

# Biological Diversity Working Group Newsletter



THE  
WILDLIFE  
SOCIETY

Fall 2025

Bi-Annual Newsletter

The board members of the BDWG are excited to kickstart our revitalized newsletter with an introduction to the board members and the student travel grant award winners for this year's TWS Annual Conference.

We wanted to provide some information to the members of BDWG such as the meeting link, if you would like to join our board meetings, as well as provide a link to directly donate towards BDWG which is how we are able to fund student travel grants each year.

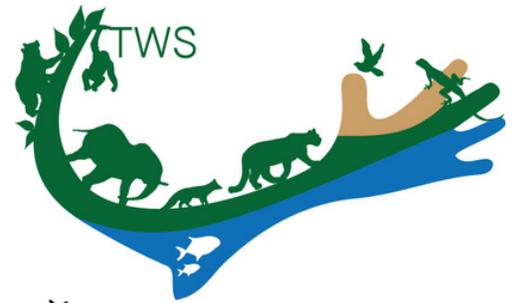
Lastly, we are actively looking for presenters for our "Collaborative Conservation" symposium for the TWS 2026 Annual Conference in Des Moines, Iowa. We welcome any and all speakers involved in the conservation of biological diversity. Please reach out to us at [twxbdwg@gmail.com](mailto:twxbdwg@gmail.com) if you are interested in presenting!

## Interested in attending a board meeting?

Starting November 5<sup>th</sup>, we will meet at 4:30pm to 5:30pm EST on the **first Wednesday of each month**.

The meeting is open to all members of BDWG, and we welcome your attendance and participation.

Please click [here](#) to join the zoom meeting. Password: 000000



## Biological Diversity Working Group

Board Members:

Chair - TJ Francisco

Past Chair - Greg Smith

Chair-elect - Amanda Barone

Secretary - Mary Hiney

Treasurer - Joe Drake

Board Members - Alexa Murray &  
Hailey Shanovich



## Donate to BDWG

We are able to send students to the TWS Annual Conference by awarding travel grants. With your support, we are able to send students like Aimee Chhen to the conference to either present their research orally or as a poster.

[CLICK HERE TO SUPPORT BDWG](#)

Under 'please direct donation to' select BDWG

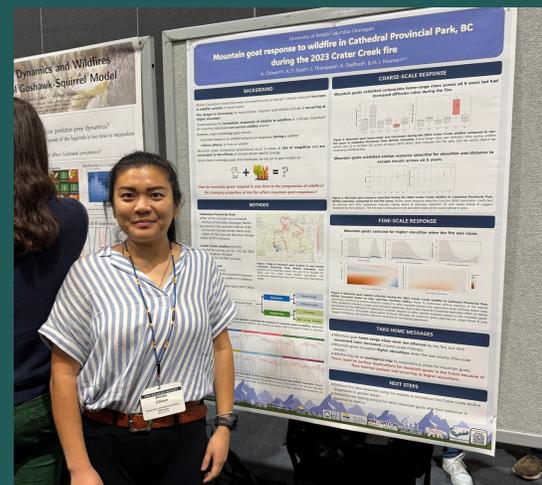


Image by Aimee Chhen, used by BDWG with permission.

[Facebook](#) | [Instagram](#) | [TWS BDWG](#)

# Meet your Board Members



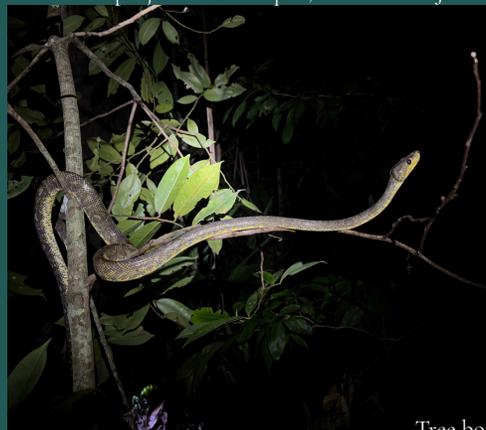
Images by TJ Francisco, used by BDWG with permission.

## TJ Francisco - Chair

A PhD candidate at Stanford University, TJ primarily works with reptiles and amphibians in forests and agroecological landscapes to investigate the consequences of land-use decisions on biodiversity, species interactions, and invasions. In Costa Rica, he researches the effects of strategically diversifying oil palm farms on herpetofauna diversity, habitat quality, and smallholder farmer well-being. Orinoquía, Colombia and Miami, Florida are the other sites where he currently conducts his land-use change and biodiversity experiments. He is interested in the interconnections between political ecology, food sovereignty, and wildlife conservation. For the past two years, he has served as the chair-elect for our Biological Diversity Working Group.

