



# WILDLIFE TECHNICAL ASSISTANCE

Technical Bulletin No. 1

Fall Edition November, 2011

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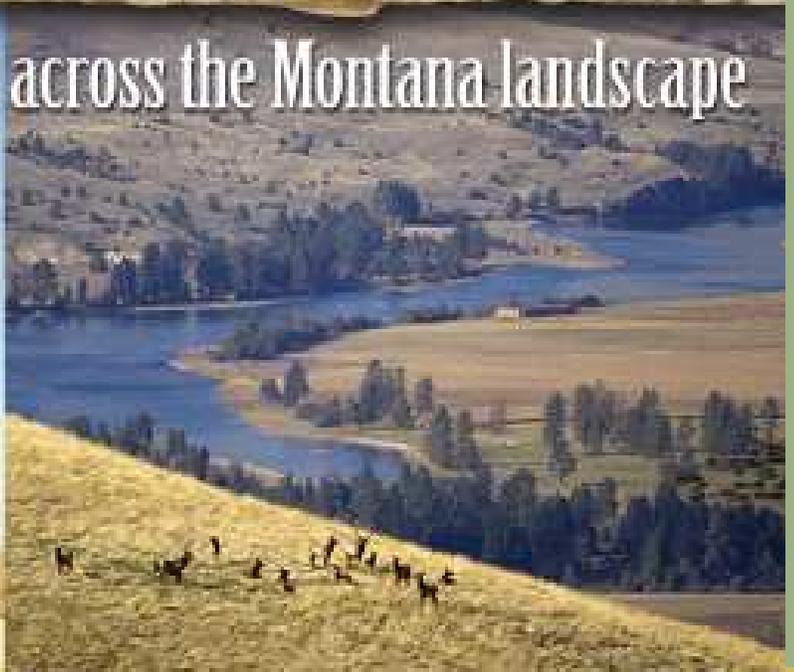
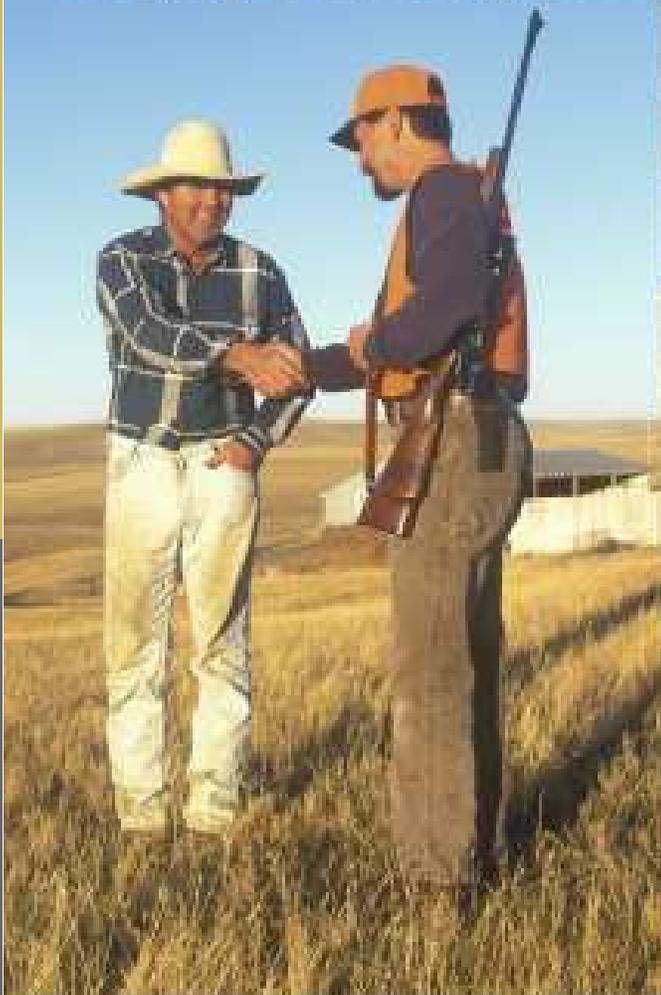
**Montana Fish,  
Wildlife & Parks**

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# Celebrating Montana's Hunting Heritage

## Forging common ground across the Montana landscape



The Hunter-Landowner Stewardship Project is a program designed to promote responsible hunter behavior and help hunters and landowners build effective relationships based upon mutual respect and understanding.

The voluntary information program is available at no cost through the Montana FWP Web site at [fwp.mt.gov](http://fwp.mt.gov). Click "Hunter-Landowner Stewardship Project" on the home page.

This program is intended to reach an audience of hunters and landowners. People who complete the program can receive a certificate, bumpersticker, and free cap.

Help preserve hunting opportunities across Montana.

In Montana, we're all neighbors, no matter which side of the fence we're on.

Good neighbors watch out for each other.

So if you observe or suspect violations, contact 1-800-TIP-MONT (1-800-847-6668) and help protect our hunting heritage.

 Hunter Landowner  
STEWARDSHIP PROJECT

[fwp.mt.gov](http://fwp.mt.gov)

# PRODUCT FIELD EVALUATION

*...continually seeking new products that increase FWP's ability to respond to and address wildlife conflict issues and game damage in a more effective and cost-efficient manner.*

## Weiser Nature's Defense Manufacturer Information

**Easy to use and effective:** A first-of-its-kind product to make protecting agricultural and landscaping investments easier.

**Certified Organic Active Ingredients:** Organic Garlic (0.00125%), Organic Cinnamon (0.00028%), Organic Clove (0.00028%), Organic White Pepper (0.00028%), Organic Rosemary (0.00015%), Organic Thyme (0.00015%), Organic Peppermint (0.00009%)  
**Inert Ingredients:** Urea, Calcium Carbonate, Water (99.99752%)

**Nature's Defense is advertised to repel the following animals:** Deer, Rabbit, Squirrel, Mouse, Rat, Mole, Vole, Shrew, Skunk, Chipmunk, Woodchuck, Gopher, Groundhog, Porcupine, Elk, Beaver, Armadillo, Raccoon, Possum, Prairie Dog. It is also reported to work to deter domestic and feral Cats.

**General Use:** Apply Nature's Defense twice a week for the first two weeks, then once a week for maintenance. Lightly sprinkle granules in and around areas where animals are causing damage and or in areas needing protection.



