

Grant Application



Jade Keehn

Email : jade.e.keehn@odfw.oregon.gov

Application ID : A69KJ135

Custom Ref. -

Application Start Date: 2023-08-24 19:28:42

Application Completed Date: 2024-01-03 00:59:37

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

Provolt Pond Turtle Project

4 Name of your organization

Oregon Department of Fish and Wildlife

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

Jade Keehn

Jade Keehn

Oregon Department of Fish and Wildlife

1495 E. Gregory Rd.

Central Point, OR 97503

Jade.e.keehn@odfw.oregon.gov

541-670-3277

OWF Application: Provolt Pond Turtle Project

Project Summary

The northwestern pond turtle (NWPT) is a semi-aquatic reptile occurring in pond and stream habitats of southwestern Oregon. Given concerns over declining population trends in portions of its Oregon range, management actions are needed to address threats to persistence and to support habitats that sustain NWPT populations. This project proposes research and monitoring efforts that will quantify habitat use of NWPT at a recreational facility (Provolt Seed Orchard Special Recreation Management Area) in Josephine County, Oregon. In partnership with the Bureau of Land Management (BLM), Oregon Department of Fish and Wildlife (ODFW) will deploy VHF transmitters on up to 12 adult turtles, and will monitor turtle movements and document observation locations for up to 15 months from spring of 2024 through summer of 2025. Resulting observational data will be used to identify critical NWPT habitat such as nesting or overwintering areas, to monitor turtle use of planning areas, to better understand the status of this important population of NWPT, and to update site management plans to ensure long-term compatibility of conservation and public use goals at this recreational site.

Background

The northwestern pond turtle (NWPT) is southwestern Oregon's only native species of semi-aquatic turtle. As a charismatic reptile with highly visible group basking behaviors, populations of NWPT provide quality opportunities for outdoor education/outreach and wildlife watching activities for Oregon residents.

Since the early 1990's, wildlife managers have been working to identify and remedy concerns over declining abundance and distribution of NWPT in portions of its range. This month, the U.S. Fish and Wildlife Service determined that a threatened listing status under the Endangered Species Act may be warranted ([12-month finding](#) published 3rd October, 2023). In Oregon, Northwestern pond turtles are a [priority species](#) in the Klamath Mountains and an Oregon Conservation Strategy Species considered Sensitive-Critical in all ecoregions where it occurs (OCS 2016). The species faces many threats to persistence, and recent survey efforts suggest that 26 to 58 percent of former pond turtle habitat in Oregon is unlikely to be occupied by turtles at present (Samara Group LLC, 2021).

Management actions that address conservation goals for NWPT can suffer from a lack of data needed to determine when, where, and how to restore or enhance habitat. Overland movement corridors, upland nesting areas, overwintering areas, and/or juvenile rearing habitats are important for persistence; however, these locations are frequently undocumented

for NWPT populations. Lack of observations or habitat use information in these locations can limit the effectiveness of conservation measures designed to sustain local populations. Here, we propose a study to better document habitat use of NWPT for a regionally significant pond turtle population occurring on the Provolt Seed Orchard Special Recreation Management Area (SMRA) in Josephine County, Oregon (Figure 1). Formerly a conifer seed orchard, the area is currently managed by the Medford Bureau of Land Management (BLM) as a SRMA to provide recreational and outdoor educational opportunities to the general public.

New management direction at Provolt Seed Orchard SRMA will provide for enhanced wildlife watching and outdoor educational and recreational opportunities. This management change will result in greater public access to the facility, with the potential for new or heightened threats to one the largest known population of pond turtles on BLM lands within the Grants Pass Resource Area. Disturbance from humans and pets, habitat alteration, loss of habitat connectivity, introduction of non-native species, and mortality from predators could affect the local population of NWPT, and management actions are needed to limit impacts while ensuring long-term persistence of the resident NWPT.

