

November 30, 2019

Tim Greseth, Executive Director  
Oregon Wildlife Foundation  
901 SE Oak Street, Suite 103  
Portland, Oregon 97214

OrW Grant #18-29

Dear Tim,

On behalf of the High Desert Museum, thank you for the Oregon Wildlife Foundation's generous grant of \$3,336 to support the Upper Deschutes Spotted Frog Stewardship program. I am pleased to submit this final report on the success of the program.

Over the course of the past year, two eight-week afterschool clubs at Cascade Middle School and Pilot Butte Middle School and four family stewardship programs actively engaged 68 community members in stewardship activities at the Ryan Ranch Riverbank Restoration Project, which is restoring a historic wetland to create suitable habitat for the Oregon spotted frog and other wetland dependent species.

These programs combined hands-on activities with learning experiences to successfully increase students and families understanding of their local ecosystems and spark an ongoing interest in active stewardship. For example, following the program 100% of students agreed that it is worth the effort to make the Deschutes River a healthier home for fish, frogs or other organisms and could list specific things they could do to improve the health of local rivers and streams. One student's favorite part of the program was that *"we got a chance to donate our time to wildlife,"* while another stated: *"I learned how to help our environment, what spotted frogs do and what they need to survive."*

Please see the attached final invoice for the remaining expenses (\$1,987). We appreciate the Oregon Wildlife Foundation's generous support of this program and the Museum's mission, and we hope to partner with you again to advance restoration and education projects in Central Oregon.

Sincerely,

  
Dana Whitelaw, Ph.D.  
Executive Director

*Thank you very much for your partnership!*



## ***Upper Deschutes Spotted Frog Stewardship Initiative*** **Oregon Wildlife Foundation Report**

### **Progress and Results**

Through our Upper Deschutes Spotted Frog Stewardship initiative, the Museum successfully involved students and families in the Ryan Ranch Riverbank Restoration Project, which is helping to create suitable habitat for the Oregon spotted frog and other wetland dependent species, such as migratory birds, water fowl, elk and native wetland plants. This initiative included eight-week afterschool clubs at Cascade Middle School and Pilot Butte Middle School and four family stewardship programs, which provided opportunities for community members to learn about environmental stewardship and actively participate in the management of our local ecosystems.

To measure the success of the proposed project goals, we conducted pre and post-assessments for the afterschool clubs and surveys for the family stewardship workshops. Because the last afterschool club concluded last week and we have not yet analyzed the data, the statistics below are based on the spring afterschool clubs and family stewardship programs.

*Goal 1. Improve the habitat for the Oregon spotted frog and other aquatic organisms in critical sections along the Upper Deschutes River, focusing on Ryan Ranch.* Project partners removed the berm separating the Deschutes River and the historic wetland at Ryan Ranch last fall, and this initiative actively involved community members in wetland restoration following its removal. This restoration was aimed at improving the habitat for the Oregon spotted frog and included picking up litter along the Upper Deschutes River, conducting water quality testing and planting willow stakes.

Through this active involvement, participants became more aware of restoration activities occurring in their community and why they are important. One student learned that “*people are restoring a wetland to make a new habitat for spotted frogs, an endangered species here in Oregon,*” while another student commented: “*the most interesting thing I learned is why its important to protect rivers.*”

*Goal 2. Increase access to engaging educational and stewardship activities for 20 low-income middle school youth and 45 family members.* The program successfully engaged 23 middle school students and 45 family members in stewardship activities and inspired increased motivation to become involved in stewardship projects and take actions to help improve the health of local streams and rivers.

In the post-assessment, 46% of students reported that their favorite part of the program was doing stewardship activities, and 100% of students agreed or strongly agreed that it is worth the effort to make the Deschutes River a healthier home for fish, frogs or other organisms and that measuring water quality in the Deschutes River is important. There was also a large increase in the number of students who agreed or strongly agreed that people have a responsibility to solve environmental problems (from 43% to 97%). One student’s favorite part of the program was that “*we got a chance to donate our time to wildlife*” because “*the wildlife*

*can't fix problems on their own so we need to help them."* At the end of the family workshops, 57% of families were motivated to become involved in a stewardship project.

In addition, the program increased knowledge of specific stewardship skills. For example, there were large increases in the number of students who could identify ways a river could be checked to see if it is healthy and could list three things that people can do to improve the health of local watersheds. For example, one student listed *"teach others about the river, do not disturb habitat and advocate for measures to protect the river."* At the end of the workshops, families could also identify specific stewardship actions around local rivers and streams, including staying on trails and planting plants.

*Goal 3. Increase knowledge of the Oregon spotted frog life cycle, habitat needs, current conditions and encourage critical thinking about how multiple water users interact.*

Through pre and post-assessments, students demonstrated a significant increase in their understanding of the spotted frog's specific habitat needs. While in pre-assessments, most students named the general habitat, such as river or stream, in post-assessments, students referenced plants, shallow/wetland and silt/mud/substrate. One student learned that *"a lot of factors play into the frogs' survival and that one bad factor can be detrimental."* Through surveys, families also indicated an understanding of spotted frog habitat needs.

