

Bitterroot Wildlife Internship 2024 Field Note

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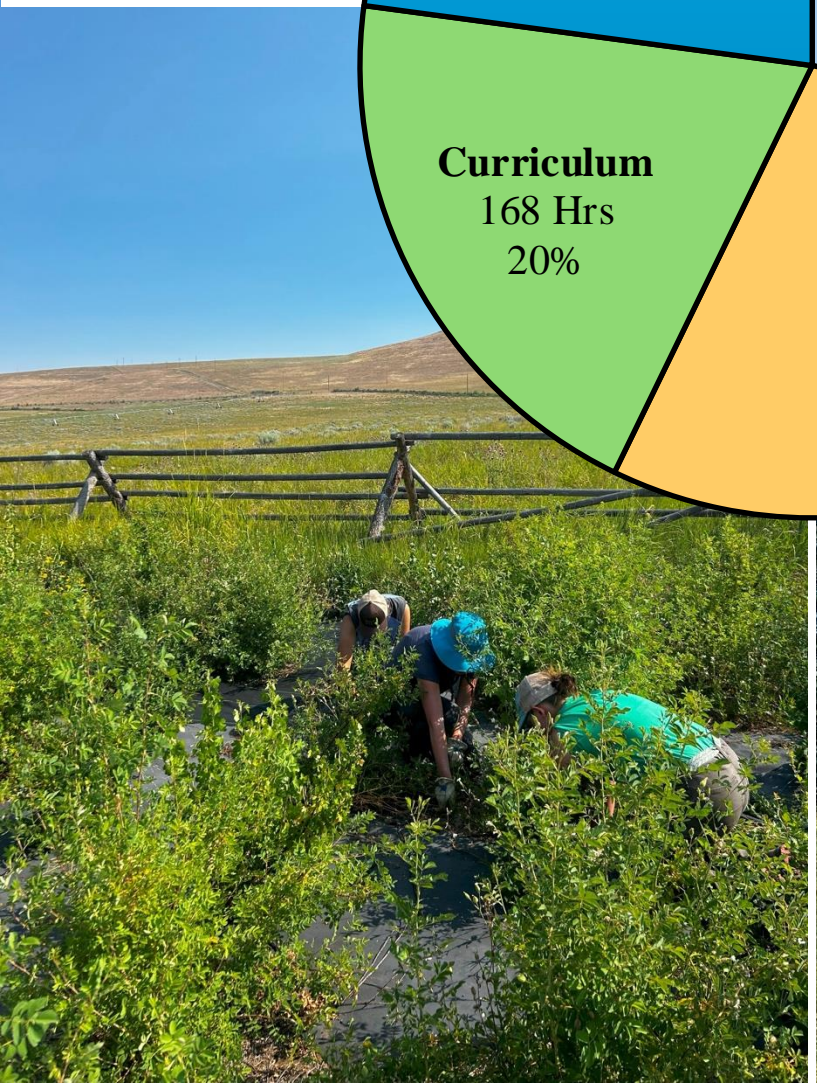