To support this aim, the BLM developed a Site Management Plan which identifies four planning areas of approximately 12 acres within Provolt Seed Orchard where confirmed or potential habitat for NWPT may benefit from management actions to minimize threats and promote persistence (Fukuda 2020). A better understanding of habitat use within these planning areas is essential for effectively addressing threats, uplifting habitat, and providing habitat connectivity needed to support and sustain pond turtles. Our proposed study will address this need by completing the following objectives:

- Track turtle use of, and movement through planning areas to include locations where restoration is planned or has been completed;
- identify areas where turtle use is most likely to conflict with recreational users;
- document seasonal variation in habitat needs and areas of use;
- fill in key data gaps on areas of use (e.g. nesting, estivating, or overwintering areas) within/beyond identified planning areas; and
- collect data on population size, sex ratio, and population health.

By addressing these objectives, this project will support informed conservation actions that will enable managers to better protect habitats critical to the life history of pond turtles at Provolt Seed Orchard SRMA. Outcomes of this study will serve as a baseline for comparison as future management actions proceed, providing inference regarding the effectiveness of actions completed to date, and informing future amendments to the site management plan. Data collected during this project can also broaden our understanding of habitat needs for pond turtle populations throughout our region.

Methodology

BLM and ODFW staff will conduct up to 5 trapping sessions each year to capture or recapture previously marked turtles at Provolt Seed Orchard. Each trapping session consists of 1 site visit to evaluate the trapping location, 1 site visit to deploy traps, and 1 site visit the following day to retrieve traps and process animals. Trapping sites will include at least two separate water features where turtles are known to occur within the orchard.

All captured turtles will be checked for injuries, sexed, measured, weighed, and aged by counting scute annuli. Females would be checked for the presence of eggs. Each individual would be marked by carapace notching. Turtles would also be photographed before being released. Captures of individual turtles at different trapping locations will provide insight into use of various water features within the orchard, and will provide the basis for simple population estimate, sex ratio estimation, age classification, and identification of wildlife health concerns (shell disease, poor body condition, ectoparasites).

Habitat use data will be collected from spring of 2024 through fall of 2025. Up to 12 adult turtles will be fitted with 10-15 g VHF transmitters (Holohil RI-2B). Transmitters will not exceed 5% of animal body weight and will only be deployed on healthy animals with no evidence of injury. Transmitters will be attached with epoxy, avoiding application over scute margins. Turtles may also receive an auxiliary color marker to facilitate visual identification. Transmitted animals will be monitored by 1-2 observers on foot over the life of the device for up to 15 months. Observers will take care to avoid approaching animals and will not disturb individuals that are actively nesting. Every attempt will be made to remove the transmitter at the completion of the study, though prior research indicates that transmitters are unlikely to remain attached to an animal for more than 12 months. During the breeding season, each transmitted NWPT will have its location acquired a minimum of 2 times per week. During inactive periods, lengths between fixes will vary between 0 to 4 fixes per month. Triangulations or biangulations will be taken as needed where turtle locations are inaccessible to the observer.

