

BENTON COUNTY PUBLIC WORKS

GARY STOCKHOFF

DIRECTOR

HTTP://CO.BENTON.OR.US/AWPP

# **Benton County Agriculture and Wildlife Protection Program**

Non-Lethal Deterrents Grant Program Guidelines and Information

## **Background**

The Benton County Budget Committee has approved \$45,000 for the 2021-23 fiscal biennium to continue a program to encourage the proactive use of non-lethal animal damage deterrents in an effort to foster the coexistence of agriculture and wildlife in Benton County. While there is an educational outreach component of the Benton County Agriculture and Wildlife Protection Program (AWPP), the majority of funds goes towards a merit-based, cost share, reimbursement grant program. Agricultural operations in Benton County that wish to prevent conflicts with wildlife may qualify for up to \$5,000 in reimbursement grant funds for the purchase of proactive non-lethal wildlife deterrents to protect livestock and crops. Individuals experiencing conflicts with beavers may also qualify for grant funds for the purchase of deterrents to protect trees or prevent flooding.

This community-based program is funded by Benton County and managed by county officials in partnership with representatives from Oregon State University Extension Service, Chintimini Wildlife Center, Oregon Department of Fish and Wildlife, and Program Advisors.

The goals of the Benton County Agriculture and Wildlife Protection Program are to:

- Protect livestock and crops while coexisting with wildlife;
- Encourage the proactive use of non-lethal animal damage deterrents to prevent conflicts with wildlife;
- Offer a wildlife-friendly, non-lethal animal damage control program;
- Educate farmers and the community about wildlife conflicts and non-lethal methods to avoid conflicts;
- Foster a collaborative relationship between the farming and wildlife conservation communities, and Benton County government built around common goals.

## **Grant Program Timeline**

The AWPP program requires an application for non-lethal wildlife deterrent reimbursement funds. Submit applications online or mail/email by November 30<sup>th</sup> at 11:59PM to:

Benton County AWPP 360 SW Avery Ave.

or:

AWPP@co.benton.or.us

Corvallis, OR 97333

Applications for beaver deterrents will be accepted at any time and evaluated by County staff as they are received. All other grant applications will be evaluated by a grant review committee.

#### Successful applicants will be notified of the amount awarded the first working week of January.

The total number and amount of grants awarded will be based upon availability of funds, with the committee typically awarding the majority of funds within the first year of the biennium. Successful applicants may purchase the approved deterrents and submit reimbursement request forms and receipts to Benton County.

Non-lethal wildlife deterrents described in the grant recipient's project plan must be installed by <u>May</u>

30th to be eligible for reimbursement. Beaver deterrents must be installed four months after grants are awarded.

Checks in the name of the applicant are issued after County staff conducts a site visit and confirms that deterrents have been installed. Successful applicants are required to keep project records, report conflicts, evaluate their project, and abide by program requirements. **After a successful award, annual reports will be required for three subsequent years by grantees, due on January 31** annually.

## Who is Eligible for Grant Funding?

Agricultural operations in Benton County, of any size, on owned or leased land, that are anticipating or have experienced conflicts with wildlife may apply for reimbursement funds. Commercial and hobby or lifestyle farms are eligible to apply. Individuals anticipating or experiencing conflicts with beavers may also apply. Though the non-lethal deterrents project must be located in Benton County, it is not necessary to be a resident of Benton County to apply. Applicants must plan to use their non-lethal deterrents at the project location(s) for three years to be eligible to receive grant funds.

#### What is Eligible for Grant Funding?

Non-lethal wildlife deterrent equipment devices, and housing which proactively protect livestock and crops are eligible for funding. Beaver deterrents to protect trees or prevent flooding are also eligible for funding. Deterrents for deer and elk are not eligible for funding. Examples of non-lethal deterrents include, but are not limited to: livestock guardian animals, certain types of fencing, birthing sheds, visual and acoustic scare devices, and flow devices such as beaver pond levelers.

Non-selective <u>lethal</u> wildlife control methods such as traps, snares, calling-and-shooting, denning (killing animals in their burrows or dens – usually with poisons), or poisons are <u>not</u> reimbursable, or allowed, under this program.

Reimbursement funds can only be applied to new purchases made after the grant award date. Retroactive costs or purchases made prior to the grant award date will not be allowed.

#### **How Much Grant Funding is Available?**

The AWPP for 2021 includes \$40,000 for the cost share reimbursement grant program - \$35,000 for general anticipated conflicts with wildlife – (including beavers) – and \$5,000 specifically for unexpected conflicts with beavers that arise outside of the grant application window. Each applicant may request up to \$5,000 in reimbursement grant funds. Partial awards may be necessary based on fund availability and strength of individual applications.

## **Selecting Non-Lethal Methods and Tools**

Applicants can select which non-lethal methods they believe will work best for their particular operation and describe how they will be used in their plan for conflict prevention in the grant application. The specific technique(s) employed will depend on the wildlife species present history of conflicts, type and size of the operation, site characteristics, cost, and available resources. A single non-lethal method is rarely successful in most situations, so it is important to review all methods and match several tools to your specific situation and vary their use frequently. Non-lethal deterrents work best if used before conflicts with wildlife occur. Once wildlife has learned to exploit an unprotected resource, it can be challenging to prevent future conflict.