**Burrowing Animals:** Sprinkle granules directly into all holes found in yard, flower beds, along foundations, etc. Fill in hole(s) after 2 weeks or 4 applications.

**Tunneling:** For mole or vole tunneling, poke a small hole every two or three feet along all tunnels. Sprinkle granules into each hole. Fill in holes after 2 weeks or 4 applications.

**Rodent Control Around Buildings:** Sprinkle granules near all cracks or openings along the outside foundation of house, garage, shed, or other buildings where rodents may enter.

**Coverage:** Each 22 ounce bottle of Nature's Defense will cover up to 700 linear feet or 3500 square feet **when applied as directed**. Each 50 lb. container will cover up to 25,000 linear feet or 125,000 square feet **when applied as directed**.

**NOTE:** Allow one week for Nature's Defense All Purpose Animal Repellent to take full effect.



50# Bulk granular: \$199.00

Weiser's Nature's Defense Patent Pending granular animal repellent in a large 50 lb. container. Useful for protecting large areas, commercial crops and businesses.



Packets: \$299.00

Weiser's Nature's Defense Patent Pending 60-Day Weather-Proof Deer Repellent Packs are advertised to be an effective and long lasting deer repellent. Covers 5 Acres.

## FWP Field Trial Results

- ⇒ When applied as a haystack perimeter deterrent and used as directed, several landowners experienced satisfactory deterrence of deer and elk damage to haystacks, even with significant snowfall and snow cover.
- ⇒ Landowners that did not use as directed did not realize any noticeable deterrence of damage to haystacks.
- ⇒ Testing and evaluation of bulk granules and packets will continue through winter 2011/2012.
- ⇒ Additional test sites are needed. Contact Joe Weigand if you have sites in need of game damage deterrence along with landowners that would be willing to help with evaluation of this product.

# FUTURE PRODUCT FIELD EVALUATIONS

## TEST SITES NEEDED

*Materials available for field evaluation are provided at no cost to the Region*



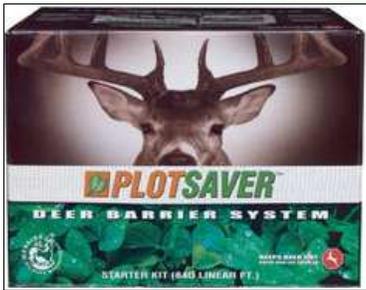
Deer Scram™ is an all natural, biodegradable, and environmentally safe deterrent. It is guaranteed to keep deer and rabbits away from gardens, shrubs and trees, while not being offensive to humans. It is blended from selected organic components and is purported to change deer behavior. As they near the applied barrier of Deer Scram deer become alert to a sense of danger due to the odor.

Deer Scram can be applied any time of year to stop deer browsing or to change the paths the deer have grown accustomed to using. It can be applied as a protective perimeter strip or it can be evenly spread over a garden bed or flowerbed. Deer Scram is advertised to shield flowers, shrubs, trees, ornamentals, vegetable gardens, forests, vineyards, orchards, field crops and nursery stock when used as directed and consistently applied every 30-45 days.

### Four 25 pound buckets are available for immediate evaluation and testing.

- ◆ Each bucket covers 32,400 square feet or 3/4 acre (157.5' x 157.5'), although this would serve game damage purposes better if applied as a perimeter barrier and deterrent.

If found to be effective this could prove to be a useful and better alternative to bloodmeal which FWP can no longer use to prevent minor game damage issues.

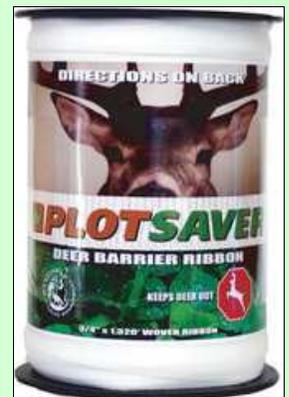


PLOTS AVER system is promoted to be an effective perimeter repellent system. Instead of broadcast spraying large blocks of land, a perimeter barrier system is applied. PLOTS AVER features a reusable PLOTS AVER barrier ribbon hung 30" high that is treated with PLOTS AVER deer repellent to create a physical and sensory perimeter barrier that elk, moose, mule deer, and whitetail deer will supposedly not cross. The system works by smell and sight and is reported to not be rendered ineffective after a heavy rain.

### Materials are available to test six (6) sites with perimeters of up to 840 linear feet or 1 acre (210' x 210').

Each test kit will include:

- ◆ 840' pretreated ribbon
- ◆ 30 white fiberglass stakes
- ◆ 3/8" clips for fiberglass stakes
- ◆ extra repellent (1 pint)
- ◆ empty pressurized sprayer for reapplying repellent as needed



Three containers of **Magic Circle** liquid repellent are also available at no cost to the Regions

Contact Joe Weigand with questions regarding the products or projects featured in this bulletin.

# TECHNICAL ASSISTANCE KNOW HOW

## GETTING THE ASSISTANCE ON THE GROUND IN AN EFFICIENT AND EFFECTIVE MANNER

### INSTALLING AN ELK PASSAGE IN AN EXISTING BARBED-WIRE FENCE

This is an inexpensive way to allow elk, deer, and antelope to freely cross barbed-wire fence with minimal risk of injury or death. It is especially useful where elk cross heavily traveled roadways during summer when calves are small and have difficulty jumping or getting through a fence. When a calf is stopped by a fence, the adult female tends to stop and wait for her calf. This means that she probably stopped in the road right-of-way. By allowing free passage of calves, elk herds are likely to spend less time in the right-of-way, thereby reducing risk of a vehicle collision. For optimum benefits, the Elk Passage should be installed on both sides of the right-of-way. The opening can be easily “closed” for when cattle are present (see next page for details).



***Total estimated cost per passage (both sides of right-of-way): \$150.00***

***Installation time for two persons: 2 hours***

#### **Materials List - Per 2 60' sections of fence to be modified**

20 10' sections of 1.5" OD PVC pipe  
1 100 ct Bag of Large (7" or 11") UV Resistant Plastic Cable Ties  
# 16 or larger soft wire  
Fencing Pliers  
Leather Gloves  
Leatherman, shears, or wire cutter to clip tag end of cable ties.

#### **PVC Pipe Pre-installation Instructions**

Cut a ¼" slot entire length of each pipe. A ¼" cut can be made by matching up two 1/8" wide blades on a table saw. A wood guide can easily be constructed for use on a table saw.

