of dogs can be slightly to highly aggressive, they can be effective. It is however a balance to find a dog that will patrol, and be appropriate for your yard area based on whether you have children and visitors, and how much time the dog will spend with the livestock. With distant pasture livestock where your dog will not go out to pasture, you will have a dog in your yard 12 months a year to solve a problem which may only be of a short duration, so this is not an option for all producers.

Hazing of Predators

Hazing can be a valid practice for reducing predator attacks. Human presence, human scent, and occasional removal of problem predators if needed is very helpful to reinforce predators' hesitance to walk into your pens and paddocks. Manitoba's *Wildlife Act* allow for livestock producers to remove coyotes, wolves, bears, but not cougars if they are attacking livestock. This is called "in defence of property." If a predator is removed for this reason, you are required to notify your local Manitoba Conservation officer within 10 days of doing so. This gives the authorities the knowledge there is a problem that the wildlife is causing. Multiple seasoned ranchers told us that if you have a coyote presence but no attacks, that perhaps leaving your local coyote in place might be in your best interest as predators are very territorial, and the coyote that you "know" is better than a new predator or predator(s) coming onto your farm taking their place.

Finally, if your operation is subject to livestock losses or injuries due to predators, preserve the carcass and take photos of the injury and contact Manitoba Agricultural Services Corporation (MASC) immediately to submit a claim under the Wildlife Damage Compensation Program for Livestock Predation. Most predator losses are subject to compensation if there is a provable attack. This program is available to all affected producers with no pre-enrolment required or fees involved. Contact your local MASC office for details. See <https://www.masc.mb.ca/masc.nsf/contact.html>

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