

# TWS NPWMWG

Newsletter



## Our Mission

The Native Peoples Wildlife Management Working Group promotes improved relationships between state / provincial / federal wildlife managers and tribal wildlife managers through improved communications. The Working Group provides a forum for tribal and agency wildlife professionals to discuss wildlife management on reservations and aboriginal lands and to share viewpoints on proposed policies affecting wildlife management in Indian Country. The Working Group works to enhance wildlife management on and off reservations through joint activities.

## Inside this Issue

Goals for 2025 ..... pg.2  
 Annual Meetings ..... pg.3  
 Native Student Professional Development Program Update ..... pg.4  
 Native American Research Assistantship Program Update ..... pg.5  
 Black-footed Ferret Restoration on Standing Rock Reservation ..... pg.6-8  
 TEK in Wildlife Management ..... pg.9  
 Cultural Burning on Karuk Aboriginal Territory ..... pg.10  
 New NPWMWG Board Members ..... pg.11  
 NPWMWG Information ..... pg.12

# NPWMWG Goals for 2025

**We love when our members get involved!**

**See below for NPWMWG pursuits, and please reach out if you'd like to contribute!**

## Financial Support

One of the greatest challenges our board seeks to overcome is the financial inequities faced by Indigenous students and researchers. We have been successful in obtaining grant funding to support the Native Student Professional Development (NSPD) Program and will continue to seek new opportunities. If you're aware of any funding sources that may support our work, please share with our treasurer Dominick Harris ([dominickharris@gmail.com](mailto:dominickharris@gmail.com)).

## Tribal Wildlife Management Course Development

In support of Indigenous student learning and our board is assisting in the development of course content for improved education regarding Indigenous Wildlife Management. The development of this program is still in the early stages and would greatly benefit from your input. If you have educational materials you'd like to share, are aware of funding opportunities to support this effort, or would like to get involved, please reach out to chair-elect Avery Tilley ([avetill2000@gmail.com](mailto:avetill2000@gmail.com)).

## NPWMWG Webinars

As a working group of The Wildlife Society, we have been given the opportunity to host one of TWS's monthly webinars this fall. We're also hoping to host our own webinar to engage our members in conversations regarding Indigenous Wildlife Management. If you have ideas for topics you'd like to see covered by these webinars or you'd like to get involved, please reach out to chair Celina Gray ([celina.gray19@gmail.com](mailto:celina.gray19@gmail.com)).

## Awards Committee

Our working group intends to nominate someone for The Wildlife Society's Annual Diversity Award. We would also like to begin giving awards to those members of our community most deserving of recognition for their contributions to conservation and Indigenous wildlife management. If you would like to support this initiative or join our newly formed Awards Committee, please contact board member: Nadira Mitchell ([nadira8mitchell@gmail.com](mailto:nadira8mitchell@gmail.com)).



# Annual Conferences



**The Wildlife Society  
32nd Annual Conference**

Reflected in this year's conference logo (designed by Indigenous artist Dusty LeGrande), The Wildlife Society is hoping to emphasize Indigenous wildlife management and research at this year's conference; we hope to see you all there!

The conference will be held in Edmonton, Alberta from October 5–9th. In the Cree / Nehiyaw language, Edmonton is known as *amiskwaciwâskahikan* which means to Beaver hills house, the inspiration for this year's logo.

Abstract submissions will open in April and registration will begin in June at [twsconference.org](https://twsconference.org)

The Habitat Restoration Working Group is also planning to host a symposium at the conference. If you're conducting Indigenous-led restoration work, they'd love to include you! Contact them at [twshabitatwg@gmail.com](mailto:twshabitatwg@gmail.com)

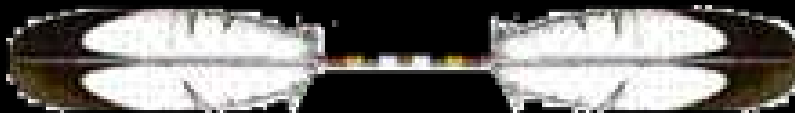
**Native American Fish and Wildlife Society  
42nd Annual Conference**

The 42nd Annual Native American Fish and Wildlife Conference will be held in Riverton, Wyoming from May 12–15th.