#### For more information see:

- Benton County AWPP Website: https://www.co.benton.or.us/awpp
- UC Davis Livestock-Predator Hub: https://rangelands.ucdavis.edu/predator-hub/current-research
- Farming with Carnivores Network: <a href="https://farmingwithcarnivoresnetwork.com/animal-husbandry">https://farmingwithcarnivoresnetwork.com/animal-husbandry</a>
- Non-Lethal Solutions to Reduce Conflicts: <a href="https://tinyurl.com/y9eyed3h">https://tinyurl.com/y9eyed3h</a>
- The Encyclopedia of Animal Predators: <a href="https://www.jandohner.com/resources">https://www.jandohner.com/resources</a>
- Safeguarding Livestock: <a href="https://mountainlion.org/portalprotectlivestock.asp">https://mountainlion.org/portalprotectlivestock.asp</a>
- Resolving Conflicts with Beaver: <a href="https://www.beaverinstitute.org/">https://www.beaverinstitute.org/</a>

For questions about the Benton County Agriculture and Wildlife Protection Program, the application form, or help designing a proactive wildlife deterrent program and selecting non-lethal methods and tools, please contact:

Sheanna Steingass, Environmental Project Coordinator Benton County Public Works 360 SW Avery Ave Corvallis, OR 97333 AWPP@co.benton.or.us

#### **Grant Application and Selection Process**

Grant Awards are based on responses to questions in the reimbursement grant application form. All grant applications will be evaluated by a selected grant review committee and County officials using a blind review process. Applicants that have not received funding in past years will be given priority consideration.

In general, grants are awarded based on:

- 1. Agreement between the applicant's philosophy of animal damage control and AWPP goals;
- 2. Likely effectiveness of the proposed non-lethal deterrents project plan; and
- 3. Availability of funds

### **Grant Program Requirements**

<u>Please read this section before starting your application</u> as it includes information on which expenses and types of projects are qualified for funding. This application also includes terms that must be met for reimbursement to occur.

**Reimbursement Funds:** The grant funds received can only be used for the purchase of non-lethal deterrents to prevent wildlife-caused damage to, or loss of, livestock, crops, or property.

**10% Cost Share:** Grant recipients agree to make a cash and/or in-kind (non-cash) contribution of at least 10% of the total cost of the project. The 10% contribution may include cash used for the purchase of deterrents approved through the AWPP 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.

Labor: Labor provided by the recipient or paid contractors is <u>not a reimbursable expense but can be</u> <u>used to count towards the 10% cost share requirement.</u> Labor can be a quoted rate, or estimated at \$15/hour if provided in-kind by the grant recipient.

**Record Keeping:** <u>Grant recipients agree</u> to maintain a record of their non-lethal deterrents project operations for three years from the date the grant is awarded via the <u>Record Keeping Form</u>. The records will include descriptions of any conflicts with wildlife which were prevented or resulted in damage or loss. The <u>Record Keeping Form</u> is included in the Application Packet.

**Reporting:** <u>Grant recipients agree</u> to immediately report any damage to, or loss of, livestock or crops, or flooding by beavers resulting from a failure of the deterrents used. Reports should be made to the Benton County <u>Environmental Project Coordinator</u> so that consultation with wildlife conflict experts is initiated and adjustments to deterrents can be discussed.

**Project Evaluation:** Grant recipients agree to submit annual Project Evaluation Reports by January 31 (2025-2028 inclusive). This report evaluates the effectiveness of grant-funded non-lethal deterrents over the previous calendar year ending on December 31. This information will be used by County officials to evaluate the effectiveness of the AWPP and help identify effective methods and projects.

Restrictions: Grant recipients are prohibited from using non-selective lethal wildlife control methods anywhere on the property where the funded non-lethal deterrents project will be implemented until <a href="December 31">December 31</a>, 2028. Non-selective lethal methods can kill non-target species and non-offending individuals. Indiscriminate killing may have unintended consequences.

**Attractant Removal:** Grant recipients agree to remove all wildlife attractants at the project site including excess animal feeds, afterbirth, and sick, injured or dead livestock.

**Specific Situations or Exceptions:** Targeted killing (e.g. shooting) of an offending individual wild animal is allowed under the program but *only when the animal is caught in the act of biting, wounding, killing or chasing healthy livestock.* Shooting wildlife that respond to calls (calling-and-shooting) is not allowed under the program. Wild animals engaged in scavenging dead or dying livestock may not be killed. *Any use of <u>lethal</u> control must fall within the rules and regulations set forth by the Oregon Department of Fish and Wildlife. Threats to human health and safety involving wildlife should be directed to ODFW.* 

**Site Visits:** County staff will schedule site visits to farm properties or other locations where AWPP project activities are conducted to verify installation, use and success of non-lethal deterrents. To be eligible for reimbursement, projects must be completed by May 30<sup>th</sup> of the year of award.