In addition, the afterschool clubs engaged students in critical thinking about how multiple water users, including agriculture, irrigation, wildlife, recreation and community, interact and how they might find compromises through a watercolor activity. See the attached photographs of the watercolor drawings.

### **Successes and Challenges**

This initiative was overwhelmingly successful in increasing students and families understanding of their local ecosystem, connecting students to nature and inspiring ongoing interest in stewardship through hands-on experiences. Participants were able to connect the information they learned in the program with their lived experiences in Central Oregon, including biking and hiking along the river, and will be able to make more informed decisions about how they interact with the river in the future.

In addition, an unexpected success from the afterschool program was the way it created bonding opportunities across a wide diversity of students, including different grade levels and social groups. Because there was no prior history of this type of program in the schools, students who signed up for it were interest driven, resulting in a broad mix of students who were able to learn together over the course of eight weeks.

One of the biggest challenges with this project has been finding ways for students to care about the spotted frog without actually seeing one. While care is a foundational step for building long-term investment in stewardship activities, species can feel abstract if students are not able to actively engage with them. To help build this foundation, education staff connected the spotted frog to the larger ecosystem, which included plants and wildlife students could see and form a connection with.

**Lessons Learned**

One of the biggest lessons learned from the afterschool series and family workshops was the time required to build a foundational understanding about these issues and invest families in stewardship activities. The afterschool clubs were significantly more successful in motivating students to take stewardship actions than the one-day family workshops likely because of the length of time students engaged with the restoration project. Even with eight weeks, however, students were often just acquiring base knowledge by the end of the program and additional time could have enabled students to gain more from their interactions with experts and to develop a more in-depth understanding of the issues.

**Additional Information**

As part of a larger initiative funded by the Environmental Protection Agency, the Museum will implement another eight-week afterschool club in the spring of 2020. We will use lessons learned from the first two afterschool clubs and continue to build our capacity to offer engaging environmental education programs that actively involve participants in restoration projects. In addition, partner organizations, including the Upper Deschutes Watershed Council, Trout Unlimited and the Children's Forest of Central Oregon will continue to implement programs designed to build public awareness of the importance of wetlands to local ecosystems. Combined these programs are having a profound impact on community understanding of and support for ongoing efforts to promote biodiversity in our region.

Oregon Spotted Frog Program  
High Desert Museum



Through three series of eight-week afterschool clubs, middle school students were able to actively engage with restoration projects happening in their community, including conducting water quality tests.



Students also participated in the Ryan Ranch Restoration project by planting sedges along the banks of the river.



Through continued trips to the restoration site, students were able to revisit the sedges they helped plant and discuss how this activity helped to restore the wetland habitat and the long term impact of this restoration project.



Students also used a watercolor activity to explore different site users and how these users can collaborate.



Examples of the students' watercolors.

## Oregon Spotted Frog Stewardship Adventure

09.07.19  
9:00 am - 1:00 pm

This four-hour workshop will teach families about the Oregon spotted frog, watershed health and activities to protect the riparian ecosystem. This workshop is for families with kids between the ages of 7 and 10 years old. It will include hands-on science and art activities, a field trip to an Oregon spotted frog habitat and a stewardship project.

9:00 am - 1:00 pm

Free

Space is limited.

[RSVP: Registration](#)



With support from Oregon Wildlife Foundation

Venue: High Desert Museum

### KPOV Community Calendar

The KPOV Community Calendar is a way to keep up with events in our community. The Calendar airs on Monday, Wednesday, and Friday at 10AM, 3PM, and 8PM.

Voices:

Monday - Jim Roberts

Wednesday - Avani

Friday - Tori Colotte

[SUBMIT A CALENDAR EVENT](#)

[← BACK TO ALL EVENTS](#)

#### Oregon Spotted Frog Stewardship Adventure

Saturday, May 4, 2019  
9:00 AM - 1:00 PM

Google Calendar - ICS

[High Desert Museum](#)

Calling all families—learn about the Oregon spotted frog and how to keep our local watershed healthy in this interactive workshop. Conduct hands-on science and art activities. Take a field trip to an Oregon spotted frog habitat and participate in a stewardship project. This workshop is for children ages 7 to 10 and an adult caregiver. Bring a hat, sunscreen, water bottle and lunch. Transportation provided.