This year's conference is being hosted by the Eastern Shoshone & Northern Arapaho Tribes of the Wind River Reservation.

Abstracts and Travel Grant submissions are due March 7th

<https://nafws.org/product/2025-annual-national-conference/>



# Update from the Native Student Professional Development Program

The Native Student Professional Development (NSPD) Program has continued its great success from the past several years and is looking forward to continuing to expand the opportunities it's able to offer Indigenous students.

One of the primary goals of the NSPD Program is to provide Indigenous students with funding to attend the annual Wildlife Society Conference. Additionally, these students receive professional mentorship and guidance while at the conference. Last year, we received a record number of applicants for the NSPD Program. In order to support as many Indigenous students as possible, we are currently seeking additional financial support. If you're aware of potential financial support resources, otherwise interested in supporting the program, or simply have questions for us, please contact the NSPD Program Co-coordinators Dominick Harris ([dominickharris@gmail.com](mailto:dominickharris@gmail.com)) and Remington Bracher ([bracher@ualberta.ca](mailto:bracher@ualberta.ca)).

## Some important updates:

- We were able to support the per diem costs for six students to attend The Wildlife Society Annual Conference in Baltimore in 2024 and we also provided these students with professional development toolkits to support their continued achievements.
- We will be supporting two of these students' attendance at the Native American Fish and Wildlife Conference in 2025.

Looking forward to the 2025 TWS Conference in Edmonton, Alberta, the theme will be Indigenous Knowledge and Perspectives. We really want to incorporate the NSPD Program and its students into the conference and we're working closely with conference coordinators to make sure the Native Peoples Wildlife Management Working Group, its members, and Indigenous students are elevated to the forefront of these discussions.





# Update from the Native American Research Assistantship Program

Cameron Kovach, *Director of Operations, The Wildlife Society*

The Native American Research Assistantship (NARA) Program offers opportunities for Native undergraduate or graduate students to gain experience during paid (at least \$6,500), 3-month summer research projects with USDA Forest Service Research and Development (USFS R&D) scientists. Established in 2014, NARA provides training for careers in natural resource and conservation-related fields, promotes Native student advancement in the wildlife profession, and elevates Indigenous Traditional Ecological Knowledge (ITEK) within federal research.



Last summer, NARA excitedly welcomed Hunter Grove and Nadira Mitchell to the program!

Hunter worked with Helen Chmura on a project entitled, "Validating Methods for Detecting Pregnancy Status in Rare Forest Mesocarnivores." During this lab-based project, Hunter validated methods for assessing reproductive status in free-ranging mesocarnivores, such as wolverines and Canada lynx, using non-invasive measurements of hormone metabolites in scat.

Nadira worked with Serra Hoagland on a project entitled, "Fulfilling Tribal Wildlife Research and Management Needs." During this project, Nadira assisted in developing sections of a comprehensive Tribal Wildlife Management Plan (TWMP) requested by the Mescalero Apache Tribe. Specifically, Nadira researched, drafted, and edited technical sections of the TWMP and assist the development and coordination of local community focus groups to understand wildlife needs and interests of the tribal community, especially related to ITEK provided by elders and practitioners within the community.

For more information on the NARA Program, [click here](#).



# Standing Rock Tribe, New Century Environmental, and USFWS Release Endangered Ferrets on Reservation

Michael P. Gutzmer, *Principal, New Century Environmental LLC*

Starting in 2021 and continuing through 2023, the Standing Rock Indian Tribe Game & Fish Department, New Century Environmental (NCE), and the United States Fish and Wildlife Service (USFWS) released a total of 75 black-footed ferrets (*Mustela nigripes*) on their reservation in South Dakota. The Standing Rock Sioux Tribe, located in North and South Dakota, collaborated to release ferrets in acceptable habitats on the South Dakota portion of the reservation south of McIntosch where expansive prairie dog towns meet suitable living requirements for ferrets.

