



TOOL RESOURCE GUIDE

*An Overview of Tools and Best Practices for
Human-Carnivore Conflict Prevention*



**PEOPLE AND
CARNIVORES**



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Fladry



Primary users

Ranchers, livestock managers, and agency representatives

Description of tool

Interspersed flagging suspended from a strand of electrified cordage.

How it works

Fladry operates on wolves' innate fear of new things in their environment. The flagging is a novel stimulus and triggers a fear response. In field trials, properly electrified fladry can be effective in excluding wolves from pastures for roughly 60 days.

Best practices

- Relatively easy installation process that takes far less planning than a permanent fence
- Spooled fladry has proven to be the most efficient way to handle fladry
- A powerful fence charger is required to keep sufficient voltage (aim for 7,000 volts)
- Must be checked and maintained regularly

Manual of Best Practices

peopleandcarnivores.org/wp/wp-content/uploads/FladryManual.pdf

P&C Short Film—“Flagging Down Wolves”

peopleandcarnivores.org/flagging-down-wolves-film/

Electric Fencing



Primary users

Farmers, ranchers, livestock managers, and agency representatives

Description of tool

Electrified wire hung on insulated posts, designed to exclude bears and wolves from calving pastures, chicken coops, vegetable gardens, orchards, beehives, and other areas where carnivores shouldn't go.

How it works

Fences energized to 7,000 volts and higher have proven very effective in keeping carnivores out of trouble spots. Once installed, the fences require only modest maintenance and the electricity cost is very low (can be made virtually free through solar power). The voltage is enough to deter carnivores from entering but is non-injurious and non-lethal.

Best practices

Design and materials will depend on the type of project;

- Short distance, temporary fences can be easily built without the need for machinery and with relatively inexpensive materials
- Permanent fences require more planning and may involve heavy machinery
- Switches installed on lower wires to prevent the fence from being disabled by snow

P&C Short Film—"Corn Bears"

peopleandcarnivores.org/corn-bears-film/

Livestock Carcass Removal and Composting



Primary users

Local municipalities, landowner and watershed groups, and ranchers

Description of tool

Centrally located compost pile situated in a carnivore-resistant facility, providing a solution for livestock owners to dispose of their dead animals.

How it works

Livestock die from a multitude of causes and, when left in a field or pasture, they become attractants for large carnivores. By removing these attractants from the field, we effectively decrease the risk of future conflicts with carnivores.

Best practices

- Deadstock are collected and buried deep beneath layers of bark, dirt, and other natural materials, surrounded by a sturdy concrete wall
- Electric fencing added to the perimeter will deter carnivores from entering
- Imperative that someone regularly makes rounds to pick up dead animals
- Community organization is crucial to the success of carcass composting operations

P&C Short Film—“Living with Carnivores: Boneyards, Bears, and Wolves”

vimeo.com/131528982

Range Riders and Livestock Management



Primary users

Ranchers and livestock managers

Description of tool

A proactive management strategy combining grazing management, stockmanship, and knowledge of local carnivores, with the goal of preventing conflict with large carnivores.

How it works

Range riders actively manage and herd cattle, utilizing regenerative grazing techniques to benefit rangeland health and prevent livestock depredations. By keeping cattle bunched together, the herd is provided safety in numbers and predators are less likely to pose a threat to livestock.

Best practices

- Combine grazing management with knowledge of local carnivores
- Keep cattle in large herds to mimic the natural behavior of grazing animals
- Find and treat or remove sick animals and carcasses
- A reasonable ratio of practitioners to land area and number of livestock is required
- Cattle must be checked regularly to assess the success of operations

P&C Short Film—“Herding for Coexistence”

peopleandcarnivores.org/herding-as-a-tool-film/

Livestock Guardian Dogs



Primary users

Ranchers and livestock managers

Description of tool

Specific breeds of dogs developed over thousands of years to exhibit a certain combination of behaviors that make them effective guardian animals.

How they work

Livestock guardian dogs (LGDs) stay with the group of animals they protect as a full-time member of the flock or herd. The presence of LGDs is usually enough to ward off some predators, though the dogs may also attack or fight with predators to protect the flock.