**(Instructions continued on next page)**



**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 threading on PVC pipe. Push pipe onto wire, not wire into pipe, concentrating on fore-end of pipe. If 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 begin “feeding itself” into the pipe once it has been adequately started. Pull pipe down the wire until ½ rod from where posts with clipped wires resume. Anticipate that the pipe will occasionally catch on a barb and stop sliding; good gloves are critical.



**Step 3:** Repeat with three more pipes. Attempt to space the joint between two pipes at a post where possible. This will allow clipping of the three wires to a post.

**Step 4:** The last (fifth) pipe will require installation in the reverse direction. Starting near the end of the fourth pipe, find a space between barbs and install pipe as in Step two, push into place one-half the distance from where posts with clips resume.

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



**Step 6:** Attach the top PVC pipe to posts using #16 or larger soft wire. Attach the top pipe to posts no more than 40” high. The bottom pipe can be attached at 16” – 18” height or dropped closer 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’ section of post, 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 pipe to roll and not work it’s way off the wire. Clip tag end of cable tie.



**Covering the gap when livestock are present:**

1. Cut a 90’ section of Deer-D-Fence lengthwise down the center.
2. On the inside (pasture side) of fence, attach top of Deer-D-Fence to top pipe with cable ties. Tuck bottom of Deer-D-Fence under bottom pipe toward outside of pasture. Attach to bottom PVC pipe if desired.
3. Clip cable ties and remove Deer-D-Fence during the portion of year when cattle are not present. Roll-up and store Deer-D-Fence until needed again.



**When domestic sheep are present:**

Install top pipe only and drop to a height of 30.” If welded-wire is present, remove top clips from posts and roll over top of welded-wire to a height of 30.” Re-install clips. Install PVC pipe over barbed wire (if present) and attach to posts so that it just clears and rolls freely above welded-wire fence.

**Pronghorn option (no domestic sheep):**

Install bottom pipe only and attach to posts 18” from ground.

# PRIVATE LAND TECHNICAL ASSISTANCE

## FEATURED PROJECT

**Landowner:** Jack Mulcare

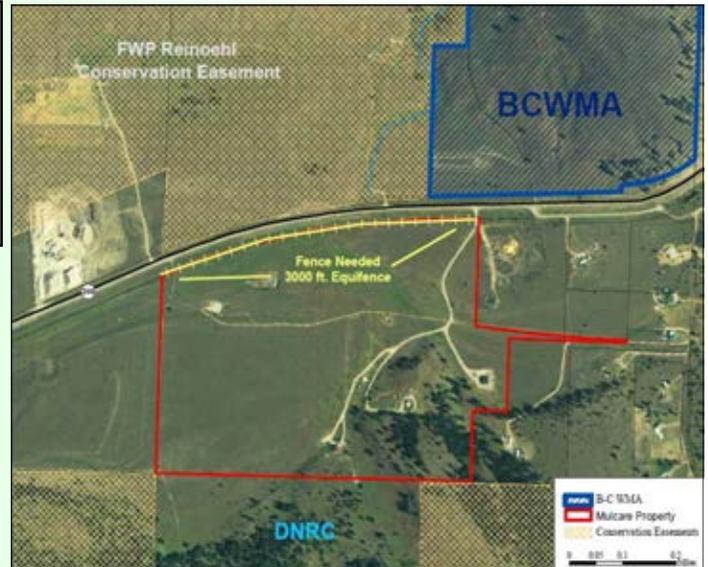
**FWP Project Coordinator:** Jay Kolbe

**Location:** South of the Blackfoot/  
Clearwater WMA

**Project Type:** Wildlife Friendly Fence –  
Equifence

**Materials:** 3000 ft of Equifence, high  
tensile wire, fiberglass posts, and a so-  
lar charger

**Cost (2008):** \$1,648.77

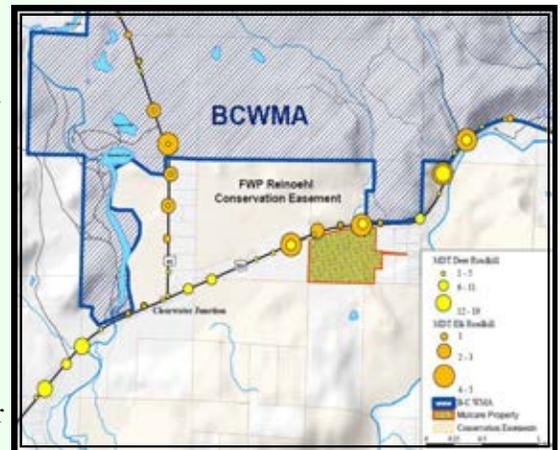


Jack Mulcare owns 160 acres south of Hwy 200 across from the Blackfoot Clearwater Wildlife Management Area (WMA) and the FWP/Reinoehl Conservation Easement. His property sits in one of the most active elk movement corridors adjacent to the WMA and elk highway mortality on the Highway fronting this property was greater than anywhere else along Hwy 200 adjacent to the WMA. Elk regularly move from the WMA and the Reinoehl Easement through this property to access DNRC, TNC, and other protected properties to the south.

The fence along the highway was regularly torn down by passing elk to the point where Mr. Mulcare quit trying to maintain it several years prior to this project. When he decided to resume pasturing horses he called Jay Kolbe to ask whether Fish, Wildlife and Parks could recommend a new approach and perhaps help with fence construction costs. Like most private landowners, Mr. Mulcare is a working man and not a wealthy guy. Because of the quality relationship and past cooperative partnership with Mr. Mulcare, Region 2 wildlife biologist Jay Kolbe sought resources to help with purchase of materials.

Mr Mulcare is close with the managers of the E Bar L where FWP cooperated in an Equifence project the year before and he believed that style of fence would also be a good fit for his situation. Because horses were the primary livestock to be contained and the FWP goal was to pass elk as fluidly as possible across Hwy200 and through this property to minimize time they spend in the Highway corridor, Equifence was the fence material and design of choice. Mr. Mulcare provided the labor and equipment for installation as well as a share of the material expense.

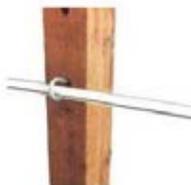
Jack is a great partner to FWP; he's on the Blackfoot Recreation Steering Committee, a party to the Blackfoot River Recreation Corridor Landowner Agreement, a Block Management Cooperator, active with BBCTU restoration steering committee, and a member of the Blackfoot Challenge Wildlife Committee.