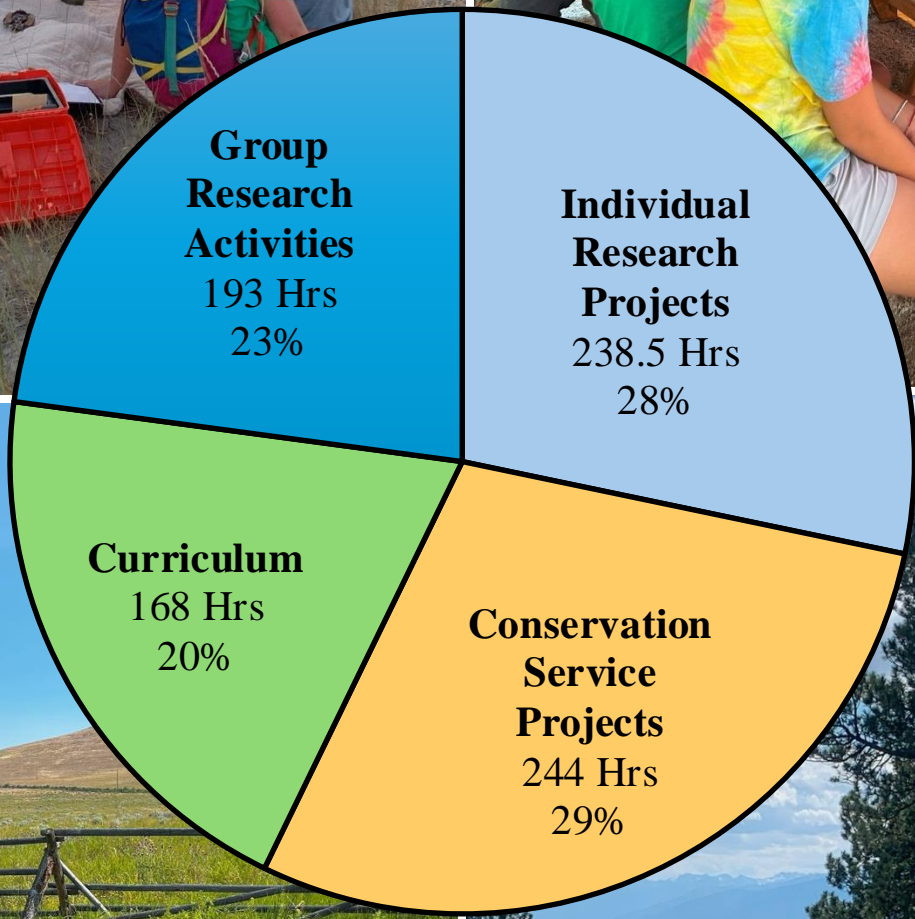
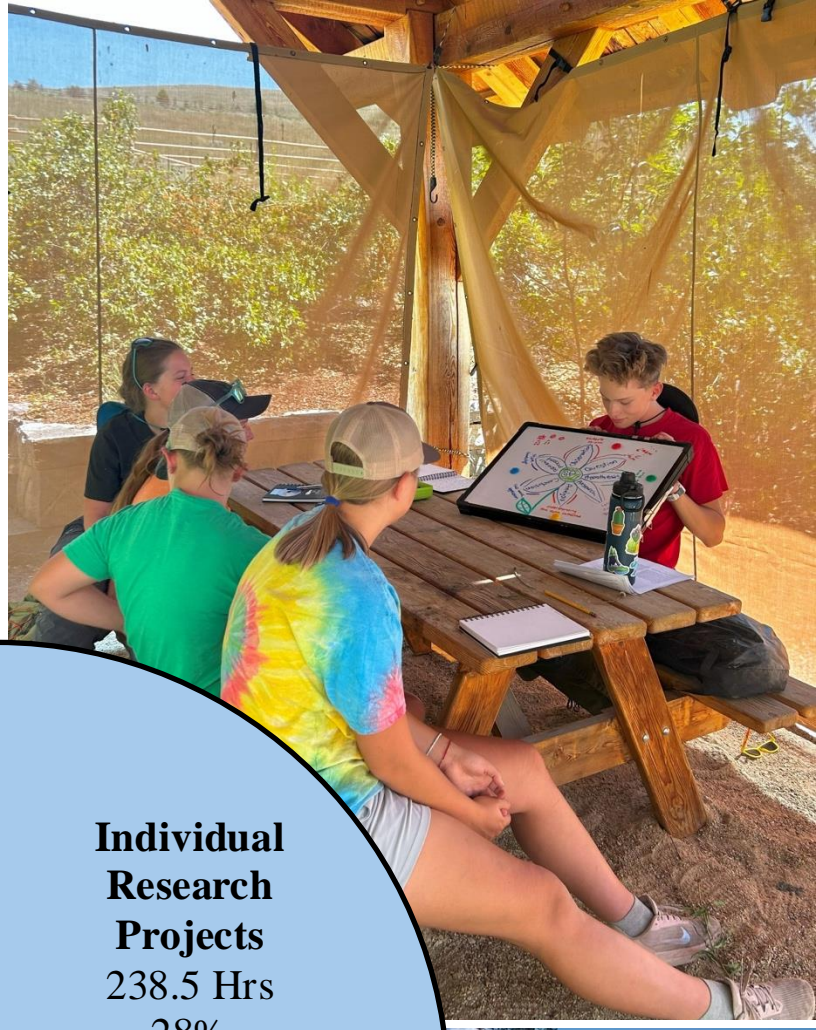
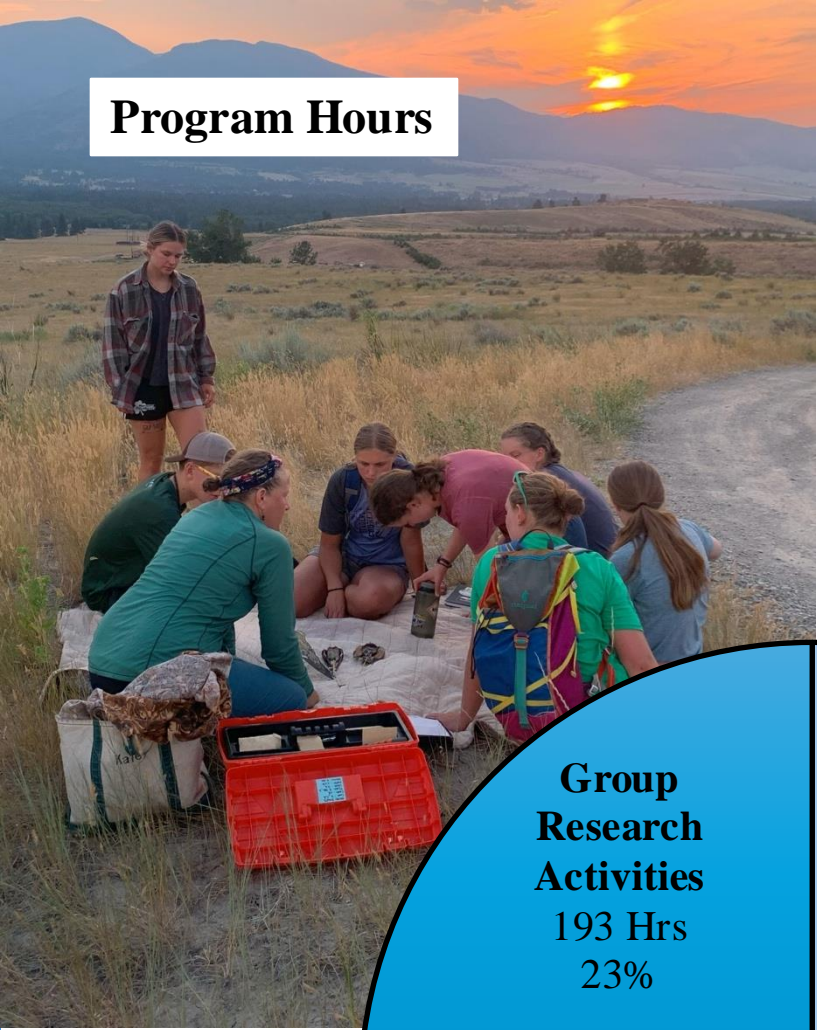
Session 1: June 9th - July 4th 2024