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# Non-Lethal Wildlife Deterrents Grant Application Form

## Benton County Agriculture and Wildlife Protection Program

This Grant Application form, provided by the Benton County Agriculture and Wildlife Protection Program (AWPP), must be completed in order to be considered for non-lethal wildlife deterrent methods and tools reimbursement grant funds. Your response on this application form will be used to evaluate your application.

Agricultural operations in Benton County that wish to prevent conflicts with wildlife may apply for **up to \$5,000** in reimbursement grant funds. Individuals anticipating or experiencing conflict with beavers may also apply. Partial rewards may be necessary based on fund availability. Grant recipients agree to make a cash and/or in-kind (non-cash) contribution of at least 10% of the cost of the total project.

The application includes the following sections:

- **A. Questionnaire** to assist in understanding of your farm operation, needs for the program services and grant funding, project site characteristics and conflict history, understanding of non-lethal methods and their use, and philosophy of animal damage control.
- **B.** Proposed Non-Lethal Deterrents Project Plan a description of the methods, tools, implementation plans, and expected costs that will be used to evaluate the likely effectiveness of your proposed deterrents.
- **C. Budget Summary** a table of items, costs, and amounts requested for reimbursement.
- D. Agreement Checklist a list of program requirements that must be agreed to and initialed.
- E. Release and Signature

Please provide an answer to every question. If a question does not apply to your situation please indicate 'None' or 'Not Applicable (N/A)". **Unless otherwise noted, questions pertain only to livestock or crops on the property where the funded non-lethal deterrents will be implemented.** 

If you plan to use your non-lethal deterrents at more than one project location please download and complete a <u>Grant Application Additional Site Form</u> 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 site. Please return your Additional Site Form(s) with your Grant Application Form.

<u>Applications for beaver deterrents will be accepted at any time</u> and evaluated by County staff as they are received. Grant applications will be evaluated by the Grant Award Committee and County officials.

**Successful applicants will be notified of the amount awarded by January 5, 2024.** Grants will be awarded based on availability of funds.

For questions about the Benton County Agriculture and Wildlife Protection Program, this application form, or help designing a proactive wildlife deterrent program and selecting non-lethal methods and tools, please use the contact information below.

Note: Applicants should <u>not</u> purchase materials or initiate a project in expectation of funding until receiving the final grant award document signed by an authorized County official. Successful applicants may then submit a reimbursement request form and receipts for approved deterrents to the county office. A check in the name of the applicant is then issued.

All approved and funded deterrents described in the grant recipients project plan must be in place and operational by May 30, 2024 for reimbursements to occur. Beaver deterrents must be installed four months after grants are awarded. Reimbursement will occur after installation verification.

Applications must be received by November 30, 2023 by 11:59pm and submitted via mail or email to:

Benton County AWPP 360 SW Avery Ave Corvallis, OR 97333

or:

AWPP@co.benton.or.us

Date:	
Name of applicant:	
Name of farm or operation, if applicable:	
Physical address or description of project location:	
Mailing address, if different:	
Telephone:	Email:

## A. QUESTIONNAIRE

## **General Information**

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 question that do not apply.

1.	How long have you been farm	ing?	years (please fill in	Not applicable		
2.	. What level of income do you expect to d		derive from your farm	products?		
	Primary Supple	mental	No Income	Not app	licable	
3.	What type of livestock or crop non-lethal deterrents? Please			do you plan to pro	otect with your	
	Livestock					
	Sheep	# of adı	ults:	# of lambs		
	Goats	# of adı	ults:	# of kids		
	Pigs	# of adı	ults:	# of piglets		
	Cattle		ılts:	# of calves		
	Poultry					
	Chickens	# of adı	ults:	# of chicks		
	Ducks		ults:	# of ducklings		
	Geese	# of adı	ults:	# of goslings		
	Turkeys	# of adı	ults:	# of poults		
	Other Livestock	species	and # adults / young:			
	Not applicable					
	Crops/Plants					
	Forestry/Nursery Trees		types and # or acres:			
	Fruits/Nuts		types and # or acres:			
	Grass/Sod		types and # or acres:			
	Other crops		types and # or acres:			
	Hives (bees/honey)		types and # of hives: _			
4.	How many acres do you own		or lease	_ at the project lo	ocation?	
	Does someone reside at the n					

County Use C	nly: Application #	- 22
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6.	Describe the setting of your non-lethal deterrents project. Is it:		
	Mostly isolated from residential homes, non-farm businesses, and public parks?	Yes	No
	Mostly open grassland/pasture?	Yes	No
	Relatively flat?	Yes	No
	Other details about your property		
7.	If you answered "no" to any part of <b>Question 6</b> , the setting of your property may challenge to the effective use of the non-lethal deterrents you plan to apply for. If you plan to deal with these or any other complicating factors.	•	now
	Statistic Description		
W	ildlife Damages		
8.	Please indicate the wildlife that have caused damage to or losses of livestock, cro at your non-lethal deterrents project location in order from most to least problematic Indicate rank with number: 1, 2, 3, with 1 being the most problematic		
	Coyotes Beavers Raccoons Bol	bcats	
	Foxes Skunks Cougars Por	cupines	
	Bears Birds		
	Other (describe)		
	No Damage or Loss Not Applicable No History (new far	rm or loca	ition)
9.	Please indicate the causes of damage to or losses of livestock, crops, or property	at vour no	n-
	lethal deterrents project location in order of most to lease problematic causes.  Indicate rank with number: 1, 2, 3, with 1 being the most problematic:	,	
	Livestock		
	Weather Disease Predation Poaching		
	Other (describe)		
	No Damage or Loss Not Applicable No History (new far Page <b>8</b> of <b>29</b>	rm or loca	ition)