### EquiFence™

#### Features

- Ideal for horse fencing.
- UV-resistant for long life.
- Best for permanent fence.
- Conductive has a core of 12.5 Gauge, medium-tensile galvanized wire with a unique, electrically conductive polymer allowing use as an electric fence wire. Resistance: 560 ohms/mile.
- 10 year warranty.



#### Additional benefits

This fence serves as a demonstration tool in a highly visible area. Mr. Jack Mulcare is also a valuable partner who is able to effectively "sell" the wildlife friendly fence concept to other landowners with similar needs elsewhere in the valley.

# GAME DAMAGE INNOVATIONS

## TRADITIONAL STACKYARD EXAMPLE



### For Deer and Elk Exclusion

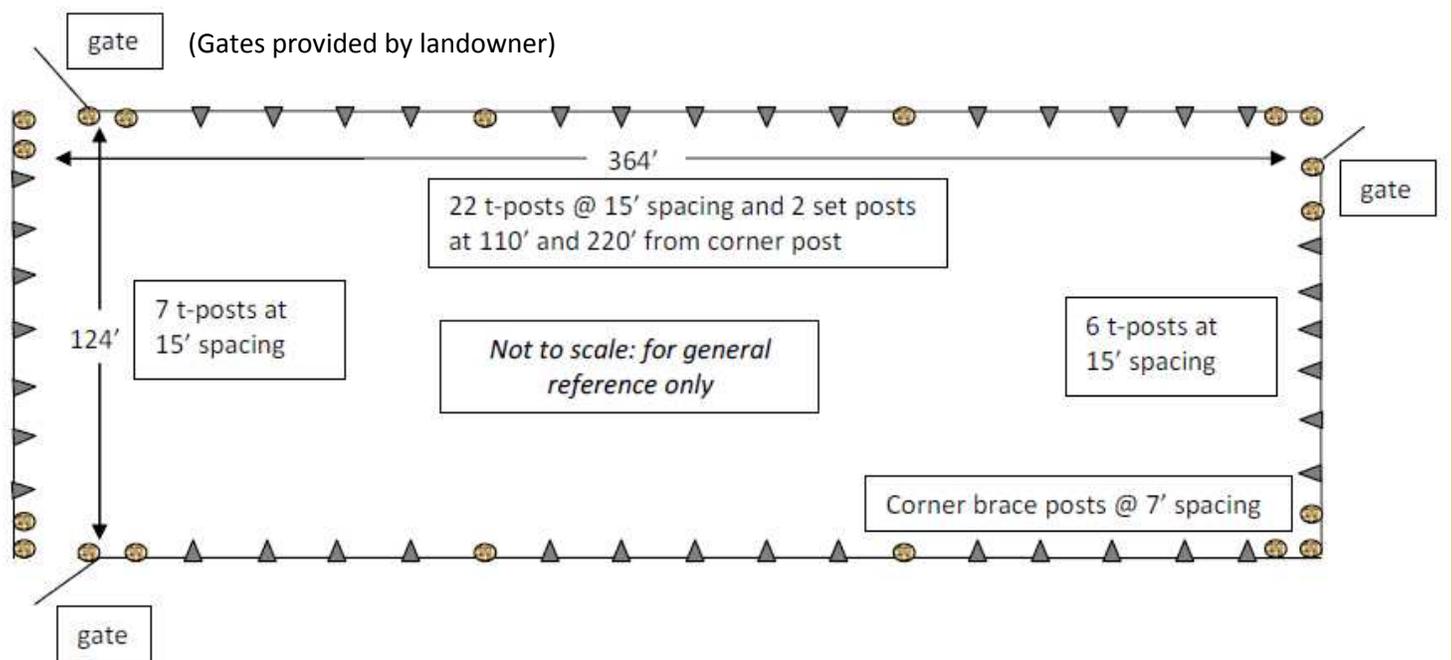
**Approximate Material Cost (2009): \$2,000.00**

#### Materials

- 19 – 6" x 12' wood set posts
- 8 – 4" x 8' wood brace posts
- 54 – 10' steel posts
- 3 – 78" x 330' rolls of woven wire
- 2 – 1320' rolls of barbed wire

#### Specifications

- 3 20' gate openings
- 7' between brace posts
- 15' between steel t-posts
- WILL HOLD APPROXIMATELY 500 ROUND BALES**

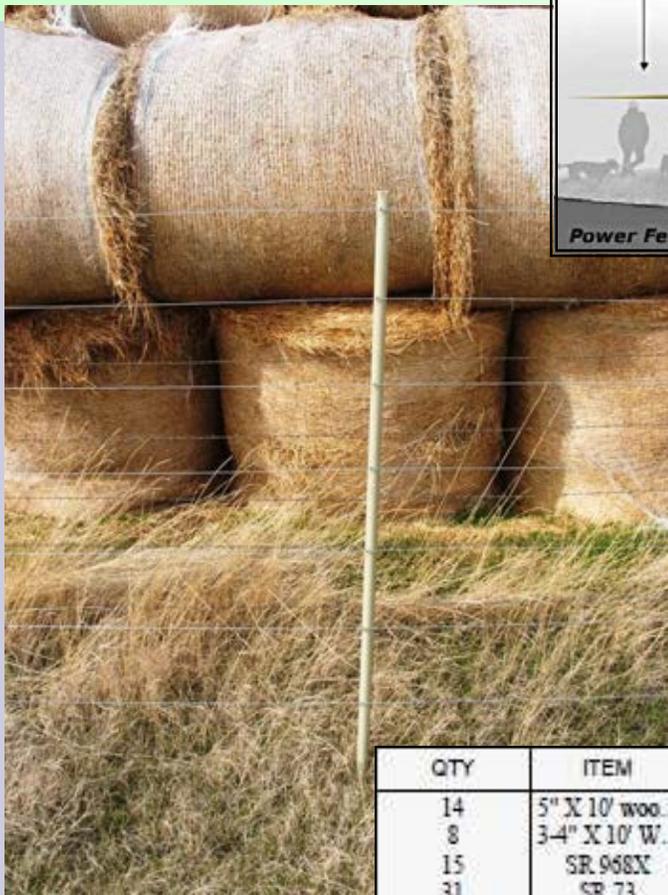


# GAME DAMAGE INNOVATIONS

## STACKYARD ALTERNATIVES

### **ELK EXCLUSION: 7-STRAND ELECTRIC STACKYARD [125' x 375']**

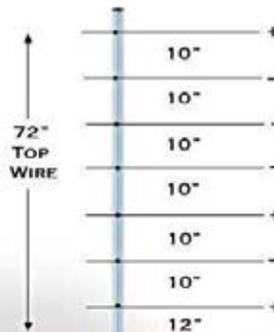
**Approximate Material Cost  
(2011): \$1,825.00**



Contact Joe Weigand if interested, or if you have questions about stackyard designs.

