

# 58<sup>th</sup> Joint Annual Meeting

### NEW MEXICO AND ARIZONA CHAPTERS OF THE WILDLIFE SOCIETY AND ARIZONA/NEW MEXICO CHAPTER OF THE AMERICAN FISHERIES SOCIETY

### FEBRUARY 6-8, 2025

### THE CLYDE HOTEL

#### ALBUQUERQUE, NEW MEXICO

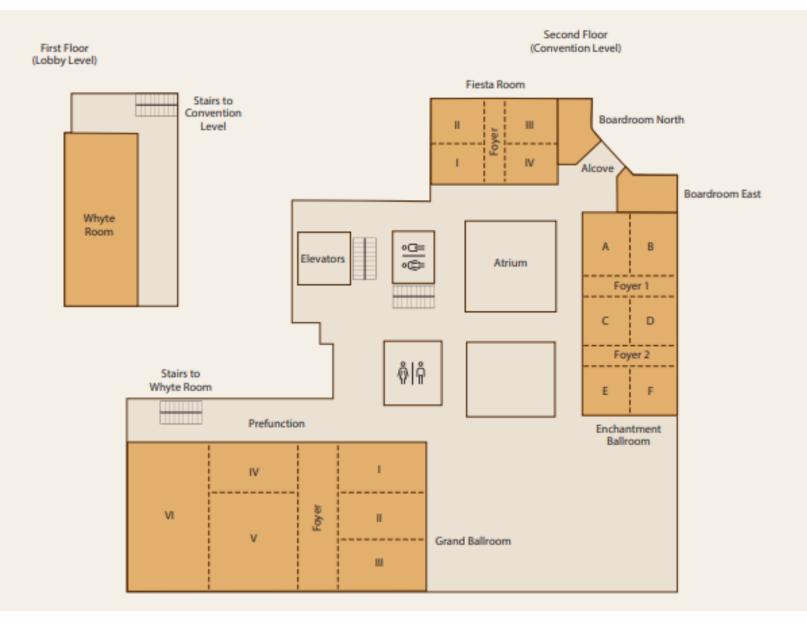
PRESENTED BY:



### Schedule at-a-Glance

Thursday February 6			
End	Event	Location	
9:00 a.m.	Morning Coffee / Snacks	Prefunction	
4:00 p.m.	AFS Piscicide Application Workshop Enchantment (A		
12:00 p.m.	Wildlife Trapping and Handling Workshop	Enchantment (C/D)	
1:00 p.m.	Lunch	On Your Own	
3:00 p.m.	Resume Building Workshop	Enchantment (E/F)	
4:00 p.m.	Wildlife-Friendly Fencing Discussion	Enchantment (C/D)	
6:00 p.m.	Registration	Lobby/Elevators	
6:00 p.m.	Poster/Photo Set-up	Enchantment Courtyard	
6:00 p.m.	Presentation Loading	Enchantment Foyer 1	
6:00 p.m.	Raffle and Silent Auction set-up	Boardroom East	
5:00 p.m.	AZ TWS Business Meeting	Enchantment (A/B)	
5:00 p.m.	NM TWS Business Meeting	Enchantment (C/D)	
5:00 p.m.	AZ/NM AFS Business Meeting	Enchantment (E/F)	
8:00 p.m.	Welcome Social and Appetizers	Grand Ballroom (IV-V	
9:30 p.m.	Student Quiz Bowl	Grand Ballroom (VI)	
	Pagistration	Lobby/Elevators	
		Enchantment Foyer 1	
		Prefunction	
9.00 a.m.	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	Enchantment Courtyard	
12:00 p m		Grand Ballroom (IV-VI	
	•	On Your Own	
		Grand Ballroom (I-III)	
		Enchantment Courtyard	
		Enchantment (C/D)	
		Enchantment (C/D)	
		Enchantment (E/F)	
		Enchantment (A/B)	
		Grand Ballroom (I-III)	
		Enchantment Foyer 1	
1	0	Enchantment Courtyard	
0.50 p.m.		Boardroom East	
9:30 p.m			
D p.m.9:30 p.m.Banquet and Awards CeremonyGrand Ballroom (IV-D p.m.9:30 p.m.Poster/Photo Take DownEnchantment Courty			
	End        9:00 a.m.        4:00 p.m.        12:00 p.m.        12:00 p.m.        3:00 p.m.        4:00 p.m.        6:00 p.m.        6:00 p.m.        6:00 p.m.        5:00 p.m.        5:00 p.m.        5:00 p.m.        5:00 p.m.        8:00 p.m.	EndEvent9:00 a.m.Morning Coffee / Snacks4:00 p.m.AFS Piscicide Application Workshop12:00 p.m.Wildlife Trapping and Handling Workshop1:00 p.m.Lunch3:00 p.m.Resume Building Workshop4:00 p.m.Wildlife-Friendly Fencing Discussion6:00 p.m.Registration6:00 p.m.Poster/Photo Set-up6:00 p.m.Presentation Loading6:00 p.m.Presentation Loading6:00 p.m.Raffle and Silent Auction set-up5:00 p.m.AZ TWS Business Meeting5:00 p.m.AZ/NM AFS Business Meeting5:00 p.m.AZ/NM AFS Business Meeting8:00 p.m.Student Quiz Bowl9:30 p.m.Student Quiz Bowl9:30 p.m.Registration11:00 a.m.Presentation Loading9:00 a.m.Morning Coffee/SnacksDeadline to Submit for Photo Contest12:00 p.m.Lunch12:00 p.m.Student Mentor Lunch5:00 p.m.Student Mentor Lunch12:00 p.m.General Sessions-Wildlife 15:20 p.m.General Sessions-Wildlife 15:20 p.m.General Sessions-Wildlife 35:20 p.m.General Sessions-Fisheries5:30 p.m.Student Poster Session9:30 p.m.Banquet and Awards Ceremony	