Session 2: July 14th - August 8th 2024



The Bitterroot Wildlife Internship offers high school students a unique opportunity to immerse themselves in experiential learning through personalized research projects, conservation service work and a comprehensive ecological curriculum. This program is a partnership between Ecology Project International and MPG Ranch in Western Montana. During a four-week session, student interns are guided by instructors, mentor researchers and staff who support their experience. The 2024 season resulted in significant insights and accomplishments for all participants.

Program Hours



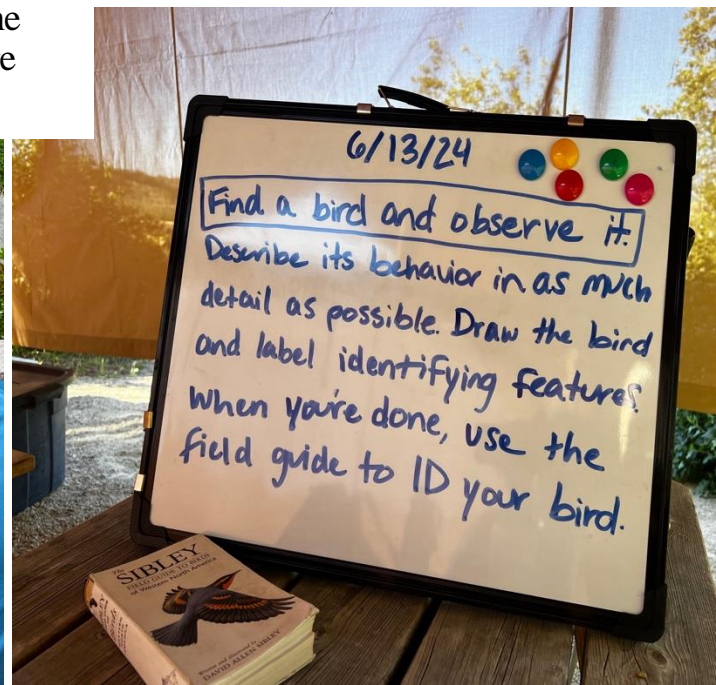


BWI interns completed over 200 hours of service work on the ranch. They helped install a flowering 'Bee Lawn' which will serve as a demonstration area promoting pollinator habitat, collected seed for the MPG seed farm and picked apples from the orchard to make and can homemade cider.





