



A Landowner's Guide to Wildlife Friendly Fences: How to Build Fences with Wildlife in Mind

Ministry of Environment
September 2016

The wildlife friendly fencing options listed in this brochure are intended for general livestock rangeland containment situations. It is not intended for licensed zoos, fur farms, commercial wildlife farms or domestic game farms.

Acknowledgements

Special thanks to Joe Weigand and Jay Kolbe with Montana Fish, Wildlife and Parks for the use of their wildlife friendly fencing information, specifications and photos for this publication. Additional thanks to the Rocky Mountain Elk Foundation, partnered with Montana Fish, Wildlife and Parks to test fence designs in various livestock and wildlife situations and provided invaluable insights and suggestions. Thank you all.

Authors

Christine Paige, Ravenworks Ecology Stevensville, Montana

Saskatchewan Editors

John Pogorzelec, Ministry of Environment
john.pogorzelec@gov.sk.ca

Sherri Dobbs, Ministry of Agriculture
sherri.dobbs@gov.sk.ca

Illustrations

E.R Jenne, Missoula, MT

Table of Contents



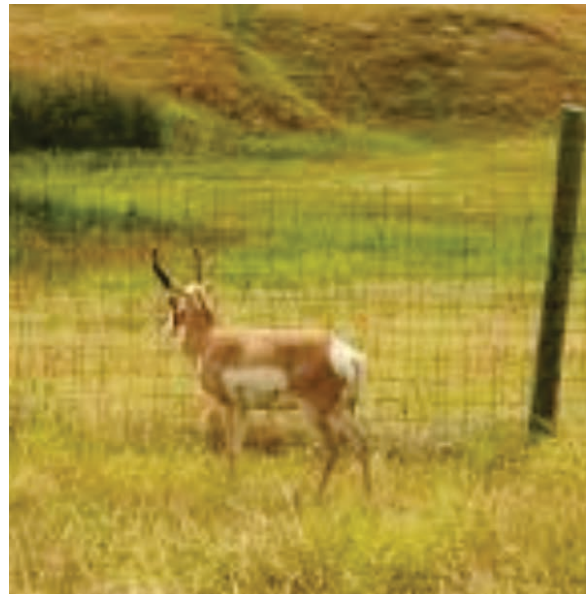
Wildlife and Fences	1
Problem Fences	2
Wildlife Friendly Fences	5
Friendly Designs	6
Visibility	9
Sites with Low or Seasonal Livestock Use	10
Sites with High or Continuous Livestock Use	14
Openings, Crossings and Passes	17
Remedies for Existing Fences	25
Fence Alternatives	26
If You Must Exclude	27
Getting Help	32
Sources	33
Contact Information	34

Wildlife and Fences

Fences crisscross Saskatchewan's landscapes like countless strands of a spider's web. Barbed-wire, woven-wire and other fences define and divide ranches and farms, outline property boundaries, enclose pastures and rangelands, and run for miles along highway and road corridors. Yet fences can be barriers and traps for wildlife, from big game animals to birds, causing injury and unnecessary fatalities. Animal damage to fences is also costly and frustrating for landowners.

We share our lands with a rich and abundant array of wildlife in Saskatchewan – wildlife that must travel across landscapes to find food, shelter and water for survival. Too often, animals and birds are injured or killed when they collide with fences or get tangled in wires. Most people would prevent these needless deaths if only they knew how.

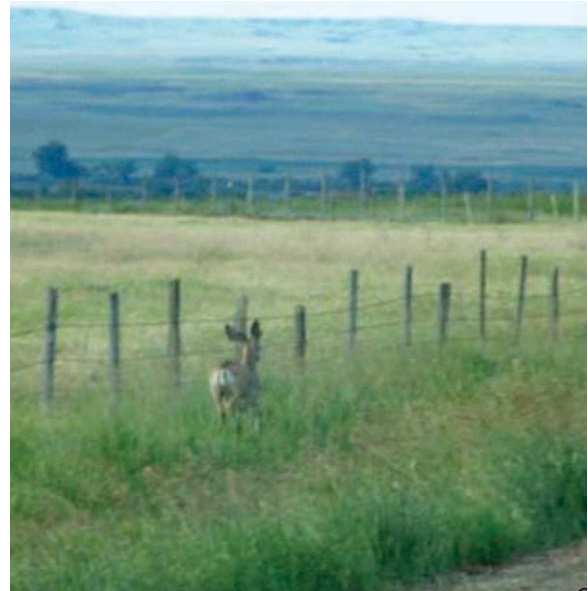
Not all fences are problem fences. By tailoring your fence design and placement, you can prevent injury to wild animals and lessen wildlife damage to your fence. Many of these methods are low-cost or can save you money in the long-run by reducing the need for fence repair.



Deer, elk, moose and pronghorn are all capable of jumping fences, but barbed-wire can snag animals and tangle legs, especially if wires are loose or spaced too closely together. If animals can't pull free, they die a slow and desperate death. Even when animals do clear fences, or crawl through or under the strands, they often bear countless scars from wire barbs.

Some fences, especially woven-wire, can be a complete barrier to fawns and calves even if adults can still jump over. Separated from their mothers, the youngsters curl up and die of starvation, stranded and unable to follow the herd. Woven wire can also block animals, such as bears and pronghorn, that are unable to leap fences and are too large to slip through.

If woven wire is topped with one or more strands of barbed-wire, the fence becomes a complete barrier, especially for fawns, calves, pronghorn and other animals that are incapable or unwilling to jump over such a fence. Animals trying to leap a woven-wire/barbed-wire fence are even more likely to tangle a leg between the top barbed-wire and the stiff woven wire.



What kinds of fences cause problems for wildlife?

Fences that:

- are too high to jump;
- are too low to crawl under;
- have loose wires;
- have wires spaced too closely together;
- are difficult for fleeing animals or birds to see;
- create a complete barrier.

Top Right: A panicked deer looks for a way through a barbed-wire fence.

Top Left: Pronghorn doe caught up in top two strands in attempts to jump over the fence.

Bottom Left: Calf elk caught up in loose fencing.

Birds, too, collide with fences, breaking wings, impaling themselves on barbs and tangling in wires. Large, low-flying birds such as ducks, geese, cranes, swans, grouse, hawks and owls are especially vulnerable. Waterfowl fly into fences that run near or across waterways, and low-flying hawks and owls may careen into fences when swooping in on prey.



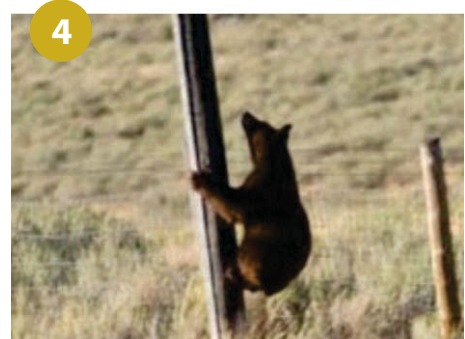
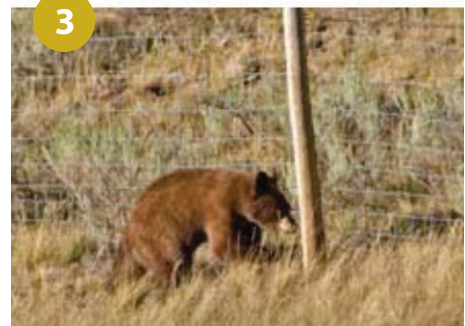
Swans and other waterfowl can be victims of fences strung across or near waterways.



The remains of a sharp-tailed and sage grouse after colliding with wire fence. Many birds are vulnerable to fence collisions.



This badly tangled pronghorn was fortunately freed by the photographer, who was able to clip the wires.



Above: After crossing a highway, a black bear desperately searches for a way through a woven-wire fence, finally climbing a power pole to leap over.

Hard Numbers

Recently, researchers at Utah State University completed a study of wildlife mortality along more than 600 miles of fences in the rangelands of northeastern Utah and northwestern Colorado (Harrington 2005, Harrington and Conover 2006). By repeatedly driving and walking fencelines over two seasons, they tallied the number of mule deer, pronghorn and elk carcasses they found caught in fences and lying next to fences. They also studied which fence types caused the most problems. Here are their key findings:



Snared and Entangled

- On average, one ungulate per year was found tangled for every 2.5 miles of fence.
- Most animals (69 per cent of juveniles and 77 per cent of adults) died by getting caught in the top two wires while trying to jump a fence.
- Juveniles are eight times more likely to die in fences than adults.
- Mortalities peaked during August, when fawns are weaned.
- Woven-wire fence topped with a single strand of barbed-wire was the most lethal fence type, as it more easily snared and tangled legs between the barbed-wire and rigid woven-wire.
- 70 per cent of all mortalities were on fences higher than 40 inches.



Blocked and Stranded

- Where ungulates were found dead next to, but not in fences, on average one ungulate per year died for every 1.2 miles of fence.
- 90 per cent of these carcasses found near fences were fawns lying in a curled position – probably separated from their mothers when they could not cross.
- Most of these indirect mortalities were found next to woven-wire fences.



Top: Antlered animals can become fatally tangled in poly rope fence and loose barbed wire.

Maintaining fence tension and using high-tensile wire for electric fences prevents such tragedies.

Middle and bottom: Elk, deer and other ungulates can suffer a terrible death if their legs tangle in fences. Landowners have the sad and frustrating job of clearing out carcasses and repairing wildlife damage to their fences.

Getting Started

The best situation for wildlife is open habitat with no fences at all. Where fence is necessary, less fence is better. To get started, consider your needs and create a plan.

This guide will help you with designs that are wildlife friendly. You can tailor any of these designs to your specific needs.

But first consider these questions:

1. What is the purpose of the fence? Do you need to mark a boundary? Deter trespass? Enclose or exclude livestock? If your fence is for livestock, what kind, in what seasons, and for how long? Your purpose should determine your fence design and placement.
2. What is the topography? Are you fencing on hills, in rocky country where posts cannot be driven, or near or across streams or wetlands? Can you design your fence to avoid topography traps for wildlife?
3. Which wildlife species are in your area and may need to negotiate the fence?
4. What are the daily or seasonal wildlife movements in the area? Do animals calve or nest nearby?
If you are interested in learning more about species in your area, Saskatchewan Ministry of Environment launched a new App known as HABISask. HABISask is a hunting, angling and biodiversity information client-centred, online mapping application, including access to the Saskatchewan Conservation Data Centre's species occurrences and information on species at risk. The HABISask link is available [here](#).