The black-footed ferret is the most endangered mammal in the United States. A small to medium-sized carnivore, female ferrets weigh from 645–850 grams. The ferret's fur is yellowish-buff with pale under parts, the forehead, muzzle, and throat are white, and the feet are black. A black mask surrounds the eyes and is well-defined among juveniles. The black-footed ferret is the only ferret species native to the Americas, and there are no recognized subspecies.

Black-footed ferret restoration on the Standing Rock Reservation began in October 2012 when NCE and the tribal biologist for Standing Rock documented a ferret south of the Grand River near Mobridge, South Dakota. Since then, NCE has supported the Standing Rock Tribe's efforts to fund restoration efforts.

In 2021, NCE secured a Bureau of Indian Affairs (BIA) grant to support the Standing Rock Game & Fish Department's efforts to document black-footed ferrets' presence on the reservation including assessments of ferret abundance and possible impacts on other endangered species, such as northern long-eared bats (*Myotis septentrionalis*).

At present, known black-footed ferret populations exist only at reintroduction sites where introduced populations remain small, fragmented, and intensively managed, with only a few of these introduced populations producing wild-born adults. As a result of the bottleneck of the captive breeding program, ferrets have lost 90% of their genetic diversity. Spotlight surveys conducted since May 2022 have revealed survival of 10 unique introduced ferrets.



*The first black-footed ferret released on Standing Rock Indian Reservation south of McIntosch, South Dakota*

*Story continues on next page...*



In 2024, primary goals were to protect and enhance the habitat and populations of black-footed ferrets and black-tailed prairie dogs (*Cynomys ludovicianus*) in the 2.3 million acres of tribal and private land on the Standing Rock Reservation in the Missouri Coteau Region of North and South Dakota. Standing Rock hopes to be part of a six-tribe ferret-focused effort in habitat evaluation, plague treatment, community engagement, and management plan development funded by the National Fish and Wildlife Foundation in a Buffalo Grasslands Initiative in the northern Great Plains.

The long-term goal for the Standing Rock Tribe is to maintain controls for black-tailed prairie dogs in an area primarily used for cattle grazing, and the USFWS goals are to eventually save the ferret from extinction by expanding the ferret's range into this part of South Dakota.

*Story continues on next page...*



*Jeff Kelly (Director of the Standing Rock Indian Tribe Game & Fish Department) and Seth Gutzmer (Wildlife Biologist for the Standing Rock Indian Tribe Game & Fish Department) holding a black-footed ferret photo on day of ferret release.*



In support of our black-footed ferret restoration efforts, we submitted three grants to the BIA. Descriptions in brief of our ancillary BIA proposals include:

### 1) ESA-Endangered Black-footed Ferret Non-invasive DNA Survey Methods

The ESA-endangered black-footed ferret was reintroduced to Standing Rock with releases in 2021 and 2022, and efforts supporting ferret reintroduction are ongoing. Among these efforts is an extensive effort to survey for ferrets. These surveys are conducted to evaluate key aspects of the reintroduction program. These efforts have almost exclusively involved spotlighting, which is the method used and recommended by the Black-footed Ferret Recovery Implementation Team (BFFRIT). Although spotlighting for ferrets is extensively used by BFFRIT, our extensive experience with this technique and an enormous published literature strongly suggests that it is inefficient, expensive, and likely unsustainable at the level needed. Additionally, as spotlighting does not supply key data (e.g., genetic data), the acquisition of which involves highly invasive secondary actions, such as trapping and handling of the endangered ferrets. The current literature strongly discourages such actions in surveying rare and endangered animals, for which any disturbance is potentially highly detrimental.

