Grant Application

Sally Compton

Email : info@thinkwildco.org
Application ID : A42CS81
Custom Ref. -

Application Start Date: 2022-08-04 00:32:24
Application Completed Date: 2023-02-06 21:06:17

1	Have you previously applied for a grant from the Oregon Wildlife Foundation?	
		no
2	Has a previously submitted grant application been denied funding support?	
		no
3	Title of your proposed project	
		Beaver Behavior & Habitat Monitoring and Analysis
4	Name of your organization	
		Think Wild
5	If your organization is not a 501c3 nonprofit, please identify your fiscal sponsor - If this does not apply to you, write N/A	
		n/a
6	Your name or the name of the Project Manager	
		Reese Mercer

7	organization mailing address - Please enter full address with city, state & zip
	62410 Erickson Rd. Bend, OR 97701
8	your phone number or that of the Project Manager
	541-362-1024
9	your email address or that of the Project Manager
	beavers@thinkwildco.org
10	a brief biographical statement about yourself or that of the Project Manager
	I have 8 years of experience in wildlife and beaver biology and habitat studies and have served as a board member of the National Beaver Institute for over two years. I am the co-founder and co-organizer of www.beavercon.org event, hold a B.S. in Business Administration and have over 20 years of nonprofit leadership, marketing, and program management experience.
11	social media handles that your organization uses - Enter social handles or URLs such as instagram, facebook, twitter, youtube, etc. so that we can use to cross promote on our channels - if you do not have any, please place N/A
	Instagram: @thinkwildco , @beaverworksoregon , Facebook: Think Wild Central Oregon , Beaver Works Oregon , YouTube: @thinkwild3523 , @beaverworksoregon
12	are you are currently following Oregon Wildlife Foundation on its social media channels?
	- Instagram - Facebook - YouTube

13	what is the total estimated cost of your project?
	8862
14	Funding that you are requesting from OWF - If you're request is for more than $5,000, please contact Tim Greseth - tim@myowf.org before submitting your application.
	5000
15	what type of project are your proposing?
	wildlife habitat restoration or improvement
16	will your project address an Oregon Conservation Strategy habitat or species?
	yes
16.1	What habitat or species is addressed?
	Wetlands, specifically those within Central and Eastern Oregon sagebrush steppe that can support beaver success. Beaver activity creates productive riparian habitats, and 41% of the Oregon Conservation Strategy's strategy species benefit from beaver modified habitat.
17	what is the location of your proposed project?
	The project will be developed primarily in Bend Oregon, using data gathered around the Deschutes River Basin.
18	what ecoregion and Conservation Opportunity Area (COA) is your proposed project located in? - See https://www.compass.dfw.state.or.us/ for the information you need to answer this question
	Blue Mountains ecoregion, with some work and outreach to East Cascades and Northern Basin & Range. One of our planned habitat restoration sites along Cottonwood Creek is within the Warner Mountain Conservation Opportunity Area, and many of our other sites are along waterways connected to other COAs within the John Day River, Crooked River, and Deschutes River Basins.
19	what is the anticipated start date of your project? - Day/Month/Year
	01-03-2023

20	what is the anticipated end date of your project?
	30-04-2023
21	has a local, state or federal biologist reviewed this project?
	no
21.1	What is your plan for an external review of the project?
	We will utilize our connections with ODFW as well as our hired contractor, to get an external review and feedback on this project.
22	have you already or will you obtain necessary permits from all requisite agencies as applicable to proposed project?
	yes
23	what will the funds you are requesting be used for? - this would be a good time to review, if you haven't already done so, our grantmaking guidelines at www.myowf.org/grants
	OWF funds will be used for the materials, travel costs, hired contractor, and software needed to design and establish a framework and platform for trail camera monitoring of beavers. We will utilize the experience of our staff and volunteers as well as the expertise of an outside contractor to create our methodology. We will also purchase a laptop computer and necessary software to use for data collection and analysis. Finally, travel costs will be incurred through visits to monitoring sites throughout the project.
24	provide us a brief summary of your proposed project
	This project seeks to create and establish a scientific methodology and database for beaver monitoring efforts in Oregon’s high desert. Think Wild’s Beaver Works program has over two years’ worth of trail camera and field observation data from four different monitoring sites, amounting to over 3000 hours of trail camera footage and more than 200 pages of field notes. With this project, we aim to organize and categorize our existing data, and create reproducible methods for future data collection. Once developed, we plan to use our new framework to continue our monitoring efforts, as well as share our data collection methods and data platform with other organizations such as watershed councils, soil and water conservation districts, restoration organizations, and other researchers looking to answer questions about beaver populations and habitats. Ultimately, the purpose of this monitoring study is to better understand beaver behavior and the limiting factors to successful beaver habitat and establishment. This information is then used to inform riparian habitat restoration and conservation efforts for beavers in Central and Eastern Oregon.