Saturday 1	Saturday February 8				
7:00 a.m.	8:00 a.m.	Morning Coffee/Snacks	Prefunction		
8:00 a.m.	12:00 p.m.	General Sessions-Wildlife 1	Enchantment (C/D)		
8:00 a.m.	12:00 p.m.	General Sessions- Wildlife 2	Enchantment (E/F)		
8:00 a.m.	12:20 p.m.	General Sessions- Wildlife 3	Enchantment (A/B)		
8:00 a.m.	12:00 p.m.	General Sessions- Fisheries / Wildlife	Grand Ballroom (I-III)		
12:30 p.m.		TWS/AFS Officer's Lunch	Carrie's Restaurant		



# Schedule of Oral Presentations • Friday, February 7 • Afternoon Session 1

Friday Feb. 7	Wildlife 1/Student Competition	Wildlife 2	Wildlife 3	Fisheries 1
Room	Enchantment C/D	Enchantment E/F	Enchantment A/B	Grand Ballroom I-III
1:20	Rabies virus prevalence and dispersal in the AZ-Mexico borderlands region prior to the arrival of the common vampire bat ( <i>Desmodus rotundus</i> ) <b>Kiera C. Majzner**</b>	Environmental education through lagomorph population monitoring at Petroglyph National Monument <b>Macy King*</b>	Human behavior and wildlife population dynamics in relation to the COVID-19 pandemic across the gradient of urbanization <b>Olivia L. Nguyen*</b>	Techniques to induce spawning of Sonora suckers <i>Catostomus insignis</i> in captivity <b>Taylor Saucier*</b>
1:40	Avian community response to pinyon- juniper woodland management in south- central New Mexico Adam Cupito**	Stable isotope diet analysis of northern river otter in Rio Grande del Norte National Monument and Albuquerque Biopark <b>Sophia Griego*</b>	Are urban species adapting to climate change? Dynamic avian habitat use and implications for future coexistence <b>Jeffrey D. Haight</b>	Ageing the anomaly: Sonora suckers subjected to uncharacteristic flow regime <b>Regan Doss*</b>
2:00	Animals acclimated to humans show relaxed antipredator behavior: the case of Guenther's dik-diks <b>Raymond Owino**</b>	Detection and diet analysis of collared peccary in Valencia County <b>Maximus Youngman*</b>	Climate, vegetation, and urban lizard declines: A decade-long study of perennial and intermittent reaches along the Salt River Heather L. Bateman	Gila topminnow ( <i>Poeciliopsis occidentalis</i> ) demographics and morphology (2016- 2024) in the Santa Cruz River, Arizona <b>Matthew Mayer*</b>
2:20	Noise levels of American crows within a river corridor Sabine Pritchard*	The contribution of electric utility transmission line rights-of-way to pollinator biodiversity in Arizona <b>Ronald A Waline</b>	Documenting Ord's kangaroo rat habitat within a wildland urban interface <b>Rosemary Cochran</b> *	Isotopic signatures of individual fish species in Rio Grande del Norte National Monument Jakob Harris*
2:40	Modeling avian hotspots of potential West Nile Virus outbreaks: a case study in Coconino County, Arizona <b>Gracie Ann Fischer*</b>	Investigating the effects of invasive species and climate change in the populations of freshwater turtles in the southwestern United States <b>Esteban O. Rosario Sánchez*</b>	Urbanization and host relatedness shape virome composition in a widespread, generalist carnivore <b>Natalie Payne*</b>	Comparison of the survival and growth of age-0 wild (MXY × FXX) and hybrid (MYY × FXX) brook trout <b>Breanna Graves</b> *
		3:00-3:20 BRE	AK	