	Crops	
	W	Veather Disease Girdling Stripping Browsing Grazing
	C	onsumption Beaver-caused flooding
	0	ther (describe)
	N	o Damage or Loss Not Applicable No History (new farm or location)
	Proper	ty Damage
	D	amaged bee hives Chewed irrigation lines
	0	ther (describe)
	N	o Damage or Loss Not Applicable No History (new farm or location)
10.		ESTIMATE the total amount of livestock, crops, or property you have lost at your non-
		deterrents project location due to wild animals or domestic dogs during the last three
	<u>years</u> . ■	If you have not experienced losses, mark one of the following:
		"None", "Did not keep records", or "No history (new farm or location")
	2023	Sheep Lambs Goats Kids Cattle Calves Poultry
		Other (species and number):
		Crops (types and # or acres):
		Property (describe):
		None Did not keep records No History (new farm or location)
	2022	Sheep Lambs Goats Kids Cattle Calves Poultry
		Other (species and number):
		Crops (types and # or acres):
		Property (describe):
		None Did not keep records No History (new farm or location)
	2021	Sheep Lambs Goats KidsCattleCalves Poultry
		Other (species and number):
		Crops (types and # or acres):
		Property (describe):
		None Did not keep records No History (new farm or location)

# **Lethal Deterrents History**

- **11.** Are you currently using, or have you used, any of the following non-selective <u>lethal</u> methods to protect your livestock, crops, or property at your non-lethal deterrents project location?
  - For each method used, mark a "<u>C</u>" if the method is <u>being currently used</u>; or mark a "<u>P</u>" if you have used the method in the <u>past</u>. Please mark all that apply.
  - If no lethal methods have been used, mark "None Used". If no conflicts have occurred, mark "Not Applicable/No Conflicts".

				C	.ounty use Uniy: A	Application # 22
	Sr	nares	Tr	aps		
	Po	oisons	Sh	ooting ( <u>not</u> o	caught in the act	t)
	Ca	alling-and-shooting	De	enning (killing	g animals in thei	ir burrows or dens)
	N	one Used	No	ot Applicable	/No Conflicts	
12.	Who im	nplemented the <u>lethal</u> Please mark all that a If <u>no conflicts have be</u>	pply. If <u>no lethal m</u>	ethod have l	<u>been used</u> , mark	
	Aı	oplicant		Private	e wildlife control	l operator
		SDA-APHIS Wildlife Se	rvices Trapper		(describe)	· ·
		one Used			pplicable / No Co	
13.	Were <u>le</u>	ethal control methods	used <i>before</i> or <i>afte</i>	er the conflic	t(s) occurred? P	lease mark all that
	apply.					
	•	If no lethal methods I	nave been used, m	ark "None Us	sed"	
	•	If no conflicts have be	<u>een experienced</u> , m	nark "Not Ap <sub>l</sub>	plicable / No Co	nflicts".
	Ве	efore After	None Used	d	_ Not Applicable	e / No Conflicts
14.		ESTIMATE the total nu			•	
		nts project location to	protect your lives	tock, crops o	r property <u>durin</u>	ig the last three
	<u>years</u> .					
	•	If no wild animals have	<u>-</u>		•	·~ // \
		"None", "Did not kee	precords, or No	nistory (new	farm or location	n )
	2023	Coyotes	Beavers Ra	accoons	Bobcats	Cougars
		Other (species and #	killed):			
		None Di				
	2022	Coyotes	Beavers Ra	accoons	_ Bobcats	_ Cougars
		Other (species and #	killed):			
		None Di	d not keep records	No	History (new far	m or location)
	2024	<b>C</b> = -1	<b>D</b>		D. L	
	2021	Coyotes				
		Other (species and #				
		None Di	d not keep records	No	History (new far	m or location)

# **Non-Lethal Deterrents History**

- **15.** Are you currently using, or have you ever used any of the following non-lethal methods to protect your livestock, crops or property <u>at any location</u>?
  - For each deterrent used, mark a "C" if the deterrent is being currently used; or mark a "P" if you have used the method in the past. Please mark all that apply.
  - If you have no experience with non-lethal methods, mark "No Experience"
  - If <u>no conflicts have been experienced</u>, mark "Not Applicable / No Conflicts".