25 upload pre-project pictures or a video

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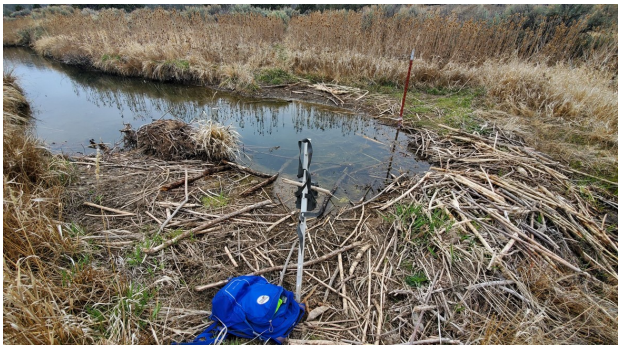
By submitting these photos or video I warrant that I am the legal owner of this media and grant the Foundation permission to reproduce, exhibit, or publish them for all general purposes in relation to Oregon Wildlife Foundation's work. If you have questions about photo or video submissions please refer to myowf.org/grants for guidance.



https://www.youtube.com/watch?v=2YGy_lFUKp8&t=5s

https://www.youtube.com/watch?v=0DFrwWOzyvk

26 fill out our budget form

Project Revenue	Cash	In-Kind	Committed / Pending
Oregon Wildlife Foundation Request	5000		Pending
Volunteer Time		2800	Committed
Think Wild Committed Funds	1062		Committed
REVENUE	6062.00	2800.00	
		TOTAL PROJECT SUPPORT	8862.00

Project Expenses	Cash	In-Kind	Total
Project Lead Contractor	4800		4800.00
Software, database membership	500		500.00
Laptop for data processing	500		500.00
Travel Costs	262		262.00
Volunteer Time		2800	2800.00
			0.00
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			0.00
		TOTAL PROJECT EXPENSES	8862.00
Balanced budget? This cell should read "0" ---->		NET	0.00

27 upload a narrative of your proposed project

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Please make sure your narrative is no more than 7 pages long, single spaced, 12 pt. font (Calibri preferred).

1 Document Uploaded

28 upload letters of support

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letters of support are strongly encouraged. in particular a letter from a supervising biologist

1 Document Uploaded

29	I understand that I am required to submit a Project Completion Report, copies of any publications or social media posts crediting the Foundation's support, and post-project pictures at the completion of my project
	yes

Beaver Behavior & Habitat Monitoring and Analysis - OWF Project Narrative

Think Wild is a wildlife center in Bend, Oregon with the mission to inspire the High Desert community to care for and protect native wildlife through rehabilitation, education, and restoration. Think Wild began its Beaver Works program in 2019 to promote the success of beavers and native wildlife in Oregon's high desert. The program is centered around our understanding of beavers as a keystone species, with beaver occupancy on the landscape supporting a wide range of other native species who depend on their habitat building behaviors. In fact, 41% of all identified strategy species from the Oregon Conservation Plan depend on successful riparian habitats like those created by beaver activity in streams.

Unfortunately, Oregon's beaver populations have drastically declined in the past 200 years since European settlers and the fur trapping industry decimated their numbers. Best estimates put current beaver populations at only 5-10% of their pre-fur trade numbers. As our Beaver Works program has developed strategies and performed projects related to supporting beaver population recovery, we have come to realize the limitations of our understanding of current beaver numbers, behaviors, and conditions of their occupancy on the landscape.

There is very limited information out there about beavers in arid regions like Central Oregon's high desert. These landscapes are prone to extreme conditions such as drought, wildfire, and flash flooding events, and stream reaches in the region have been historically degraded by overgrazing and improper management. We believe that providing the proper conditions for beaver success in this arid, high desert region will support natural beaver population recovery, and over time help combat the environmental issues we see in the area. However, in our review of existing research, reports, and literature, we found very little to inform our work, especially when attempting to better understand the "desert beavers" whose natural population recovery we seek to support. Additionally, most beaver monitoring efforts are limited to presence surveys or population inventory, but do not offer additional information about beavers or their behavior.

