**Kaitlyn:** Here at the U.S. Fish and Wildlife Service, we recognize that the future health of fish, wildlife, plants and their habitats lies in the hands of the next generation of conservationists. By supporting students in their studies now, the U.S. Fish and Wildlife Service is investing in the future of conservation.

**Kaitlyn:** I’m Kaitlyn Landfield

**Mary:** And I’m Mary McFadzen.

**Mary:** We’d like you to meet three Native American graduate students who the Service supports. Xavier Lovato, Ken Edmo, and Sattie Whitefoot Fisher all attend the University of Montana in Missoula.

**Kaitlyn:** Together, with the students, we are pleased to share some of their experiences and perspectives.

**Xavier:** *\*\*Greeting in Native Language\*\**That was just like a short introduction in my native language from my parent’s tribes. So we speak Keres and that was that. My name is Xavier Lovato. I’m from Cochiti and Kewa Pueblos New Mexico, mid Central New Mexico right along the Rio Grande River. So where I grew up is just a little bit south of Santa Fe and it was close to the Valles Caldera area, Jemez Mountains.

**Ken:** My name is Kenneth Edmo. I'm from the Flathead reservation and Northwest Montana and I spent the majority of my life there. A little bit about the landscape. I would say the biggest feature is the Mission Mountains, really gorgeous place. A good place to go hiking and things like that. Also, the Flathead Lake it’s a large freshwater lake and is used a lot for recreation in the summertime. And then I would say the valley which consists of small towns with a strong presence of agriculture and ranching. I’m used to a more rural kind of place, not a big city. I’m used to almost knowing everybody.

**Sattie:** My name is Sattie Fisher. My maiden name is Sattie Whitefoot which is a name that is known for being on the Yakama reservation. I mostly grew up on the reservation and when I was younger, I had four brothers and sisters at the time living there. All five kids shared one room. We were in the mountains all the time because we were fishing and hunting. I didn’t know it was because we didn’t have money to do anything else, it was just that was how we had to live. But I mean for me that was like the coolest thing ever as a kid being in the mountains all the time. Even though we didn't have everything financially we had everything besides that.

**Mary:** Growing up in rural places, each of the students developed a deep appreciation for the land and the wildlife that depends on it. As they journeyed from high school to college, that appreciation fueled their pursuits of a career in conservation.

Xavier Lovato earned his Bachelors’ degree from New Mexico State University in fish, wildlife and conservation ecology. In 2021, he started graduate school in the Wildlife Biology program at the University of Montana. He studies how the Mexican spotted owl, a threatened species, uses habitat on the Mescalero Apache Reservation in New Mexico.

**Xavier:** My research project focuses on spotted owl occupancy and habitat monitoring with the use of acoustic monitoring. It’s pretty much a new developing field. You would say this is like the first approach ever for Mescalero Apache reservation to do this. What we'll be doing is just getting these acoustic monitoring units and deploy them randomly in these hexagons and within those hexagons there will be three random points. We're going to be placing those monitors at those three points to see if we get any hooting activity going on and that's an indicator like where these owls are and to see what type of habitat there in, just to follow their movements from their overall challenges today. Like drought, wildlife, forest stress and insect outbreaks. A lot of tribes are not funded very well so this is a low budget project we're doing to see if it will help implement management strategies for the future and for tribes all over.

**Kaitlyn:** While Xavier’s path led him to study ways we can better find a species, the Mexican spotted owl, Ken’s path led him to find ways we can better avoid conflict with a species – the grizzly bear.

Ken Edmo graduated with a degree in wildlife and fisheries from Salish Kootenai College in Pablo, Montana. In 2020, he started as a graduate student in the Resource Conservation program at the University of Montana where he now studies ways to reduce conflicts between grizzly bears and people.