### 2) Recognizing ESA Shared High Value Habitat

Recent BIA-funded surveys conducted by tribal biologists have shown that ESA-listed or candidate bat species (e.g., northern long-eared bats, tricolored bats (*Perimyotis subflavus*), and little brown bats (*Myotis lucifugus*)) are present, but insufficient to address recently published research suggesting prairie dog towns may be high value habitat for endangered bats in prairie habitats. The Standing Rock Department of Game and Fish proposes surveys to assess prairie dog towns as high value habitat for ESA-listed and other bats on Standing Rock. If prairie dog towns are high value habitat, protection and conservation of prairie dog towns (which are also crucial habitat for black-tailed prairie dogs and ESA-endangered black-footed ferrets) on Standing Rock – which are currently under pressure from agricultural and wind energy interests – will be crucially assisted.

### 3) ESA Plague Surveillance and Wildlife Disease Monitoring and Implementation

The immediate implementation of a program to detect sylvatic plague outbreaks (epizootics) on Standing Rock is crucial. USFWS, BFFRIT, and the Black-footed Ferret Field Operations Manual (BFFFOM) all recognize the crucial importance of plague monitoring for black-footed ferrets and black-tailed prairie dogs. In addition to ferret reintroductions on Standing Rock, other factors make immediate action desirable. Foremost, plague epizootics have been documented on prairie dog colonies in Dewey County, South Dakota, which borders Standing Rock to the south. According to Kempema et al. (2015), *Yersinia pestis* – the bacterium that causes plague – is likely present on Standing Rock, and Corson County (the portion of Standing Rock that borders Dewey County) is at high risk for epizootic plague. Available land area and landowner cooperation are other positive caveats.





# New Research

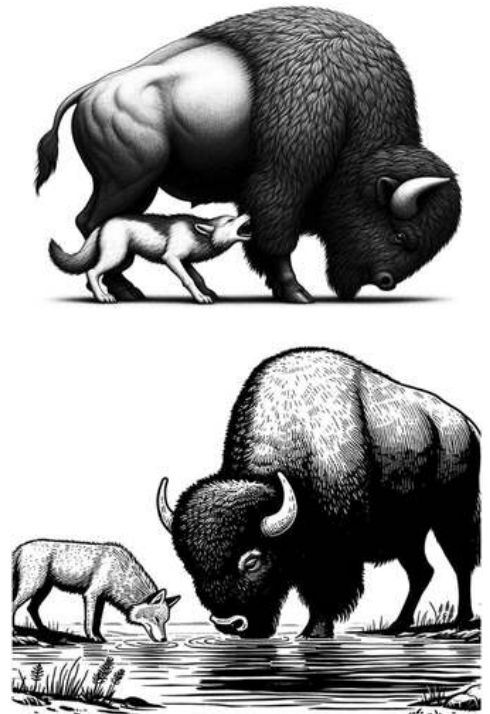
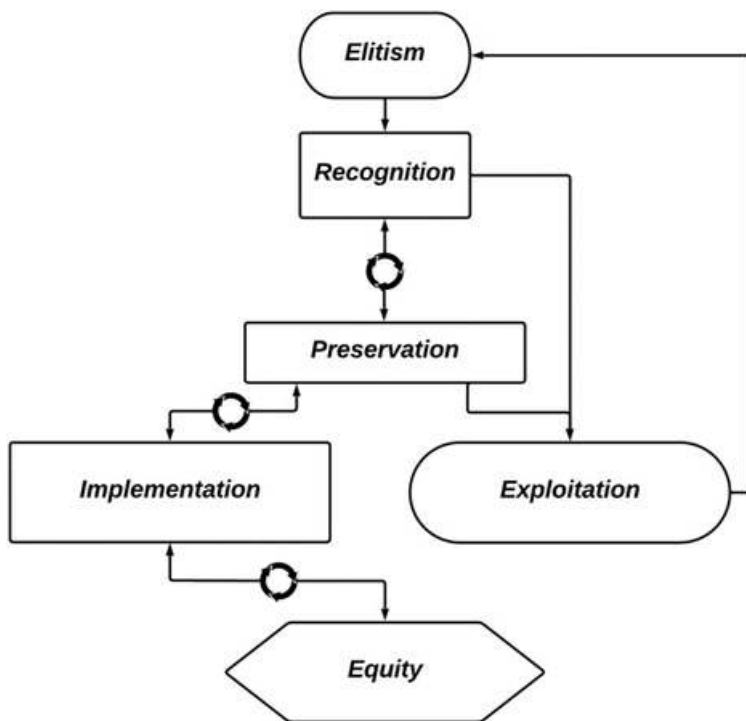
## State of Traditional Ecological Knowledge in the Wildlife Management Profession

