

Fencing in Alberta

Corral Fencing

- usually wooden posts and rails
- horizontal rails must be spaced to contain lambs

or

- windbreak boards
- provide shade and shelter

or

- portable 5 m (16 ft.) galvanized mesh hog panels
- attach to post
- flexible and effective
- relatively inexpensive

Net Wire Fences

- deters coyotes
- expensive to install
- coyotes may climb wire if less than 150 cm (5 ft.) (may consider deer fencing)
- sheep often get their heads caught in net-wire fencing
- expected life performance 20 years
- three strands of electric wire may be added to the top to discourage coyotes from climbing
- use galvanized, high-tensile net-wire mesh wire
- electric wire may be added to the outside bottom of a net-wire fence to discourage coyotes from digging under. Place electric wire 10 to 15 cm (4 to 6 in.) above ground level and 10 to 20 cm (4 to 8 in.) out from the mesh.
- an electrified mesh wire fence presents a greater physical barrier to predators and requires less maintenance than a fence made from single-strand wires

Nine Wire Electric Fencing

- expected life performance is approximately 30 plus years
- bottom wires should be no more than 15 cm (6 in.) apart
- single strand wire is less expensive than net-wire fencing
- used nine taut single strands of 12.5 gauge, high tensile smooth wire
- height of fence should be 137 cm (4.5 ft.)
- wires should be alternately charged (+) and grounded (-), beginning with the bottom wire as a charged wire

Fence Construction

How to receive the maximum benefit from an electric fence

- select the best equipment and materials to meet the requirements of the area being fenced

- follow proper construction procedures and requirements without taking shortcuts
- routinely inspect and maintain the fence

Posts

- use pressure-treated wood posts
- corner posts, end posts and brace posts are the backbone of a fence
- on level ground posts should be spaced up to 8 m (26 ft.) apart
- on hills and hollows, posts should be spaced up to five metres apart

Fence Post Insulators

To hold wires in place and to prevent the loss of electrical charge through the post to the ground, insulators should be used on charged wires.

Porcelain Insulators

- are best suited to high-strain areas such as at corners, gates or on rises and dips of the fence
- relatively expensive - subject to frost damage

Line Post Insulators

- most popular
- may be nailed or stapled to the posts

Tube Insulators

- 10 cm (4 in.) long plastic tubes that are slipped onto the wire (one for each post)
- fasten to post with staple

Wrap-Around Insulator with Metal Insert

- are designed for wire strung around the outside of posts in corners or curves

Double “U” Insulator

- porcelain or plastic
- used to insulate tensioned wires at end, corner or gate locations

Ground Rods

- used to properly ground electric fences
- drive four 185 cm (6 ft.) lengths of ground rod or galvanized pipe into the ground at 185 cm (6 ft.) intervals next to the energizer
- leave 7 to 15 cm (3 to 6 in.) of rod out of the soil
- use a 12.5 gauge, high tensile wire to continuously connect a ground wire in a series from the negative terminal of the energizer to each rod or pipe

Caution - avoid placing the ground rods closer than 8 m (26 ft.) to the following: telephone rod, any underground metal pipe system, any metal support or other part of a structure sitting on or driven into the ground

Temporary Electrified Fencing

- mesh electric netting
- easy to put up and take down
- enables producers to graze sheep where there is no permanent fencing
- temporary electrified fencing is not intended as a permanent fence

Electric Energizers

- **uni-polar energizers** are most effective on an electric fence with alternating charged and grounded wires
- **bi-polar energizers** have a positive and negative charge terminal as well as a ground terminal. The positive and negative terminals are connected to alternate wires of a fence with multiple single-strand wires. The ground terminal is connected to ground rods. An animal that touches any single wire of the fence receives one half of the energizer's voltage output. When positive and negative wires are touched at the same time, the full energizer shock is received.

For more sheep fencing information refer to: Wire Fences for Livestock Management and Fencing with Electricity. Both manuals are available from Alberta Agriculture & Food, by calling 1-800-292-5697.