Photos from a new field project in Orinoquía, Colombia. TJ is monitoring sensitive species in a newly established preserve.

Red footed tortoise



Tree boa



Dwarf caiman

Tapir



Jaguar

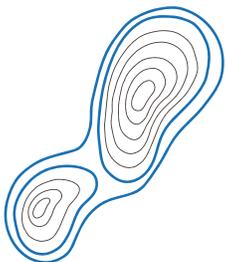
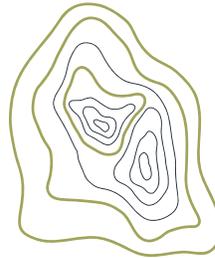
# Meet your Board Members



**Joe Drake - Treasurer**

Images by Joe Drake, used by BDWG with permission.

Joseph Drake received his PhD at UMass – Amherst and his M.Sc. from Texas Tech University. More recently, he was a postdoc at Virginia Tech and is now a postdoc at The Ohio State University. Joe has been involved in TWS' Biological Diversity Working Group for a while, and the past several years has served as the BDWG's treasurer. He is excited to continue his role as treasurer. He has largely focused on applied quantitative ecological research covering topics from invasive species management & policy, metapopulation dynamics, and connectivity modelling. His experiences cross many geographies and landscapes, so loves his field work but accepts that he has to actually use a computer to analyze and write-up all the findings from the field.



Images by Amanda Barone, used by BDWG with permission.

**Amanda Barone - Chair-Elect**

Amanda Barone is a land steward of 60 acres of farmland and forest in the Adirondack Park in New York State. She is a member of Permaculture Institute of North America, Certified Wildlife Trackers Association, and Mid-Hudson Mycological Association. She has a Master of Public Administration and Masters of Science in Emergency Management. She is excited to be Chair-Elect of The Wildlife Society Biological Diversity Working Group.

# Meet your Board Members



Images by Mary Hiney, used by BDWG with permission.

## Mary Hiney - Secretary

Mary Hiney is in her third term as secretary for the Biological Diversity Working Group. She currently holds a bachelor's degree in Ethnic Studies and a masters degree in Environmental Policy and Management. She is honored to work alongside the Forest Service as an ORISE Fellow focusing on Tribal Co-Stewardship in Practice. She enjoys spending time with her daughter, reading a good book, and volunteering.



Images by Alexa Murray, used by BDWG with permission.

## Alexa Murray - Board Member

Alexa Murray is one of the board members at-large for the Biodiversity Working Group. She earned a BS in wildlife conservation from Virginia Tech and a masters in fisheries, wildlife, and conservation biology from NC State University. She is currently working as the SE regional wildlife biologist for the New Mexico Department of Game & Fish. She is in charge of all things wildlife in her region, from keeping bear cubs warm during den checks to tracking bighorn sheep through the desert to putting GPS backpacks on turkeys. Based in Roswell, she hasn't had any alien sightings...yet.

# Student Travel Grant Awardees



Anna with an acoustic detector in the field in a mosquito and tick infested forest in Minnesota



Anna presenting in Hall D at the conference in Edmonton



A photo of a gliding flying squirrel after releasing it during trapping efforts

Images by Anna Peterson, used by BDWG with permission.