Ty J. Werdel, David Matarrita-Cascante, and Jacob E. Lucero

*Department of Rangeland, Wildlife, and Fisheries Management at Texas A&M University*

In this recent publication in the *Journal of Wildlife Management*, Ty Werdel (lead author and board member for the Native Peoples Wildlife Management Working Group) and his coauthors discussed the state of TEK in the wildlife management profession.

Werdel et al.'s work focuses on the path from elitism to equity when incorporating TEK. Check out the complete interview where Werdel goes into greater depth regarding his own experiences integrating TEK and western science [here](#).



To read the complete article, [click here](#). For a sneak preview, check out their abstract below:

Traditional Ecological Knowledge (TEK), described as the relationship between Indigenous peoples and the ecosystem, has always been part of Indigenous communities and their daily lives; however, TEK has progressively been incorporated into the academic and professional field of North American wildlife management and ecology despite its historical domination by Western scientific attitudes, knowledge, and methods. The objective of this note is to provide an overview of such progression from the standpoint of the first author, an Indigenous professional trained in a Western scientific paradigm. More specifically, the paper categorizes the history and the current state of TEK in the wildlife management profession while providing insights for the future of the field.



## New Research

### [Blending Indigenous and Western Science: Quantifying Cultural Burning Impacts in Karuk Aboriginal Territory](#)

Skye M. Greenler, Frank K. Lake, William Tripp, Kathy McCovey, Analisa Tripp, Leaf G. Hillman, Christopher J. Dunn, Susan J. Prichard, Paul F. Hessburg, Will Harling, and John D. Bailey

Collaborative efforts among the Karuk Tribe (*W. Tripp, McCovey, A. Tripp, Hillman*), Mid Klamath Watershed Council (*Harling*), Oregon State University (*Greenler, Dunn, Bailey*), and U.S. Forest Service (*Lake, Hessburg*) resulted in this recent publication in *Ecological Applications* in which Greenler et al. examined the impacts of cultural burning in Karuk Aboriginal Territory of northern California. Their work has been highlighted by [The Wildlife Society](#) and [Oregon State University](#). Congratulations!



To read the complete article, [click here](#), or check out their abstract below:

The combined effects of Indigenous fire stewardship and lightning ignitions shaped historical fire regimes, landscape patterns, and available resources in many ecosystems globally. The resulting fire regimes created complex fire-vegetation dynamics that were further influenced by biophysical setting, disturbance history, and climate. While there is increasing recognition of Indigenous fire stewardship among western scientists and managers, the extent and purpose of cultural burning is generally absent from the landscape-fire modeling literature and our understanding of ecosystem processes and development. In collaboration with the Karuk Tribe Department of Natural Resources, we developed a transdisciplinary Monte Carlo simulation model of cultural ignition location, frequency, and timing to simulate spatially explicit cultural ignitions across a 264,399-ha landscape within Karuk Aboriginal Territory in northern California. Estimates of cultural ignition parameters were developed with Tribal members and knowledge holders using existing interviews, historical maps, ethnographies, recent ecological studies, contemporary maps, and generational knowledge. Spatial and temporal attributes of cultural burning were explicitly tied to the ecology of specific cultural resources, fuel receptivity, seasonal movement patterns, and spiritual practices. Prior to colonization, cultural burning practices were extensive across the study landscape with an estimated 6972 annual ignitions, averaging approximately 6.5 ignitions per Indigenous fire steward per year. The ignition characteristics we document align closely with data on historical fire regimes and vegetation but differ substantially from the location and timing of contemporary ignitions. This work demonstrates the importance of cultural burning for developing and maintaining the ecosystems present at the time of colonization and underscores the need to work collaboratively with Indigenous communities to restore ecocultural processes in these systems.