*Assistance is available for evaluating a few more 7-strand and 9-strand e-stackyards.*

#### 7 - WIRE PERMANENT ELK



#### SPECIFICATIONS:

|                         |   |
|-------------------------|---|
| # WIRES:                | 7   |
| FENCE HEIGHT:           | 72"   |
| LINE POST:              | SOLID ROD FIBERGLASS 1.2" X 96" 7-HOLE SR967X |
| SPACING:                | 50 FT.  |
| STAY: (2 PER LINE POST) | .74" X 73" 7-HOLE SR737                       |
| SPACING:                | 20 FT.  |
| BRACING:                | "H" BRACE- 12" MIN. WIDTH                     |
| POLARITY:               | HOT / GROUND                                  |
| WIRE TENSION:           | TIGHT (200 LBS.)                              |
| APPLICATIONS:           | ELK EXCLUSION                                 |

FOR EXCLUSION NOT CONTAINMENT

Power Fence Design

**\*9 strands are recommended for deer**

#### Construction time:

- ◆ One day or less for setting corner posts (with hydraulic auger)
- ◆ One day for bracing corners, installing fiberglass posts, putting wire in place, connecting charger and battery
- ◆ Less than one day for gate installation

#### **Materials List - add battery, charger, and gate for complete stackyard (Gate not provided by FWP)**

| QTY | ITEM            | DESCRIPTION                               | PRICE EACH | AMOUNT |
|-----|-----------------|---|------------|--------|
| 14  | 5" X 10' woo... | 5" X 10' Wood Brace Post                  | 17.00      | 238.00 |
| 8   | 3-4" X 10' W... | 3-4" X 10' Wood Rail                      | 10.00      | 80.00  |
| 15  | SR.968X         | Solid Rod Post 96" x 1 1/4-13/4 + 7 holes | 11.20      | 168.00 |
| 31  | SR.73           | Solid Rod (stay) - 73"                    | 5.65       | 175.15 |
| 3   | 505             | 1/2 Mile Hi Tensile Wire 2640'            | 98.50      | 295.50 |
| 3   | 702             | Long Stay Clip (50/bag)                   | 11.75      | 35.25  |
| 2   | 704             | Short Post Clip (100/bag)                 | 11.75      | 23.50  |
| 25  | FSTDSP          | In-Line Wire Strainer (StaFix)            | 2.49       | 62.25  |
| 2   | 814206          | Porcelain Bullnose Insulator 10pk         | 8.50       | 17.00  |
| 2   | FSTWPC          | Woodpost Claw Insulator-Green, 25 pk      | 8.15       | 16.30  |
| 3   | SA110           | Ground Rod 6'                             | 11.00      | 33.00  |
| 3   | SA112           | Heavy Duty Ground Rod Clamp               | 3.25       | 9.75   |
| 1   | 806017          | STX: Underground Cable 12.5 ga X 165'     | 47.00      | 47.00  |
| 3   | SA052           | Heavy Duty Joint Clamp/ Line Tap (20pc)   | 26.00      | 78.00  |
| 1   | FSTSS           | Cut-Out Switch                            | 9.00       | 9.00   |
| 1   | 806214          | Digital Voltmeter                         | 39.99      | 39.99  |

