



Safeguarding the Ranch, Farm, and Home from Grizzly Bears



Preventing and reducing problems with grizzlies

While delisting of grizzly bears is a top priority, this toolkit has been developed to prevent and reduce problems with grizzly bears. These tools are tailored for Montana's agricultural communities. Some tools in this summary will also reduce problems with black bears and could reduce livestock losses to wolves. This overview contains a list of state and federal agency contacts that provide technical expertise, information, and cost-share funding for many of the tools featured in this summary.

Background

Livestock producers, farmers, and landowners throughout Montana historically lived with grizzly bears in the early years of state settlement. Today, grizzlies and other predators pose challenges to those who make a living from the land and value rural livelihoods. Bears can threaten human safety and destroy property. However, a variety of tools can help reduce the risk of having conflicts with bears. Many livestock producers across the state have used a host of tools and techniques to protect their property and maintain working ranches. Using proven tools and working together as neighbors can be a practical way to protect human safety, maintain profitable operations, and to uphold the strong ethic of stewardship that Montana producers are known for. We hope that the tools and approaches found in this tool-kit will be useful.

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About this Tool Kit

This summary was compiled by members of the Montana Livestock Loss Board and the Montana Stockgrowers Association. Additionally, Montana livestock producers and landowners who have direct experience using many of the tools in this summary, contributed their valuable thoughts and insights. The Montana Livestock Loss Board, U.S. Dept. of Agriculture-Wildlife Services, U.S. Fish and Wildlife Service, and Montana Dept. of Fish, Wildlife and Parks contributed their expertise to this overview and provided a review of the tools found in this document.

1. Neighbor Networks: Like a forest fire safety phone tree, this tool connects residents, game wardens, wildlife managers, and Wildlife Services personnel so precautions can be taken to protect human safety and property. A phone tree, e-mail, or group text-message list can connect ranchers, landowners, farmers and residents who want to team up to let each other know when bears are active in an area. If a local group wishes to do so, they can designate a point person to receive updates on grizzlies or other predators from local, state, or federal authorities.

- The tool works well when a designated, volunteer point-person can call their neighbors to alert them when needed.
- Several point-people can then link the larger community together and can quickly and easily alert local bear managers about concerns.
- Wildlife managers benefit by being able to call or e-mail each point person on phone tree list to let them know when grizzlies may be active or are a possible threat to human safety.

2. Livestock Carcass Management: Livestock carcasses from natural death loss can attract bears and other predators onto boneyards and ranches. Removal of carcasses off of boneyards or ranches can be a useful way to reduce the chances that grizzlies are attracted to a ranch in the first place. Techniques and existing programs that have been used successfully in Montana include:

- Large numbers of livestock carcasses removed during calving season from ranches across MT to composting facilities or sanitary landfills.
 - E.g., Blackfoot watershed, Granite Co., Big Hole Valley
- Composting and sanitary sites for livestock carcasses can be strategically located for efficient carcass pick-ups and electrified.
- Individual ranchers remove dead livestock and take to secure facilities or sanitary site.
- When removal off the ranch/farm is impractical, livestock carcasses can be moved and relocated to remote and random areas on private ranch/farm property, preferably with minimal human access; pre-approved private/public sites (state/fed) have also been used.
- If carcasses are removed and buried, it is advisable to do so well away from home sites, calving areas, or ranch operations.

3. Electric Fence: Well designed and regularly maintained multi-wire electric fences, both permanent and temporary, will stop grizzly bears from accessing and killing livestock or damaging property. Electric fence applications used in Montana include:

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|----------------------------|--|---|--|
| • Calving areas | • Sheep lambing areas/bedding yards | • Chicken coops (other poultry) | • Feedlots |
| • Corrals | • Beehives/bee hive staging areas | • Orchards/small crop fields (corn, cereal crops) | • Garbage sites (roll-off boxes/dumpsters) |
| • Spring turn-out pastures | • Enclosures/pens (goats, pigs, small-stock) | • Grain bins/granaries/creep feeders | • Waste transfer sites/composting sites |

For more information on design, specifications, and upkeep for multi-wire, alternating +/- electric fence, please see the following links:

Practical Electric Fencing Resources Guide: Controlling Predators: <http://www.lwwf.org/index.php/resource-guides>

A Landowner's Guide to Fences and Wildlife: http://igbconline.org/wp-content/uploads/2016/03/A_Landowner_Guide_to_Fences_.pdf (pg. 47)

Deterring Bears with Electrified Fencing: <http://fwp.mt.gov/fishAndWildlife/livingWithWildlife/beBearAware/bearAwareTools.html>