Fence and Crossing Placement

The placement of fences is just as important as the type of fence used. Fencing need not restrict wildlife movement everywhere on your property. Wherever possible, design your fence to provide wildlife-free travel to important habitats and corridors, as well as access to water. Wetlands and riparian habitats are especially important for all wildlife.

Watch for daily and seasonal wildlife movement patterns and look for trails.

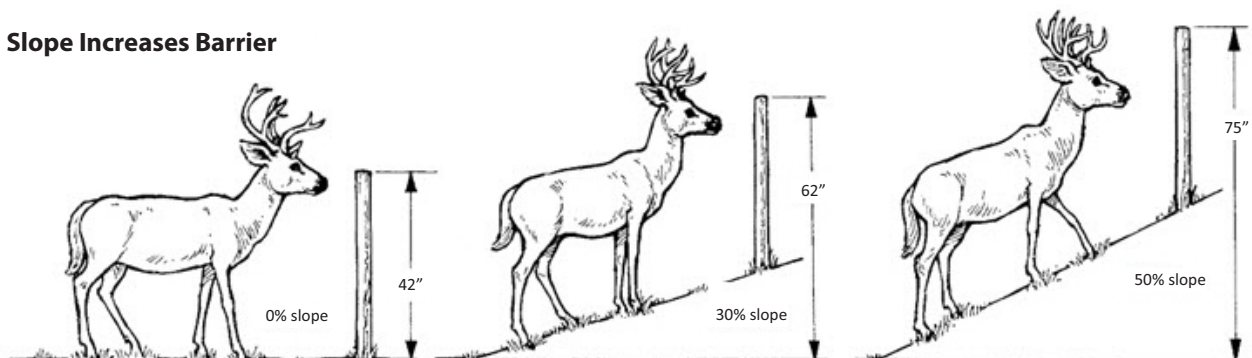
Use special purpose fencing only in the areas needed, such as livestock pastures, haystacks, gardens, orchards, yards, play areas, or kennels. Design property boundary fences so wildlife can easily cross over or under, or with gaps or lay-down sections for wildlife passage wherever livestock are not present.

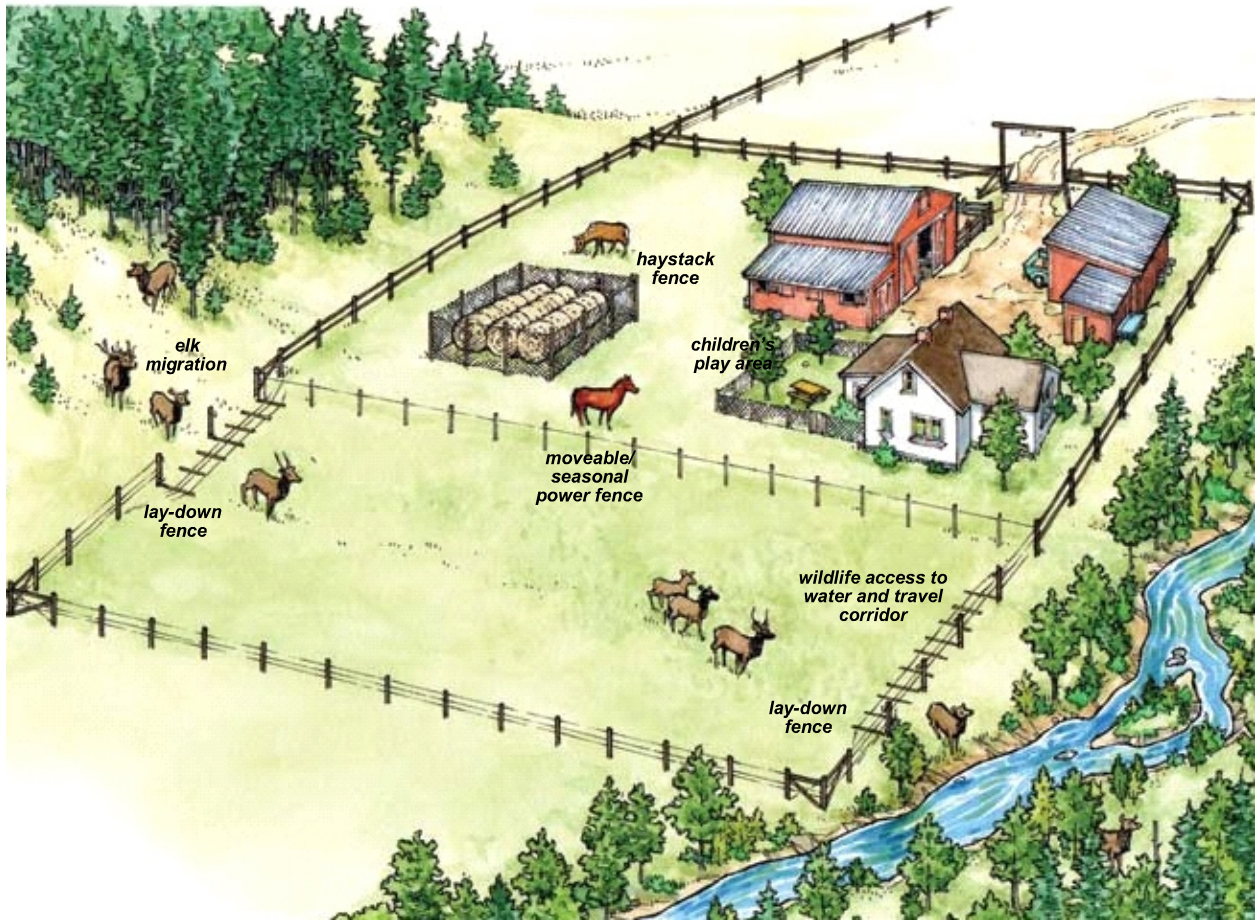
Work with your land's topography. Swales, gullies, ridges and stream corridors can funnel wildlife through an area – keep these open to allow wildlife passage and avoid topography traps.

When you design your fence, consider:

- purpose of the fence
- topography – hills, gullies, streams and wetlands
- species of wildlife present
- daily or seasonal wildlife movements in the area
- presence of water, food and cover for wildlife
- presence of young animals

Slope Increases Barrier





Place crossings, jumps, open gates and other wildlife openings in appropriate locations. Deer, elk and pronghorn are more likely to use openings at fence corners than in the middle of a fence run, unless there is cover, habitat, or natural corridors or trails to attract them through. Intermittent openings should be placed where animals naturally travel, in riparian corridors, along gullies and ridges, and on existing game trails.

A fence of any height is more difficult to cross when placed across a steep slope. As ground slope increases, the distance an animal must jump to clear the fence increases considerably (see illustration above). For instance, a 42" fence may be passable on level ground, but a slope of only 10 per cent increases the effective fence height to 48.6"; a slope of 30 per cent increases effective height to 62", and on a 50 per cent slope animals encounter an obstacle 75" high. Fences on steep slopes become nearly impossible for animals to jump without injury.

Tailor your fences to specific needs and allow wildlife access to water, important habitats and travel corridors.

- Look for wildlife trails and watch for seasonal patterns.
- Provide wildlife access to riparian habitats, water holes and other high-quality habitats.
- Provide passage along swales, gullies, ridges and stream corridors.
- Use the appropriate fence design for each activity.
- On slopes and in natural travel corridors, plan for wildlife crossings.

The ideal wildlife friendly fence should:

- allow relatively free passage for animals to jump over and crawl under; and
- be highly visible for both ungulates and birds. You can combine or tailor many of the ideas presented here for your specific situation.

Fences should be low enough for adult animals to jump, preferably 40" or less, and the top two wires should be no less than 12" apart. Deer and elk easily tangle their back legs if the top wires are closer together. The bottom wire or rail should be high enough for pronghorn, calves and fawns to crawl under, at least 18" from the ground. Increasing visibility using a top rail, high-visibility wire, flagging or other visual markers can help ungulates and birds, such as sage and sharp-tailed grouse, hawks, owls and swans, better navigate fences.

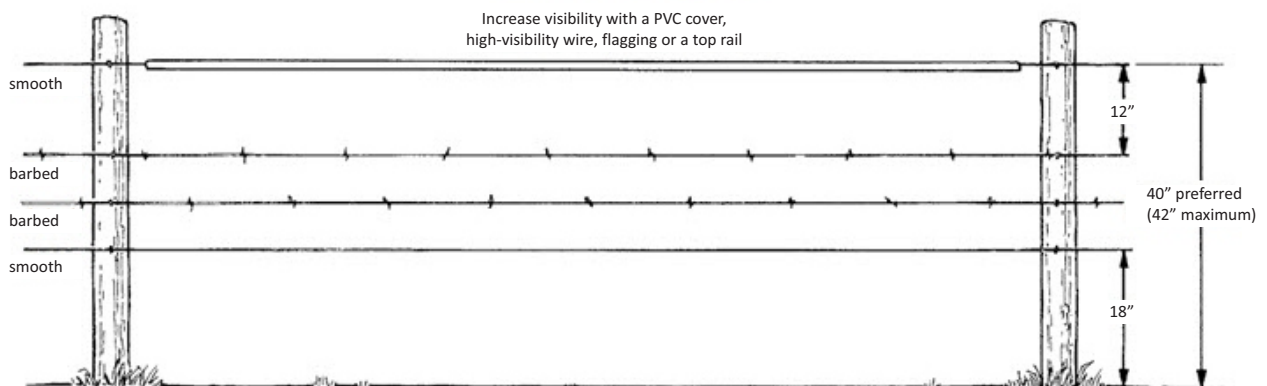
Using smooth wire – barbless wire, high-visibility tape or braid, or high-tensile electric wire – for the top and bottom strands will prevent snagging and injuries. In wildlife migration areas, drop-down fence, lay-down fence or crossings can be used for seasonal wildlife passage.

Wildlife Friendly Ideal

Wildlife friendly fences should be low enough for adult animals to jump, high enough for animals to crawl under, and minimize the chance of tangling. The Ministry of Environment recommends:

- A top wire or rail preferably no more than 40" above the ground, and absolutely no more than 42";
- At least 12" between the top two wires;
- At least 18" between the bottom wire or rail and the ground; Smooth wire or rail for the top, smooth wire on bottom.
- No vertical stays;
- Posts at 16.5-foot intervals;
- Gates, drop-downs, or other passages where wildlife concentrate and cross.

Ideal Wildlife Friendly Fence



The friendliest fences are very visible and allow wild animals to easily jump over or slip under the wires or rails.