**Ken:** My project is going to be on mitigating human and grizzly conflicts. My specific focus is going to be on 3 factors or objectives of managing food attractants across Montana for landowners and the public. That will include what regulations are required, what recommendations are there and resources that are available to landowners in the public. I’ll observe the agencies and tribes that deal with managing these issues and I'll see what is consistent and what differs across jurisdictions. I’ll use this information to build a guide of standardized regulations and the resources that are provided. I would like this guide to be easily accessible to the public through pamphlets, agency websites, etc. And if I do have time, I would like to make an app with this information. Through this information I hope in some way that it helps change behaviors that will reduce conflict between human and grizzlies, and bears in general.

**Mary:** While Xavier and Ken both knew they wanted to pursue a degree in wildlife conservation, things weren't so clear for Sattie.

As an undergraduate, Sattie searched for a major that fit. But after trying out different majors ranging from nursing to microbiology and exploring the world through internships abroad, Sattie found her passion for wildlife biology. She received her undergraduate degree in wildlife and fisheries at Salish Kootenai College, and in 2020, as a wife and mother, Sattie began her graduate degree at the University of Montana. Now, she studies the impacts of feral horses on deer and elk habitat in the state of Washington.

**Sattie:** My project is going to be looking at the impacts of feral horses on our reservation. Horses are becoming extremely overpopulated and they're also degrading the land because the horses will eat the plant all the way down to the crown and there's nothing left. Right now my reservation looks really bare where horses are and you could tell because there's just no vegetation in the area. The question is what do we do and how do we manage them. The goal of my research is to identify some of those exact negative impacts like this is exactly what they're doing, where, and how. I'm going to be setting up some trail cameras and looking at the landscape and I'll be able to visualize areas where there's high horse usage and low horse usage and the impacts of the vegetation in those areas. I'm also going to be implementing indigenous knowledge into that. I'll be asking some of the elders, some of the locals and tribal members, historically what the horses look like then versus now because Native Americans, we as a people we didn't write things down like history. We passed stories down through oral stories and so that's how our history has been passed down. My goal is to be able to take some of those locals' point of view and some of the indigenous people, some of those Elders point of view and put it on paper.

**Kaitlyn:** The results of all three student’s projects will inform important management decisions that will help conservation in their communities and beyond. When we asked the students to reflect on their journeys to graduate school, they offered advice for youth in their communities who may be interested in continuing their education.

Xavier urged those continuing their education to take pride in what they have already accomplished and keep their dreams afloat.

**Xavier:** My advice for people who are continuing their education is never to give up and don't stop what you're doing because I guess just for you to take a moment and reflect back on how far you came and what you been through to get where you are today. And that’s a lot honestly. Living year to year is like a big accomplishment because you grow as a person and each year there's a lot of ups and downs and that only builds more to the table I guess for you to like be ready and learn more core values as you grow as a person and everything like that. I would say not to give up on your dreams but only to pursue them because the sky's the limit.

**Mary:** Ken encouraged those struggling through their degrees to seek the company of their peers.

**Ken:** There are many times when you're going to be really overwhelmed, it’s going to be very stressful. But just remember why you're here and to have a career. Hopefully that is enough to motivate you. A good support system is to talk to your peers of your struggles because they are definitely going through similar situations as you and just knowing that other people are going through those situations that can be also a really good motivator and just to help lift you back up.

**Kaitlyn:** Sattie, inspired by her own travels, encouraged young people in her community to seek out and take advantage of as many travel opportunities as possible.

**Sattie:** I would encourage all of the younger generations to apply for as many scholarships as they can. Take those opportunities uh even if they're scared. I remember I went to Costa Rica and I was so scared because it was an eight-week program which is not that long but it felt like a long time to be away from home. It's definitely going to be tough moving away from the reservation and going away for that long, but do it, you won't regret it. We can always come back. It doesn’t matter how long you’ve been gone your still going to be welcomed back with same open arms of your friends and family.

**Kaitlyn:** From kids simply enjoying the outdoors growing up to professionals in wildlife biology and conservation, Xavier, Ken, and Sattie are making the U.S. Fish and Wildlife Service and their communities proud. Through sharing their stories, these students are lighting a path for younger generations to get involved in conserving the fish, wildlife, and plants that make these lands home.

**Mary:** Thank you to those listening and thank you to Xavier, Ken, and Sattie for sharing your stories.