\*Student paper; \*\* Competition Entry

# Schedule of Oral Presentations • Friday, February 7 • Afternoon Session 2

Friday Feb. 7	Wildlife 1	Wildlife 2	Wildlife 3	Fisheries 1
Room	Enchantment C/D	Enchantment E/F	Enchantment A/B	Grand Ballroom I-III
3:20	Avoiding disturbance to nesting birds during construction of renewable energy facilities in the Southwest United States: a case study at the SunZia Wind Project <b>Dakota D. Crane</b>	Hispid cotton rat stable isotope diet analysis in a cottonwood-dominated riparian forest before and after wildfire, flooding, and restoration using goats Ada L. Kieweg and Lelia Yane*	Mammals of the APFF Médanos de Samalayuca, interactions and conservation <b>Cuauhcihuatl Vital-García</b>	Factors influencing growth of blue catfish and walleye in Caballo Reservoir, New Mexico <b>William H. Bass IV*</b>
3:40	Converting a Large Alfalfa Farm to Wintering Waterbird Habitat in the Middle Rio Grande Valley of New Mexico: Mitigation for the SunZia Project <b>Quentin R. Hays</b>	North American porcupine home ranges and use of recent fire landscapes in New Mexico through GPS collaring <b>Isabel Robertson*</b>	Den site to dispersal: insights into puma reproduction, survival, and movement Mark A. Peyton*	Documenting native desert fish communities in the American Southwest <b>Wesley Franklin</b>
4:00	Use of drones for post-construction carcass mortality monitoring at wind projects <b>Pete David</b>	Findings from 21 years of North American porcupine captures, Bernalillo County, NM <b>Katie Rielage*</b>	Black bear resource selection in relation to wildfires and forest restoration treatments in the Jemez Mountains - An update Matthew Keeling*	The emergence of Pearce Ferry Rapid, Colorado River – and fish movement <b>Dave Rogowski</b>
4:20	A review of photovoltaic solar energy, microclimates, and thermal ecology of wildlife <b>Caleb L. Loughran</b>	Comparing the efficacy and accuracy of acoustic recorders and game cameras in detecting Mexican gray wolves <b>Catherine A Castagnet*</b>	Black bear research on the Navajo Nation <b>Deandra Jones*</b>	Utilizing R Markdown to dynamically summarize single and multi-year sportfish survey data Sean Deery
4:40	Pronghorn space-use and movements near utility scale solar energy development in New Mexico Aaron N. Facka	Detecting New Mexico meadow jumping mice through environmental DNA Makayla P. Grandpre*	Diet and microbiome analysis of critically endangered mountain gorillas <b>Kat Harper*</b>	Destruction is easy, but can we undo degradation and improve riverscapes? Skyler Hedden
5:00	Evaluating the effects of wind energy developments on mule deer and pronghorn occupancy in central New Mexico rangelands <b>Iona M. Rohan*</b>	Small mammal diversity in the Pinaleño Mountains of the Madrean Sky Island Archipelago in southeastern Arizona <b>Ellen R. Tierney*</b>	Wildlife on the move: understanding species dynamics and influencing factors on the Arizona Trail <b>Ali Lotfi*</b>	Online portal for Bureau of Reclamation fish barrier information in the Gila River Basin <b>Alexes Albillar</b>