Visibility

The best way to prevent a frightened deer or low-flying swan or grouse from colliding with a fence is to make it highly visible. One solution is a top rail; however, heavy snow build-up along the rail can sometimes deter elk and deer from crossing, so a rounded rail that will shed snow more easily is preferable.

High Visibility Fence

For wire fences, a less expensive alternative is to slip sections of small diameter PVC pipe over the top strand. High-visibility wire is also available in many forms – tape, braid and polymer-coated wire – many of which can be electrified if needed. White wire is the most visible to wildlife.



High visibility helps wildlife negotiate fences. It is especially important in grasslands and near creeks and wetlands to protect low-flying birds, such as grouse, owls and swans. PVC pipe, flagging and white wire or tape all help wildlife see fences.



The least expensive solution is to simply hang flagging, or other materials along the top, although many materials can fade or be lost and need regular replacement.

Visibility (continued)

Another relatively inexpensive alternative is offered by the Sutton Avian Research Center in Oklahoma using “undersill” or trim strips of white vinyl siding cut into three inch pieces. The undersill siding strips have a lip that can be snapped onto barbed-wire fence and the vinyl strips can be easily cut with tin snips or a miter saw. The siding pieces are lightweight and durable, and a long run of fence can be marked quickly and easily.

Durable Vinyl Markers for Wire Fence for Ungulates and Grouse

- Several 12-foot strips of alternating “undersill” or trim strips of white and dark vinyl siding, available at home hardware centres.
- Cut strips to three-inch lengths. Use tin snips for small projects, or use a 10-inch miter saw with a 200-tooth blade to cut up to eight pieces at a time for larger projects.
- One 12-foot siding strip yields 48 pieces.
- For grouse species near leks, snap pieces of alternating colored strips onto the top two wires, approximately five feet apart. For other species, strips can be spaced further apart.
- Alternating coloured strips for grouse or ungulates provides for better fence wire visibility during all seasons.



Durable and lightweight fence markers can be cut from strips of vinyl siding trim. The trim strip has a lip that easily snaps onto fence wires.

Durable Coloured Markers on Wire Fence

For grouse species (especially sage grouse) near lek sites, the top two wires should be marked with vinyl coloured strips, spaced approximately five feet apart. It is preferred that the top wire be smooth wire when possible.



Sites with Low or Seasonal Livestock Use

Not all situations require a five-strand barbed-wire or woven-wire fence. Smooth wire fence, various types of post and rail fences, and temporary or moveable electric fences can be used for seasonal pastures, horse pastures and many other situations with low or intermittent livestock use.

Three-strand Smooth Wire Fence

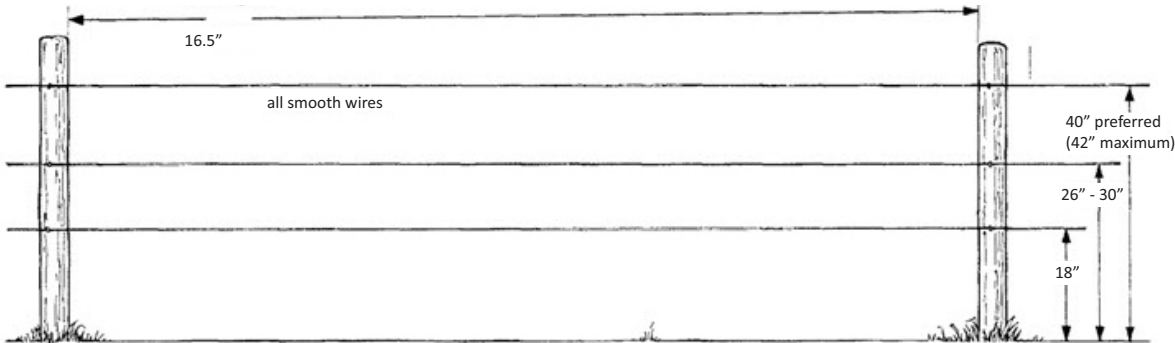
Use three strands of smooth (barbless) wire. High-tensile wire is effective for light livestock control.

- Top wire 40 to 42" high;
- Center wire 30" above the ground;
- Bottom wire 18" above the ground;
- Preferably, no vertical stays; and
- Wood or steel posts at 16.5-foot intervals.



Photos above and left, show potential impacts of woven fence for younger ungulates. When woven fence is no longer required, it should be removed and/or replaced with strand wire options.

Three-strand Smooth Wire Fence



Seasonal Electric Wire Fence

A flexible electric fence that allows passage for elk and other ungulates can still be effective for livestock, particularly horses broken to electric fence. It can be laid down seasonally to allow free wildlife passage. This fence is useful for keeping stock out of sensitive habitats or for short-duration grazing where permanent fencing isn't desired.

- Pre-drill 72" x 1" heavy fiberglass posts;
- Drive posts 24" into the ground at a 32-foot spacing (a t-post pounder can be used if ground is soft);
- Use treated wooden posts for bracing at ends and centre;
- Place a top wire of conductive high-visibility tape, braided wire or polymer-covered wire no higher than 42" height, electrically charged (medium-tensile 12-gauge plastic-coated wire is satisfactory);
- Place a second grounded strand of high-tensile wire at 30";
- Attach strands to fiberglass posts with wire clips that can be removed when fence is laid down;
- Use insulators for attaching hot top wire to wooden posts; grounded wire can be stapled or clipped directly to wooden posts; and
- Use a solar electric energizer (size and placement depends on the run length of fence).

To work properly, this fence needs to flex as elk and other animals pass over it. Install as few rigid post supports as possible, and use the minimum recommended wire tension.

Placing the energizer toward the middle of the fence will afford the greatest electrical efficiency.



This two-wire seasonal power fence can be used where stock are broken to electric fence. Wooden posts brace the ends. The fiberglass posts can be laid down when the fence is not in use.



Movable Electric Wire Fence

A moveable electric fence can be used for short-duration grazing, to keep stock out of sensitive areas such as wetlands, or for other situations where livestock needs to be temporarily controlled. This fence works well for stock that has been previously broken to electric fences.

The design can be tailored to your situation, but a simple fence can be constructed using high-visibility tape or “turbo wire” and fiberglass posts or plastic-insulated steel posts. A moveable fence can use either a single hot wire (when there is sufficient moisture for an adequate ground) or two wires, the top one hot, the lower wire grounded. Moveable posts on the market include designs with hooked or pigtail tops for quickly stringing wire, and a tread-in foot. These can be rapidly set up and moved as needed.

- Use 40” to 42” fiberglass or plastic-insulated steel posts, designed with hooks or loops for wire and tread-in spikes at the foot;
- Place one to two strands of high-visibility tape or polymer-covered turbo wire;
- If two wires, the top should be hot, the lower wire grounded. Top wire should be no higher than 42”; lower wire no lower than 18”; and
- Use a solar electric energizer (size and placement depends on the run length of fence).



A temporary electric fence can be used to keep stock out of sensitive areas and is easily negotiated by most wildlife.



Tips on electric fences

Most electric fence problems are caused by poor grounding. Follow the manufacturer's specifications for grounding the energizer and fence for your fence type and conditions. The number of ground rods needed may vary; a maximum reading of 0.2kv on a volt metre in dry conditions indicates an adequate ground. Wooden and steel fence posts require insulators for attaching hot wires; ground wires can be stapled or clipped on directly. Fiberglass and plastic line posts do not need insulators, but do require special clips for attaching wires. Check the fence regularly to be sure it is charged.

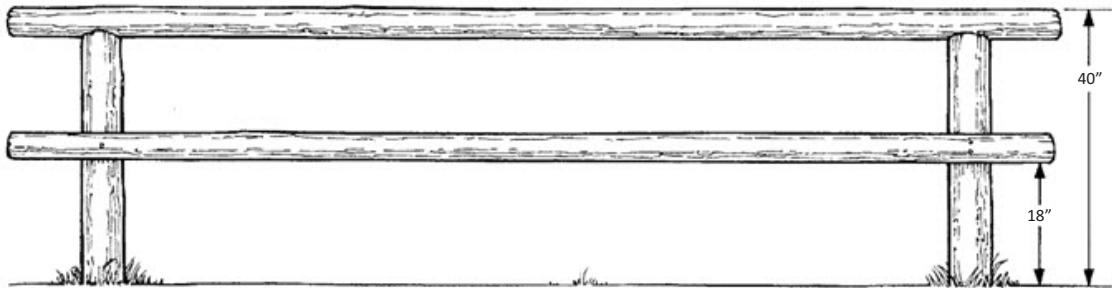
Post and Rail Fence

A post and rail fence is highly visible to wildlife and can be constructed for situations with or without livestock. Rail fences can either use a top rail with wires below, or two to three rails total. A two-rail fence is preferable to a three-rail fence for wildlife. Unless the fence is quite low, use rounded poles for the top rail, rather than a square or split-rail, to prevent too much snow build-up in winter, which can deter elk and deer. Also, unless the fence is easily jumped and there is ample clearance underneath, boards or planks are not recommended as these can create a visual barrier.

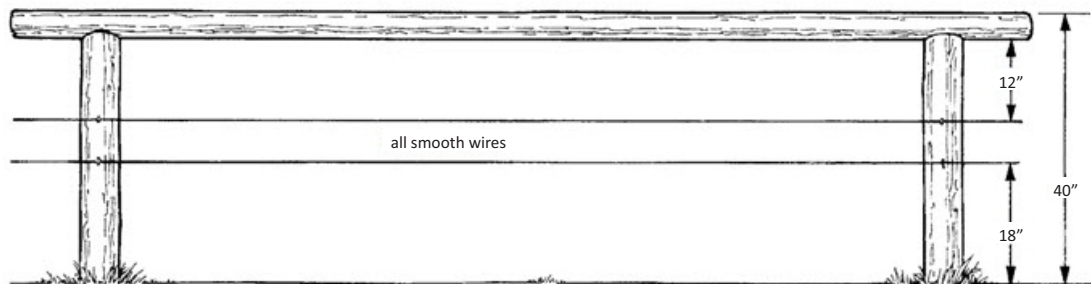


- Use pressure-treated six-foot to eight-foot posts, spaced 10 feet to 14 feet apart.
- Use pressure-treated poles for top rail, placed no more than 40 inches above the ground.
- Place smooth lower wires at 18 inches and 28 inches above the ground.
- Second wire should be at least 12 inches below top rail.
- OR place pressure-treated poles for lower rails, the bottom rail placed with at least 18 inch clearance from the ground.

