# WILDLIFE SMART Protecting Stored Forage and Grain from Wildlife Damage

Livestock feed and stored grain can be an attractant for wildlife, such as deer and elk. When wild animals feed on these attractants, supplies may be ruined and lost, and wild deer and elk may spread disease amongst themselves and to livestock.

There are things producers can do to reduce these risks. This fact sheet offers some helpful advice to protect your stored forage and grain, your livestock, and wildlife.

# THINGS YOU NEED TO KNOW ABOUT THE RISKS OF WILDLIFE ACCESSING LIVESTOCK FEED AND GRAIN

- Adverse weather conditions, such as drought or excess moisture, can reduce forage production, creating feed shortages for livestock producers, and increasing the importance of protecting available feed supplies.
- Wet conditions can delay the removal of hay/silage bales or grain piles from the field, increasing their vulnerability to wildlife damage.
- Winter weather, including extreme cold, greater snow depth and crusted snow conditions, can cause an increase in wild ungulates (deer, elk and moose) seeking out hay, silage and stored grain for feed.
- Grain bags will not exclude wildlife bears can claw, deer and elk can paw through, and ravens will peck holes in the bags to obtain grain.
- Chronic Wasting Disease (CWD) is spread through body fluids such as saliva, urine, and feces.
  Concentrating wild deer and elk at a feeding site greatly increases the chances of spreading this disease to others, as well as increasing the risk of spreading other diseases such as bovine tuberculosis, brucellosis and parasites.



- In certain areas of Manitoba, it is illegal to place an attractant for deer, elk, moose and caribou. This prohibition includes areas along the borders with Saskatchewan and the United States, as well as along provincial roads and highways.
- Manitoba conservation officers can order people to stop feeding wildlife due to concerns about the health and safety of wildlife, the safety of people, or to prevent property damage. Additional enforcement action, up to and including charges and possible fines, may occur if orders issued are not complied with.



# THINGS YOU CAN DO TO REDUCE THE RISK OF WILDLIFE DAMAGE TO LIVESTOCK FORAGE AND GRAIN

## **Be Proactive**

- Plan and construct permanent wildlife exclusion barriers for storage areas well in advance of frozen ground conditions.
- Bring bales to securely fenced stack yards as soon as possible and ensure the gate(s) is closed when in use.
- Don't feed wildlife; secure any food attractants so they cannot be accessed by wildlife.
- Clean up any spilled hay, silage or grain.
- Allow hunters to access your land for legal wildlife hunting opportunities to help manage populations in the area.
- Avoid using extended grazing practices, like corn or swath grazing, in areas likely to experience high pressure from wildlife. Where these practices are used, some losses to wildlife are likely; the use of additional management practices can assist in reducing losses.

#### TRADITIONAL PERMANENT FENCE FOR DEER AND ELK EXCLUSION



## **Use Permanent Exclusion Barriers**

• The most effective option to protect stored grain is in a secure grain bin. Storing grain bags within a fenced area, as described below can also be effective.

- The most effective option to protect hay or silage bales, and silage piles/pits is to securely fence the storage area. Fences need to be tall enough to prevent deer and elk from jumping over and close enough to the ground to prevent them from crawling under. Barbed wire should not be used in fence construction due to the potential for wildlife injury or death to occur. Regular monitoring and maintenance of these fences are required.
- Recommended specifications for a traditional permanent fence:
  - o Fencing Height: Minimum 2.4 m (8 ft) in height (also applies to gates).
  - Line posts: 3.7 m (12 ft) pressure-treated wooden line posts; 13 to 15 cm (5" to 6") in diameter, driven 90 cm (36") into the ground. Line posts should not be more than 7.6 m (25 ft) apart. A mixture of pressure-treated wood and steel posts could also be used.
  - Wire: Woven wire (also known as page wire) at least 2.4 m (8 ft) in height. Placing wire on the outside of the posts, facing the area from which the wildlife are approaching will make it a stronger fence. Wire tension should be sturdy enough that it supports a 91 kg (200 lb) person leaning against the wire between two posts while having a 15 cm (6") to a maximum 25 cm (10") "give" to the wire, once secured.
  - The bottom of the fence and gate should be no more than 10 cm (4") off the ground; target the bottom wire of the fencing averaging 2.5 cm (1") off the ground.
  - o Make the top highly visible by using a top rail, high-visibility wire or flagging.
  - Install a one-way gate placed in one or two corners, to allow animals that might be inadvertently trapped inside to find a way out more easily. The gate can be constructed with formed poles or tines on spring-loaded hinges, which allow animals only one direction of travel. To reduce the chance of injury, if animals attempt to breach the gate from outside, ensure the end of each tine has a heavy plastic disc or ball affixed to it.
  - Bracing is a very important component of fence installation. Use inline braces for fencing runs longer than 400 m (1,320 ft). Bracing should be installed on all corners and on each side of a gate.