\*Student paper

Sat. Feb. 8	Wildlife 1	Wildlife 2	Wildlife 3	Fisheries/Wildlife 1
Room	Enchantment C/D	Enchantment E/F	Enchantment A/B	Grand Ballroom I-III
8:00	Portrait of changing community composition in urban wetlands of the Salt River Luke Ramsey-Wiegmann*	2025 Review and revision of the State Wildlife Action Plan for New Mexico <b>Ginny Seamster</b>	Win-win: Inquiry-based learning in a high school biology classroom using bullfrogs removed for conservation <b>Audrey K. Owens</b>	Survival of razorback sucker stocked into a river-reservoir complex: Insights for native fish recovery <b>Christopher J. Jenney</b>
8:20	Distribution of the Arizona night lizard <b>Ryan P. O'Donnell</b>	Recent evolutionary history and current population structure of <i>Peromyscus eremicus</i> species complex from Baja California <b>Victor Andreev</b>	Addressing American bullfrogs to support conservation and recovery on native species in the Southwest and beyond <b>Karlee Jewell</b>	Current status and management of Sonora chub ( <i>Gila ditaenia</i> ) in Arizona <b>Alex Cameron</b>
8:40	What is a picture worth: involving citizen science to investigate venomous reptile ecology Jacob B. Lee	Informing the future: wildlife management through Heritage data <b>Cheyenne Herzog-Lowrance</b>	Bullfrog monitoring and removal efforts in and around the Gila National Forest <b>Rebecca A. Cozad</b>	Topminnow and pupfish: social animals Brett Montgomery
9:00	Searching for an elusive and cryptic reptile, the Gila Monster, in Southwestern New Mexico <b>Anthony J. Pawlicki</b>	Restoration in action: enhancing New Mexico's landscapes for wildlife <b>Brock C. Lorenzen</b>	Recovery of a Chiricahua leopard frog metapopulation in southeast Arizona following the removal of invasive American bullfrogs Javan M. Bauder	Using vital dyes to mark Gila topminnow for mark-recapture abundance estimation <b>Hudman Evans</b>
9:20	Why did the bobcat cross the road? Urban bobcat behavior and roadkill mitigation strategies Jesse Alston	Biodiversity assessment of the resolution Copper Project: Pathways to nature positive in critical mineral development Sanjiv Fernando	Dispersal of invasive American bullfrogs in southeast Arizona <b>Emma Sudbeck*</b>	Assessing detection of New Zealand Mudsnails at low densities using quadrats in Arizona streams <b>Crosby Hedden</b>
9:40	Mexican wolf habitat selection in Arizona <b>Reilly T. Jackson</b>	Use of passive audio monitors to investigate owl communities: Lessons Learned <b>Brent D. Bibles</b>	Bullfrog removal to support northern leopard frogs on the Kaibab National Forest Lias Hastings	Estimating persistence and movement probability of hatchery Gila trout in an Arizona stream <b>Alex Loubere</b>
	10:00-10:20 BREAK			