Post and Rail Fence



Post and Wire Fence



Sites with High or Continuous Livestock Use

Most livestock pastures do not require a five- to six-strand barbed-wire fence. In many situations, a three- or four-strand barbed-wire fence, a combination of smooth and barbed-wire, or a high-tensile electric fence will work well for livestock control, particularly if the pasture quality inside the fence is as good or better as outside the fence.

Sheep, bison and cows with calves may require more impermeable fence for control. If you must use fences with woven wire or more than four wires follow these tips:

- Consider the placement of the fence perimeter carefully, and limit the extent of impermeable fence whenever possible.
- Avoid excluding wildlife from streamsides and water sources, or cutting off migration and travel corridors.
- Keep the fence height to a maximum of 40 inches to 42 inches and create periodic crawl-openings for fawns and calves by raising the bottom 18 inches from the ground, placed where animals typically travel.
- Avoid topping woven wire fences with barbed-wire. In any situation, allow 12 inches between the top wire and the next wire below – whether barbed or woven wire.
- Create seasonal openings using lay-down fence sections or gates to open the fence during months when stock are not present.



Four-strand Barbed-wire for Cattle or Sheep

Woven-wire fences block wildlife passage, particularly for fawns, calves, pronghorn and medium-sized animals unable to jump over fence. On cattle and sheep range, it is possible to use a four-strand barbed-wire fence that controls livestock but still allows for passage of pronghorn, deer, moose and elk.

For cattle, use a wire spacing of 18–22–28–40/42 inches - the top wire should be at 40 to 42 inches or less. Allow 12 inches between the top two wires and 18 inches between the bottom wire and the ground. Use a smooth bottom wire.

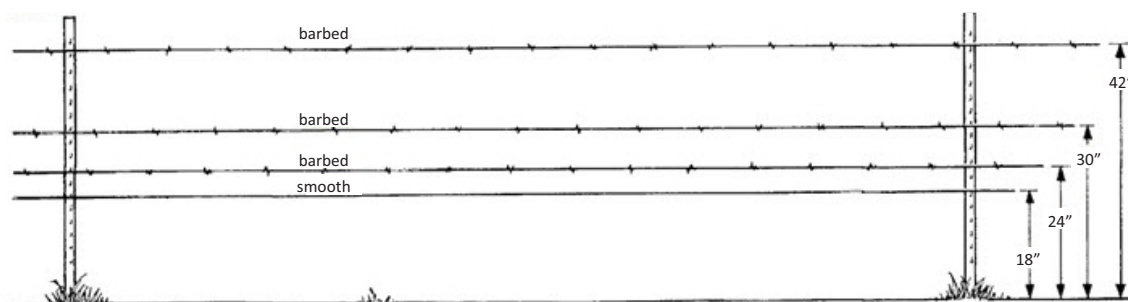
A four-strand fence for sheep can have a top wire no more than 32 inches high. Allow at least 10 inches between the top two wires. (A lower fence is easier for deer and elk to jump, and so the 10-inch spacing between top and second wires will usually be adequate). The bottom wire should be smooth wire and at least 10 inches above the ground.

- Top wire height 32 inches maximum for sheep, 40 to 42 inches for cattle or 38 inches for both sheep and cattle.
- At least 10 to 12 inches between the top two strands.
- A bottom smooth wire, at least 10 inches above the ground for sheep or sheep/cattle fence, and 16 to 18 inches for cattle.

SHEEP AND CATTLE FOUR-STRAND BARBED WIRE FENCE
(Adapted from Wyoming Game and Fish dept., 2004)
Recommended Wire Heights Above the Ground

	Cattle	Sheep	Sheep & Cattle
Top wire	40" to 42" barbed	32" barbed	38" barbed
2nd wire	28" barbed	22" barbed	26" barbed
3rd wire	22" barbed	16" barbed	18" barbed
4th wire	16" to 18" smooth	10" min. smooth	10" min. smooth

Four-strand Barbed-wire with Bottom Smooth Wire



Combination Smooth and Barbed-wire Fence

In many situations, a combination of smooth wire and barbed-wire can effectively contain livestock and allow for easier wildlife passage. Smooth wire can be used for the top and bottom wires and one to two barbed-wire strands are used for the centre strands. High-tensile wire can be used on top, and poly-coated white high-tensile wire will increase visibility for wildlife. The top wire should be 40" to 42" high or lower, and the bottom wire at least 18" above the ground to provide wildlife clearance. Allow at least 12" between the top and second wires.

- Place top smooth wire at 40" to 42" maximum height – high-tensile or poly-coated white high-tensile wire is recommended.
- Allow at least 12" between top and second wires.
- Place bottom smooth wire at least 18" from the ground.
- Use barbed-wire for center two wires.

Three-wire High-tensile Electric Fence

Researchers in Wyoming found that a three-wire high-tensile fence (with a hot-ground – hot configuration) is not only effective for containing cattle, but allows elk, mule deer and pronghorn to traverse the fence. They found that wild ungulates usually were not deterred by electric fences even with charges ranging from 0.5 and 4.5 joules, perhaps because of the insulating properties of their hair. Although wild ungulates were occasionally shocked when they nosed or bit a wire, or touched hot and grounded wires

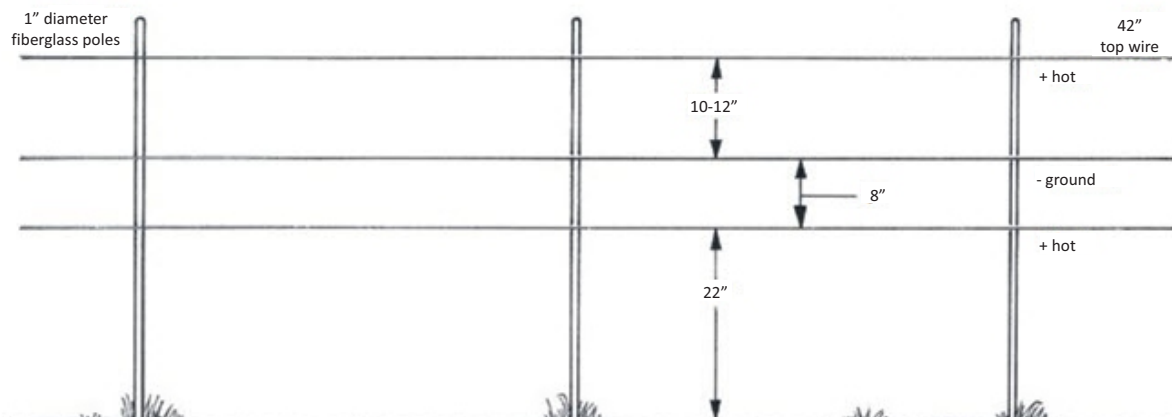
together, most animals readily negotiated the fences.

Further, the researchers determined that three-wire fences effectively contained bulls separated from cows coming into estrus, and calves from cows in the fall. A two-wire fence can be used for areas without weaning calves but, curiously, pronghorn showed a high aversion to two-wire fences, perhaps because of the novel height and their general reluctance to jump fences rather than crawl under (Karhu and Anderson 2003, 2006).

Note that high-tensile fences require proper construction techniques, including adequate braces, proper tensioning, care not to kink or break wire, and proper attachments and insulators for posts and braces. However, high-tensile fences need minimal maintenance, provide great strength, can be easily electrified and will outlast most other fences.

- Maintaining fence flexibility is key to allowing wildlife to traverse the fence.
- Use fiberglass posts no greater than one inch in diameter;
- Brace fence with wood posts at least five inches in diameter; use braces at all corners, gates, and direction changes greater than 15 degrees. Appropriate insulators are needed with wooden posts.
- Space posts at a minimum of 50 feet apart if stays are used, and maximum of 50 feet apart with no stays;
- Fence stays can be problematic, making it harder for wildlife to pass between the wires,

Three-wire High-tensile Electric Fence



sometimes causing the fence to flip and twist when wildlife cross, and increasing the risk of grounding out the fence. If stays are used, the free span should be at least 30 feet for wildlife to cross effectively;

- Smooth, 12.5 gauge, Class III galvanized wire with a tensile strength of 170,000 PSI and breaking strength of 1,308 pounds is adequate. To increase visibility, for the top wire use white poly-coated wire with the same specifications;
- Space wires at 22–30–40/42 inches from the ground. The top wire should be no higher than 42 inches with 10 to 12 inches between the top and middle wires. A bottom wire at 22 inches allows both young and adult wild animals to pass under easily. Connect wires to posts with metal clips or fasteners designed for electric fences;
- Top wire is hot, second wire is grounded, bottom wire is hot;
- Tighten wires to 150 pounds tension. If too tight, the wires are more likely to break. Although high-tensile wire has a high breaking point, it is also more brittle, and easily broken if tightly bent or kinked;
- Place solar energizer according to manufacturer recommendations;
- Ground fence properly according to the energizer instructions, and add extra rods as needed. Locate ground rods at fence ends and intermittently in between.
- Keep fence electrified even when livestock are not present to prevent wildlife damage to fence. This also prevents the battery from freezing and prolongs battery life.
- Securely attach electric fence warning signs intermittently along the fence and at crossing points.



A 3-wire high-tensile power fence is effective even for separating bulls from cows in estrus. Using high tensile wire at the proper tension is key to prevent wildlife damage.

Openings, Crossings and Passes

To modify any fence design, you can include openings and crossings in your fence to allow wildlife passage for periods when livestock are not present. Fence passes keep fawns and calves from being stranded, provide openings for other animals unable to jump fences, and help wildlife cross when snow hinders passage over or under fences. Wildlife crossings are especially important when fawns and calves are small, from June 1 through the summer, and for seasonal wildlife movements and ranges. Such openings can considerably reduce wildlife damage to fences and decrease maintenance costs.

Wildlife openings can include sections with drop-down wires or rails, lay-down fence, or

simply additional gates secured open. The local topography and patterns of wildlife travel should help determine the placement of crossings. Look for signs of wildlife use and travel such as tufts of hair caught on fence wires, game trails, trails to water, or gullies and swales that act as wildlife corridors.

Wildlife crossings can include:

- Individual sections built to wildlife friendly standards;
- Drop-down wire or rail fence designs;
- Lay-down fence;
- Extra gates, secured open for wildlife;
- PVC modifications to wire fence for ungulate passage.