Lessons from BWI instructors and Michael Ormandy served to complement the students' research and service work. The curriculum covered restoration planning, the history of the Bitterroot Valley, local ecology and more with an emphasis on maintaining a field journal.





While on the ranch, BWI interns enjoyed unique opportunities to learn from MPG's many researchers. Some of these outings included early mornings with Eric Rasmussen for hummingbird banding, evenings with Kate Stone observing nightjars, following Matt Schertz on a herp hunt and assisting Marirose Kuhlman with the Montana Bumblebee Atlas.



Session One Overview



Sun's out, snakes out for session one! In between transplanting native plants in the Education Garden and working on their research projects, these interns loved to catch snakes, frogs and turtles around the ranch. With interests ranging from anatomy and physiology to veterinary science to wildlife management, these students were particularly fascinated by all the wildlife that make their home on the ranch.

“This opened my eyes to what niche you can study and really made me feel like I had the opportunity to go into whatever career I truly cared about...The BWI internship solidified that these were some of the things I want to do professionally and will impact the lifestyle choices I’ll make in the near future”



Alex J.



Alex worked with Ylva Lekberg and Mary Ellyn DuPre to investigate drought tolerance in two native grasses. Research like this is essential for understanding how plants might adapt in response to the changing climate. In addition to being a great scientist, Alex is quick-witted and a fantastic camp chef.



Alex B.



Alex partnered with fellow intern Kaylie and Mat Seidensticker to test new methods for surveying caterpillar populations. This involved midnight excursions with UV flashlights searching for tiny caterpillars in the dark and cold. Undeterred by the lack of sleep, Alex also took the opportunity to learn several new skills including pinning lepidoptera specimens, fishing for invasive pike and a newfound love for hiking with a shovel.



Anna



Anna spent her mornings in the seed farm working with Rena Belcourt transplanting bitterroot flowers and studying their growth under varying conditions. Her research found that transplant success varies between pre-bloom and post-bloom bitterroots. Anna is also an artist and found time to sketch her surroundings during her time on MPG.





Bella



Bella wins the award for most hardcore hiker! For her project, she climbed steep slopes with Norman French in search of invasive houndstongue and the weevils that feed on it. Her research concluded that these weevils are serving as an effective biocontrol for this invasive plant. Bella is also interested in medicine and anatomy—she led everyone in a fascinating exploration of a wild horse skeleton found during our service work.



Kaylie



Kaylie worked with fellow intern Alex B. and Mat Seidensticker to detect caterpillars with UV light. Kaylie is a champion for the smallest critters and she is endlessly curious about them. She asks fantastic questions and will not be deterred until she finds the answers.



Makweti



Makweti worked with Matt Schertz to investigate patterns in the morphometrics of western painted turtles. He found significant sexual dimorphism in the dimensions of their shells. He also helped Matt with ongoing research on the ranch's snake population by catching snakes in the Education Garden. He once caught seven snakes in one day!