# Schedule of Oral Presentations • Saturday February 8 • Morning Session 1

# Schedule of Oral Presentations • Saturday, February 8 • Morning Session 2

Sat. Feb. 8	Wildlife 1	Wildlife 2	Wildlife 3	Fisheries/Wildlife 1
Room	Enchantment C/D	Enchantment E/F	Enchantment A/B	Grand Ballroom I-III
10:20	Effectiveness of neck fladry collars in deterring Mexican gray wolves <b>Caleb Garzanelli</b>	Accipiter visual discrimination influences squirrel pelage coloration via background matching crypsis Sean M. Mahoney	Adjusting for non-response bias in surveys of natural resource users <b>Matthew J. Clement</b>	Success, setbacks and perseverance: native fish conservation efforts in the Blue River, Arizona 2012-2024 <b>Brian Hickerson</b>
10:40	The TWS Mexico Chapter: a successful accomplishment <b>Luis A. Tarango-Arámbula</b>	Gambel's quail trapping methods, survival, and nest success in southeast Arizona Alexis C. Rickert*	Eradicating Invasive American bullfrogs on the Babocomari River in southeast Arizona <b>Christopher L. Prewitt</b>	Looking for love in all the right places: using mobile PIT tag antenna surveys to locate razorback sucker spawning locations in the San Juan River Adam Barkalow
11:00	Uncovering wild rodent lung fungal community dynamics in a Madrean Sky Island Luisa J. Zamora Chavez*	Conservation of black-footed ferrets in Arizona: Lessons learned Holly E. Hicks	Spatiotemporal visualization of frog communities in Arizona <b>Kathryn Davison</b>	An overview of Arizona's recent native fish translocation and stocking efforts Zach Beard
11:20	Genetic diversity and connectivity of Brush Mice in the Madrean Sky Islands Damien C. Rivera*	Bacteriophage diversity and biogeographic dynamics in wild rodents from the Baja California Peninsula <b>Karla L. Vargas</b>	Monitoring of frog breeding phenology near Gila Cliff Dwellings of southwestern New Mexico J. Tomasz Giermakowski	Using stable isotope analysis to track migratory patterns of warbler species from 2019-2023 Alto Bridges*
11:40	Southwestern willow flycatcher habitat assessment and monitoring in the U.S. Southwest: Methods and resources <b>Chris Sanderson</b>	Of mice and Mora: The New Mexico meadow jumping mouse ( <i>Zapus budsonius</i> <i>luteus</i> ) on Rio Mora National Wildlife Refuge <b>DeeAnne T. Meliopoulos</b>	Status and distribution update of northern leopard frogs in Arizona <b>Brandon Foley</b>	Rodent diversity and gene flow across urban desert remnants in Metro Phoenix <b>Morgan L. Pierce*</b>
12:00			Phenotypic variation of Arizona Toad ( <i>Anaxyrus microscaphus</i> ) tadpoles in New Mexico <b>Melissa Villatoro Castañeda</b>	

\*Student paper

#### NM Chapter of the Wildlife Society Executive Board



President - Travis Zaffarano (NMDGF) President-Elect - Vacant Past President - Orrin Duvuvuei (NMDGF) Secretary- Kyle Tator (Jicarilla) Treasurer - Tony Opatz (NMDGF) Newsletter Editor - DeeAnne Meliopoulous (USFWS) Board Member - Leland Pierce (NMDGF) Board Member - Jacob Lobato (TetraTech) Board Member - Danica Cooke (BLM) Student Chapter Liaison - Orrin Duvuvuei (NMDGF)



#### 2025 Planning Committee

**General Chair** Travis Zaffarano (NMDGF)

**Facility Arrangements** Leland Pierce (NMDGF)

Announcements Travis Zaffarano (NMDGF)

**Registration** Tony Opatz (NMDGF)

Plenary Committee Travis Zaffarano

Program Chairs (General Sessions) James Cain (USGS) Elizabeth "Betsy" Hedden (USBR)

Continuing Education Elise Goldstien (NMDGF) Nicholas Forman (NMDGF) Kathy Granillo (SW Chapter TWS) Bryan Bakevich (NMDGF)

Student Social and Volunteers Jack Marchetti (NMDGF)

Program Layout and Printing Travis Zaffarano (NMDGF) Tony Opatz (NMDGF)

**Photography** Wheeler Brunschmid (NMDGF) **Raffle** Jacob Lobato (TetraTech)

**AZ TWS Liaison** Holly Hicks (AZGFD)

AZ/NM AFS Liaison Elizabeth "Betsy" Hedden (USBR)