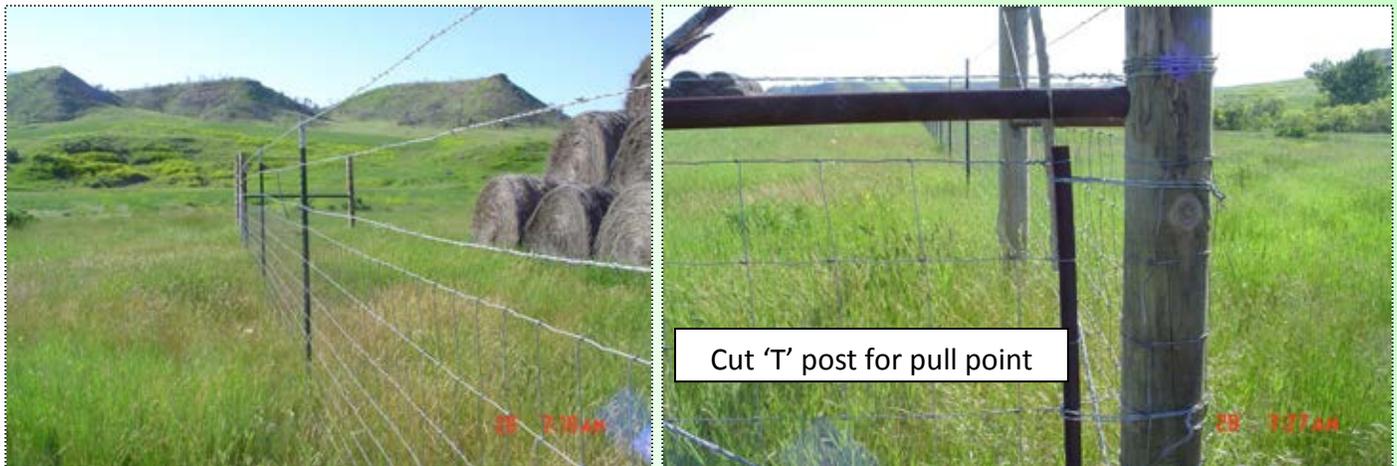
# GAME DAMAGE INNOVATIONS

## STACKYARD ALTERNATIVES

Stackyard with woven wire bottom and barbed top

**Approximate Material Cost (2011): \$1,765.00**

Stackyard design and photos provided by: Jack Austin



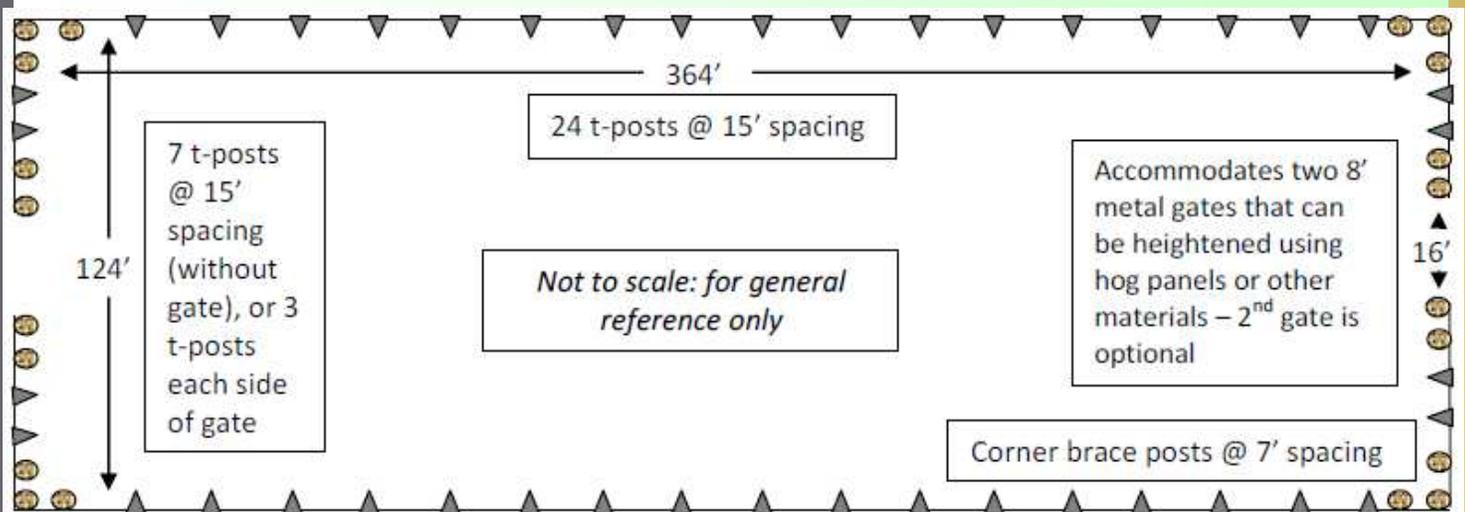
### Materials

- 20 – 6" x 12' wood set posts
- 10 – 4" x 8' wood brace posts
- 57 – 10' steel posts
- 3 – 47" x 330' rolls of woven wire
- 3 – 1320' rolls of barbed wire
- 4 – 8' lightweight swinging gates w/ hinges (**Not provided by FWP**)

### Spacing

- 7' between brace posts
- 15' between steel t-posts

**WILL HOLD APPROXIMATELY 500  
ROUND BALES**





## LIVING WITH WILDLIFE GRANT PROGRAM

**Featured Grant Project:** *Decreasing Human-Bear Conflict by Making Garbage and Bird Food Off-limits in Yellowstone Gateway Communities (2009 - 2011)*

**Project Sponsor:** Keystone Conservation

**Project Partners (names, affiliation, etc.):**

Mary Jane McGarrity, Executive Director, Big Sky Owner's Association  
Kevin Germaine, Big Sky Natural Resource Council  
Jessica Wiese, Education Outreach Specialist, Big Sky Institute  
Kevin Frey, Bear Management Specialist, Montana Fish, Wildlife and Parks  
Mel Frost I&E specialist, Montana Fish, Wildlife and Parks  
Illona Popper, Bear Awareness Gardiner  
Bill Michael, Northland Products  
Robb Larson, Montana State University Mechanical Engineering Program  
Patty Sowka, Living With Wildlife Foundation



**Project objectives:**

Focus attention on communities in Gallatin, Madison and Park Counties, Montana, with the objectives to (1) reduce the availability of garbage through provision and cost-share of bear-resistant containers in areas of known and growing conflict, and (2) launch a "Summer Plants, Winter Feeders" campaign to encourage birdscaping with native plants in ex-urban locations in order to reduce another powerful attractant for bears. The campaign will also help residents of ex-urban locations understand the connection between their actions and wildlife conservation.

**Project accomplishments through June, 2011:**

Gardiner – In response to needs identified by FWP Bear Specialist Kevin Frey, Keystone Conservation purchased 14 bear-resistant garbage cans for residents of Gardiner. These were among the cans distributed in a raffle/lottery sponsored by Bear Aware Gardiner (BAG) and Montana Fish, Wildlife, and Parks in April 2010. All eligible recipients signed up with a personal commitment to improve sanitation and help reduce bear/human conflicts. The cans were distributed with the agreement that the can must remain at the homes for which they were purchased even if the present residents move. A high percentage of the cans were given to residences near the Yellowstone River and Gardiner High School, areas of high bear use. Keystone Conservation expects the cans to significantly help reduce bears becoming habituated and food conditioned.

(Continued on next page)



**Living With Wildlife focuses on preventing or solving human/wildlife conflicts in urban and suburban settings. The program's goal is to develop creative, proactive solutions to human-wildlife conflicts.**

**Living With Wildlife  
Grant Review and  
Selection  
Committee  
2011/2012**

Joe Weigand

Quentin Kujala

Lauri Hanauska-Brown

Kurt Cunningham

Walt Timmerman

BAG estimates that with 60 more bear-proof garbage cans they could have 100% of residences in Gardiner supplied with bear-proof containers. Keystone Conservation also continues to work with BAG and commercial businesses in Gardiner to find unique solutions to bear-proof commercial waste.

Big Sky – Working with Big Sky Natural Resource Council, Big Sky Institute, Big Sky Owners Association, and Allied Waste (AW), Keystone Conservation has continued the educational campaign to reduce the availability of garbage and other anthropogenic foods to bears in Big Sky. Keystone Conservation continues to work to educate in Big Sky residents with two primary messages: (1) keep garbage cans secure inside until the morning of pick-up, and (2) reduce other attractants around homes and yards. Keystone Conservation adopted the name BEAResponsible<sup>SM</sup> for the campaign, and is using this name and logo on all educational materials.