4. Crops, Grain, and Livestock Feed: Planted and irrigated crops can attract bears, elk, and other wildlife onto ranches and farms—these food sources can be attractive to grizzly bears and some consideration may be warranted in terms of what varieties of crops to plant and where fields are located. Grizzlies will eat grain, cereal crops, and livestock/poultry feed when unprotected or unsecured. Techniques being used in Montana to prevent bear access include:

- Retrofitted, high-strength steel doors for existing grain bins/granaries (requires custom welding and fitting).
- Cargo containers or sea-boxes with man-door access and skid-steer loader access (requires customization).
- Bear resistant containers, steel drums (50 gal. w/locking lids), or other high-strength containers for livestock feed; grizzlies have been known to access barns and sheds to obtain grain/feed if doors are left open.
- Electric fencing erected around existing grain bins, feed storage sheds or small barns.
- Electric fencing (temporary or permanent) of small crop fields located near ranch/farm home sites.

5. Home Protection and Household Garbage: Grizzly and black bears can become unwelcomed and persistent visitors at ranch and home sites when garbage, pet food, burn barrels or other human-based foods are available. Bears that learn this behavior can become a safety risk. A variety of tools that producers and landowners have used in Montana include:

- Perimeter electric fencing of entire ranch home-site can create a “safe-zone” for business as usual inside fence.
 - Wood slate fences built with electrified wire (+/-) on the outside of the wood slates can accommodate children and pets inside fence perimeter without worry of shocks.
- Bear resistant trash cans or dumpsters and electrified mats and temporary electric fences around garbage.
- Garbage stored in secure steel (50 gal. drums w/locking lids) or high quality bear resistant plastic containers.
- Garbage stored in secure out-buildings, sheds, barns, or garages.
- Regular garbage removal, management of house-hold attractants, and pets:
 - Open dumps will attract grizzly bears and can be fenced or removed when feasible.
 - Burn barrels with a raised rack/proper ventilation can reduce the attractiveness to grizzlies.
 - Depending on breed, size, and vulnerability of dog, some dogs may be best kept in at night.
 - Feeding pets indoors at night can be a good way to protect pets and keep bears away.
 - Barbecues that are cleaned regularly or stored conveniently, can help keep bears away.
 - Fruit trees can be protected with electric fence; fruit can be picked off of tree before Fall to avoid attracting bears and having damage done to trees.
 - Home gardens can be protected with electric fence.
 - Composters can be electrically fenced.

6. Herding and Husbandry Practices: A variety of herding practices, range riding, and husbandry practices can help reduce the risk of grizzly bear depredations on livestock. In Montana, these practices include:

- Use of herders and livestock guard dogs for intensive herding and protection of sheep bands.
- Use of enclosures/corrals or electric fencing for night penning of sheep.
- Use of range riders to increase cattle and sheep supervision rates in high risk areas with grizzlies and other predators.
- Use of ranger riders for early detection of livestock carcasses for:
 - Determining cause of death by a Wildlife Services investigation(s).
 - Determining if loss can be compensated by the MT Livestock Loss Board.
 - Removal of carcasses when practical can prevent attracting grizzlies and other predators to livestock herd.
- With producer guidance, range riders can help detect sick, injured, or lost livestock and can help monitor overall herd health.
- Use of ranger riders can help monitor grizzly activity and alert producers and others (managers, neighbors) with regular updates.
- Caution is warranted in high risk areas that grizzlies use frequently: dense cover, tree thickets, or regular movement/travel paths.
- Calving areas near dense brush, tree thickets, creek/river bottoms, beehives, and open bone-yards may increase the chances of grizzly depredation during the short window when newborn calves are most vulnerable.
- Adjusting creep feeder locations when there is grizzly activity—in some cases, feeders can be moved within an electrified pasture or away from creek/river bottoms.

7. Livestock Guardian Animals: Livestock guard dogs and other animals (e.g., donkeys) have been used primarily with sheep to deter both bears and wolves but livestock guard dogs have also been used successfully with cattle in Montana.

- Livestock guard dogs can provide 24-hour protection, tend livestock, travel with livestock, and can alert producers, herders, and range riders; depending on breed, guard dogs can chase-off or harass bears away from livestock or out of an area.
- Donkeys can provide 24-hour surveillance, forage along with livestock, and can alert producers, herder, and range riders when bears may be present but generally do not harass away bears like some breeds of livestock guard dogs.

For more information on emerging research on livestock guard dogs, see USDA-Animal and Plant Health Inspection Service: <https://www.aphis.usda.gov/aphis/ourfocus/wildlifedamage/programs/nwrc/research-areas/predator-research>

8. Frightening and Scare Devices: While typically used as a temporary solution, a variety of tools used by bear management specialists and Wildlife Services personnel can create a fear/flee response in bears. Devices include:

- Propane canister guns
- Sirens, strobe lights, pyrotechnics, motion sensor sprinkler systems, and off-the-shelf “Critter-Gitters”
- Movement activated guard (MAG) boxes use a passive infrared detector to set off a lights/sounds to scare predators

9. Avoiding Negative Encounters with Grizzly Bears: As a general rule of thumb, the more one knows about grizzly bear behavior and bear activity, the better the chances are to avoid unwanted bear encounters. While there is always risk having grizzly bears in close proximity to humans, *grizzly bears generally avoid people*.