#### **ONE-WAY GATE**



- Recommended specifications for an electric permanent fence:
  - o Minimum 2.13 m (7 ft) in height.
  - Line posts: 3 m (10 ft) pressure-treated wooden line posts; 13 to 15 cm (5 to 6") in diameter, driven 75 cm (30") into the ground, and spaced at 9 m (30 ft) intervals.
  - Brace posts: 3 m (10 ft) pressure-treated wooden brace posts; 13 to 15 cm (5 to 6") in diameter; driven 90 cm (36") into the ground.
  - Wire: 12.5 gauge, smooth Class III galvanized wire with a tensile strength of 170,000 PSI and breaking strength of 593 kg (1308 lb). To increase visibility, use white-poly-coated wire with the same specifications. Placing wire on the outside of the posts facing the area from which the wildlife are approaching will make it a stronger fence.
  - Spacing: install the bottom wire at 10 cm (4") from the ground and the top wire at a minimum of 2.13 m (84"); space the bottom three wires at 20 cm (8") intervals and another six strands at 25 to 30 cm (10 to 12") intervals.
  - o Wooden posts require the use of insulators.
  - o Alternate charged and ground wires, with the top and bottom wires both being hot.
  - o Install cut-off switches on lower wires if they may become buried in snow.
  - o Remove vegetation that may contact wires.
  - Follow manufacturer's instructions to place energizer, and properly ground the fence. To ensure the fence is providing sufficient power, target delivery of 4,000 to 7,500 volts.

- o Install electric fence warning signs.
- As ungulates have poor depth perception, you can increase the deterrence of wildlife crossing the fence by adding a single wire fence 92 cm (three ft) outside the initial fence. This single wire would be placed 86 cm (34") above ground level and run parallel to the initial fence.
- Ensure snow is kept clear of fences to maintain adequate fencing height relative to the position of wildlife that approaches it, as well as to maintain an effective charge for an electric fence.
- For electric fencing, ensure an effective charge is maintained by checking every hot wire frequently with an electric fence voltage tester, particularly in areas furthest away from the energizer. Also, clear away any tall vegetation that could draw down the charge.

#### **TEMPORARY EXCLUSION USING STRAW BALES**



#### **Use Temporary Exclusion Barriers**

- Option 1: Use a heavy-duty UV-resistant plastic 5 cm x 5 cm (2" x 2") mesh netting to wrap haystacks.
- Option 2: Place a row of double stacked straw bales around the stacked hay or the stored feed you want to protect.

- Option 3: Use a temporary electric fence:
  - Option (a): Lean eight-foot long two-by-fours up against the haystack, spaced about 3 m (10 ft) apart. String and secure seven wires 25 cm (10") apart around the fence posts, alternating the charged and grounded strands. Use insulators to attach hot wires to the two-byfours. Ensure the top and bottom wires are charged.
  - Option (b): Poke fiberglass or steel rebar posts horizontally into the haystack to hold wires in place and away from the hay. Insulators must be used to attach hot wires to wood or steel posts, but are not required with fiberglass or plastic posts. String and secure an odd number of wires (three or preferably five) at intervals of 25 cm (10") apart, alternating the charged and grounded strands. Ensure the top and bottom wires are charged.

### FROZEN GROUND HAYSTACK ELECTRIC FENCE

## Use Other Deterrents

• The use of noise-making devices (such as cracker shells or propane-fired scare cannons), as well as motion-activated lights and noise-making devices can sometimes deter ungulates from an area temporarily. This approach is less likely to be effective under severe winter conditions.

## **Report Concerns to a Conservation Officer**

- Report any feeding of wild deer and elk in areas of Manitoba where this is illegal. Prohibited areas are identified in Manitoba's Wildlife Protection Regulation.
- Report any sick or dead wild deer, elk, or moose.



For more information on reducing the risk of conflicts with wildlife, visit manitoba.ca/human-wildlife.

To report wildlife showing aggressive behaviour, or that appears sick, injured, or orphaned, contact a conservation officer at the local district office or call the TIP line at 1-800-782-0076.