

Frequently Asked Questions about a Conservation Innovation Grant to Reduce Predator Conflicts on Working Lands

Introduction: The project team, led by Heart of the Rockies Initiative and Western Landowners Alliance, in partnership with USDA-Wildlife Services, Montana State University, Utah State University, Colorado State University, the Blackfeet Nation Stock Growers Association and the Confederated Salish and Kootenai Tribes, and over 600 ranches are working to cultivate resilient ranches, rural communities and connected landscapes by reducing the financial costs of sharing working lands with large predators (grizzly bears and wolves) through financial and technical assistance for landowner-implemented nonlethal conflict prevention techniques.

Three techniques accepted by the ranching and conservation communities - range riding, carcass management, and various fencing/fladry scenarios - are being implemented and refined by a land steward network spanning seven western states (MT, ID, WA, OR, CA, AZ, and NM). These conflict prevention techniques are critical to an integrated approach to supporting working lands (food and fiber producing landscapes) and wildlife under the Four C's Framework - Compensation, Conflict prevention (non-lethal), Control (lethal), and Collaboration. Conflict prevention techniques support localized spatial and/or temporal separation between predators and livestock within a dynamic working-wild landscape, leading to more permeable habitats that allow for wildlife movements within and across connected landscapes.

Purpose: This FAQ is designed to answer questions that the project team and NRCS staff have been asked as this project has been shared across local, state, and national NRCS offices. By having a record of responses to frequently asked questions, we hope to accelerate innovation and provide clear information about how NRCS provide a critical role in meeting the needs of landowners experiencing conflict with large carnivores.

Why does this project focus on grizzly bears and wolves and not other predators?

These species often have protected status that limits other tools available to avoid conflicts. The expansion of these species in an ecosystem often results in a new financial burden that can threaten the economic viability of ranch operations.

Does this work/assistance fall under other federal agencies scope of work (e.g., USDA-WS or USFWS)?

Currently, no federal agency offers financial assistance for landowner-implemented non-lethal conflict prevention tools. While some states (OR, MT, and AZ) offer limited resources through state programs that distribute funds to counties, landowners-led groups and landowners, these programs are consistently under-funded and not able to meet the growing requests for both technical and financial assistance from landowners operating in landscapes that provide habitat to large predators. As the need increases due to expanding predator populations, ranchers are looking to NRCS, their most-trusted resource conservation partner, to support producer-led implementation of non-lethal strategies as part of a whole ranch conservation approach.

The availability of financial and technical assistance through NRCS would complement the support offered by state and federal wildlife agencies through agency-implemented non-lethal conflict prevention tools. NRCS conservation programs supporting landowner-implement non-lethal tools would fill a much-needed gap in delivering win-win solutions for livestock production and wildlife.

What are the considerations of developing an Interim Practice Standard (IPS) compared to using existing Practice Standards?

NRCS Headquarters is currently evaluating whether the nonlethal predator deterrent practices can fit under existing Practices, or if IPS's are needed. (*An IPS is used by NRCS if a proposed practice or practice scenario cannot be easily fit under an existing practice in addressing a resource concern.*) A few applicable existing Practices offer landowners assistance on similar management strategies and facilitating infrastructure, and may be applicable; however, no existing Scenarios under these Practices fit the specific needs or issue in the context of large carnivore conflict. Examples are provided below.

Range Riding

Prescribed Grazing (528) through a scenario of managing grazing animals more intensively across predator occupied pastures could be utilized; however, this practice does not currently encompass the full variation on range riding that is deployed by ranch operations that are innovating on the use of riders to address wildlife conflict. Riding strategies vary in that an operation may focus mostly on livestock, or a combination of both livestock and predators.

- Management activities can consist of monitoring pasture condition, monitoring and altering livestock use and location, monitoring predator activity, and/or riding as an active buffer between livestock and predator activity.
- Livestock husbandry activities and grazing management are part of an operation's conflict reduction plan that can be implemented by a range rider. Riders may be used to observe, move, or bunch livestock in response to a change in livestock behavior or other sign of predator presence. Riders may doctor sick animals or remove risk prone animals from the herd that could elevate the risk of conflict for the entire herd. They may deploy salt or mineral at set times of the day to draw livestock to certain locations or to bunch them at night.
- Riders also may be used to observe predator activity and deploy novel objects (Wolves are neophobic.) to discourage predators from using locations currently being grazed by livestock.

Of further note, range riding is done at both the individual ranch scale and the community (multi-ranch) scale. When implemented across multiple neighboring ranch operations it can reduce the concern of pushing predators onto a neighbor's livestock.