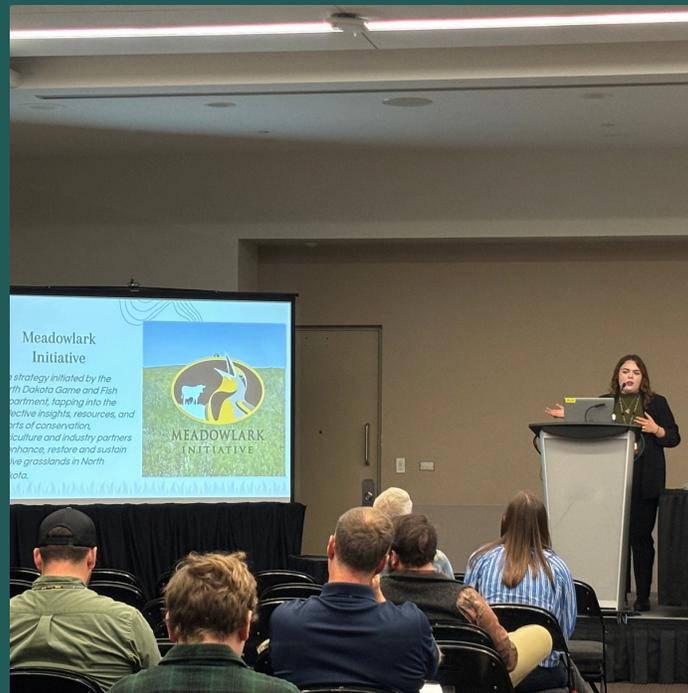
## Anna Peterson

My name is Anna Peterson and I am a Master's student at the University of Minnesota Duluth in the Integrated Biosciences Program. Broadly, my project focuses on flying squirrel distributions through time in Minnesota with several aims nested within. We have two species of flying squirrels in Minnesota, the northern and southern flying squirrel (*Glaucomys sabrinus* and *G. volans* respectively). Northern flying squirrels are a species of concern in nearby states and are now listed as vulnerable in 2025 updates to Minnesota's State Wildlife Action Plan. This is in part due to range expansion of southern flying squirrels into historically northern flying squirrel range resulting in competition for resources. My first aim was to identify the historic distribution of flying squirrels in Minnesota by using online repositories such as ARCTOS, VertNet, and GBIF to compile complete records that included location, date, and species. The second aim was to determine current distributions of both species in the state using acoustics, trapping, and camera trap records. My focus within these datasets was the acoustic work where I developed a filter that can differentiate the species-specific ultrasonic trill call that is produced by both species and allows for species identification. This allowed us to use our newly collected acoustic data as well as previously collected data for bats to identify sites with flying squirrel detections. With the historic and current distributions in hand, we were able to see a broader temporal and spatial overlap of the species historically than what we had previously thought.

As well as an apparent contraction of the sympatric zone in the current distribution with both species shifting their ranges northward in Minnesota. My final aim is to model flying squirrel species distributions currently in Minnesota and project into the future using MaxEnt under different climate scenarios. A large component of this is analyzing vegetation data collected from our project to see where each species is being found in the state in allopatric and sympatric areas. Each of these aims provides managers and researchers baseline information on flying squirrels in Minnesota. We are continuing the acoustic work and expanding it to the larger Great Lakes Region to learn more about flying squirrel distributions as well as examine potential regional differences in calls and filter performance.

I have attended our local Minnesota chapter of The Wildlife Society for the last few years, but this was my first time attending the annual conference that took place in Edmonton, AB, CA this October. I had an incredible time learning about the vast ways that acoustics are being used in research across different study animals and getting to explore new research areas through all the wonderful presentations. I had fun sharing my presentation with the research community on such a large stage and I look forward to continued participation in The Wildlife Society and the Biological Diversity Working Group. Thank you to my advisors, lab mates, and collaborators for making this research possible and so enjoyable!

# Student Travel Grant Awardees



Images by Ashlyn E. D. Herron, used by BDWG with permission.

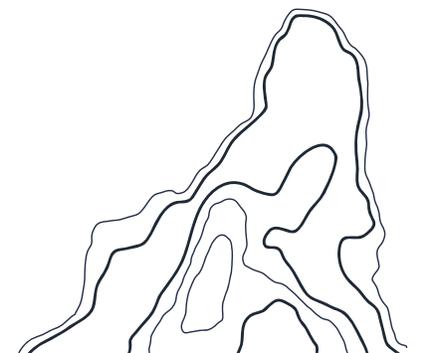
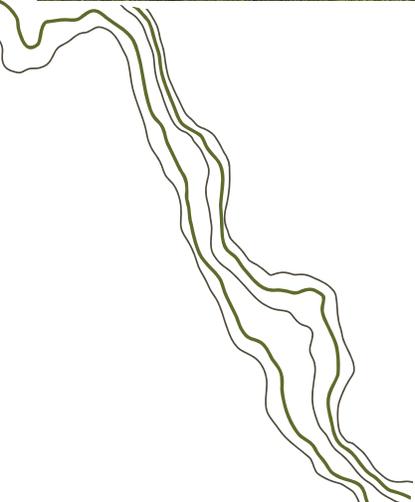