Best practices

- A minimum of two dogs is required to protect from large predators, and more livestock will require more dogs
- Proper health care is essential (vaccines, adequate food/water, etc.)
- Certain dogs may perform better in places where they are more likely to encounter people, other dogs, or vehicle traffic. As such, they must be selected at the individual level for specific needs
- The management and proper training of dogs is paramount to LGD success

P&C Short Film—“Livestock Guardian Dogs”

peopleandcarnivores.org/livestock-guardian-dogs-film/

Scare Devices



Primary users

Ranchers and livestock managers

Description of tool

Audible or visual deterrents deployed near livestock pastures that scare predators away from attractants.

How it works

Audible or visual stimulants present an unknown risk to wildlife and deter large carnivores from entering cattle and sheep pastures by mimicking human presence in the area.

Types of Scare Devices

Audible Deterrents

- Propane-fueled canons, cracker shells, or Radio Activated Guards (RAG)

Visual deterrents

- RAG systems that trigger lights, motion-detecting lights, or fox lights

Best practices

- Alter location, timing, and type of device to minimize carnivore habituation

Foxlight short video available at

peopleandcarnivores.org/scare-tactics/

Garbage Management and Security



Primary users

Residents or businesses living or operating in or on the edge of bear country

Description of tool

Bear-resistant containers that secure garbage from bears. Some cans are fully-automated to unload contents when picked up by a garbage truck.

How it works

Bears that become conditioned to eating garbage are likely to continue searching for anthropogenic food sources and lose their fear of humans. By properly securing garbage, bear conflicts can be reduced and bears will return to their natural sources of food.

Best practices

- Garbage management is most successful when whole communities buy in and participate
- Lids and doors should be tight enough to reduce odors and access by bears
- All containers should be tested and certified bear-resistant by the IGBC

IGBC Certified products list

<http://igbconline.org/certified-products-list/>

Bear Poles



Primary users

Hunters, outfitters, and backcountry recreationists

Description of tool

Horizontal log running between two upright trees used for storing camp food, game meat, and livestock feed away from bears. May also be constructed as steel poles or structures.

How it works

Preventing access to attractants keeps people and bears safer, while reducing large carnivore conflicts in the backcountry.

Best practices

- A rope of about 50 feet and a sturdy bag are required to hang and hold attractants
- Attractants should be hung at least 10 feet off the ground and 4 horizontal feet from the vertical trees

P&C Short Film—“Bear Poles in the Backcountry”

peopleandcarnivores.org/bear-pole-film/

Public Food Storage



Primary users

Backcountry campers, hikers, and hunters

Description of tool

Containers ranging from small backpack-portable cylinders to large steel boxes that allow backcountry travelers to store food in secure areas.

How it works

Bear-resistant containers prevent bears from accessing human foods and other attractants, thereby reducing habituation to these items.

Best practices

- Know the food storage regulations on public lands
- Keep all attractants in bear-proof containers or hanging from bear poles
- Use containers properly and maintain them to ensure effectiveness

IGBC Certified Bear-Resistant Products

<http://igbconline.org/certified-products-list/>

Bear Spray



Primary users

Anyone traveling in or occupying bear country

Description of tool

A non-lethal spray deterrent (capsaicin) designed to stop closely approaching behavior in bears.

How it works

Bear spray uses a fine cloud of capsaicin mist to temporarily reduce a bear's ability to see, smell, and breathe, giving a backcountry traveler time to safely leave the area.

Best practices

- Always carry bear spray when traveling in bear country, and know how to use it
- Keep bear spray readily accessible, not stored away in your pack
- Pay attention to surroundings and remain aware for signs of bears in the area—tracks, scat, tree rubs, or scavenger birds
- Practice using bear spray. Get comfortable removing it from the holster and removing the safety. If possible, practice firing with an inert container of spray
- Purchase only bear spray that is clearly labeled as a bear deterrent, and be sure that it is not expired
- Do not use bear spray as a preventative deterrent around camp or on objects, as residue may actually become an attractant once it is no longer aerosolized and volatile

P&C Short Film—“Averting Grizzly Encounters”

peopleandcarnivores.org/averting-grizzly-encounters-film/



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We envision an American West with abundant wildlife, healthy land, and vibrant rural communities where keystone species such as grizzly bears, wolves, cougars, and other native carnivores fulfill their ecological roles.

We reconnect and restore carnivore populations in the Northern Rockies by working with the region's people to prevent human-carnivore conflicts.

We work with landowners and managers, tribes, community groups, and other NGOs to keep people safe, and bears, wolves, and cougars wild.

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Solutions that work for people and wildlife

