BENTON COUNTY NATURAL AREAS & PARKS
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HTTP://CO.BENTON.OR.US/AWPP

Benton County Agriculture and Wildlife Protection Program

Non-Lethal Deterrents Grant Application Additional Site Form

If you plan to use your non-lethal deterrents at more than one project location, please complete this **Grant Application Additional Site Form** for each additional site. Additional Site Forms are necessary, for example, if you apply for different deterrents for use at different sites or if you move your livestock seasonally and plan to use the same deterrents at different sites.

This Additional Site Form contains only the location-dependent application questions found in the Questionnaire and Proposed Non-Lethal Deterrents Project Plan sections of the Grant Application Form. Please return your Additional Site Form(s) with your Grant Application Form.

The Additional Site Form includes the following sections. **All questions pertain only to livestock or crops involved in your proposed non-lethal deterrents project at the location you describe below.**

A. **Questionnaire** - to assist in understanding the characteristics and conflict history at this additional project site.
B. **Proposed Non-Lethal Deterrents Project Plan** - a description of the methods, tools, implementation plans, and expected costs at this additional project site.
C. **Budget Summary** - a table of items, costs, and amount requested for reimbursement.

Please provide an answer to every question. If a question does not apply to your situation please indicate 'None' or 'Not applicable'.

Date:_____

Name of applicant:_____

Name of farm or operation if applicable:_____

Mailing address:_____

Physical address or description of additional project location:

_____

_____

Telephone:_____ Email:_____

A. QUESTIONNAIRE

Please answer each question below. If you are completing a printed paper form and additional space is needed, please attach pages as necessary to completely answer all questions. If you are applying only for beaver deterrents unrelated to farming operations, answer questions that relate to your beaver conflict and mark 'Not applicable' for questions that do not apply.

1. How many acres do you own _____ lease _____ at this additional non-lethal deterrents project location?

2. Does someone reside at this additional non-lethal deterrents project location? _____ Yes _____ No

3. Is the setting of this additional non-lethal deterrents project mostly isolated from residential homes, non-farm businesses, and public parks?

_____ Yes _____No

If no, please describe:_____
_____
_____

4. Is the environment at this additional non-lethal deterrents project location mostly open grassland/pasture? _____ Yes _____ No

If no, please describe: _____
_____
_____

5. Is the terrain at this additional non-lethal deterrents project location relatively flat?

_____Yes _____No

If no, please describe: _____
_____
_____

6. Please indicate the causes of damage to or losses of livestock, crops, or property at this additional non-lethal deterrents project location **in order of most to least problematic causes**. Indicate rank with number: 1, 2, 3, etc. with 1 being the most problematic. If no damage or loss, mark None or Not applicable if appropriate. If new farm or location mark No history and indicate anticipated causes.

Livestock:
_____ Weather _____ Disease _____ Predation _____ Poaching
_____ Other (describe) _____
_____ None _____ Not applicable _____ No history (new farm or location)

Crops:
_____ Weather _____ Disease _____ Girdling _____ Stripping _____ Browsing _____ Grazing
_____ Consumption _____ Beaver-caused Flooding
_____ Other (describe) _____
_____ None _____ Not applicable _____ No history (new farm or location)

7. Please indicate the animals that have caused damage to or losses of livestock, crops, or property at this additional non-lethal deterrents project location **in order of most to least problematic species**. Indicate rank with number: 1, 2, 3, etc. with 1 being the most problematic. If no damage or loss, mark None or Not applicable if appropriate. If new farm or location mark No history and indicate anticipated animals.

_____ Coyotes _____ Beavers _____ Raccoons _____ Bobcats
_____ Foxes _____ Skunks _____ Cougars _____ Porcupines
_____ Bears _____ Birds
_____ Other (describe) _____
_____ None _____ Not applicable _____ No history (new farm or location)

8. Please ESTIMATE the total amount of livestock, crops, or property you have lost at this additional non-lethal deterrents project location due to wild animals or domestic dogs during the last three years. Mark no losses, no records, or no history if appropriate.

2020 Sheep _____ Lambs _____ Goats _____ Kids_____ Cattle _____ Calves _____ Fowl _____
Other (species and #) _____ Crops (types and # or acres) _____
Property (describe) _____
No losses _____ Did not keep records _____ No history (new farm or location) _____

2019 Sheep _____ Lambs _____ Goats _____ Kids_____ Cattle _____ Calves _____ Fowl _____
Other (species and #) _____ Crops (types and # or acres) _____
Property (describe) _____
No losses _____ Did not keep records _____ No history (new farm or location) _____

2018 Sheep _____ Lambs _____ Goats _____ Kids_____ Cattle _____ Calves _____ Fowl _____
Other (species and #) _____ Crops (types and # or acres) _____
Property (describe) _____
No losses _____ Did not keep records _____ No history (new farm or location) _____

9. Are you currently using, or have you used, any of the following non-selective lethal methods to protect your livestock, crops, or property at this additional non-lethal deterrents project location? For each method used, mark a 'C' if the method is Currently being used or 'P' if you have used the method in the Past. Please mark all that apply. If no lethal methods have been used, mark None used. If no conflicts experienced, mark Not applicable/No conflicts.