The following tips can be helpful for avoiding unwanted encounters with grizzly bears:

- Never approach a bear, even if the bear(s) appears calm.
- Be alert and learn to recognize and watch for signs of bears in the area.
 - Common grizzly bear sign includes: tracks, scat, claw and teeth marks on trees, hair rubs on trees/fences/posts, stripped bark, caches, diggings, overturned rocks, torn apart logs/stumps, and day beds.
- Be aware that bears will develop their own travel paths and will use berry patches or other preferred habitats on a regular basis.
- Be aware that grizzly bears can aggressively defend carcasses.
- Carry bear spray and know how to use it:
 - If a bear charges you, proper use of bear pepper spray is the best way to deter an attack.
 - If you inadvertently encounter a bear, you should remain calm, move slowly, and attempt to leave the area immediately.
 - Do not run from a bear.
 - If a bear makes physical contact with you:
 - Drop to the ground, lie face down, assume cannonball position; protect the neck/head with hands and play dead.
 - Report all encounters to local authorities.

For more information on avoiding bear encounters: https://www.fws.gov/mountain-prairie/es/species/mammals/grizzly/close_encounters.pdf
<https://www.nps.gov/subjects/bears/safety.htm>

10. Compensation for Verified and Probable Livestock Losses to Grizzly Bears: The Montana Livestock Loss Board will pay fair market value only for confirmed and probable losses to grizzly bears, wolves, and mountain lions (*NEW-beginning-October 1, 2017*) as determined by USDA-Wildlife Services. If you suspect a loss is from a grizzly bear, wolf, or mountain lion follow these steps:

1. When possible, preserve the “scene.”
2. When possible, attempt to cover the livestock carcass with a tarp, cover tracks with a bucket, document the scene with photos or video.
3. Call USDA Wildlife Services state office: **(406) 657-6464 - Montana Wildlife Services (WS) – State Office – Billings, MT**
 A specialist in your area will be notified; they will contact you and can arrange an investigation to determine cause of death. **Next Steps:**
4. A USDA-WS investigator will send your investigation report to the USDA-WS state director in Billings.

5. USDA’s Billings office will send a copy of the investigation and Livestock Loss Board’s claim form to the livestock owner.
6. The livestock owner may now submit a claim to the Livestock Loss Board’s office: Phone: **Livestock Loss Board: (406) 444-5609**
Department of Livestock - Livestock Loss Board, PO Box 202005, Helena, Montana 59620-2005

Contacts and Funding Sources: Most of the tools found in this guide require labor, materials, and funding. Costs can vary depending on the type and extent of each project. The table below links the 10 tools from this toolkit to potential funding sources, informational assistance, or equipment that may be loaned out for temporary use. A check-mark indicates possible cost-share funding. Availability of funding and equipment can vary over time. For standardized projects, the entities below generally provide 50% cost-share match for projects that producers and landowners are interested in. In many cases, landowner’s in-kind labor can be used as the landowner’s cost-share. Many projects can be completed when a partnership can be formed to pool funds from multiple sources. Note that the list of tools in this summary is not exhaustive. Other organizations may have additional expertise and funding available. For more information about the tools in this summary or potential funding, please contact the following:

Contact	Phone	Website
Montana Livestock Loss Board (LLB).....	(406) 444-5609	http://llb.mt.gov
MT Department of Fish, Wildlife and Parks (FWP).....	(406) 444-7320	http://fwp.mt.gov/
Wildlife Services(WS).....	(406) 657-6464	https://www.aphis.usda.gov/aphis/ourfocus/wildlifedamage/programs
USFWS-MT Partners Program (FWS).....	(406) 793-7400	https://www.fws.gov/partners/
USFWS- Grizzly Bear Recovery Office (FWS).....	(406) 243-4903	https://fws.gov/mountain-prairie/es/grizzlyBear.php http://igbconline.org/

Tools:	LLB	FWP	WS	FWS
1. Neighbor Networks	✓	✓	✓	
2. Livestock Carcass Management	✓	✓		✓
3. Electric Fence	✓	✓	✓	✓
4. Crops, Grain, and Livestock Feed		✓		✓
5. Home Protection and Household Garbage		✓		
6. Herding and Husbandry Practices	✓	✓		
7. Livestock Guardian Animals	✓	✓		
8. Frightening and Scare Devices	✓	✓	✓	
9. Avoiding Negative Encounters w/grizzlies		✓		
10. Compensation	✓			