	Guardian Animals	Fencing
	Guardian dogs	Permanent electric fencing to exclude wildlife
	Guardian llamas	Portable electric fencing to exclude wildlife
	Guardian donkeys	
	Guardian Geese	
	Scare Devices	
	Horns	Noisemakers
	Lights	Lasers
	Radios	Bells
	Fladry (hanging strips of fabric)	Scarecrows
	Sprinklers	<del></del>
	3prinklers	(Question 15 continued on next page)
	Protective Housing	Beaver Deterrents
	Barn	Flow Devices (beaver pond levelers)
	Birthing shed	Culvert fencing ("Beaver Deceivers")
	Shepherds/herders	Abrasive tree paint
	Other (describe)	
	No Experience	Not Applicable / No Conflicts
16	Who implemented the non-lethal meth	nods marked above? Please mark all that apply.
10.	<ul> <li>If no non-lethal methods have</li> </ul>	
	- II <u>no connects have been expen</u>	enced, mark "Not Applicable / No Conflicts".
	Applicant	Private wildlife control operator
	USDA-APHIS Wildlife Services Trap	oper Other (describe)
	None Used	Not Applicable / No Conflicts
17.		ore or after the conflict(s) occurred? Please mark all that
	apply.	
	·	non-lethal methods, mark "None Used"
	·	enced, mark "Not Applicable / No Conflicts".
	Before After N	one Used No Applicable / No Conflicts
	P	age <b>11</b> of <b>29</b>

# **Proposed Non-Lethal Methods**

- **18.** Please indicate here the resources you used to select non-lethal methods and tools and develop your non-lethal deterrents project plan in Section II below.
  - Indicate rank from most to least helpful with number: 1, 2, 3, etc. with <u>1 being the most</u> helpful.
  - If you did not need or seek information or assistance, please mark the appropriate line.

	Website links provided on the Benton County AWPP Webpage
	Benton County Farming with Wildlife Workshop videos
	OSU Extension Service Small Farms Conference Table
	'The Encyclopedia of Animal Predators' by Janet Dohner
	Chintimini Wildlife Center
	Oregon State University Extension Service
	Benton County AWPP representatives
	Other farmers using non-lethal deterrence methods
	USDA-APHIS Wildlife Services
	Private wildlife control operator
	Other (describe):
	I have knowledge of non-lethal methods and did not need information or assistance.
	<ul><li>I have knowledge of non-lethal methods and did not need information or assistance.</li><li>I did not seek information or assistance</li></ul>
19.	
19.	I did not seek information or assistance
19.	I did not seek information or assistance  Realistic expectations are important when gauging the success of non-lethal deterrents. What
19.	I did not seek information or assistance  Realistic expectations are important when gauging the success of non-lethal deterrents. What
19.	I did not seek information or assistance  Realistic expectations are important when gauging the success of non-lethal deterrents. What
19.	I did not seek information or assistance  Realistic expectations are important when gauging the success of non-lethal deterrents. What
19.	I did not seek information or assistance  Realistic expectations are important when gauging the success of non-lethal deterrents. What

25. Have you received Benton County Agriculture and Wildlife Protection Program grant funds anytime in the past?
\_\_\_\_ No
\_\_\_ Yes, in \_\_\_\_ (year)

#### **B. PROPOSED NON-LETHAL DETERRENTS PROJECT PLAN**

Please give a detailed description of your non-lethal deterrents project plan, including any plans to use non-lethal methods to deter beaver. Table 1 below may be used to assist in selection non-lethal methods and tools for your project plan. This table was originally produced by agricultural professionals with the <a href="University of California-Davis Livestock-Predator Hub">University of California-Davis Livestock-Predator Hub</a> and combines observations and data 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. Table 2 below may be used to assist in selecting non-lethal methods to deter beaver.

Table 1. Non-lethal wildlife deterrents and their effectiveness

Benton County Agriculture and Wildlife Protection Program

Non-Lethal Predator Deterrent Resource Card

		Pred	lator Sp	ecies				
		Dog	Coyote	Bobcat	Cougar	Blk Bear	Fox	Wolf
	Livestock guardian dog							
	Donkey		•				•	
ıts	Llama							
rer	Wire fencing w/ trip wire	0						
eterrents	Permanent electric fencing	0		0		•	0	
Det	Temporary electric fencing	0		0	•			
] le	Electro-net fencing	0		0				
辛	Fladry or turbo fladry		•					Δ
Nonleth	Attractant (carcass) removal							
9	Human presence							
_	Night pen							Δ
	Fright tactics/devices		•	•	•	•	•	
	Lambing/calving shed	0					0	
	Multi-species grazing			•	•	•	•	
	Highly Effective Mod. Effective Mixed Results							

Original Table and Information available via UC Davis Rangelands Program:

https://rangelands.ucdavis.edu/predator-hub/current-research/

Table 2. Non-lethal beaver deterrent methods

Non	Non-Lethal Beaver Deterrence Methods and Tools						
METHOD	DESCRIPTION						
Devices to protect culverts and 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						
	Devices to 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						

Please describe your plan, and be sure to include:

- Which livestock and crop species are you protecting, and how many acres or individuals are you planning on protecting?
- What species of predators do you intend to deter with each proposed method?
- Any potentially-complicating factors that might affect success of implemented non-lethal deterrents, and how you will respond to them.
- Some examples of complicating factors might include: size of your operation, setting, environment, terrain, integration with other guardian animals, or other plausible situations that may arise.

#### C. PROPOSED NON-LETHAL DETERRENTS PROJECT BUDGET

## **Background for Applicants**

Please fill in the tables below in regards to methods, tools and costs for items requested for reimbursement through AWPP. 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) cost share contribution of at least 10% of the total cost of the project. This may include cash used for the purchase of approved deterrents, and/or an 'in kind' contribution of labor or labor costs for the installation of deterrents.