Fencing, Fladry, and Drive-Over Mats

Scenarios could be added under Fencing (382) to incorporate some permanent and semi-permanent fence designs that are being installed by ranchers and wildlife conservation partners

to reduce conflict. However, there are challenges to using 382, a facilitating practice, for fladry and other temporary barriers (e.g., polywire) that are used short-term or moved often within a season. The temporary nature of fladry's placement is critical to maintaining its successful use, so that predators do not become habituated to it. These types of barriers, along with electrified drive-over mats may be appropriate under Upland Wildlife Habitat Management (645). While a critical consideration of conflict prevention structures/barriers is maintaining connectivity, the primary purpose is to 'bump' predator activity to preferred corridors and avoid habitat sinks. This also may make Structures for Wildlife (649) an option, but this practice is typically used to address habitat deficiencies or modify existing structures that are a hazard to wildlife.

Carcass Management

With regards to carcass management, Animal Mortality Facility (316) could be used where a ranch has a need to secure or process carcasses to reduce predator risk initiated and amplified by scavenging. Given that the practice as currently written is limited to on-ranch facilities, a new Scenario could apply to community-scale carcass management facilities and operations typically located off-ranch, along with carcass hauling. These are the primary ways that ranchers are implementing carcass management to address large predator conflict. Carcass management, as it is currently implemented, prevents conflicts with large carnivores by removing attractants (carcasses) from individual operations and processing carcasses at communal facilities. Community carcass composting and transfer sites are located outside of typical wildlife travel corridors and protected by electric fencing, so they do not become an attractant.

Some Scenarios of conflict prevention tools are appropriate as facilitating practices while others are more suited to a management practice, and this can be determined through the planning process using the appropriate assessment and evaluation tools.

What is the resource concern being addressed?

Conflict prevention techniques support localized spatial and/or temporal separation between predators and livestock within a dynamic working-wild landscape, leading to more permeable habitats that allow for wildlife movements within and across connected landscapes. In some locations, the resource concerns considered are terrestrial habitat for wildlife or feed and forage balance; however, these do not currently encompass all the resource management and production challenges that result from conflict between large predators and ranch operations.

Terrestrial habitat concerns can occur when habitat sinks result from predators coming into regular conflict with livestock or humans, which can lead to the use of lethal control measures and ultimately result in take. Conflict prevention techniques lead to more permeable landscapes. Feed and forage imbalance can occur when pasture use (annually or seasonally) is limited or eliminated due to predator pressure on livestock.

Another potential concern is animal health and mortality. Large predator pressure can result in production losses as a result of direct predation or reductions in weight gain and fertility.

Our understanding is that NRCS Headquarters is reviewing the resource concern question and will be providing an answer.

How will Technical Assistance be provided given current knowledge of NRCS staff?

The CoW-CIG team is working closely with NRCS and all the project partners to compile information and develop planning tools that will provide state offices, specialists and eventually field offices and planners with the resources to provide technical assistance to ranchers and communities requesting support on these practices.

A Risk Assessment Framework has been developed to assist planners in selecting tools appropriate for a specific operation's context. There will be Technical Notes for each of the 3 tools available by summer 2023. Each Tech Note will include an introduction to the tool, a description of how this tool interacts with predator ecology, case studies, and a worksheet guiding planners through the risk assessment framework.

Is there a potential for "take" under the ESA through implementation of these tools?

Yes, these actions will likely result in "take" under ESA, but these tools are designed to deter large carnivore-livestock interactions while minimizing and avoiding take under ESA to the maximum extent practicable. All actions taken must comply with applicable laws and regulations. These include state, federal, tribal, and local laws.

Do Carcass Management facilities create a water quality or disease transmission risk?

As with any other practice, proper planning and establishment of site-specific implementation requirements based on site conditions will address any potential for environmental impacts. Furthermore, well-managed composting practices inactivate/degrade viral and bacterial pathogens. All carcass management actions taken must comply with applicable laws and regulations. These include state, federal, tribal, and local laws.

Is range riding a practice that is a normal part of typical ranch activity? If so, why would NRCS provide Financial Assistance?

NRCS currently uses Prescribed Grazing (528), Upland Wildlife Habitat Management (645), Irrigation Water Management (449), Forage Harvest Management (511), Forest Stand Improvement (666), Wetland Wildlife Habitat Management (644), Fishpond Management (399), Feed Management (592), Early Successional Habitat Development/Management (647), Dust Management for Pen Surfaces (375), Drainage Water Management (554), Brush Management (314), etc. These practices help the producer implement improved management activities and new technology to address resource concerns that their previous management did not effectively address.

In areas with wolves and grizzly bears, ranch employed riders (cowboys) often change their activities (placing and checking wildlife cameras or looking for predator sign) or the intensity of their activities (increasing the frequency of checking cattle). This change in activity or intensity is considered range riding.