

Problem #3: Predator attacks on livestock in fall during weaning or after fall roundup

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/>

This is a list of the most successful management practices that the LPPP found to help avert fall confinement predation.

Predator Resistant Livestock Pens With Seven High Tensile Electric Wires

The project involved building 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 was very effective at keeping all animals away from predators. The cost of materials for these five acre pens totalled under \$4,000 in 2022 prices and 86% of cooperators agreed that the pens save livestock from predators, and 86% of producers would recommend other producers build these pens if they are having problems at calving time.

Predator Resistant Livestock With Fixed Knot Page Wire With Ground Apron

This involved the use of predator page wire with a dig-proof 22 inch wire mesh apron on the ground. This system was purchased and installed in 2023 and local evaluations of this RMP are ongoing. However, farms in Minnesota that installed this fencing system have slowed predator invasions to zero or near zero. The cost of the wire component alone is about \$4 per linear foot before posts or hardware are factored in, and as of 2023 the wire was only available in the United States.

Deadstock Composting Pens

These were installed and rated by co-operating farms, and all involved agreed that better removal of deadstock was important. Reducing food sources for predators to dine on was a positive move and does not cost as much as you might expect. While this does not directly keep predators off of your livestock, it can reduce traffic of scavenger animals such as coyotes and bears to an operation. Deadstock is nature's way of inviting predators to your pasture, so if the found deadstock is promptly disposed of, scavenger birds will not be present. The deadstock composting pens built for the project were made with chain link fence or apron wire and predator proof gates and cost about \$2,500 for a 64 x 64 foot pen. Some 78% of producers indicated that the smell was either minimal or there was no smell, and 91% of producers who used them would recommend them to all producers.

Solar Foxlights

These are small solar-powered flashing light devices that emit a light show at night that consists of multi-colored lights going off 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 easy to set up, and actually allow calves which are suffering from weaning ailments to recover without predators venturing into their livestock pen. Note: this practice works well for fall weaning and calving as the nights are long and the days are short. An investment in four solar foxlights adds up to under \$800 and will help many farms. Some 85% of farms trying solar foxlights 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 it is intended to temporarily encircle an existing pen or small paddock to prevent coyotes or wolves from entering the pen. Producers were initially

hesitant to spend half a day setting up a temporary fladry wire pen for 50-60 days of use. The little red streamers don't appear very scary to humans. However, through this project we have 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. Some 80% of producers who used fladry reported that they would recommend it to others. Fladry is not cheap. 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.

Vet Assessments

These were tested by a number of producers. It involved a vet visiting the farm to have a visual assessment and an in-depth conversation about how animal health can potentially be improved. The aim was to have a minimal number of livestock on pasture with a health issue, be it lameness, pneumonia or scours and cocci or other. Recommendations varied, such as improved vaccination regimes or nutritional care, to the use of 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 to access medications if needed, having a vet out during any risk season is an ideal time to have this evaluation.

Donkeys or Livestock Guardian Dogs

Guardian animals in pens can be helpful to reduce predator attacks. Livestock guardian dogs like the Great Pyrenees breed and others have proven themselves for sheep and cattle protection for centuries. Donkeys are another guardian animal that can be useful for livestock guarding. Some donkeys have an inborn instinct to repel predators from their group, and can be very helpful. However not all donkeys behave equally; some are excellent protectors and some are not. Female donkeys are often more protective and appropriate in many cases. Male donkeys can be used in cattle, but not in sheep due to fighting with rams. Male donkeys and all donkeys can be fierce fighters and can be dangerous to humans. The end result is that the use of donkeys can be good or bad depending on the donkey. This project did not specifically test livestock guardian animals but we had a lot of comments and commendations on their value. As well, we did find that having a GPS collar on a guardian animal is very helpful, especially with dogs who might roam outside of the pasture boundaries.

Predator Management

This project tested multiple mitigation techniques that can reduce predator attacks, but each has its limitations. One aspect that should be considered by producers is some level of trapping and hunting of problem predators for the protection of property. In Manitoba producers are allowed under *The Wildlife Act* to remove coyotes, wolves and bears, but not cougars in protection of property. Predators not historically or recently harming your livestock should be left alone, as no harm is better than new predators moving into your pasture. Producers need to be aware that pelts taken in summer are valueless, and even prime winter pelts have recently been of low value and difficult to justify the expense of trapping. However if a producer is experiencing losses, the Manitoba Trappers Association can be assigned to help through the Problem Predator Removal Program. This program is funded by Manitoba and is intended to remove problem predators once there is an approved compensation claim with Manitoba Agricultural Services Corporation (MASC) for a lost animal. Producers should also consider building a relationship with local trappers; trapping can help moderate predator populations in season and improve problems in summer. For more information please refer to: https://www.gov.mb.ca/nrnd/fish-wildlife/pubs/fish_wildlife/factsheet_livestockpredation_old.pdf

Other Livestock Management Techniques

Producers do not always lose calves/lambs at weaning time, but potential illness and risk abounds when so many challenges all hit at the same time. Predators can hear a newly-weaned herd for many miles and they understand the implications: sick, slow animals, and the occasional deadstock that they do not even have to fight for. While there are no 100 per cent cures for livestock illness at weaning or fall calving there are a few mitigation plans that can work to give your youngstock an extra few days to recover without being harassed.

Once a calf has shed the weaning stress and achieved a full stomach the illness potential will plummet and the predators will move on. The following strategies may prove beneficial:

- Vaccinate youngstock prior to weaning. If possible, vaccinate two weeks prior to weaning as the vaccine will work better with a healthy animal, and will not cause additional stress on weaning day.
- Wean all groups over the shortest period of time possible. If you wean multiple groups over a long period of time the later entrants will be exposed to sicker animals than if all were weaned at the same time. Also, the earlier weaned stock will be exposed to different pathogens from later weaned stock who enter late. The earlier weaned animals will already be stressed when the late entrants arrive with new pathogens.
- Don't mix sale barn animals with your own during the weaning stress period, as sale barn animals can bring new pathogens into your herd. The new pathogens may not infect the herd, but the risk does increase.
- Get energy and protein into the calves prior to the weaning date. Feeding the cows and calves hay, silage or grain prior to weaning will adjust stomach bacteria and eating preferences to keep energy up in calves when they most need it. Creep feeding calves grain or high quality hay is also good to maintain constant nutrition through the weaning adjustment period.
- Keep youngstock mortalities out of the predator food chain. A dead calf close to your herd almost guarantees that there will be predators close by when other calves are slow and lethargic. If you do not adopt a deadstock composting pen, deep burial is an option.

Finally, if your operation is subject to livestock losses or injuries due to predators, preserve the carcass and take photos of the loss or 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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