In-kind cost share contributions can include, but are not limited to: construction of protective housing, or installation or other devices or deterrents purchased with grant program funds. Please estimate your cash and/or in-kind cost share contribution for each type of deterrent and open it in the appropriate tables below.

#### **GUARDIAN ANIMALS**

## **Background for Applicants**

Guardian animals are specific breeds and species used to protect livestock and crops. These can include Livestock Guardian Dogs (LGD's), llamas, donkeys, geese, etc. Selecting, training, and utilizing a guardian animal, especially a Livestock Guardian Dog (LGD) that is appropriate to your circumstances is an important consideration that ensures that particular animal will work effectively for you.

## The following webinars, by Jan Dohner, LGD expert, might be helpful to you:

"A Deeper Dive into Livestock Guardian Dogs" provides an overview of recognized LGD breeds, as well as training and handling tips. <a href="https://www.anymeeting.com/afjsvfisbb/E958DF88824D39">https://www.anymeeting.com/afjsvfisbb/E958DF88824D39</a>

"Troubleshooting Livestock Guardian Dog Behaviors" provides information on guarding poultry, multiple LGDs, and using invisible fence to help prevent roaming. <a href="https://www.anymeeting.com/976-407-717/E958DE85894631">https://www.anymeeting.com/976-407-717/E958DE85894631</a>

Please note: labor costs for training, feeding, or veterinary are not reimbursable. One time costs such as a doghouse, or labor costs for constructing a shelter may be applied towards the minimum cost share contribution.

## Here is an example of a cost breakdown:

If a trained Great Pyrenees guardian dog has an initial purchase of \$2,250 and initial supplies materials and labor for a shelter total \$750, and a cost share contribution of \$150 is made for initial pet supplies like a collar, dishes, etc., the \$150 could be used towards the 10% match requirement.

### A. LIVESTOCK GUARDIAN ANIMALS

If requesting a guardian animal, please calculate the total cost for your guardian animal purchase below: If you are **not** requesting a guardian animal, please leave blank.

Calculate the cost of your livestock guardian animals here:

GUARDIAN ANIMAL/MATERIALS/LABOR	BREED (IF APPLICABLE)	# OF ANIMALS	COST
Example: Trained dog purchase	Great Pyrenees	1	\$2,250
Example: Plywood and dog supplies			\$600
Example: 10 hours labor*			\$150
		TOTAL COST	

<sup>\*</sup>Provide a professional estimate or calculate labor costs at \$15/hour

Now calculate your cost share contribution for your guardian animal project:

ANIMAL/	BREED (IF	# OF	COST	I will contribute:			
MATERIALS/ LABOR	APPLIC.)	ANIMALS		Labor HOURS	Labor COST	Money towards animal/materials:	TOTAL Contribution
Example: Trained dog purchase	Great Pyrenees	1	\$2,250				
Example: Plywood and dog supplies			\$600				
Example: 10 hours labor*			\$150				
						TOTAL CONTRIB.	

<sup>\*</sup>Provide a professional estimate or calculate labor costs at \$15/hour

#### 2. FENCING

## **Background for Applicants**

This section is for new fencing or improvements to existing fencing which serve to reduce conflicts with wildlife (for example, electrification or fladry) or to contain guardian animals.

## What is <u>not</u> eligible for funding:

- Fencing to exclude deer and elk.
- **Fencing for the sole purpose of containing livestock** (e.g. electric single wire, high-tensile fence with horizontal wires more than 6" apart, or any fence less than 60" high.
- Labor costs for installing or moving fencing however these expenses may be applied toward the minimum 10% cost share contribution.

Please note that the most effective predator deterrent fencing is at least 60" (5 feet) high with at least one strand of electrified wire hanging 6" from the top of the fence.

**A. NEW FENCING** – Portable electric, woven wire, other.

If including fencing in your project, please provide a drawing of your plans for new fencing at your project site. <u>Indicate height and materials.</u> A page for this is provided on Page 22.

## Here is an example of a cost breakdown:

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 \times 10 \text{ hours} = $150 \text{ for a total project cost of } $4,000$ .

The cost share contribution could be 10 hours of labor (\$150) and \$250 cash towards the cost of fencing (\$1,000), or 10% the total cost of the project.

Calculate the total cost for your new fencing project here:

MATERIALS/SUPPLIES/LABOR	LINEAR FEET OR UNITS	HEIGHT (IN.)	COST
Example: Electro-net fencing	5,280 feet	60	\$3,850
Example: Labor	10 hours		\$150
		TOTAL COST	

<sup>\*</sup>Provide a professional estimate or calculate labor costs at \$15/hour

Please enter the 'TOTAL COST' and 'TOTAL CONTRIB.' amounts into the summary budget worksheet.

Now calculate your cost share contribution for your new fencing project.

MATERIALS/	LINEAR	COST		I will contribute:				
SUPPLIES/ LABOR	FEET OR UNITS		Labor HOURS	Labor COST	Money towards materials & supplies	TOTAL Contribution		
Example: Electro-Net Fencing	5,280 feet	\$3,850			\$250	\$250		
Example: Labor	10 hours	\$150	10	\$150		\$150		
					TOTAL CONTRIB.			