Keystone Conservation has produced a set of weather-resistant tags to be placed on garbage cans, with information about the day and time of garbage pick-up, a reminder to store cans indoors until the morning of pick-up, and contact information for AW. They have also produced a set of posters with brief tips on keeping your home and yard free of bear attractants for distribution to homes. The tags and posters are particularly aimed at tourists staying in rental units that may not be aware of the issues.



Keystone Conservation is also helping to produce a map of the garbage collection routes and schedules for distribution throughout all Big Sky residences to educate residents about the importance of taking their garbage out the day of pick up.

In March, 2011, Keystone Conservation partnered with the Big Sky Natural Resource Council and the Big Sky Institute in an effort to extend the effort beyond its initial geographic parameters in the Big Sky Owner's Association neighborhoods to more neighborhoods in the Big Sky Area. There has been considerable interest already in providing the informative tags on garbage cans in more residential areas of Big Sky.

The BSOA has also initiated a pilot program with Allied Waste to use one entire neighborhood as a time/cost evaluation for using manually operated bear-proof garbage cans. Allied has committed to hiring an additional employee to ride in the garbage truck to walk ahead of the

truck and unlock the cans, and will determine what additional cost this requires for future adjustment of rates charged to homeowners.

Bear-Proof Garbage Cans/Technology – A significant obstacle in efforts to bear proof communities is that there has been no fully automatic bear proof garbage can that is compatible with existing sanitation trucks. After communicating with Patty Sowka of the Living With Wildlife Foundation, Keystone Conservation identified a plastics roto-molding manufacturer, Northland Products, successfully tested a fully automatic 90 gallon bear-proof garbage can at the Grizzly and Wolf Discovery Center in West Yellowstone. They are tooling their facility for mass production of these cans, and anticipated re-testing their production model in June or July, 2011. Keystone Conservation is hoping to be able to use some of these cans in a BSOA/Allied Waste Pilot project, as well as promote their field-testing and use in other areas.

# INTEGRATING HUMAN DIMENSIONS RESEARCH INTO WILDLIFE MANAGEMENT

## WHAT IS HUMAN DIMENSIONS RESEARCH AND WHY CONDUCT HD RESEARCH RELATED TO WILDLIFE MANAGEMENT?

As the landscape continues to become more and more urbanized, and humans continue to place more pressure on our natural resources and wildlife populations, wildlife management is and will continue to be a significant issue for natural resource and outdoor recreation organizations. Wildlife populations provide numerous hunting opportunities, wildlife viewing opportunities, and contributions to overall biodiversity. Aside from economic or instrumental value, wildlife holds subjective value and expresses subjective values in nature for most people. These values may be symbolic, aesthetic, or educational, but they are as important as utilitarian or economic values in the consideration of management options. These values in wildlife need to be incorporated into the planning process of natural resource and outdoor recreation organizations in the form of satisfactions, outcomes, objectives, and other measures of organization success.

The human element of wildlife management is becoming more important as it becomes clear that an understanding of the public and constituents often means the difference between the success or failure of wildlife management programs. Natural resource and outdoor recreation organizations use biological and ecological research to better understand and manage wildlife and wildlife habitat. Effective natural resource and outdoor recreation organizations use human dimensions research and techniques to better understand and work with their constituents and stakeholders. Among the benefits of using human dimensions research are enhanced management of the resource and a constituency that is supportive of the organization and its mission. Overall, natural resource and outdoor recreation organizations that effectively incorporate the human element into organization management functions and decision making ultimately spend more time and money on the resource, as opposed to making ill-fated decisions, because of a lack of understanding of the public and constantly dealing with controversy.

### Public Attitudes Toward Wildlife

Wildlife is very important to the American public. When asked to rank the importance of environmental or natural resource issues, issues related to the conservation and protection of wildlife are often among the top responses. In studies across the U.S., the majority of Americans also often agree that it is important to them to know that wildlife exists in their state. Regional studies in the northeastern and southeastern U.S. found that overwhelming majorities (91% in the northeast and 90% in the southeast) of respondents indicated that it was *very* important to them to know that wildlife exists in their state.

Research has demonstrated that although there are some exceptions, most notably with endangered species and nongame species that depend on wetlands, a majority of the public feels that many wildlife populations are healthy and stable. In general, users of the resource are more likely to feel that wildlife populations are healthy. With the exception of endangered species and other species perceived as declining, the public wants most wildlife populations kept at present levels, although in some specific situations, the public wants certain wildlife populations reduced. For example, research has shown that in northern New Hampshire, residents felt there were too many moose and a slight majority wanted the moose population reduced in the area. The primary reason these citizens wanted moose populations decreased was because of the threat of vehicular collisions. In Maryland, the majority of large landowners (those who own 20 acres or more) say that the deer population where they live is too high. In general, large landowners held positive attitudes toward deer; however, a majority would like to see the population decreased with the most popular reason being to reduce losses to crops from deer.

Cultural carrying capacity studies in New Hampshire, Vermont, and Arkansas indicate that there is a segment of the population that wants to see several populations of wildlife increased. A clear pattern has emerged among these peoples' attitudes toward wildlife and the potential consequences of increasing wildlife populations: those that want wildlife populations increased are still willing to tolerate increased wildlife populations even if it means damage to human property. However, most who want to see wildlife populations increased are not willing to increase population levels if it means harm to the wildlife population, its habitat, or other wildlife in the area.

[Adapted from Responsive Management, Inc. 2011]

## RECENT FWP HUMAN DIMENSIONS RESEARCH RELATED TO WILDLIFE MANAGEMENT

**Charles, Alan & Michael S. Lewis.** 2004. *Block Management Landowner and Hunter Evaluations: Survey Highlights from 2003 and Comparisons to 1996 Surveys.* RMU Research Summary No. 13. Helena, MT: Human Dimensions Unit, Communication & Education Bureau of the Fish and Wildlife Division. Montana Fish, Wildlife & Parks.

**Charles, Alan & Mike Lewis.** 2008. *Selected Results From a 2008 Survey of Montana Big Game Outfitters Regarding the Variable-Priced Outfitter Sponsored License.* HD Unit Research Summary No. 25. Helena, MT: Human Dimensions Unit, Communication & Education Bureau of the Fish and Wildlife Division. Montana Fish, Wildlife & Parks.