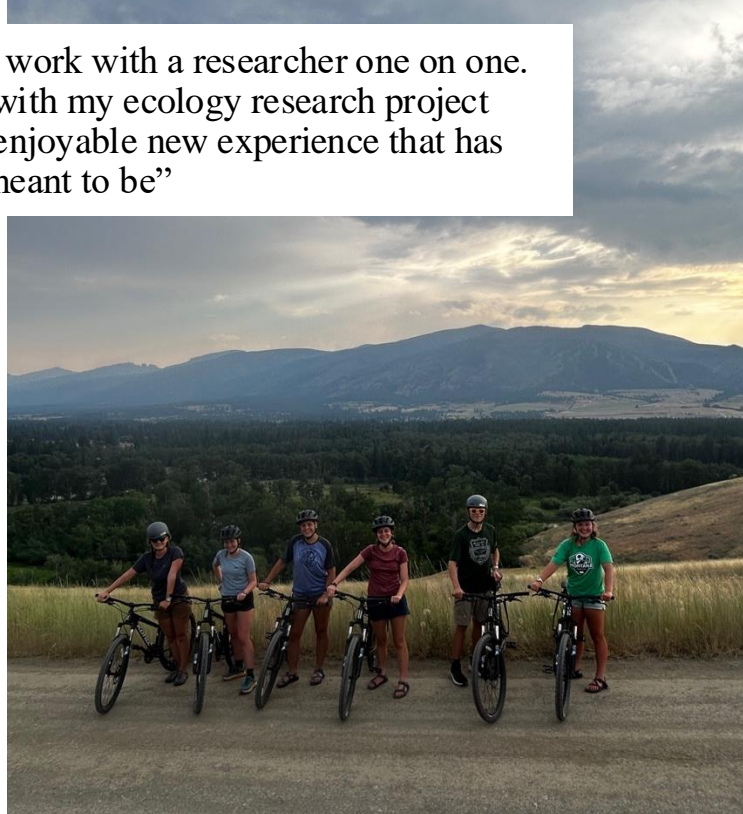


Session Two Overview

Session two students showed great dedication to service work. They spent time removing invasive weeds, collecting native seeds and making cider for the MPG community. When they weren't working on their research projects, they hung out at the river, played karaoke games and honed their pickleball skills.



“Before BWI, I’d never had the opportunity to work with a researcher one on one. Having more freedom to explore my interests with my ecology research project under the supervision of professionals was an enjoyable new experience that has confirmed that science research is where I’m meant to be”





Amelia



Amelia worked with Erik Samsøe and Kyle Doherty to investigate the impact of MPG's wild horse population on the landscape. She used remote sensing to quantify the density of horse droppings to determine what areas the horses frequent most. Amelia could often be found lending a helping hand to her fellow interns during research and service work.



Caitlin



Caitlin's research and enthusiasm inspired us all to pay more attention to the plants around us. When she wasn't studying the nutritional imbalance of Douglas Fir beetles with Lorinda Bullington, you could find her single-handedly destroying invasive mullein.

Felix



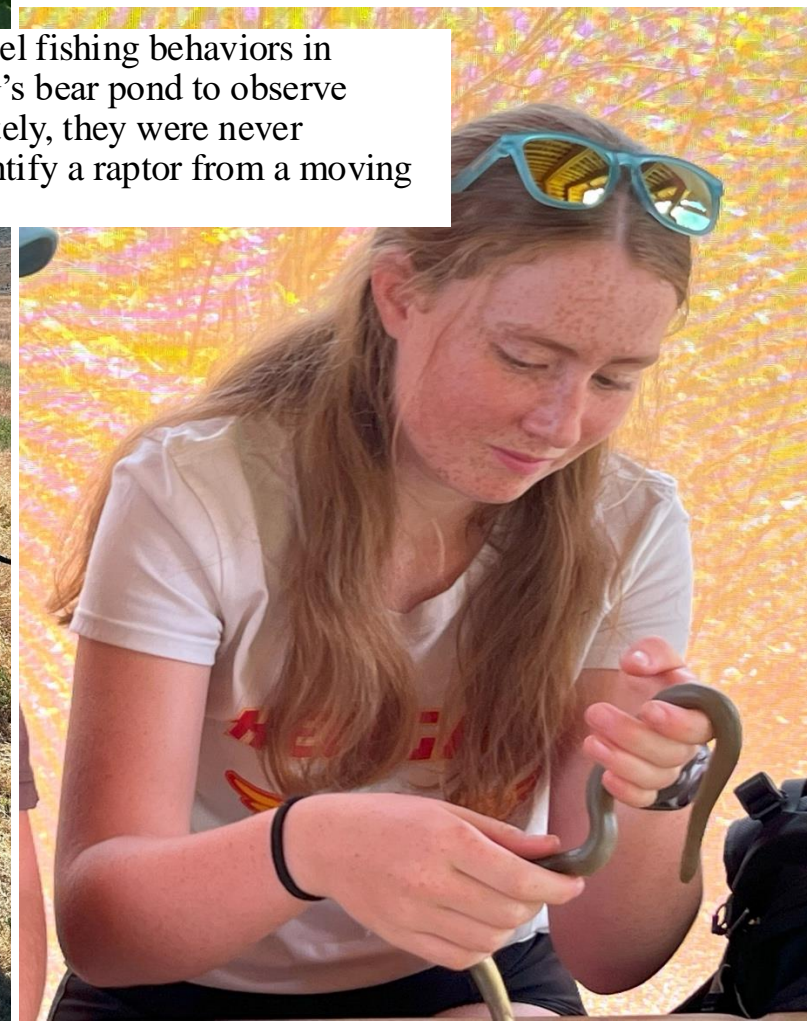
Felix used mavic drones with Erik Samsøe and Kyle Doherty to investigate wild horses' impact on the ranch's vegetation. He found that the horses' feces were positively correlated with vegetation cover. Felix jumped headfirst into every activity, from dominating the pickleball court to climbing trees to get the best apples.