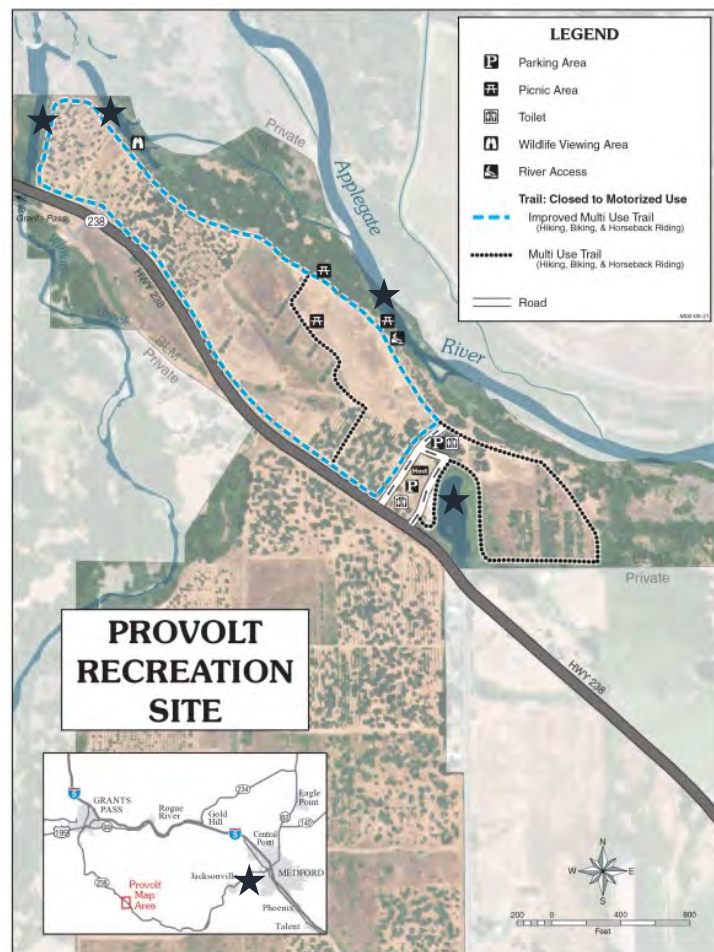
Collected data will include turtle location, turtle behavior, a description of habitat at the observation site (e.g. aspect, distance to water, soil type, and plant community composition). A spatial dataset will be developed to map animal locations within the seed orchard. Locality data will be used to track seasonal patterns of habitat use and movement, highlighting areas of importance to the local NWPT population. We will also report the number and size of home ranges within planning areas, including any overlap with prior management actions of interest. Analyses and a final report will be completed by the spring of 2026, with sharing of final results to funders and projects partners completed by summer of 2026.

Timeline

Task	Action	FY2023-24				FY2024-25				FY2025-26		
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Project Management	Apply to Grants	■	■									
	Contracting		■	■								
	Compliance		■	■								
	Fiscal Reporting				■				■			
Project Implementation	Season Preparation	■	■									
	Field Surveys			■	■	■	■	■	■			
	Analysis and Reporting									■	■	■

Project Map

Figure 1. Location of Provolt Seed Orchard. Turtles will be marked on BLM-owned parcels along the Applegate River, with potential trapping locations shown as ★. Monitoring will occur along developed trails and roadways.



Budget

The total project budget is \$71,618. ODFW is requesting \$4,981 from OWF in support of supplies and technician time needed to monitor locations of transmitted animals. An indirect cost exemption will be requested to ensure that grant funds will not be used towards indirect rate. Match from ODFW includes \$32,962 (640 hours) in staff time towards project objectives, \$4,559 for travel expenses, and \$3,795 in cash and in-kind match for supplies. Match funds from the BLM include \$11,125 in staff time and travel expenses.

Biographical Statement

The project will be co-managed by ODFW’s Regional Wildlife Conservation Biologist (Jade Keehn), and by BLM’s Medford District Wildlife Biologist (Jason Reilly). Jade Keehn is a non-game biologist specializing in rare and at-risk species. She has worked as a wildlife professional for more than 14 years, and has 9 years of experience in roles supporting the conservation of

Provolt Pond Turtle Project

reptiles including federally listed chelonian species. Jade regularly oversees inventory and monitoring projects including federal grants with budgets ranging from \$5,000 to \$500,000. As the regional contact for Northwestern Pond Turtle (NWPT), Jade interfaces with state and federal partners to facilitate coordinated conservation actions for this species. She is experienced with field monitoring techniques for turtles and other native wildlife, and regularly provides technical assistance and implementation support for habitat management, research, mitigation/land use consultation, and conservation efforts targeting NWPT within southwestern Oregon.

Relevant Citations

Fukua Z. 2020. Site Management Plan for the Northwestern Pond Turtle (*Actinemys marmorata*); Provolt Special Recreation Management Area. Bureau of Land Management, Medford District, Grants Pass Resource Area. 34 p.

Endangered and Threatened Wildlife and Plants; Threatened Species Status With Section 4(d) Rule for the Northwestern Pond Turtle and Southwestern Pond Turtle. 88 Fed. Reg. 68370 (proposed 3 October 2023) (to be codified at 50 C.F.R. 17).

