## LIVESTOCK PREDATION PREVENTION PROJECT (LPPP) FLADRY TO REDUCE PREDATOR/LIVESTOCK INTERACTIONS

As tested by Manitoba producers cooperating with the Manitoba Livestock Predation Prevention Pilot Project



mbbeef.ca | 204-772-4542

Fladry is a line from which brightly-coloured flags are suspended. The fladry line can supplement an existing fence in order to prevent canine predators from accessing livestock. The novelty of the flags provides a psychological barrier for canine predators. Electrified fladry is known as turbo fladry; it improves and extends the effectiveness of a fladry system. Variable results were reported by pilot project producers who used fladry to protect their herds and flocks.

#### **Background:**

The turbo-fladry installation used in the pilot project consisted of an electrified polywire which had flags hanging down from a polywire every 18 inches. The rippling flags in a light breeze are intended to cause fear in canine predators, such as coyotes or wolves, who tend to be fearful of novel objects they encounter. Fladry is intended for short-term use, such as 30 to 90 days, followed by removal, roll up, and indoor storage to keep the product from breaking down in the sun, wind, or moisture. The electrified aspect of turbofladry allows a predator to be repelled by the electric shock it receives if it makes contact with the electrified wire. This is particularly effective if the animal sniffs at the wire and makes contact with their sensitive nose. Fladry has not been shown to be effective for bears or cat predators. The electrified aspect of the fence is also important to keep cows and sheep from chewing and knocking down the wire, as well as to shock the predators.

# Pilot Project Costs of installing 1,320 feet of fladry (2021)

ltem	Cost
1 roll of 1,320 linear feet of Jonco Industries Turbo Fladry deluxe \$724 USD plus freight. Cost converted to Canadian dollars is roughly \$1,100 CDN.	\$1,100
100 fiberglass 3/8-inch posts 36 inches long @ \$2.70 each	\$270
5 bags of screw-on claw insulators for fiberglass posts @ \$20.25/ bag	\$101.25
Total without labor	\$1,471







### Fladry Wire Project Facts:

- 1. Tested on 6 commercial Manitoba farms.
- 2. Tested on 2 beef farms and 4 sheep farms.
- 3. Producers averaged 215 head.
- 4. 50% of producers believed that fladry would save livestock.
- **5.** 80% of producers would replace the fladry if lost or destroyed.
- 6. 60% of producers claimed that all predators were held out of livestock during the use of fladry.
- 7. Cost of installation and short season of use are deterrents to adoption of this practice.



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# Fladry Wire as a Predator Risk Mitigation Practice

Predators: Wolves, coyotes.

**Livestock:** All species of livestock, although sheep and goats will chew the streamers if they can reach them.

#### **Fladry Wire Basics:**

- 1. Fladry is a visual deterrent to wolves and coyotes; installation makes them fearful to cross the fladry line for a limited period of time.
- 2. Fladry, particularly turbo-fladry, used in combination with additional deterrents will likely increase the effectiveness of keeping predators away from the herd or flock. Turbo-fladry and foxlights, or turbo-fladry and human presence (with some level of human scent trail), as well as the trapping and/or hunting of predators in the area would increase wariness of coyotes and wolves.
- **3.** Fladry needs to be close to the ground so that a predator cannot simply walk underneath. As such, the line needs to be hung between 22 and 29 inches from the ground. This low height is not high enough for containing beef cattle, as cattle can step over. It is also easy for sheep to walk underneath, especially at times, before shearing and once the fleece has grown back. Installing fladry outside of an existing livestock fence is recommended. This will also prevent the livestock from damaging the fladry.
- 4. Fladry needs to be rolled up after the peak risk season is over. Sun bleaching and wind ripping at the flags would cause damage in short order. Once a predator is accustomed to the fladry it is no longer a deterrent, and will not be effective after that point. Fladry can be reused the following season to again mitigate a highrisk period.
- 5. Having a homebuilt roller is ideal for removing a fladry line to store indoors. Hydraulic hose repair shops will typically give away plastic hose reels, which can be used for storing fladry; see the document link at end of factsheet.
- **6.** Picking up the temporary posts and storing for the winter is also necessary.
- **7.** Fladry will collapse to the ground in case of heavy, wet snow, which may stay for the duration of winter. As such

fladry should be removed early in fall before such snow falls. Spring use can be accomplished by drilling holes in the ground with a cordless drill for the fiberglass posts. As snow melts you will be able to resume use once more.

#### **Recommended Uses of Fladry:**

- Short-term predator protection, such as calving or lambing season.
- Night penning of animals which are accustomed to electric fencing.

#### **Conclusions:**

Manitoba producers may have difficulty accepting fladry as a valid predator mitigation as it appears to humans to be a simplistic, non-threatening device. However, in mountain and foothill pastures of the American Rocky Mountains there have been numerous successful reports of fladry usage. It appears that in general, the most successful uses were found in cases where producers calved the cows on pastures that kept on moving with grass growth. This concept has several advantages, as there is daily human presence and scent trails due to management during calving seasons. Trapping and hunting would be a normal activity in these areas, to reinforce the fear of humans and unknown objects like fladry. In the case of summer pasture in Manitoba the cost per foot of wire, and short season usage generally does not fit pasture scenarios.

The general consensus of this project is the best use of fladry in Manitoba is to use it around smaller calving pastures in spring for a short duration while calves are getting their strength, and surpassing juvenile scours, coccidiosis, and pneumonia. Some producers used it around sheep enclosures or very small fall pastures with good short-term success. Another key to fladry's success is to combine it with other techniques such as foxlights, and leaving a human scent trail as often as possible. Hunting and trapping activities also increases fear of the area and the unknown.

**Further information:** This link provides more information on the use of fladry for wolf control:

Electrified Fladry for Deterrence of Gray Wolves: An Evolving Manual of Best Practices

https://extension.colostate.edu/wp-content/ uploads/2022/01/FladryManual.pdf

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#### **Project Participant Feedback**

"We had one large wolf grabbing sheep any night he wanted right out of our confinement pens. We had lots of game camera photos of the wolf, but couldn't get him when we stayed into the night to remove him. We installed fladry and a set of foxlights, and the problem ended that day, the wolf either moved on and hunted at a neighbor's farm, or was removed while looking for new hunting grounds. Either way, the problem stopped."

- Ethelbert, Manitoba sheep producer

"The fladry wire does help reduce predator activity, along with other things like dogs and night penning, but in high wind the fladry wrapped around the wire and was knotted up. The streamers also frayed in the strong fall winds."

- Sandy Lake, Manitoba sheep producer

"We had about 5% streamer damage because of wind in the first season of use."

- Minnedosa, Manitoba sheep producer

LPPP Project survey Question: "Did the fladry wire prevent predators from getting into your livestock?" Answer: "NO"

- Baldur, Manitoba Beef Producer

### For more information on the Manitoba Livestock Predation Prevention Pilot Project and other Risk Mitigation Practices please visit https://mbbeef.ca/



#### MANITOBA BEEF PRODUCERS