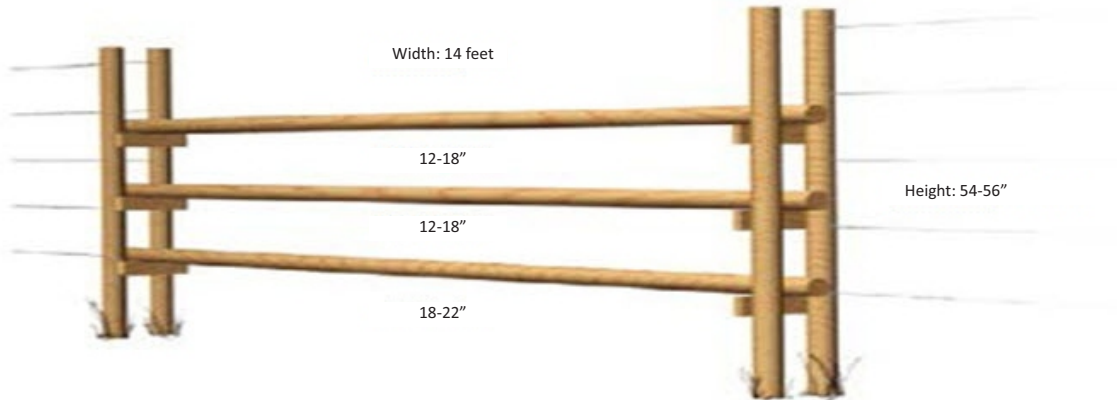


Elk and other wildlife readily travel through seasonal fence openings. Here a wildlife gate is installed on an elk trail.

Drop-down Fences: Dropped Rail

Jackleg fence, high post-and-rail fences, and worm or zigzag fences are often used for property boundary fences, but may be difficult for some animals to negotiate. An occasional gap in the fence can provide a crossing. Animals will often move along the length of a fence seeking an opening. Simply drop the rails to the ground every 400 feet to allow animals to step across. Rails should be dropped where there are signs of wildlife passage, such as game trails, and in stream corridors, gullies or other natural funnels.

Jump Rails for Big Game

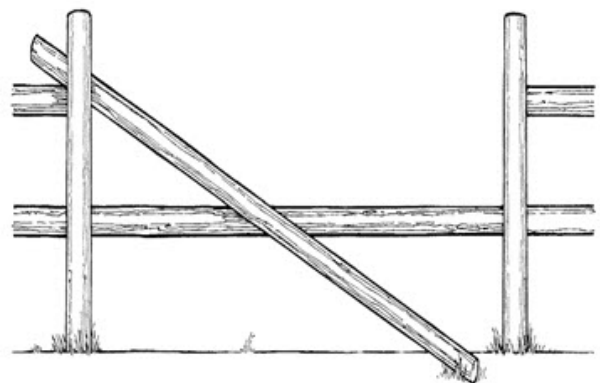


The space between the bottom and second rail should be 18" or more when moose or elk are present.

Dropped Rails for Wildlife Crossing



Dropped Rail for Wildlife Jump



Durable PVC Big Game Passage

Installing PVC pipe over bunched fence wires is an inexpensive way to allow elk, deer and antelope to freely cross existing barbed-wire fence with minimal risk. This design is especially useful where elk, moose or other ungulates cross heavily-traveled roadways and have difficulty crossing a fence, delaying their movement out of danger, particularly in spring and summer when calves are small. Along roads, the PVC passage should be installed on both sides of the right-of-way.

These instructions are for a metal t-post, five-strand barbed-wire fence, with no livestock present, but can be adapted for other situations.

Materials for modifying two-60 foot sections of barbed-wire fence:

- Twenty 10-foot sections of 1.5 inch OD PVC pipe
- One 100-count bag of large (7" or 11") UV-resistant plastic cable ties
- #16 or larger soft wire
- fencing pliers, wire cutter, leather gloves

Before Installation:

With a table saw, cut a 1/4" slot the entire length of each PVC pipe. Note that a 1/4" cut can be made by matching up two 1/8" wide blades and using a wood guide.

Installation:

Step 1: Remove all wire clips from about 50 feet or three fence posts and allow wire to hang freely.

Step 2: Beginning near first post with clips removed, grip the top three strands of wire and pinch together. Locate a space between barbs that will allow you to thread on the PVC pipe. Push pipe onto wire (not wire into pipe) concentrating on fore-end of pipe. If the pipe gets hung up on a barb at the fore-end, work barb into end of pipe and continue. Once the pipe has been adequately started, grip pipe near the fore-end and begin pulling down the length of the wire. The wire will feed itself into the pipe. Pull pipe down the wire until about eight feet from where posts with clipped wires resume.

Step 3: Repeat with three more pipes. Space the joint between two pipes at a post where possible. This will allow you to clip the three wires together to a post.

Step 4: The last (fifth) pipe must be installed in the reverse direction. Starting near the end of the fourth pipe, find a space between barbs and install pipe as in step 2, push into place eight feet from where posts with clips resume.

Step 5: Repeat steps 2 through 4 with the bottom two wires.

Step 6: Using #16 or larger soft wire, attach the top PVC pipe to posts no more than 40 inches above the ground. Attach the bottom pipe at 18 inches above the ground, or dropped closer to the ground to create a larger middle gap for deer fawns/elk calves to go through rather than under. Where a joint between pipes is located at a post, enough space can be left to clip the wires to the post.

Step 7: Attach three cable ties per 10-foot section of PVC pipe, one near each end and one in the middle. Squeeze PVC pipe while pulling cable tie tight. Gap from cut will not be completely closed but will be small enough to allow the pipe to roll and not work its way off the wire. Clip tag end of cable tie.



Montana FWP



Montana FWP

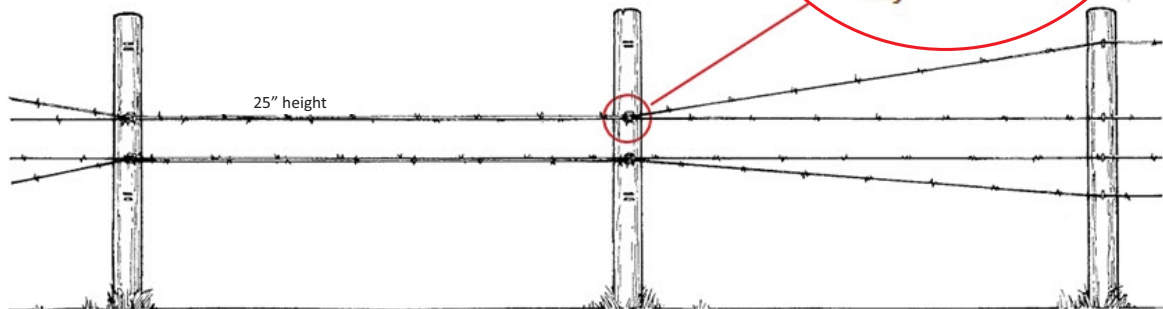
PVC pipe threaded over bunched fence wires creates an effective and durable big game passage.

Drop-down Fences: Adjustable Wire Fence

Adjusting the height of one or more wires is an easy and effective way to allow animals to cross during migration periods if livestock aren't present. Drop the top wire to the level of the second wire, either in sections or along an entire run of fence, to allow wildlife to jump over easily. Lowering the top wire to 25 inches or less allows elk and deer to hop over easily in almost all conditions. Raise the lowest wire in the same way to help wildlife crawl under. A simple staple lock allows wires to be rapidly adjusted from one level to another and the wires can be adjusted by only one person.

Existing fences can be readily modified by installing staple locks to create a drop wire so wire height can be adjusted when livestock are not present.

Adjustable Fence for Seasonal Wildlife Passage



Staple lock for wooden posts:

- Install two fence staples horizontally and less than an inch apart on each post at the level of both the top wire and the second wire.
- Slip the fence wire between the two staples.
- Secure it in place by hooking a third staple through the paired staples vertically, like a latch.



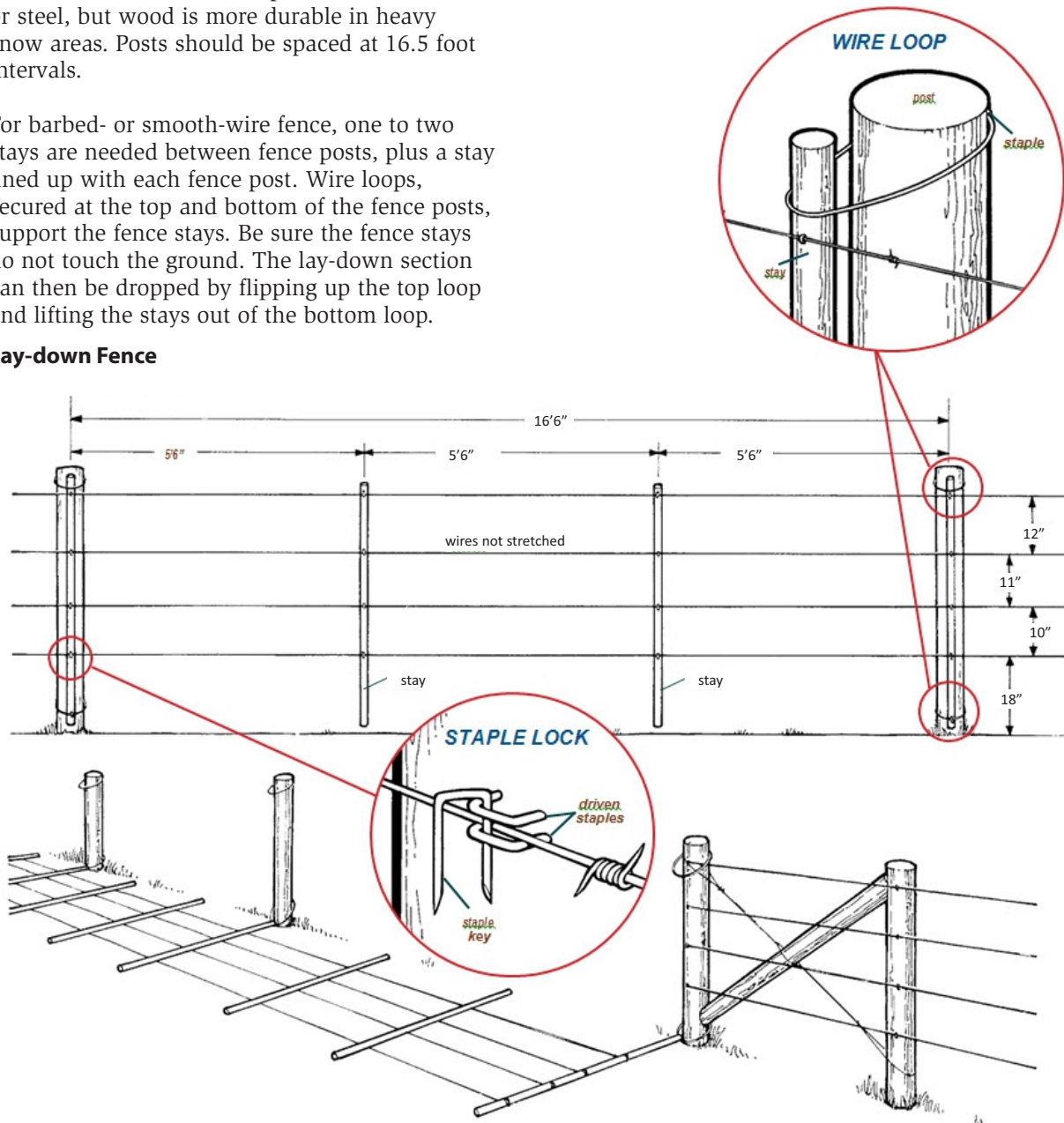
Drop-down Fences: Lay-down Fence

A lay-down fence is a standard three-wire or four-wire fence that can be laid on the ground as a unit to allow ungulates or low-flying birds such as grouse near lek sites to pass through during migration or seasonal use. A lay-down fence can also reduce snow and wildlife damage and save maintenance costs. Most designs allow a single person working alone to let the fence down or put it back up.