_____ Snares
_____ Poisons
_____ Calling-and-shooting
_____ None used
_____ Traps
_____ Shooting (not caught in the act)
_____ Denning (killing animals in their burrows or dens)
_____ Not applicable/No conflicts

10. Who implemented the lethal control methods marked above? Please mark all that apply. If no lethal methods have been used, mark None used. If no conflicts experienced, mark Not applicable/No conflicts.

_____ Applicant
_____ USDA-APHIS Wildlife Services trapper
_____ None used
_____ Private wildlife control operator
_____ Other (describe) _____
_____ Not applicable/No conflicts

11. Were lethal control measures used before or after the conflict(s) occurred? Please mark all that apply. If no lethal methods have been used, mark None used. If no conflicts experienced, mark Not applicable/No conflicts.

_____ Before _____ After _____ None used _____ Not applicable/No conflicts

12. Please ESTIMATE the total number of animals that have been killed at this additional non-lethal deterrents project location to protect your livestock, crops, or property during the last three years. If no animals have been killed mark None. Mark none killed, no records, or no history if appropriate.

2020 Coyotes _____ Beavers _____ Raccoons _____ Bobcats _____ Cougars _____

Other (species and # killed) _____

None killed _____ Did not keep records _____ No history (new farm or location) _____

2019 Coyotes _____ Beavers _____ Raccoons _____ Bobcats _____ Cougars _____

Other (species and # killed) _____

None killed _____ Did not keep records _____ No history (new farm or location) _____

2018 Coyotes _____ Beavers _____ Raccoons _____ Bobcats _____ Cougars _____

Other (species and # killed) _____

None killed _____ Did not keep records _____ No history (new farm or location) _____

B. PROPOSED NON-LETHAL DETERRENTS PROJECT PLAN

Please fill in the tables below on methods, tools, and costs for items requested for reimbursement for your project site. In the questions following each table, describe your implementation plans for items requested for reimbursement. Applicants may apply for **up to $5,000** in reimbursement grant funds.

Grant recipients agree to make a cash and/or in-kind (non-cash) contribution of **at least 25%** of the total cost of the project. The 25% contribution may include cash used for the purchase of deterrents approved through the grant program and/or an in-kind contribution of the expected labor costs for the installation of deterrents during the three-year period of the grant program ending December 31, 2023. In-kind contributions may include, but are not limited to, construction of protective housing for livestock or housing for guardian animals, or the installation of any other deterrent methods and devices purchased with grant program funds.

Please estimate your cash and/or in-kind (non-cash) cost share contribution for each type of deterrent **over the three-year period ending on December 31, 2023** and enter in the appropriate tables below. Your total cost share contribution **must be at least 25% of the total cost of the project**.

Use Table 1 below to assist in selecting non-lethal methods and tools for your project plan. This table was produced by agriculture professionals with the University of California-Davis Livestock-Predator Research and Extension Hub and combines observations and analysis from scientific studies as well as credible, on-the-ground experience. A single non-lethal method can rarely be used successfully in most situations, so it is important to review all methods and match several tools to your specific situation and vary their use frequently. Use Table 2 below to assist in selecting non-lethal methods to deter beavers.

Table 1. University of California-Davis non-lethal tool selection guidelines.

Consider these tools:	If your predator of concern is a:						
	Dog	Coyote	Mtn Lion	Black Bear	Gray Wolf	Fox	Bobcat
Livestock guardian dog	●	●	●	●	●	●	●
Donkey	●	●	NA	NA	NA	●	NA
Llama	●	●	NA	NA	NA	●	NA
Woven-wire fencing w/ trip wire	●	●	NA	NA	NA	NA	NA
Permanent electric fencing	●	●	●	?	●	●	●
Temporary electric fencing	●	●	?	NA	●	●	●
Electro-net fencing	●	●	NA	NA	NA	●	●
Fladry or turbo fladry	NA	?	NA	NA	●	NA	NA
Attractant (carcass) removal	●	●	●	●	●	●	●
Human presence / stockmanship	NA	NA	NA		●	NA	NA
Night pen (small-scale operations)	●	●	●	●	●	●	●
Fright tactics / devices		?	?	?	?	?	?
Shed lambing / calving / kidding	●	●	●	●	●	●	●
Multi-species grazing (cattle w/ small ruminants)	●	●	?	?	?	●	?

