



# BITTERROOT WILDLIFE INTERNSHIP

In Spring 2020, two groups of Ecology Project International alumni quarantined at home with their families before participating in 20-day summer Bitterroot Wildlife Internships in Western Montana. **At the 15,000-acre MPG Ranch dedicated to bioersity restoration, these ten interns partnered with scientist mentors to work on ongoing conservation research—and to develop their own.** Interns also improved habitat through conservation service, studied the impacts of historical land use on the Bitterroot Valley, and explored viewpoints of diverse stakeholders—developing skills for research, restoration, and thinking independently about contemporary issues in wildlife and land management.



INTERNS ASSIST IN A BUTTERFLY COUNT WITH EXPERT MARIROSE KUHLMAN

## RESEARCH & SERVICE AT-A-GLANCE



**357** HOURS OF CONSERVATION SERVICE  
**3** MILES OF FENCING REMOVED/RETROFITTED  
**4** ACRES CLEARED OF INVASIVE PLANT SPECIES

## CONSERVATION SERVICE

Each day, interns worked to improve wildlife habitat at MPG Ranch, in service to the ranch's goal of restoring native ecosystems and biodiversity.

A primary service project was the physical removal of two invasive plant species: black henbane and mullein. Interns also repaired fences on the boundary of MPG ranch—tightening and replacing smooth wire, installing tags to make the wires more visible to wildlife, and replacing posts as necessary. Both projects support the creation of a more wildlife-friendly landscape by removing hazards and impediments to large fauna.

## CONSERVATION RESEARCH

### Overview

Each of the ten interns contributed toward their research mentor's long-term study goals, while gaining hands-on experience in the design and implementation of their own research studies. Interns formed research questions, collected and analyzed data, and presented their findings—contributing 415 hours of research service to the ranch.

Because most interns are EPI alumni, they were able to delve into more advanced concepts of community ecology—such as succession, interspecific relationships, and land disturbance impacts.

All student-led research projects shared the goal of advancing the fields of conservation ecology and wildlife biology. Projects had a diverse range of topics, including: interactions between invasive plants and mycorrhizal fungi, the use of berms and swales as passive water catchment technologies, Lewis' woodpecker site selections and success, and insect herbivory on native milkweed plants.

The conclusions of BWI projects will inform current and future restoration efforts at MPG Ranch.



## FUNDERS

Gurinas Trust

## SPECIAL THANKS

**All MPG Ranch staff, especially:**

Johsua Lisbon  
Philip Ramsey

### Research Mentors

Jordan Hoffmaster  
Kate Stone  
Lesley Rolls  
Mat Seidensticker

Marirose Kuhlman

Morgan Mcleod  
Nate Schwab  
Sierra McMurry  
Maggie Hirschauer

Ylva Lekberg

University of Montana  
Bird Ecology Lab





# PROGRAM IMPACTS

EPI and MPG Ranch staff worked closely together this spring to develop field protocols that would keep interns and staff safe during the Bitterroot Wildlife Internships. **Even with a modified format due to COVID-19 concerns, the internship program once again saw high satisfaction from interns and research mentors, and was a highlight of EPI's work this year.** Ninety percent of interns stated that the internship was "excellent," and 100% would recommend it others.

Now in its seventh year, the Bitterroot Wildlife Internship program continues to provide authentic, immersive opportunities to Western youth for scientific research, conservation service, and public education.

## ACTIVITIES

### Science Enrichment Opportunities

Despite pandemic-related limitations on some activities, the 2020 BWI interns benefited from a number of deeply enriching (and fun!) science and conservation ventures outside their research projects.

The MPG ranch was unable to host the annual, open-to-the-public Butterfly Count due to COVID-19, but interns in the first session still had the opportunity to spend a day on Baldy Mountain capturing and documenting butterfly distribution and abundance with research mentor Marirose Kuhlmann.



Similarly, while MPG Ranch's normal public Moth Nights were cancelled, research mentor Mat Seidensticker set up an exclusive event for the second session interns, where they spent an evening capturing and cataloging moth species found on the ranch.

Interns from both sessions worked with the University of Montana Bird Ecology Lab on a nationwide songbird survey and participated in a butterfly lesson that focused on the life cycle and migration of monarchs.

### Research Symposium

All 10 interns from this summer attended and presented their project results at the 7th annual Bitterroot Wildlife Internship Research Symposium, held over Zoom with an audience of 52 research mentors, family members, and EPI and MPG Ranch staff. Two 2019 interns also presented their posters to the public at the MPG Research Conference at the University of Montana in early March.

Along with increasing awareness of the research taking place at MPG Ranch, these events allow interns to gain confidence in public speaking and to contribute to regional wildlife and land issues conversations.



HUNTER SETS UP A GAME CAMERA TO CAPTURE FOOTAGE OF UNGULATES

## PERSONAL IMPACTS



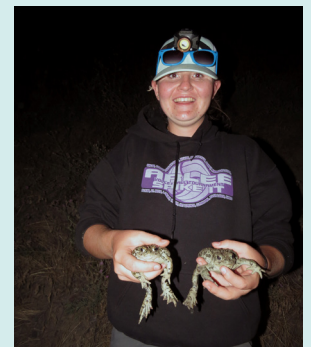
"I want to stay involved in environmental action in my school, and city level. People are willing to listen to younger people...I want to use that."

Ilan, age 16, Moscow, ID

**30%** growth in knowledge of direct actions to support conservation in local communities

"During this internship, my mentor Sierra...helped me figure out ways to do internship tech jobs through college, so now I have more of a solid plan...I learned a lot more about the inside world of doing science, and going into a science career."

Skyla, age 15, Deer Lodge, MT



## THE 2020 INTERNS

The seventh year of the Bitterroot Wildlife Internship saw another incredible cohort of interns ranging in age from 15-18. This year's intern cohort once again hailed from a wide array of Intermountain West locations:

Bozeman, MT  
Deer Lodge, MT

Huson, MT  
Kernville, CA

Missoula, MT  
Moscow, ID