Lay-down fence can be constructed from smooth wire or barbed-wire. Fence posts can be wooden or steel, but wood is more durable in heavy snow areas. Posts should be spaced at 16.5 foot intervals.

For barbed- or smooth-wire fence, one to two stays are needed between fence posts, plus a stay lined up with each fence post. Wire loops, secured at the top and bottom of the fence posts, support the fence stays. Be sure the fence stays do not touch the ground. The lay-down section can then be dropped by flipping up the top loop and lifting the stays out of the bottom loop.

Lay-down Fence





This lay-down fence using four-strand smooth wire was constructed along 1.5 miles of fencelines next to the Blackfoot-Clearwater Wildlife Management Area to allow winter passage for elk. The number of elk tracks attest to the design's success.

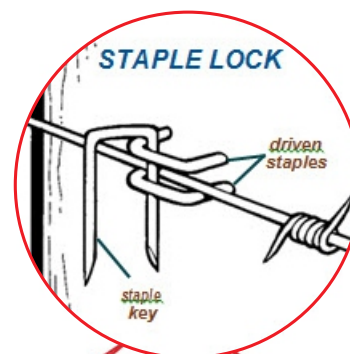
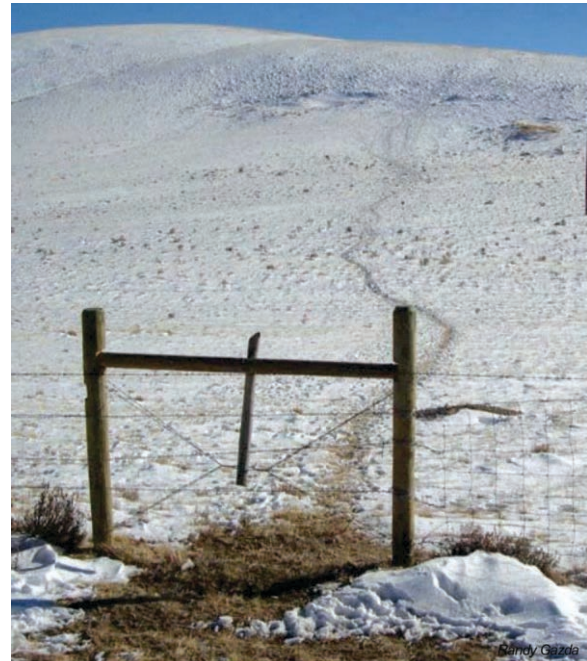


Pronghorn Underpass or “Goat Bar”

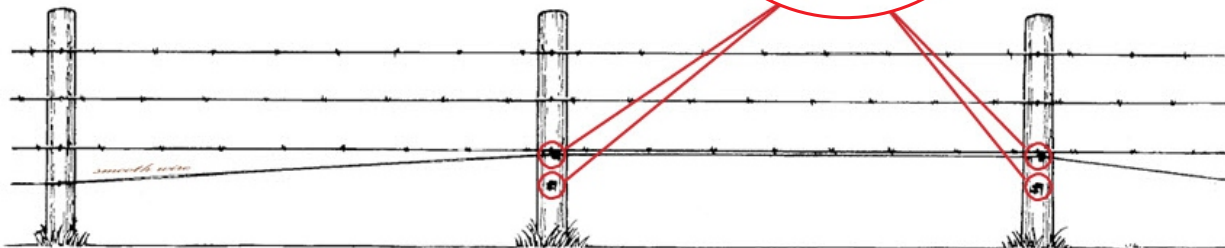
Although capable of jumping even high fences in extreme situations, pronghorn prefer to crawl under fences, and almost seem unaware of their ability to “high jump.” They will often run for miles looking for fence openings or spots to crawl under a fence, and have been known to die of starvation when blocked by a fence they see as impassable.

Pronghorn have the greatest difficulty negotiating sheep fence, which either uses lower barbed-wire strands than cattle and horse fence, or is typically made of woven wire. However, a pronghorn “underpass” can be created by raising the bottom strand in selected fence sections.

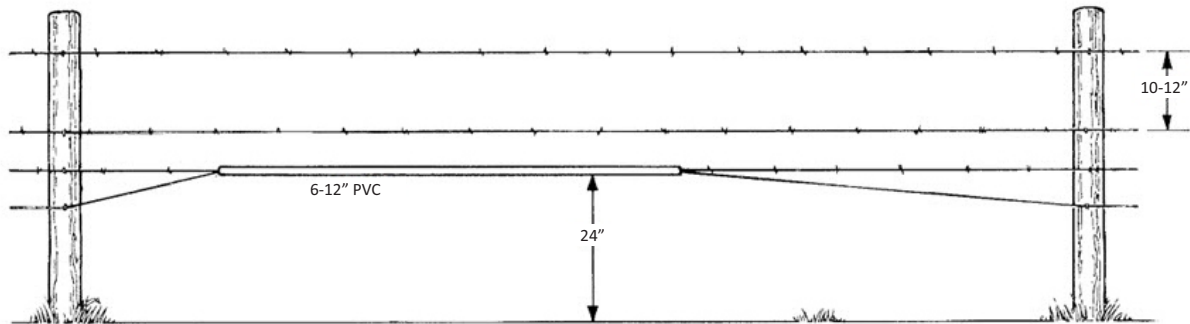
- For sheep, space wire strands at 10–16–22–32 inches above the ground, the top three strands barbed-wire, the bottom strand smooth wire.
- In selected sections, raise the bottom smooth wire on two posts to the height of the third wire, securing in place with a staple lock. The smooth wire can be dropped again if needed.



Pronghorn Underpass Fence with Raised Wire



Pronghorn Underpass Fence with Goat Bar



Where cattle or horses share the range with pronghorn, a PVC underpass or “goat bar” can be created by simply gathering the bottom two wires in a PVC pipe to make a higher clearing for pronghorn of any age to crawl under. Despite the underpass, the fence remains effective for controlling horses and cattle. This design has been used extensively in pronghorn habitat.

- Space fence wires heights at 18–24–30–40 inches; use smooth wire on the bottom.
- Cut several 6- to 12-foot lengths of PVC pipe.
- With a table saw, cut a 1/4 inch slot the length of each PVC pipe.
- Note that a 1/4 inch cut can be made by matching up two 1/8 inch wide blades and using a wood guide.
- Grip the bottom two fence wires together, and feed the PVC pipe onto the wire from one end of the pipe. If the pipe gets hung up on a barb at the fore-end, work barb into end of pipe and continue. Once the pipe has been adequately started, grip the pipe near the fore-end and begin pulling down the length of the wire.
- Space these underpasses intermittently along the fence, and especially in fence corners where pronghorn may be directed by the run of fence.



Top: A pronghorn buck crosses under a two-strand smooth wire fence.

How can you make existing fences more wildlife friendly? Fence maintenance, modifications and removal can all help wildlife.

Maintenance:

- Keep wires tight. Sagging wires and neglected fences create a hazard for both domestic animals and wildlife. Loose wires can snare animals as they attempt to cross – tight wires reduce the chance of entanglement.

Modifications:

- Replace barbed-wire with smooth wire wherever possible. Smooth wire reduces the chance of animals becoming snared on barbs and fatally entangled.
- Adjust the height of top wire: preferably no more than 40 inches and a maximum of 42 inches above the ground.
- Increase the distance between the top two wires to 12 inches to reduce entanglements.
- Reduce the number of wires to three, or at most four.
- Add a top rail, high visibility top wire, a PVC cover on the top wire, or flagging to increase visibility and prevent entanglement.

- Raise the bottom wire to at least 18 inches above the ground to allow animals to crawl under:

In selected sections, raise the bottom smooth wire on two posts to 18 inches, securing in place with a staple lock.

For pronghorn, gather bottom wires in a PVC pipe to create a “goat bar” underpass.

- Add wildlife crossings where wildlife trails cross fences by using dropped wires, dropped rails, lay-down fence or underpasses, as described earlier.
- Provide wildlife access to rivers, streams, wetlands and water holes, and through seasonal migration areas.

Removal:

- Remove old fences that are in disrepair or no longer in use. Remove any unnecessary interior fences.
- Bale and carry away piles of wire. Some recycling centres will recycle old wire.
- Many volunteer groups are interested in helping with fence removal projects to help wildlife, such as local chapters of sportsmen's groups, scout troops, 4-H and others.

When livestock are not in a particular pasture, landowners are encouraged to leave gates open as to provide unrestricted travel corridors for wildlife movement.



Scott Nicolarsen

If you do not need a fence to contain or exclude livestock, consider other creative ways to define boundaries and discourage trespass.

Hedgerows

A line of shrubs and trees can mark a boundary line, beautify your landscape and provide food and cover for wildlife. Depending on the site, a wide range of native and ornamental shrub species can be used to create an effective hedgerow – from willows, alder and big sagebrush. Many native shrubs are suitable for hedges and enhance wildlife habitat. These include American chokecherry (*Prunus virginianus*), black hawthorn (*Crataegus douglasii*), red-osier dogwood (*Cornus stolonifera*), American silver berry/wolf willow (*Elaeagnus commutata*), wild rose (*Rosa woodsii*), and willow (*Salix* species).