Oregon Conservation Strategy [OCS]. 2016. Oregon Department of Fish and Wildlife, Salem, Oregon.

Samara Group, LLC. 2021. Northwestern Pond Turtle Coordinator Project. Final report to Oregon Department of Fish and Wildlife. Portland, Oregon. 41 p.

7 organization mailing address

Please enter full address with city, state & zip

4034 Fairview Industrial Drive SE Salem, OR 97302

8 your phone number or that of the Project Manager

541-670-3277

9 your email address or that of the Project Manager

jade.e.keehn@odfw.oregon.gov

10 a brief biographical statement about yourself or that of the Project Manager

The project will be co-managed by ODFW's Regional Wildlife Conservation Biologist (Jade Keehn), and by BLM's Medford District Wildlife Biologist (Jason Reilly). Jade Keehn is a non-game biologist specializing in rare and at-risk species. She has worked as a wildlife professional for more than 14 years, and has 9 years of experience in roles supporting the conservation of reptiles including federally listed chelonian species. Jade regularly oversees inventory and monitoring projects including federal grants with budgets ranging from \$5,000 to \$500,000. As the regional contact for Northwestern Pond Turtle (NWPT), Jade interfaces with state and federal partners to facilitate coordinated conservation actions for this species. She is experienced with field monitoring techniques for turtles and other native wildlife, and regularly provides technical assistance and implementation support for habitat management, research, mitigation/land use consultation, and conservation efforts targeting NWPT within southwestern Oregon.

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

<https://www.facebook.com/MyODFW>; https://www.instagram.com/odfw_conservation/?hl=en;
<https://twitter.com/MyODFW>

12 are you are currently following Oregon Wildlife Foundation on its social media channels?

- Instagram
- YouTube
- Facebook

13 what is the total estimated cost of your project?

71618

14 Funding that you are requesting from OWF

If your request is for more than \$5,000, please contact Tim Greseth tim@myowf.org before submitting your application.

4981

15 what type of project are you proposing?

fish or wildlife research

16 will your project address an Oregon Conservation Strategy habitat or species?

yes

16.Y.1 What habitat or species is addressed?

Northwestern Pond Turtle

17 what is the location of your proposed project?

14171 Williams Hwy, Grants Pass, OR 97527, USA

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

Klamath Mountains

19 what is the anticipated start date of your project?

Day/Month/Year

15-03-2024

20 what is the anticipated end date of your project?

30-06-2026

21 has a local, state or federal biologist reviewed this project?

yes

21.Y.1 What is their name and contact info?

Jason Reilly, Wildlife Biologist, Medford District BLM, jreilly@blm.gov, 541-471-6603

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

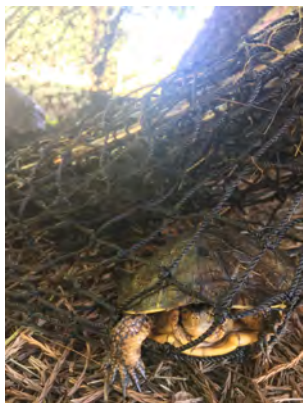
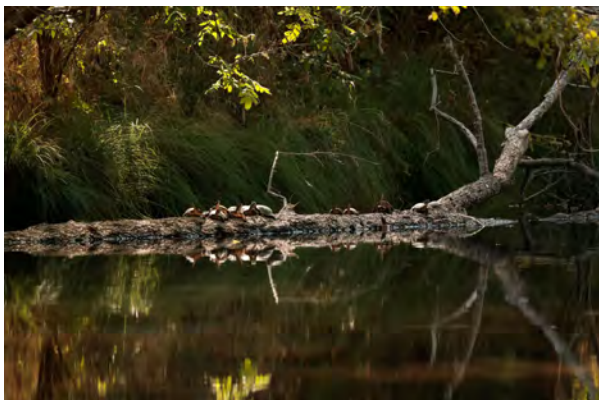
ODFW is requesting \$4,981 from OWF in support of supplies and technician time needed to monitor locations of transmittered animals. An indirect cost exemption will be requested.