● Highly effective ? Research results with varying effectiveness

● Moderately effective NA No available evidence

Table 2. Non-lethal methods and devices for deterring beavers.

Method or Device	Description
Protect Culverts / Prevent Flooding	-
Beaver Deceiver	Trapezoidal fence to prevent damming of culverts
Double Filter System	Culvert fence filter and round fence filter connected by two flexible pipes
Flexible Pond Leveler	Flexible pipe and round fence filter to prevent flooding by lowering pond height
Castor Master	Double-walled flexible pipe and round fence filter to lower pond height
Beaver Baffle	Fence-covered pipe through culvert
Clemson Pond Leveler	Perforated solid pipe installed through dam to prevent flooding
Pipe and Fence Systems	Trapezoidal fence and pipe system encourages beavers to build away from culvert
Protect Trees	-
Galvanized Welded Wire Fencing	Encircle single trees or small groves
Electric Fencing	Encircle small groves and vineyards
Abrasive Tree Paint	Sand/paint mixture applied to tree trunks

1. GUARDIAN ANIMALS

Animals used to protect livestock and crops: guardian dogs, llamas, donkeys, geese, etc. **Labor costs for training and feeding and purchase costs for food and veterinary care are not reimbursable. One time costs such as a doghouse, or the labor costs for constructing a shelter may be applied toward the minimum 25% cost share contribution for guardian animals purchased with grant program funds.**

For example, a trained Great Pyrenees guardian dog can have an initial purchase cost of $2,250 with initial supplies, materials and labor for a shelter for the dog running $750. The total cost for this non-lethal deterrents project would be $3,000. The Cost Share Contribution could include the initial supplies (collar, feeding dishes, etc.) and materials for the dog shelter as well as the labor which would equal $750 or 25% of the total cost of the project.

Guardian Animal	Breed (if applicable)	# of Animals	Purchase Costs	Cost Share Contribution				Total Project Cost	Requested Amount
				Hours	Labor	Purchases	Total		
Example: Dogs	*Great Pyrenees*	*1*	*$2,250*	*10*	*150*	*$600*	*$750*	*$3,000*	*$2,250*

*Provide a professional estimate or calculate labor costs at $15/hour.

2. FENCING

New fencing or improvements to existing fencing which serve to reduce conflicts with wildlife (for example, electrification or fladry) or contain guardian animals. **Fencing to exclude deer and elk are not eligible for funding.**

Permanent or temporary fencing for the sole purpose of containing livestock is not reimbursable (for example, electric single wire, high-tensile fence with horizontal wires greater than 6 inches apart, or any fence less than 48 inches high). **Labor costs for installing or moving fencing are not reimbursable but may be applied toward the minimum 25% cost share contribution**.

A. New Fencing – portable electric, woven wire, other.

For example, a section of portable electric net fencing can have an initial purchase cost of $3,850. The cost for labor to install fencing could be $15/hour x 10 hrs = $150 for a total project cost of $4,000. The Cost Share Contribution could be 10 hours of labor ($150) and $850 cash towards the cost of fencing = $1,000 or 25% of the total cost of the project.

Type of Fencing/Supplies	Linear ft or units	Purchase Costs	Cost Share Contribution				Total Project Cost	Requested Amount
			Hours	Labor	Purchases	Total		
Example: Electro-Net Fencing	*5,280 ft*	*$3,850*	*10*	*$150*	*$850*	*$1,000*	*$4,000*	*$3,000*

*Provide a professional estimate or calculate labor costs at $15/hour.

B. Improvements to Existing Fences – electrification, fladry, other.

For example, 5000 feet of insulated wire can have an initial purchase cost of $1,195. The cost for labor to install the electrified wire could be $15/hour x 27 hrs = $405 for a total project cost of $1,600. The Cost Share Contribution could be 27 hours of labor ($405), or 25% of the total cost of the project.

Type of Fencing Improvement/Supplies	Linear ft or units	Purchase Costs	Cost Share Contribution				Total Project Cost	Requested Amount
			Hours	Labor	Purchases	Total		
Example: Insulated Wire	*5,000 ft*	*$1,195*	*27*	*$405*	*-*	*$405*	*$1,600*	*$1,195*

*Provide a professional estimate or calculate labor costs at $15/hour.

3. SCARE DEVICES

Horns, lights, radios, bells, noisemakers, lasers, scarecrows, other. **Labor costs for installing scare devices are not reimbursable but may be applied toward the minimum 25% cost share contribution**.

For example, a Foxlight night predator deterrent has an initial purchase cost of $100. The cost for labor to install three Foxlights could be $15/hour x 7 hrs = $105. The total project cost to purchase three Foxlights ($300) and install them ($105) is $405. The Cost Share Contribution could be 7 hours of labor = $105, or 26% of the total cost of the project.