Beware using some non-native species. Non-native trees and shrubs are highly invasive and can cause irreparable damage to the landscape.

Mix it up: Consider using several species, varying the width of the hedgerow, or using plants of different heights to create a natural and wildlife-friendly hedge. Once established, hedgerows require minimal maintenance unless you want a highly manicured look.

Hedgerow



There are times when exclusion fence is necessary to keep wildlife out. If you must put up an exclusion fence, avoid fencing a large area that includes wildlife habitat. Focus exclusion fences on small areas for specific purposes, such as fencing around play areas, vegetable gardens, beehives, calving and lambing areas, or haystacks. Keep exclusion fence close to the activity you need protected, and allow wildlife to use other parts of the property.

For any exclusion fence, place gates at corners; an animal that inadvertently finds itself trapped inside is more likely to find escape through an open corner gate than through a side gate.

Deer and Elk Exclusion Fence

A permanent non-electric exclusion fence for deer and elk should be seven to eight feet high. A seven- to eight foot wooden fence that animals can't see through is typically used around housing areas. For gardens, vineyards and other agricultural plots, eight foot' woven wire fence is more often used with posts set at eight foot to 20 foot intervals, and the wire is brought tight to the ground. Make the top highly visible by using a top rail, high-visibility wire or flagging. Place gates at corners, where an accidentally trapped animal is more likely to find an escape.

Wooden Plank Fence and Chain Link Fence

Chainlink fences and wooden fences with closely-spaced vertical planks are especially unfriendly to wildlife and can create a complete barrier to animals of all sizes, from turtles to moose. If you must use chainlink or plank fences, limit their use to small enclosures.

Yard fences and play area fences often do not need to be more than four feet high. If higher, be sure gates are kept secured to prevent animals finding their way in.

For small chainlink dog kennels, attach a roof to prevent wild animals from becoming trapped inside. A roof also provides shade and shelter for your pets.

A seven- to eight-foot fence is an effective barrier to elk, but should be used only for specific needs, such as gardens or haystack yards.



Use chainlink fences only for specific purposes, such as play areas and dog kennels.

Haystack Fence

Several options exist for protecting haystacks from wildlife damage. These include electric, non-electric, temporary and permanent designs.

Temporary Solutions

A simple and cost-effective solution is to wrap haystacks with heavy-duty plastic mesh netting, such as TENAX type 202 polypropylene mesh fencing (distributed in Canada by Cascade Geotechnical Inc., Edmonton, Alberta). TENAX is a two by two inch durable plastic mesh that is strong, lightweight and easy to handle. Haystacks and large bales can be wrapped quickly, and the netting is readily lifted off when not needed. This netting is especially useful for temporary applications, rapid installation and remove settings.

TENAX plastic netting can also be used as fencing instead of woven wire, and installed on wood or steel posts using UV-resistant zip-ties. The plastic is UV-resistant and durable and materials cost is comparable to woven wire. However, labour costs for fence construction can be greater than with traditional materials. (Note that TENAX mesh fencing can be obtained for protecting bales stacks from most Ministry of Environment field offices.)

Although the mesh would cause little harm to most large animals, it is nearly invisible when erected and should be flagged to be visible to birds.

Temporary electric fences can also deter deer and elk from haystacks. For a temporary fence, lean eight foot two by fours up against the haystack, spaced about 10 feet apart. String and secure seven wires 10 inches apart around the fence posts, alternating the charged and grounded strands. Use insulators to attach hot wires to the two by fours.

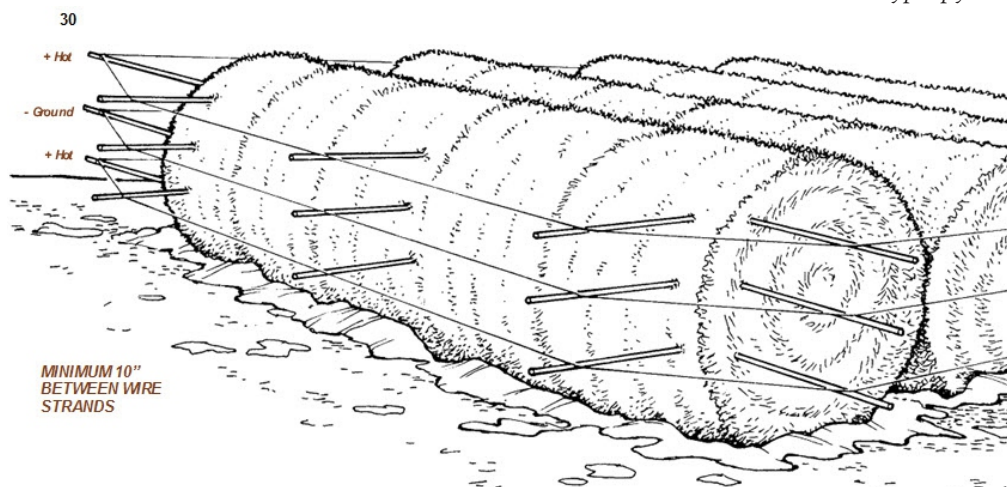
An alternative, particularly if the ground is frozen, is to poke fiberglass or steel rebar posts horizontally into the haystack to hold wires in place and away from the hay. (Note that insulators must be used to attach hot wires to wood or steel posts, but not with fiberglass or plastic posts.) Deer or elk can't jump over this set-up, and will receive a shock if they reach through for hay.



Montana FWP

TENAX Polypropylene Mesh Fence

Frozen Ground Haystack Fence





Use a poly-coated wire or tape to increase visibility – it is important that animals be able to see the fence.

Permanent Fences

Many landowners prefer to protect a large stackyard with a permanent fence. The traditional stackyard fence is at least eight feet high and uses woven wire with wood posts or a combination of wood and steel posts. Gates should be placed in the corners to allow animals that might be inadvertently trapped inside to find a way out more easily.

Note: Permanent hay shelter fencing compensation can be available by first contacting a customer service office under the Saskatchewan Crop Insurance Corporation, Wildlife Damage Compensation Program or at saskcropinsurance.com.

- A permanent electric fence, seven feet high, is also effective for protecting stackyards from game damage. This fence is constructed with seven strands of high-tensile smooth wire, alternating hot and grounded strands, spaced at 12- inch intervals.
- Use 10-foot pressure-treated wooden line posts, three to four inches in diameter, driven 2.5 feet into the ground, and spaced at 30-foot intervals.
- Use 10-foot pressure-treated wooden brace posts, four to five inches in diameter, driven three feet into the ground.
- Use 12.5 gauge, smooth Class III galvanized wire with a tensile strength of 170,000 PSI and breaking strength of 1,308 lbs. To increase visibility, use white poly-coated wire with the same specifications.
- A traditional eight-foot woven-wire fence can protect a stackyard from game damage. An alternative is a permanent seven-strand electric fence.
- Space seven strands at 12-inch intervals; the top wire at 84 inches; wooden posts require using insulators.
- Alternate hot and ground wires; bottom wire is grounded and top two wires are hot.
- Place solar energizer according to manufacturer recommendations;
- Ground fence properly according to the energizer instructions.
- Install electric fence warning signs.

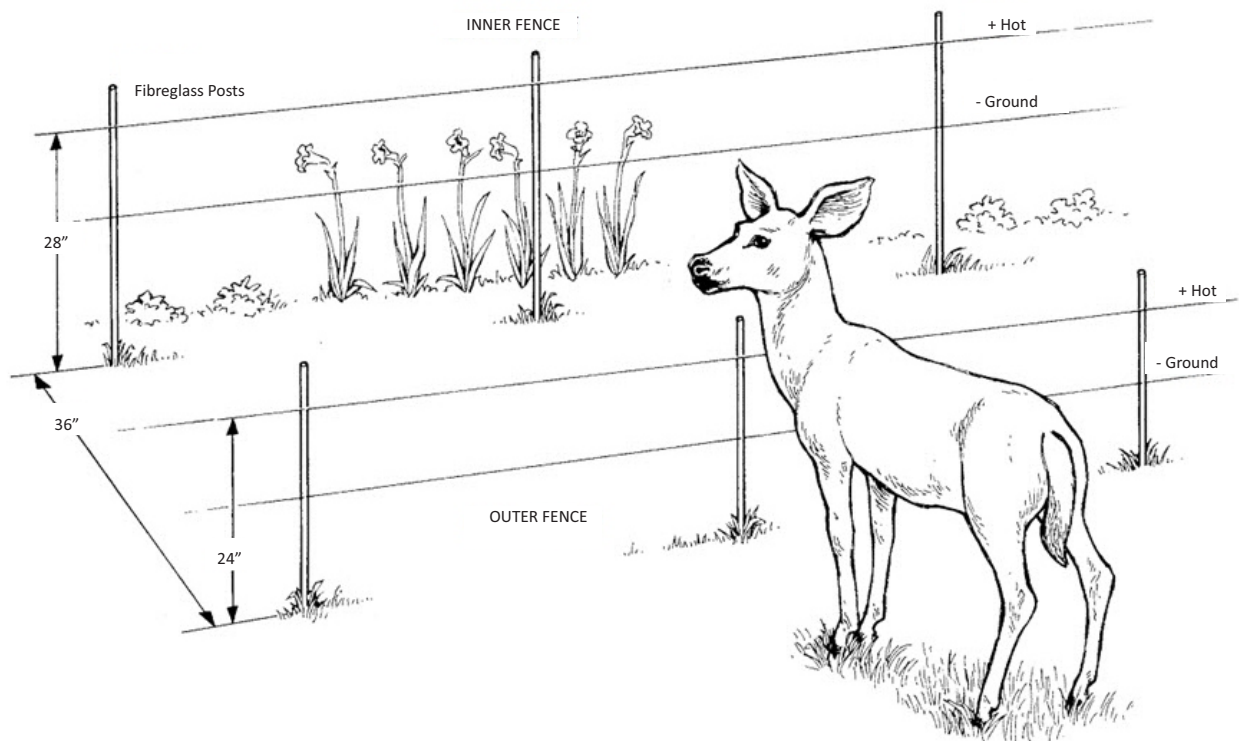
3-D Deer Fence for Yards and Gardens

Deer are not comfortable jumping fences with both height and depth, and are wary of fences that are not flat and regular. A staggered picket fence or leaning fence can be an effective deer deterrent. Another is to add tall vegetation – tall perennials, shrubs and trees – along a fence to increase the perceived depth of the barrier.