**Website** Travis Zaffarano (NMDGF)

Audio/Video Equipment Dela Jorner (NMDGF) Wheeler Brunschmid (NMDGF) Darren Vaughan (NMDGF)

#### Quiz Bowl

Leland Pierce (NMDGF) Kathy Granillo (SW Chapter TWS) Karen Gaines (NMDGF) Cheyenne Herzog-Lowrance Holly Hicks (AZGFD) Brett Montgomery (AZGFD) Audrey Owens (AZGFD) Scott Sprague (AZGFD) Tiffany Sprague (AZGFD)

# Registration

Registration will be held in the lobby at the following times:

- Thursday, February 6 2:00 p.m. – 6:00 p.m.
- Friday, February 7
  8:00 a.m. 12:00 p.m.

### Workshops

There will be four workshops on Thursday, February 7<sup>th</sup>, starting at 9:00 a.m. See the following for a brief description of each workshop.

#### **AFS Piscicide Application Workshop**

The Piscicide Application Workshop is a professional training event focuses on the safe and effective use of rotenone and other piscicides for fisheries management and restoration projects. Participants learn about the science, regulatory frameworks, application techniques, safety protocols, and environmental considerations association with use. The workshop piscicide includes presentations on case studies, hands-on scenario planning, and discussions of innovations in the field. Designed for fisheries professionals, the workshop also provides continuing education credits for pesticide applicator licenses in New Mexico and Arizona.

#### Wildlife Trapping and Handling Techniques Workshop

New Mexico Department of Game and Fish sponsors a review of wildlife trapping and handling techniques. Join us for discussion and hands-on demonstrations of various trapping techniques popular for wildlife management and research. We'll review several trapping/capture techniques as well as common handling protocols focused on safety and animal welfare. This session will focus on mammalian species including mesocarnivores, large carnivores, and large ungulates.

#### **Resume Building Workshop**

Does your professional resume need a fresh update, revision, or evaluation? Join us for a review of the key components to creating a successful resume. Geared towards young professionals and students looking for resources to help them build or refine their resumes.

# Wildlife-Friendly Fencing Discussion

Many state and federal agencies follow guidelines for wildlife-friendly fencing designed to improve landscape permeability and minimize the effects of these anthropogenic barriers. However, how are these guidelines used to inform fencing projects across DOT, private, and other stakeholders as new development occurs? Join us in discussing the implications of proper wildlife-friendly fencing and how wildlife professionals can best influence future development through collaboration and communication.

# **Presentation Loading**

During the following days and times, you will be able to load your oral presentation in the Enchantment Foyer 1:

- Thursday, February 5- 3:00-6:00 p.m.
- Friday, February 7- 8:00-11:00 a.m., 4:00-5:30 p.m.

If your presentation is scheduled for Friday, you MUST load your presentation on Thursday; presenters scheduled for Saturday can load their presentation either Thursday or Friday.

# **Raffle and Silent Auction**

Raffle tickets will be on sale and the silent auction will be open Thursday starting at 5:00 p.m. through 5:30 p.m. Friday. All silent auction items will be on display in the Boardroom East throughout the conference. The raffle drawing will be at the banquet so be sure to buy tickets!

#### Photo Contest (Enchantment Courtyard)

Come place your ballot for best photo! There are six categories: wild mammals; wild birds; wild reptiles/amphibians, fish or invertebrates; technology assist, and outside AZ/NM. Photos 5x7 up to 11x14 inch prints on backing board are accepted for the contest, no framed art. First prize entries for each category will receive \$20, and Best of Show photo will win \$50. Photos need to be entered in the contest at the registration table by 10 a.m. Friday, February 7. Name and contact information should be written on the back of all photo submissions. Photos should be removed between 7:00 and 9:30 p.m. Friday, February 7.

# **Business Meetings**

Business meetings for AFS and TWS chapters will be held on Thursday, February 6 from 4:00 to 5:00 p.m. in the various Enchantment Ballrooms.