Type/Name of Device	# of Units	Purchase Costs	Cost Share Contribution				Total Project Cost	Requested Amount
			Hours	Labor	Purchases	Total		
Example: Foxlight Night Deterrent	*3*	*$300*	*7*	*$105*	*-*	*$105*	*$405*	*$300*

*Provide a professional estimate or calculate labor costs at $15/hour.

4. PROTECTIVE HOUSING

Materials for constructing or improving barns, sheds for lambing/calving/kidding, night pens (protected area), and other protective housing. **Labor costs for constructing protective housing are not reimbursable but may be applied toward the minimum 25% cost share contribution**.

For example, materials for a lambing shed can have a purchase cost of $3,700 and labor cost to construct the shed of $15/hour x 20 hours = $300 for a total project cost of $4,000. The Cost Share Contribution could be 20 hours of labor ($300) and $700 cash towards the materials = $1,000, or 25% of the total cost of the project.

Supplies for Housing or Improvement	Purchase Costs	Cost Share Contribution				Total Project Cost	Requested Amount
		Hours	Labor	Purchases	Total		
Example: Materials for Lambing Shed	*$3,700*	*20*	*$300*	*$700*	*$1,000*	*$4,000*	*$3,000*

*Provide a professional estimate or calculate labor costs at $15/hour.

5. OTHER NON-LETHAL DETERRENTS

Describe any other non-lethal methods, tools, or devices you are considering. **Labor costs for other non-lethal deterrents are not reimbursable but may be applied toward the minimum 25% cost share contribution**.

Method/Tool/ Device/Supplies	# of Units	Purchase Costs	Cost Share Contribution				Total Project Cost	Requested Amount
			Hours	Labor	Purchases	Total		

*Provide a professional estimate or calculate labor costs at $15/hour.

What livestock or crops and how many or much (number/acres) of each do you plan to protect with:

guardian animals? _____
new fencing?_____
improvements to existing fences? _____
scare devices?_____
protective housing? _____
other non-lethal deterrents?_____

Describe the species you plan to deter with:
guardian animals? _____
new fencing?_____
improvements to existing fences? _____
scare devices?_____
protective housing? _____
other non-lethal deterrents?_____

Describe how you plan to use the non-lethal deterrents you indicated above. Include any complicating factors such as size of your operation, setting, environment, terrain, integration with other guardian animals, or other situations that may arise, and how you would avoid or respond to them:
guardian animals? _____
_____
new fencing?_____
_____
improvements to existing fences? _____
_____
scare devices?_____
_____
protective housing? _____
_____
other non-lethal deterrents?_____
_____

Expected date of implementation: _____

6. BEAVER DETERRENTS

Methods or devices to protect trees or prevent flooding. Materials for integrated fence and pipe systems (flow devices) and fencing such as culvert fencing, galvanized welded wire fencing, or electric fencing. Other methods such as abrasive tree paint. **Labor costs for installing flow devices are not reimbursable but may be applied toward the minimum 25% cost share contribution**.

For example, the cost of culvert fence and pipe for a beaver pond leveler could be $1,200. The cost of labor to construct the pond leveler could be $15/hour x 27 hours = $405 making the total project cost $1605. The Cost Share Contribution could be 27 hours of labor ($405) or 25% of the total cost of the project.

Method/Tool/Device/Supplies	Linear ft or units	Purchase Costs	Cost Share Contribution				Total Project Cost	Requested Amount
			Hours	Labor	Purchases	Total		
Example: Culvert Fence and Pipe	*20 ft*	*$1,200*	*27*	*$405*	*-*	*$405*	*$1,605*	*$1,200*

*Provide a professional estimate or calculate labor costs at $15/hour.

What do you plan to protect with the proposed beaver deterrents?:

_____

_____

Describe how you plan to use beaver deterrents. Include any complicating factors such as the stream velocity, setting, environment, terrain, or other situations that may arise, and how you would avoid or respond to them:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Expected date of implementation: _____

C. BUDGET SUMMARY

In the table below, please refer to tables 1-6 to help you summarize your proposed project budget and requested reimbursement for the project site described in this form. The total requested amount of grant funds cannot exceed $5,000, even if you have multiple project sites. Please estimate your cash and/or in-kind (non-cash) cost share contribution for each type of deterrent and enter in the table below. Your total cost share contribution **must be at least 25% of the total cost of the project**. Receipts for reimbursement must match the method/tool/device stated in the budget summary. No substitutions.

Method/Tool/Device /Supplies	Purchase Costs	Cost Share Contribution				Total Project Cost	Requested Amount
		Hours	Labor	Purchases	Total		
Totals							
Total in-kind cost share contribution must be at least 25% of the total cost of the project >							

TOTAL PROJECT COSTS: $_____
TOTAL IN-KIND COSTS: $_____
TOTAL FUNDING REQUEST: $_____

For County Use:

Applicant ID Number_____