## Ashlyn E. D. Herron

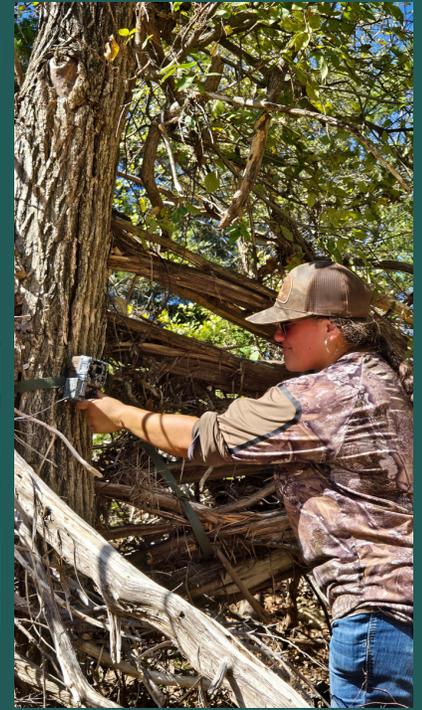
My research aims to understand how grassland birds respond to a large-scale private land grassland restoration program in Western North Dakota. I use acoustic recording units to assess how bird species respond to restored habitat on both fine habitat and coarse landscape scales. The goal of this work is to provide meaningful tools and guidance for future restoration planning to have the best outcomes for wildlife, private landowners, and managers. My findings are still preliminary; however, we are finding that species, such as bobolink (*Dolichonyx oryzivorus*) and grasshopper sparrow (*Ammodramus saviannarum*) have comparable occupancy probabilities on reseeded sites as neighboring intact sites after three years of prairie reconstruction. Species that prefer shorter, more sparsely vegetated areas, such as chestnut-collared longspur (*Calcarius ornatus*), have experienced a decline in reseeded site occupancy probability over time, highlighting the importance of having a multi-species approach when monitoring for restoration outcomes.

Future plans for this project include an upcoming final field season and working on the formal analysis to better understand what occupancy and detection reveal for habitat quality changes for imperiled grassland birds.

I am grateful for the support of the Biological Diversity Working Group that made my attendance of the annual conference in Edmonton, Alberta, possible. This was my first TWS conference and the first time I was able to give an oral presentation of my work to date, and it would not have been possible without the generosity of the BDWG.



# Student Travel Grant Awardees



Images by Liliana Navar, used by BDWG with permission.

## Liliana Navar

With the help of the Biodiversity Working Group, I presented my research, “Feral Pig Activity Patterns: Nocturnal—Diurnal Shifts and Seasonal Variability in Riparian Ecosystems of North-Central Texas.”

Our project's goal was to evaluate the influences of seasonal weather conditions and stream type on feral pigs.

We tested two main predictions:

1. Feral pigs would show increased nocturnal activity in spring and summer across the landscape.
2. Pigs would demonstrate greater use of intermittent streams.

Our study took place within Palo Pinto Mountains State Park in north-central Texas, where we used motion-triggered cameras from January to July of 2022 and 2024. Across both years, we recorded over 160,000 detections. Results showed that pig activity patterns varied by season and stream type.

Contrary to our first prediction, pigs remained active during the day in warmer months, suggesting that environmental factors such as temperature and water availability influence behavior in complex ways. Activity was generally higher at intermittent streams, partially supporting our second prediction. These findings indicate that management strategies should not focus only on nighttime activity, since substantial daytime activity can occur depending on local conditions.

I'll be graduating this December from Tarleton State University and will begin working full-time with an environmental consulting company in East Texas. I'm excited to continue contributing to wildlife science through my professional work and hope to eventually return to pursue graduate school to build on this research.



# Call for content!

Are you interested in sharing your art, photography, research, or experiences in a certain temporary, seasonal, or fellowship? Please contact Mary Hiney at [twsbdwg@gmail.com](mailto:twsbdwg@gmail.com) to have your content highlighted in our bi-annual newsletter.

**This month we are showcasing TJ Francisco's photography.**

Image by TJ Francisco, used by BDWG with permission.



## Looking for a job?

### **Postdoctoral Associate: Forecasting changes in avian biodiversity under changing climate**

The Davis Global Biodiversity and Ecoinformatics lab at Cornell University seeks a Postdoctoral Associate with experience in statistical modeling, who is also interested in or has experience with species distribution modeling, climate data analysis, and natural resource decision-making. The successful candidate will use data from eBird and structured monitoring programs to identify priority areas for migratory forest birds through the end of the century by forecasting species' responses to projected climate and land-use/land-cover change under multiple socio-climatic scenarios. The specific focus of this project will be providing external management agencies with robust, high-resolution information on the factors potentially impacting population persistence, which they will then use to make more effective decisions regarding the long-term protection for migratory species. As such, the successful candidate will work closely with researchers both at Cornell and in partner organizations, gaining valuable experience working on a large-scale, multi-sectoral problem.

In addition to external partners, the postdoctoral associate will be working closely with scientists in the Conservation Science and eBird Status and Trends teams at the Cornell Lab of Ornithology.

Please apply [here](#). Questions? Contact Courtney Davis at [cld74@cornell.edu](mailto:cld74@cornell.edu)