Because of the lack of information and understanding around beaver activity on arid landscapes, Beaver Works implemented a system of beaver monitoring efforts. Since 2020, we have been collecting footage from trail cameras at beaver sites throughout Central and Eastern Oregon. We utilize a team of citizen science volunteers and a fleet of trail cameras purchased with a previous grant to learn more about beaver activity and their habitats. To date, we have collected approximately 3000 hours of video footage, as well as 200 pages of field notes and camera observations from four different monitoring locations. Our volunteers check these locations weekly, download footage, replace batteries, and record observations of the site and resulting videos.

We now find ourselves with an abundance of raw information - data we know are valuable to our understanding of beaver activities and habitats, but are not currently organized or assembled in usable ways. We seek to create a database of usable, shareable data in order to better understand our local beaver populations. This will allow us to better analyze our data and

share data and findings with other restoration agencies, especially those who are collecting similar data in areas. We hope to establish an effective, standardized system of data collection and organization that we can continue to use and share for years to come. With increased understanding of beaver behavior, we can better work towards restoring beaver habitat and supporting natural beaver population recovery.

Creating an organized database of trail camera footage and field observations will be Phase 1 of a larger project. We seek funding from OWF to help us complete Phase 1 this spring - building the data collection methods and platform, and training staff and volunteers in implementing these methods and using the new platform. Phase 2 of the project, which is already funded by a previous grant, will take place over the summer, with our staff and volunteers reviewing previously collected data and adding it to our new platform. Phase 3 will take place this fall, with us creating and publishing a guidebook for our data collection methods and use of the platform and sharing these with other organizations to use. Over time, we hope to see our platform used to develop a more robust, usable collection of data on beavers, which can then better inform efforts aimed at their recovery and long-term success.

OWF funding would allow us to complete Phase 1 of this project. In Phase 1, we will establish a common database for storing photo, video, and observational data. We will also create a standardized methodology for field visits and how to log observations and other data. We will develop a Do No Harm citizen science protocol and train all staff and volunteers to ensure that our efforts are not interfering with beavers or their habitats. Next, we will establish a common team workstation where staff and volunteers can upload and process video and other data on the same device into our new database. Every member of the team will be trained in use of the workstation, data platform, and data organization conventions to standardize our data collection framework.

This project team will consist of two Think Wild staff members, a contracted conservation researcher, and our citizen science volunteers. Sadie Pollock, M.S. is the Education and Volunteer Manager for Think Wild and holds a Master's degree in raptor biology. Sadie will provide senior project direction, support, and management, utilizing her experience studying American Kestrel migration patterns to help us establish sound, reproducible data collection methods. Reese Mercer is the Beaver Works Program Manager, who will work as a primary data collector and provide insight and expertise on our beaver monitoring efforts thus far. Reese has created our existing data collection process, which we will use as the foundation for developing our new framework. We will also contract the services of a conservation biologist with experience in data collection and analysis. This contractor will develop and document the project design and methodology, and build the database and workflow. They will then test these methods in the field with staff and volunteers and make any necessary adjustments before finalizing our official framework for data collection and analysis.

Creating and standardizing our methods for beaver monitoring in Oregon's high desert will help inform and evaluate our beaver habitat projects. Once established, we can use this methodology to begin to answer bigger questions about beaver behavior, especially as it relates

to environmental issues in the region. Ultimately, the purpose of this monitoring study is to better understand beaver behavior and the limiting factors to successful beaver habitat and establishment. This information is then used to inform riparian habitat restoration and conservation efforts for beavers in Central and Eastern Oregon.

February 6, 2023

Oregon Wildlife Foundation
2337 NW York St. #201C
Portland, OR 97210

To whom it concerns:

I am writing to express support for the Think Wild's Beaver Works program application to conduct beaver monitoring activities in central Oregon.

As a wildlife biologist specializing in American beaver research, I have provided technical assistance to the Beaver Works program since 2021. I strongly support their holistic approach for promoting beaver populations across the Oregon high desert landscape. Their proposed monitoring activities will address one of the key recommendations developed by the Oregon Fish and Wildlife Commission Beaver Management Work Group specific to, "Understanding and Implementing Best Management Practices Through Monitoring and Researching Limiting Factors". The Beaver Works' commitment to collecting empirical data to better understand the limitations associated with persistent beaver occupancy will lead to more strategic approaches for addressing beaver habitat needs while maximizing the ecological benefits beavers provide through their damming activities in unoccupied stream reaches.

I fully support the Beaver Works program and ask that you consider funding their proposed activities as they will provide useful information to many organizations interested in supporting beaver populations in eastern Oregon. Please contact me if you have any questions.

Thank you for your time and consideration,

Vanessa Petro
ORCID: 0000-0002-2379-3774


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07/04/2022 21:06:43