Another alternative is a 3-D electric deer fence, which can be effective for keeping white-tailed deer out of orchards and vegetable gardens. This fence is basically two parallel fences only 36 to 38 inches apart, the outside slightly shorter than the inside fence. The 3-D fence can be constructed as a permanent fence with high-tensile wire or as a temporary fence with poly-rope or tape and moveable posts.

- Place two separate lines of four-foot fiberglass posts, the lines spaced 36 to 38 inches apart.
- Drive posts 16 to 18 inches into the ground
- On the inner fence, string two 12.5 gauge high-tensile smooth wires at 12 inches and 28 inches above the ground;
- On the outer fence, place two wires at 12 inches and 24 inches above the ground;
- Make sure there is at least a 12-foot clearing in front of the outer fence so deer will see the fence. Flagging or high-visibility wire also helps both deer and people see the fence.
- Install a solar energizer according to manufacturer's instructions.

3-D Electric Deer Fence for Yards and Gardens



There is an array of permanent and temporary electric fence designs that can deter bears and wolves. These fences are used only for small-scale operations, such as beehives, dumpsters, lambing or calving areas, corrals, bone piles and other small areas in need of protection from scavenging or predation.

Permanent fence specifications to deter bears and wolves range from seven-wire to 11-wire fences, 42 to 72 inches in height. Wires alternate charged and grounded, with both top and bottom wires hot. Table 2 shows a range of specifications developed by the Natural Resources Conservation Service in co-operation with FWP (NRCS 2006b).

Key to the success of electric fences is to erect them before the attractant level is high, so that animals are “trained” to a fence early on. Also, joule rating is crucial. Because of predators' thick fur, the energizer must have an adequate joule rating to deliver enough shock to deter them. Grizzly bears require a minimum of 0.7 joules or more and 6,000 volts. Be sure your energizer can deliver adequate power over the distance you need. In addition, always install warning signs on the fence.



Photos: Predator deterrent fencing should be used only around specific areas, such as corrals and beehives. Always hang warning signs on power fences.

BEAR AND WOLF DETERRENT FENCING

(Adapted from nRcS 2006B)

Charge and Recommended Wire Heights from Ground Level

	Bear ¹ 7-wire	Bear & Wolf ² 7-wire	Beehive ³ 7-wire	Wolf & Bear ⁴ 9-wire (corral or home areas)	Wolf & Bear ⁴ 11-wire (away from corral or home areas)
Top wire	(+) 42"	(+) 54"	(+) 54"	(+) 60"	(+) 72"
2nd wire	(-) 36"	(-) 42"	(-) 42"	(-) 50"	(-) 64"
3rd wire	(+) 30"	(+) 32"	(+) 32"	(+) 42"	(+) 56"
4th wire	(-) 24"	(-) 24"	(-) 24"	(-) 36"	(-) 48"
5th wire	(+) 18"	(+) 18 "	(+) 18 "	(+) 30"	(+) 40"
6th wire	(-) 12"	(-) 12"	(-) 12"	(-) 24"	(-) 32"
7th wire	(+) 6"	(+) 6"	(+) 6"	(+) 18"	(+) 26"
8th wire				(-) 12"	(-) 20"
9th wire				(+) 6"	(+) 15"
10th wire					(-) 10"
11th wire					(+) 6"

Bear¹ (42") 7-wire: Primary use is to deter grizzly and black bears; allows deer and elk passage.

Bear & Wolf² (54") 7-wire: Primary use is to deter grizzly, black bear and wolves from calving and lambing areas, but where wolf activity is low to moderate or there is potential for wolf activity.

Beehive³ (54") 7-wire: Primary use is to deter grizzly and black bears from apiaries.

Wolf & Bear⁴ (60-72") 9- or 11-wire: Primary use is to deter wolves and bears when predator activity or risk is high. Also useful for situations where ungulate damage to a lower fence (54") might be anticipated, or there is a predator issue.

Getting Help



Many sportsmen's clubs and wildlife or land conservation groups may also be interested in helping provide cost-share support or volunteers for wildlife-friendly fencing projects to enhance wildlife habitat.

- Allen, G.T. and P. Ramirez. 1990. A review of bird deaths on barbed-wire fences. *Wilson Bulletin* 102(3)553-558.
- Colorado Division of Wildlife. 2007. Fencing with wildlife in mind: understanding the impact on wildlife when fencing your property. Colorado Division of Wildlife Living With Wildlife Program. Brochure, 9 pp.
- George Miksch Sutton Avian Research Center. 2006. Fence marking for lesser prairie-chickens: a cooperative conservation solution. Sutton Avian Research Center, Bartlesville, OK. 2 pp. Online: http://www.suttoncenter.org/fence_marking.html
- Gillihan, S.W. 2000. Barbed-wire fence fatal to burrowing owl. *J. Colorado Field Ornithologists*. 34(4)220-221.
- Harrington, J.L. 2005. Characteristics of ungulate behavior and mortality associated with wire fences. Master's thesis, Utah State University, Logan, UT. 48 pp.
- Harrington, J.L. and M.R. Conover. 2006. Characteristics of ungulate behavior and mortality associated with wire fences. *Wildlife Society Bull.* 34(5)1295-1305.
- Karhu, R. and S. Anderson. 2003. Evaluation of high-tensile electric fence designs on big game movements and livestock containment. Final Report April 2003. Wyoming Cooperative Fish and Wildlife Research Unit. Laramie, WY. 27 pp.
- Karhu, R. and S. Anderson. 2006. The effect of high-tensile electric fence designs on big game and livestock movements. *Wildlife Society Bulletin* 34(2)293-299.
- Karsky, Dick. 1988. Fences. Publication #8824 2803. U.S. Department of Agriculture, Forest Service, Missoula Technology and Development Center, Missoula, MT. 210 pp. Second printing 1999.
- Montana Dept. of Fish, Wildlife and Parks. 2002. Fencing specifications for FWP properties. Internal document. MT Dept. of Fish, Wildlife and Parks, Helena, MT. October 25, 2002.
- Nero, R. W. 1974. Great gray owl impaled on barbed-wire. *Blue Jay* 32(3)178- 179.
- Nesbitt, S.A. and D.T. Gilbert. 1976. Powerlines and fences hazards to birds. *The Florida Naturalist*. April: 23.
- North Dakota Game and Fish Dept. 2006. Pronghorn management guide - 2006: Biological and management principles and practices designed to sustain pronghorn populations from Canada to Mexico. North Dakota Game and Fish Department.
- NRCS. 2006a. Natural Resources Conservation Service Conservation Practice Specification: Permanent Power Fence. Code 382(b)-1 of 5. May 2006. Natural Resources Conservation Service, Wyoming. 7 pp.
- NRCS. 2006b. Natural Resources Conservation Service General Specification Power Fence. Fence (Feet) Code 382. Specification MT-382 (Power Fence), April 2006. Natural Resources Conservation Service Montana.
- Patla, S. and D. Lockman. 2004. Considerations and prescriptions for the design, construction and management of shallow water wetlands for spring through fall use by trumpeter swans (*cygnus buccinator*) in western Wyoming. Report, Nov. 2004. Wyoming Game and Fish Department, Jackson, WY and Wildlife Services of the Rockies, Cheyenne, WY. 9 pages.
- Quitmeyer, C.J., J.A. Bopp, R.M. Stephens, R. Karhu and S. Anderson. 2004. High tensile electric fence: phase 2 – liability issues, maintenance costs, and containment of bison. Final Report December 2004. Wyoming Cooperative Fish and Wildlife Research Unit. Laramie, WY. 85 pp.
- Schmidt, L. and J. Knight. 2000. Electric fencing to control deer and elk on Montana's farms and ranches. Montana State University Extension Service, Bozeman, MT.
- Thompson, S., J. Jonkel and P. Sowka. 2005. 2005 Edition Living with Predators Guide. Practical Electric Fencing Resource Guide: Controlling Predators. Living With Wildlife Foundation, Swan Valley, MT. 38 pp. [Online](#)
- Washington Dept. of Fish and Wildlife. 2004. Make your fence wildlife friendly. Crossing Paths Newsletter, Fall 2004.
- Wyoming Game and Fish Dept. 2004. Fencing guidelines for wildlife. Revised version Habitat Extension Bulletin No. 53. Wyoming Game and Fish Dept. 12 pp.

Ministry of Environment Offices

If you need hunting information or wish to report a hunting violation, contact the nearest Ministry of Environment office listed below. The area code for all numbers is (306).

Assiniboia	642-7242
Beauval	288-4710
Big River	469-2520
Buffalo Narrows	235-1740
Candle Lake	929-8400
Christopher Lake	982-6250
Creighton	688-8812
Dorintosh	236-7680
Duck Mountain	542-5500
Estevan	637-4600
Fort Qu'Appelle	332-3215
Greenwater	278-3515
Hudson Bay	865-4400
Humboldt	682-6726
Kindersley	463-5458
La Ronge	425-4234
Leader	628-3100
Lloydminster	825-6430
Loon Lake	837-2410
Maple Creek	662-5434
Meadow Lake	236-7557
Melfort	752-6214
Melville	728-7480
Moose Jaw	694-3659
Moose Mountain	577-2600
Nipawin	862-1790
North Battleford	446-7416
Outlook	867-5560
Pierceland	839-6250
Pinehouse	884-2060
Porcupine Plain	278-3515
Preeceville	547-5660
Prince Albert	953-2322
Regina	787-2080
Rowan's Ravine	725-5200
Saskatoon	933-6240
Shaunavon	297-5433
Southend	758-6255
Spiritwood	883-8501
Stony Rapids	439-2062
Swift Current	778-8205
Wadena	338-6254
Weyburn	848-2344
Yorkton	786-1463

Saskatchewan Crop Insurance Corporation Customer Service Offices

Assiniboia	1-888-935-0017
Davidson	1-888-935-0020
Estevan	1-888-935-0002
Humboldt	1-888-935-0026
Kindersley	1-888-935-0021
Leader	1-888-935-0011
Moose Jaw	1-888-935-0012
Moosomin	1-888-935-0005
North Battleford	1-888-935-0028
Preeceville	1-888-935-0015
Prince Albert	1-888-935-0018
Raymore	1-888-935-0016
Regina	1-888-935-0001
Rosetown	1-888-935-0019
Saskatoon	1-888-935-0024
Shaunavon	1-888-935-0010
Swift Current	1-888-935-0007
Tisdale	1-888-935-0014
Turtleford	1-888-935-0030
Weyburn	1-888-935-0003
Yorkton	1-888-935-0013

To register a wildlife damage claim, call the toll-free number . . 1-888-935-0000