<sup>\*</sup>Provide a professional estimate or calculate labor costs at \$15/hour

### **B. IMPROVEMENTS TO EXISTING FENCING** – Electrification, fladry, other.

## Here is an example of a cost breakdown:

For example, 5000 feet of insulated wire can have an initial purchase cost of \$1,000. The cost for labor to install the electrified wire could be  $$15/hour \times 7$ hours = $105 for a total project cost of $1,105$ . The cost share contribution could be 7 hours of labor (\$105), or 10% of the total cost of the project.

Calculate the total cost for your improvement to existing fencing project:

MATERIALS/SUPPLIES/LABOR	LINEAR FEET OR UNITS	HEIGHT (IN.)	COST
Example: Insulated wire	5,000 feet		\$1,000
Example: Labor	7 hours		\$105
		_	
		TOTAL COST	

<sup>\*</sup>Provide a professional estimate or calculate labor costs at \$15/hour

Please enter the 'TOTAL COST' and 'TOTAL CONTRIB.' amounts into the summary budget worksheet.

Now calculate your cost share contribution for your improvements to existing fencing.

MATERIALS/	LINEAR	COST	I will contribute:				
SUPPLIES/ LABOR	FEET OR UNITS		Labor HOURS	Labor COST	Money towards materials & supplies	TOTAL Contribution	
Example: Insulated wire	5,000 feet	\$1,000					
Example: Labor	7 hours	\$105	7	\$105		\$105	
					TOTAL CONTRIB.		

<sup>\*</sup>Provide a professional estimate or calculate labor costs at \$15/hour

**Project Drawings** – If including fencing in your project proposal please include drawings of the proposed fenced area, as well as height and type of fencing. You may also include a separate page with drawn plans.

Please note that the most effective predator deterrent fencing is at least 60" (5 feet) high with at least one strand of electrified wire hanging 6" from the top of the fence.

Prop											-					
Prop	ose	d Fe	nce l	Heig	ht: _			 	 		-					
Elec	trifie	d?		Yes		No	ı									

#### 3. SCARE DEVICES

Horns, lights, radios, bells, noisemakers, lasers, and scarecrows are all examples of scare devices. Labor costs for installing scare devices are not reimbursable but may be applied toward the minimum 10% cost share contribution.

#### Here is an example of a cost breakdown:

For example, a Foxlight night predator deterrent has an initial purchase cost of \$90. The cost for labor to install three Foxlights could be  $$15/hour \times 2 \text{ hrs} = $30$ . The total project cost to purchase three Foxlights (\$270) and install them (\$30) is \$300.

The cost share contribution could be 2 hours of labor = \$30, or 10% of the total cost of the project.

Calculate the total cost for your scare devices project:

TYPE OR NAME OF DEVICE/LABOR	# OF UNITS	COST
Example: Foxlight Night Deterrent	3	\$270
Example: Labor	2 hours	\$30
	TOTAL COST	

<sup>\*</sup>Provide a professional estimate or calculate labor costs at \$15/hour

Please enter the 'TOTAL COST' and 'TOTAL CONTRIB.' amounts into the summary budget worksheet.

Now calculate your cost share contribution for your scare devices project:

TYPE OR NAME OF	# OF	COST	I will contribute:					
DEVICE/LABOR	UNITS		Labor HOURS	Labor COST	Money towards device	TOTAL Contribution		
Example: Foxlight Night Deterrent	3	\$270						
Example: Labor	2 hours	\$30	2	\$30		\$30		
					TOTAL CONTRIB.			

<sup>\*</sup>Provide a professional estimate or calculate labor costs at \$15/hour

#### 4. PROTECTIVE HOUSING

On a separate page, please provide a drawing of your plans for protective housing at your project site. Indicate measurements and materials.

Materials for constructing or improving barns sheds for lambing/calving/kidding, night pens (protected and secured areas for animals to sleep), and other protective housing. Labor costs for constructing protective housing are not reimbursable but may be applied toward the minimum 10% cost share contribution.

### Here is an example of a cost breakdown:

For example, a kit for a lambing shed can have a purchase cost of \$3,700 and labor cost to construct the shed of  $$15/hour \times 20 \text{ hours} = $300 \text{ for a total project cost of } $4,000$ . The cost share contribution could be 20 hours of labor (\$300) and \$100 cash towards the kit = \$400, or <math>10% of the total cost of the project.

Calculate the total cost for your protective housing project:

MATERIALS/SUPPLIES/LABOR	# OF UNITS	COST
Example: Lambing shed kit	1	\$3,700
Example: Labor	20 hours	\$300
	TOTAL COST	

<sup>\*</sup>Provide a professional estimate or calculate labor costs at \$15/hour

Please enter the 'TOTAL COST' and 'TOTAL CONTRIB.' amounts into the summary budget worksheet.