24 provide us a brief summary of your proposed project

The northwestern pond turtle (NWPT) is a semi-aquatic reptile occurring in pond and stream habitats of southwestern Oregon. Declining populations within the species range in Oregon have prompted management actions by state, federal, and private entities to help address threats to persistence and to support habitats that sustain NWPT populations. This project proposes research and monitoring efforts to help quantify habitat use of NWPT at a federally managed recreational facility (Provolt Seed Orchard Special Recreation Management Area) in Josephine County, Oregon. In partnership with the Bureau of Land Management (BLM), Oregon Department of Fish and Wildlife (ODFW) will deploy VHF transmitters on up to 12 adult turtles, and will monitor turtle movements and document observation locations for up to 15 months from spring of 2024 through summer of 2025. Resulting observational data will be used to identify critical NWPT habitat such as nesting or overwintering areas, to monitor turtle use of planning areas, to better understand the status of this important population of NWPT, and to update site management plans to ensure long-term compatibility of conservation and recreation goals at this recreational site.

25 upload pre-project pictures or a video

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.



26 fill out our budget form

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0	0	0	0.00
		TOTAL PROJECT EXPENSES	71618.00
Balanced budget? This cell should read "0" ---->		NET	0.00

27 upload a narrative of your proposed project

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

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

— Grant Application

Jade Keehn

Application ID: **A69KJ135**



Oregon

Tina Kotek, Governor

Department of Fish and Wildlife

Wildlife Division

4034 Fairview Industrial Dr. S.

Salem, OR 97302

(503) 947-6301

FAX: (503) 947-6330

Internet: www.dfw.state.or.us



Tim Greseth
RE: Provolt Pond Turtle Project
Oregon Wildlife Foundation
2337 NW York St #201C,
Portland, OR 97210

19 December 2023

Dear Mr. Greseth,

I am writing in support of Jade Keehn's grant application for \$4,981 to monitor an important population of Northwestern Pond Turtle (*Actinemys marmorata*) at the Provolt Recreation Site in Josephine County on lands managed by the Grants Pass Office of the Medford District of the Bureau of Land Management (BLM). Data collected through this project will provide the Oregon Department of Fish and Wildlife (Department) with valuable information on habitat use, population size, and movements of pond turtles, which will help to support management decisions and recommendations regarding pond turtles across the state. The proposed study area will provide excellent opportunities for project staff to engage with members of the public, and to identify opportunities to minimize conflict between recreational use and wildlife habitat needs.

Northwestern Pond Turtle (NWPT) occur in the Coast Range, Willamette Valley, Klamath Mountains, West Cascades, and East Cascades Ecoregions. The species is under consideration for a federal threatened status by the US Fish and Wildlife Service and is listed as Sensitive Critical in all ecoregions where it occurs. The Provolt Pond Turtle Project will address data gaps identified in the Oregon Conservation Strategy for this Strategy Species including: gathering basic life history information, describing population dynamics, and assessing the impacts of predators and invasive species. Data collected by the Department and partners at the BLM will also inform recommended conservation actions for NWPT by investigating the use of restored habitats (basking structures), identifying locations and characteristics of nesting habitats, describing movement patterns in areas with invasive species, and characterizing pond turtle nesting and upland habitat use in areas with recreational disturbance.

The Department is greatly appreciative of funding that Oregon Wildlife Foundation provides towards implementation of the Oregon Conservation Strategy, and in support of projects that are essential for the informed management of Oregon's Strategy Species. The Foundation's support helps to ensure that ODFW staff can more efficiently allocate their time toward monitoring a wide array of species, enhancing habitat, and providing customer service to the citizens of Oregon.

Sincerely,

Anne Mary Myers
Acting Wildlife Strategy Species Coordinator
Oregon Department of Fish and Wildlife
4034 Fairview Industrial Drive SE
Salem, OR 97302
541-745-4728









→ 12