\$2 per person

RSVP/Registration: <http://t34433.backbauthoring.com/t34433/tickets?tab=2&tbodyid=c1294064-6731-4415-9c2d-dcb4972c323>

With support from Oregon Wildlife Foundation

## FALL 2019

<p><b>MONDAY, SEPTEMBER 2</b></p> <p><b>Last Chance for Summer Programming</b> Last chance for Raptors of the Desert Sky, Desert Dwellers and other summer programming! To see the summer schedule, go to <a href="http://highdesertmuseum.org/daily-schedule">highdesertmuseum.org/daily-schedule</a>.</p>	<p><b>FRIDAY, SEPTEMBER 6</b></p> <p><b>Bat Walk</b> Join us on an exciting evening expedition in search of bats on our grounds using echolocator equipment. Bring weather-appropriate clothing and a flashlight or headlamp to be prepared for touring the Museum after hours. <b>7:00 pm - 8:30 pm, doors at 6:45 pm</b> <b>\$10, Members receive 20% discount</b> RSVP: <a href="http://highdesertmuseum.org/bat-walk-sept">highdesertmuseum.org/bat-walk-sept</a></p> <p>In partnership with</p>	<p><b>WEDNESDAY, SEPTEMBER 11</b></p> <p><b>Klamath 2050: River of Hope</b> In this lecture, Emma Marris, a Klamath Falls-based environmental author and journalist, will tell the story of Upper Klamath Lake and the Klamath River, a water system set to see big changes in the coming decades including dam removal, climate change and changing management philosophies. She will use the Klamath Basin to tell a broader story about the best possible future for water in the American West, imagining a 2050 where people inhabit their landscapes thoughtfully, creatively and more than sustainably—where flourishing increases over time. <b>6:00 pm - 7:00 pm, doors at 5:00 pm</b> <b>No-host bar</b> <b>Café open 5:00 pm - 6:00 pm</b> <b>\$7, Members receive 20% discount</b> RSVP: <a href="http://highdesertmuseum.org/river-of-hope">highdesertmuseum.org/river-of-hope</a></p>	<p><b>SATURDAY, SEPTEMBER 14</b></p> <p><b>Exhibition Opening: Fueling the Future</b></p>
<p><b>THURSDAY, SEPTEMBER 5</b></p> <p><b>Doc and Connie Hatfield Sustainable Resource Lecture</b> Throughout their lives, ranchers Doc and Connie Hatfield were committed to developing partnerships and building consensus to further sustainability in the High Desert. Now in its seventh year, the Hatfield Sustainable Resource Lecture celebrates their work. This year, Jon Griggs, manager of the Maggie Creek Ranches near Elko, Nevada, will be the featured speaker. Griggs has been widely recognized for his collaborative relationships and sustainable practices in the beef industry. <b>5:45 pm doors, 6:00 pm lecture</b> <b>6:30 pm reception with hors d'oeuvres</b> <b>Hosted bar</b> <b>Free</b> RSVP: <a href="http://highdesertmuseum.org/hatfield-lecture">highdesertmuseum.org/hatfield-lecture</a> Made possible by</p>	<p><b>SATURDAY, SEPTEMBER 7</b></p> <p><b>Oregon Spotted Frog Stewardship Adventure</b> This four-hour workshop will teach families about the Oregon spotted frog, watershed health and activities to protect the riparian ecosystem. This workshop is for families with kids between the ages of 7 and 10 years old. It will include hands-on science and art activities, a field trip to an Oregon spotted frog habitat and a stewardship project. <b>9:00 am - 1:00 pm</b> <b>Free</b> Space is limited. RSVP: <a href="http://highdesertmuseum.org/oregon-spotted-frog-sept7">highdesertmuseum.org/oregon-spotted-frog-sept7</a></p> <p>With support from Oregon Wildlife Foundation</p>	<p><b>FRIDAY, SEPTEMBER 13</b></p> <p><b>Exclusive Members' Exhibition Preview: Fueling the Future/ Energizando el Futuro.</b> Celebrate the opening of our exciting new exhibition, Fueling the Future/ Energizando el Futuro, with food, drinks and live music! <b>6:30 pm - 8:30 pm, doors at 6:30 pm</b> <b>Members free, Member guests \$5</b> RSVP: <a href="http://highdesertmuseum.org/fueling-the-future-opening">highdesertmuseum.org/fueling-the-future-opening</a></p>	<p><b>SATURDAY, SEPTEMBER 14</b></p> <p><b>Oregon Spotted Frog Stewardship Adventure</b> This four-hour workshop will teach families about the Oregon spotted frog, watershed health and activities to protect the riparian ecosystem. This workshop is for families with kids between the ages of 7 and 10 years old. It will include hands-on science and art activities, a field trip to an Oregon spotted frog habitat and a stewardship project. <b>9:00 am - 1:00 pm</b> <b>Free</b> Space is limited. RSVP: <a href="http://highdesertmuseum.org/oregon-spotted-frog-sept14">highdesertmuseum.org/oregon-spotted-frog-sept14</a></p> <p>With support from Oregon Wildlife Foundation</p>

6
FAMILY
FIELD TRIP
EXHIBITIONS
EVENT
WORKSHOP

The Museum recognized the Oregon Wildlife Foundation's generous support of this program on our website, newsletter and advertising, including with the KPOV Community Calendar.