*Now calculate your cost share contribution for your protective housing project:* 

MATERIALS/	# OF	COST		I will contribute:				
SUPPLIES/ LABOR	UNITS		Labor HOURS	Labor COST	Money towards materials or supplies	TOTAL Contribution		
Example: Lambing shed kit	1	\$3,700			\$100	\$100		
Example: Labor	20 hours	\$300	20	\$300		\$300		
					TOTAL CONTRIB.			

<sup>\*</sup>Provide a professional estimate or calculate labor costs at \$15/hour

### 5. OTHER NON-LETHAL DETERRENTS

Please 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 10% cost share contribution.

Calculate the total cost for your other non-lethal deterrents project:

MATERIALS/SUPPLY/LABOR	# OF UNITS	COST
Example: 4'x8' plywood sheets	100	\$3,000
Example: Labor	10 hours	\$150
	TOTAL COST	

<sup>\*</sup>Provide a professional estimate or calculate labor costs at \$15/hour

Please enter the 'TOTAL COST' and 'TOTAL CONTRIB.' amounts into the summary budget worksheet.

Now calculate your cost share contribution for your other non-lethal deterrents project:

MATERIALS/	# OF	COST		I will contribute:				
SUPPLIES/ LABOR	UNITS		Labor HOURS	Labor COST	Money towards materials or supplies	TOTAL Contribution		
Example: 4' x 8' plywood sheets	100	\$3,000						
Example: Labor	10 hours	\$150	10	\$150		\$150		
					TOTAL CONTRIB.			

<sup>\*</sup>Provide a professional estimate or calculate labor costs at \$15/hour

#### 6. BEAVER DETERRENTS

Non-lethal beaver deterrents are typically 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, abrasive tree paint, or electric fencing can be used and are reimbursable. Labor costs for installing flow devices are not reimbursable but may be applied toward the minimum 10% cost share contribution.

## Here is an example of a cost breakdown:

For example, the cost of culvert fence and pipe for a pond leveler could be \$1,350. The cost of labor to construct the leveler could be  $$15/hour \times 10 \text{ hours} = $150 \text{ making the total project cost}$  \$1500. The cost share contribution could be 10hrs of labor (\$150) or 10% of the total project cost.

Calculate the total cost for your non-lethal beaver deterrent project:

MATERIALS/SUPPLIES/LABOR	# OF UNITS	COST	
Example: Culvert fence	60 feet	\$675	
Example: Pipe	60 feet	\$675	
Example: Labor	10 hours	\$150	
	TOTAL		

<sup>\*</sup>Provide a professional estimate or calculate labor costs at \$15/hour

Please enter the 'TOTAL COST' and 'TOTAL CONTRIB.' amounts into the summary budget worksheet.

Now calculate your cost share contribution for your non-lethal beaver deterrent project:

MATERIALS/	# OF	COST	l will contribute:			
SUPPLIES/ LABOR	UNITS		Labor HOURS	Labor COST	Money towards animal/materials:	TOTAL Contribution
Example: Culvert fence	60 feet	\$675				
Example: Pipe		\$675				
Example: Labor	10 hours	\$150	10	\$150		\$150
					TOTAL CONTRIB.	

<sup>\*</sup>Provide a professional estimate or calculate labor costs at \$15/hour

### C. BUDGET SUMMARY

In the table below, please refer to the tables in Section C (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.

Your total cost share contribution must be at least 10% of the total cost of the project.

All expenditures must have a corresponding receipt, and receipts must match the method/tool/device stated in the budget summary. No substitutions.

PROJECT ITEM	(A) TOTAL COST	(B) TOTAL COST SHARE	REQUESTED AMOUNT	
		CONTRIBUTION	(A) + (B)	
Livestock Guardian Animal				
New Fencing				
Fencing Improvements				
Scare Devices				
Protective Housing				
Other Non-Lethal Deterrents				
Beaver Deterrents				
TOTALS				

Total Project Costs (Column A):	\$
Total Contribution (Column B):	\$
% Contribution (Column B ÷ Column A):	\$
Total Funding Request: (Column C)	¢

#### D. AGREEMENT CHECKLIST

Please indicate your agreement to the following terms by initialing. Applicants must agree to all Program Requirements to be eligible to receive grant funds. The additional photo release question is not a requirement, but will help provide important examples for public outreach events, and will help future applicants understand the types of projects that can be funded through AWPP.

#### E. RELEASE AND SIGNATURE

I understand that any information provided to the Agriculture and Wildlife Protection Program in this application or other correspondence is available to the public upon request.

Benton County and the Agriculture and Wildlife Protection Program are not responsible for any injuries, taxes, etc. resulting from this grant. The Applicant assumes all liabilities for actions implemented by this grant.

By submitting this application, the person named below certifies that to the best of their knowledge the information in this application is true and correct and that they are legally certified to submit this application on behalf of this farm, which is legally eligible to enter into a grant agreement.

Note: any use of <u>lethal</u> control must fall within the rules and regulations set forth by the Oregon Department of Fish and Wildlife. Reports or concerns regarding threats to human health and safety involving wildlife should be directed to the Oregon Department of Fish and Wildlife.

Applicant Signature Date \_\_\_\_\_

Print Name		
For County Use:		
Administrator Signature	Date Received	
Applicant ID Number	All Project Requirements were agreed to	
Applicant Agreed to Photo Use		