**Charles, Alan & Mike Lewis.** 2010. *Block Management Landowner & Hunter Evaluations from the 2009 Montana Hunting Season.* HD Unit Research Summary No. 31. Helena, MT: Human Dimensions Unit, Communication & Education Bureau of the Fish and Wildlife Division. Montana Fish, Wildlife & Parks.

**Lewis, Michael S.** 2011. *Overall Statewide Results From the 2011 Resident Mule Deer Hunter Preference Survey.* Helena, MT: Human Dimensions Unit, Communication & Education Bureau of the Fish and Wildlife Division. Montana Fish, Wildlife & Parks.

**Lewis, Michael S. & Rob Brooks.** 2005. *Montana State Specific Findings from the "Wildlife Values in the West 2004" Regional Western States Study.* RMU Research Summary No. 19. Helena, MT: Human Dimensions Unit, Communication & Education Bureau of the Fish and Wildlife Division. Montana Fish, Wildlife & Parks.

**Lewis, Michael S., Quentin Kujala, Ron Aasheim, & Joe Weigand.** 2007. *Selected Results From 2007 Surveys of Elk Hunters, Elk Outfitters, & Private Landowners Concerning Montana's Elk Population.* HD Unit Research Summary No. 22. Helena, MT: Human Dimensions Unit, Communication & Education Bureau of the Fish and Wildlife Division. Montana Fish, Wildlife & Parks.

**McCoy, Caitlin, Tara L. Teel, & Michael S. Lewis.** 2009. *Findings from a research project entitled: "Hunting Access Management on Private Lands in Montana."* Project Report No. 82. Project Report for Montana Fish, Wildlife & Parks. Fort Collins, CO: Colorado State University, Department of Human Dimensions of Natural Resources.

**McCoy, Caitlin, Tara L. Teel, and Michael S. Lewis.** 2009. *Hunting Access Management on Private Lands in Montana: Selected Results From a 2008 Landowner Study.* HD Unit Research Summary No. 27. Helena, MT: Human Dimensions Unit, Communication & Education Bureau of the Fish and Wildlife Division. Montana Fish, Wildlife & Parks.

**McCoy, Caitlin, Tara L. Teel, and Michael S. Lewis.** 2009. *Understanding the Values Montanans Hold Concerning Wildlife.* HD Unit Research Summary No. 28. Helena, MT: Human Dimensions Unit, Communication & Education Bureau of the Fish and Wildlife Division. Montana Fish, Wildlife & Parks.

**Weigand, Joe.** 2008. *Selected Statewide Results From a 2007 Survey of Private Landowners Concerning Montana's Elk Populations.* HD Unit Research Summary No. 23. Helena, MT: Human Dimensions Unit, Communication & Education Bureau of the Fish and Wildlife Division. Montana Fish, Wildlife & Parks.

**Weigand, Joe and Michael S. Lewis.** 2011. *Determining the Influence of Hunter Access on Antlerless Elk B License Harvest in Selected Areas of Southwest, Central, and Eastern Montana: Results from a Survey of 2010 Antlerless Elk B License Holders.* Helena, MT: Wildlife Bureau and Human Dimensions Unit of the Communication & Education Bureau, Fish and Wildlife Division. Montana Fish, Wildlife & Parks.

Contact Mike Lewis, FWP HD Unit to receive copies of any of the above research summaries or reports.

### NEXT ISSUE HD RESEARCH SPOTLIGHT

*Determining the Influence of Hunter Access on Antlerless Elk B License Harvest in Selected Areas of Southwest, Central, and Eastern Montana: Select Results from a Survey of 2010 Antlerless Elk B License Holders*



## A Landowner's Guide to Wildlife Friendly Fences:



## How to Build Fence with Wildlife in Mind



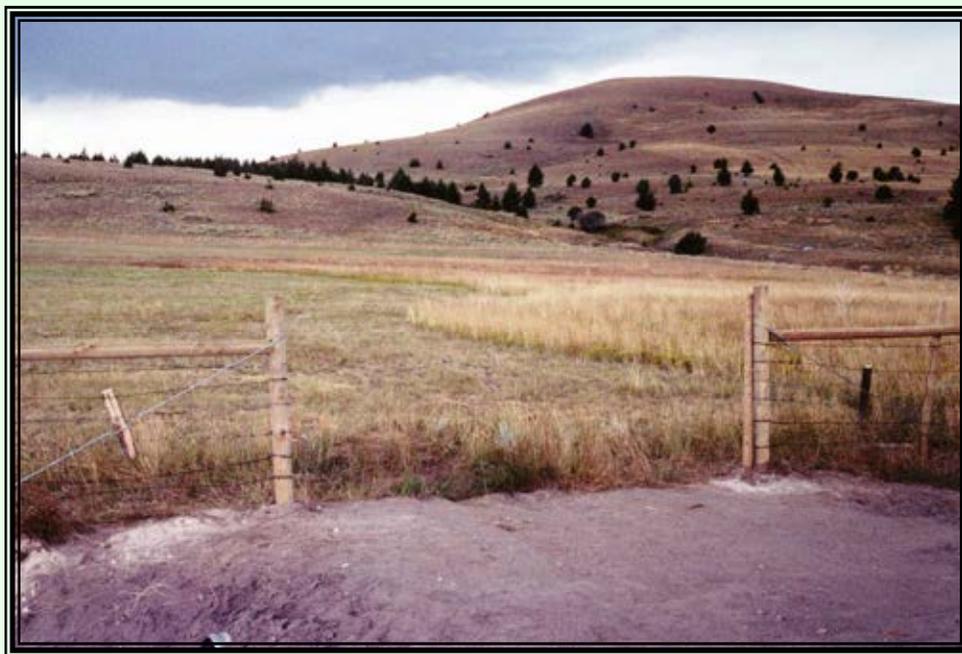
Montana Fish,  
Wildlife & Parks

First printed in 2008, *A Landowner's Guide to Wildlife Friendly Fence: How to Build Fence with Wildlife in Mind* has proven to be a valuable resource for landowners statewide. The original supply of 7,500 copies was so well received that development of an updated and expanded Second Edition is underway. Printing is anticipated winter/spring 2012.

A PDF of the document is available on the Fish, Wildlife and Parks public website (<http://fwp.mt.gov/fwpDoc.html?id=34461>) or by contacting Joe Weigand.



**Anaconda Sportsmen Club members construct a gate to allow barrier-free elk passage across private land, August 2010.**



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