Kintla



Kintla worked with Carly Brooks to investigate novel fishing behaviors in raptors on the ranch. She used camera traps at MPG's bear pond to observe hawks and owls attempting to catch fish (unfortunately, they were never successful). Kintla's superpower is that she can identify a raptor from a moving vehicle within five seconds of seeing it.



Lucy



Lucy worked with Norman French to survey leafy spurge on the ranch. Her research shed light on the relationship between this noxious weed and biocontrol insects. She kept the energy at camp high with her good humor and by teaching her fellow interns silly internet dances!





Nova



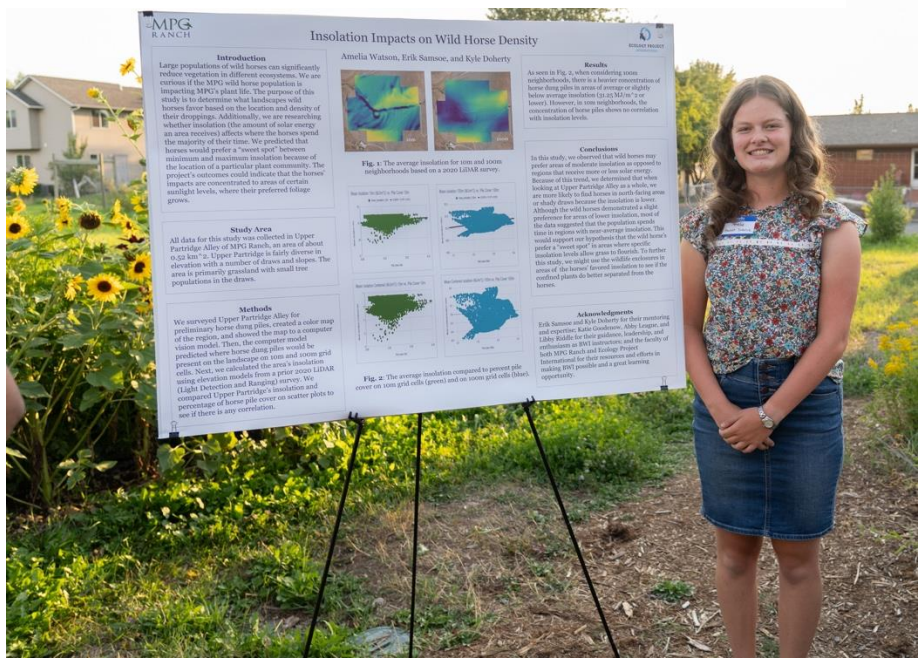
Nova contributed to the first year of a ten-year study on trait differences in wild-type and seed farm wildflowers. She worked with McKenzie Sebastian to quantify these differences in *Phacelia hastata*. Nova loves classic rock and led some pretty fire karaoke sessions at camp.



Research Symposium



After completing their seasons on MPG, interns gathered to present project posters at our research symposium. This provided a great opportunity for interns to share the results of their hard work to mentors, friends, families and EPI staff and distinguished guests. Their passion for conservation and ecological expertise acquired throughout the program was notable.





“The enjoyment I found in my BWI research project has confirmed that I will find satisfaction in a career of science research”





“Being able to do hands on conservation work and see other work that was being done was really inspiring...It also helped me become more hopeful about conservation and restoring native ecosystems”





“[BWI] has made me want to further connect with nature when I return home. I am even more enthusiastic about engaging in conservation and field work. I can’t wait to discover more back home now that I have this kind of drive to get outdoors”





“This was the highlight of my summer. Maybe even year.”

