OCRF 2024-2-46 The Audible Bats Project

Fall 2024 OCRF Project Proposal

Northwest Bat Hub, OSU Cascades

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FollowUp Form

Introduction

Project Title*

Insert the full project name assigned by ODFW, including the unique code before the Project Title that was given in the agreement.

(Example) **OCRF XXXX-XX_ ProjectTitle**

OCRF 2024-2-46 The Audible Bats Project

Upon completion of the project, please complete this Final Report document and submit it before the Project Expiration Date on the Project Agreements. The information you provide will be used for accountability and reporting and displayed to the general public. Please be as clear and concise as possible and avoid jargon or acronyms.

Project Location

Provide the nearest city and the county where project work will be completed, if multiple locations will be used provide them as a bulleted list.

- *Bend, OR*
- *Lakeview, OR*
- *Baker City, OR*
- *Corvallis, OR*
- *Burns, OR*

Anticipated Impact Measurement Unit*

Number of volunteers engaged

Anticipated Impact Measurement Unit - Other

If you selected other above, please explain here.

Anticipated Impact Value

(from the original application)

75

Anticipated Impact Value 2*

(from the original application) anticipated miles, acres, volunteers engaged, etc.

5

Actual Impact Value*

Enter the ACTUAL impact value (miles, acres, # of volunteers engaged) after completion of the project.

73

Actual Impact Value 2*

Enter a second ACTUAL impact value, after completion of the project, if original application had two. Otherwise, use this question to further explain actual impact value of the project.

6 additional sample units surveyed

Oregon Conservation Strategy Species*

List the Oregon Conservation Strategy Species and Oregon Conservation Strategy Opportunity Areas that the Project benefited.

Spotted bat - *Euderma maculatum*
Pallid bat - *Antrozous pallidus*

Final Report Questions

Project Statement*

Briefly describe what the project accomplished and the problem(s) it addressed. Make a clear and concise statement; avoid jargon and acronyms.

The Audible Bats project helped to fill in key data gaps for two of Oregon's conservation strategy species: the spotted bat and pallid bat. Though summer passive acoustic monitoring for bats in Oregon is fairly thorough, there are serious limitations to the inferences that can be made without supplemental data and novel methods of analysis. This project has increased our detection rate for spotted bats in Oregon threefold. We also gained valuable insights into pallid bat habitat use and maternity colony needs. Furthermore, this project provided a unique way for members of the community to learn about bats and contribute to conservation science in a meaningful way.

Summary of Goals*

Describe how project goals, objectives, and/or milestones were completed. Discuss any measurable and achieved benefits (# of volunteers engaged, acreage restored, retrofits,
planning documents created, research results, etc.).

I worked with a number of agencies and organizations to increase volunteer diversity and explore new areas for surveys. Volunteer survey events were conducted in partnership with the the OSU-Cascades Environmental Science program, the Woodland Park Zoo, USFWS, The Nature Conservancy, the National Park Service, and a local youth outdoor education organization. All of the volunteers who attended these events

were new to the project, and four took place in new survey areas, increasing our scope significantly.
I was able to conduct surveys in another 2 new sample units during additional outings outside of the group events.
Volunteer participation during this funding cycle was quite diverse, ranging in age from just 8 years old all the way to retirees. They also came from broad backgrounds: recreational naturalists, future biologists, veterinary students, ranchers, and science educators.
By working with partner organizations, we were able to engage volunteers in group surveys in areas not previously explored by volunteers. In particular, southeastern Oregon had been a high priority area for surveying, and working with the staff at Hart Mountain National Wildlife Refuge enabled us to make that happen.
The additional data collected from both these new survey areas as well as surveys repeated from previous years contributed to the power and interpretability of our statistical models. The ongoing analysis is providing valuable insights into the two focal species.

Lessons Learned*

Describe lessons learned and challenges faced during the grant performance period. Examples being delays, contractual issues, permitting, funding, changes to the project Scope of Work or amendments, etc.

As this project has been ongoing for a few years, there were not many new lessons to be learned, but previous lessons were again reinforced.
Trying to recruit volunteers willing to conduct surveys in remote areas continued to be a challenge. As with most citizen science endeavors, up-front excitement levels were high among participants, but tapered quickly as the realities of the work collided with day-to-day responsibilities and logistics. Even volunteers who espoused their ruggedness and eagerness for adventure struggled to commit to evenings in remote locations without a project lead to guide them. If we decide to pursue these aural surveys again in the future, it will be done via paid technicians to ensure high rates of data collection.
We had high hopes for a final season of data collection, with the goal of model validation, for summer 2026. But a lack of funding prevented that from being feasible. Right now, even the analysis has had to be put on a back burner so that funded projects can be prioritized.

Next Steps*

Describe any next steps for the project, if any.

The only thing that remains to be completed is the final analysis and manuscript generation. While preliminary models have been built and run, there are still adjustments which need to be made before predictions and inferences can be shared with confidence. I am planning to continue that work over the coming months and hopefully will have statistically robust and interpretable results by the end of 2026. As such, I won't be submitting any supplemental reports or materials at this time, but can send those when final analysis and write-up has been completed.

Attachments

Include all project data collected, such as surveys, reports, PDF maps, photo monitoring and planning documents. Upload any color photographs of the Project area(s) before and after the Project completion taken at the pre-set photo points as one document.

Optional Document URL
If documents are stored in an accessible location such as Dropbox, you may enter the url here.

Attachment 1

Attachment 2

Attachment 3

Attachment 4

Attachment 5

Attachment 6

Attachment 7

Attachment 8

Attachment 9

Attachment 10

Certification

Drafts of final reports for review may be submitted to ODFW.OCRF@odfw.oregon.gov

Certifying Statement*
I certify that the above and attached information is true and accurate.

Yes

Applicant Authorized Representative Name*
Sara Rose

Authorized Representative Title*
Sara Rose

File Attachment Summary

Applicant File Uploads

No files were uploaded