# Please Welcome our New Board Members!



**Daniel Bird** is currently at the University of Montana pursuing Ph.D. research in partnership with the Blackfeet Tribe in northwest Montana to better understand impacts of fences on elk migration movements and parturition habitat use within the reservation, Glacier National Park, and Lewis & Clark National Forest. Daniel was raised in Kewa (Santo Domingo Pueblo), New Mexico, USA and is an enrolled tribal member. He learned his unique tribal culture and language growing up within his community. These teachings focused on interactions with the environment that shaped his community for thousands of years. His lifelong goal is to increase Native American representation in STEM at all levels of science. He also plans to assist tribes in continued sustainable management of natural resources while maintaining Indigenous lifeways.



**Shannon Finnegan** is a wildlife biologist for Koniag Native Corporation in Kodiak, Alaska, where she studies Sitka black-tailed deer and brown bears to inform management decisions. Her projects include wildlife population estimation, harvest strategies, Indigenous food security, and rural community bear education. Shannon conducted her Ph.D. research on Kodiak and Afognak Islands, where she studied bear and elk movement, diets, and energy alongside Alaska Fish and Game and Native corporations. Her previous experiences include large carnivore conservation and management in South America, Asia and Southern Africa, where she collaborated with Indigenous communities on wildlife conflict mitigation.



**Nadira Mitchell** is Diné (Navajo), born and raised in Tucson, Arizona. She earned her B.S. with Honors in Wildlife Conservation and Management minoring in American Indian Studies at the University of Arizona in May 2024 before becoming an assistant researcher supporting the Mescalero Apache Tribe's tribal wildlife management plan through the Native American Research Assistantship (NARA) program. She hopes to serve as a liaison between tribal and non-tribal governments in Arizona and is particularly interested in the continued development of the Native Student Professional Development Program. Nadira also serves on the board of the Southern Arizona Research, Science, and Engineering Foundation.



# The Native Peoples Wildlife Management Working Group

## Working Group Officers

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Newsletter Editor: Nate Wehr  
[nathanielwehr@gmail.com](mailto:nathanielwehr@gmail.com)

## Interested in joining the working group?

Check out our [TWS webpage](#) for more information including resources for advancing Native Peoples in wildlife management and archived news.

To formally join the NPWMWG, please visit the TWS login website [here](#) and select the "Add Organization Unit Membership" under the "Membership" tab. To be eligible, you must be a current member of The Wildlife Society, but it is not required to be affiliated with a Tribe to participate. The NPWMWG waives membership fees for students! If you have any questions concerning working group dues or how to join, contact the membership coordinator at (301) 897-9770 or [membership@wildlife.org](mailto:membership@wildlife.org)

## Follow Us!



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## Submission Requests for Newsletters

**Calling all Working Group members!**

We want to know what is going on where you are! As a national (and now international!) working group, it is difficult to keep up on all the fantastic things members in other parts of the globe are accomplishing. Keep or working group members informed on issues and announcements pertinent to wildlife management and conservation in Indian Country!

Please feel free to submit any of the following for inclusion in the newsletter:

- Job and internship openings
- Scholarship opportunities
- Research and management on Indigenous lands
- Policy regarding wildlife management as it pertains to tribes
- TWS Conference photos or stories
- Any other conference details
- Current news pertaining to Indigenous rights / resources
- Any other announcements / information you'd like share with your tribal wildlife management colleagues

Please submit requests to Newsletter Editor, Nate Wehr, at: [nathanielwehr@gmail.com](mailto:nathanielwehr@gmail.com)