# Student Quiz Bowl

Come out to watch your schools compete in the wildlife and fisheries quiz bowl. Teams of undergraduate students from around Arizona and New Mexico are competing this year. Come out and watch on Thursday from 6:30 to 9:30 p.m. in the main ballroom.

### **Poster Session**

The poster social will be held in the Enchantment Courtyard on Friday, February 7 from 5:30 p.m. to 6:30 p.m. In addition, presenters should make every effort to be at their poster during breaks on Friday, February 7. Poster set-up will be on Thursday, February 6 between 2:00 p.m. and 6:00 p.m. It is the presenter's responsibility to find their assigned space and setup/remove the poster during the designated times. Removal of posters should occur on Friday, February 7 between 7:00 and 9:30 p.m.

# **Executive Board Lunch**

The TWS and AFS Officers lunch meeting will be Saturday, February 8, starting at 12:30pm, located at Carrie's Restaurant on the first floor of the Clyde Hotel.

### Student Mentor Lunch

There will be a student mentor lunch held on Friday, February 7 from 12:00 a.m. to 12:50 p.m. in the Grand Ballroom I-III. This is a great opportunity for students to talk with a variety of professionals from different organizations and agencies. Students must be pre-registered to attend. Note: this lunch will promptly end at 12:50 to allow the space to be reorganized for use during the general sessions.

#### Friday February 7, 2025 Plenary Session

The theme of this year's conference will be "*Renewable Energy and Wildlife: Planning, Mitigation, and Impact*". As renewable energy interests continue to expand exponentially, regions with abundant wind and solar resources - such as the American Southwest - can only expect to see an exponential growth in this industry. We have invited representatives from various state, federal, tribal, industry, and private agencies and organizations to lead our plenary discussion. The goal of this plenary is to inform us on how each entity approaches the quickly expanding renewable energy development sector in the American Southwest.

The plenary will open with an introductory presentation overviewing the current status of renewable energy, and what new directions, challenges, and expectations are for future development. Following the introduction, each panel member will be given the opportunity to introduce themselves and their role within their organization and their organization's overall involvement in renewable energy development, and/or the mitigation of impacts on wildlife and habitats. A question-and-answer session will follow, allowing the audience to drive the conversation.

#### **Plenary Panel Members:**

#### Quentin Hays - Wildlife and Renewables Program Director and Senior Wildlife Ecologist;

**Geosystems Analysis, Inc.** Quentin Hays is the Wildlife and Renewables Program Director and a Senior Wildlife Ecologist at GeoSystems Analysis, Inc., where he leads a team focused on siting, permitting, and mitigation planning for large renewable energy projects in the U.S. and internationally. He has been working in the wildlife and renewables space for nearly 20 years, and as a professional wildlife biologist for 25. His work has taken him from the Arctic to the Tropics and covered multiple taxa, including birds, bats, small mammals, and ungulates. He is currently helping lead mitigation planning and implementation for the largest renewable energy project in the history of the western hemisphere. Prior to moving into the private sector, Quentin taught college in New Mexico. He is Past President of the New Mexico and Oregon Chapters of The Wildlife Society and received the Fellows Award from The Wildlife Society in 2023. He is a resident of the Pacific Northwest, living in Corvallis, Oregon with his wife and two daughters. When not working, Quentin spends time climbing Cascade volcanoes, floating northwest rivers with his family, or slowly running trail races with his much faster friends

#### Adam Cernea Clark – Permitting and Policy Strategy Director; Pattern Energy

Adam Cernea Clark has worked on permitting complex renewable energy and multi-state transmission projects under local, state, and federal permitting regimes. He leads Pattern Energy's environmental policy work and has extensive experience working with diverse stakeholders on permitting and environmental policy matters. He has presented at numerous conferences and multi-stakeholder meetings, such as the 2024 National Wildlife Society Annual Meeting and the 2024 Nexus Sustainability Leadership Summit.

#### Ron Kellermueller - Mining and Energy Habitat Specialist; NM Department of Game and

**Fish** Ron Kellermueller has been the Mining and Energy Habitat Specialist with the NM Department of Game and Fish for nearly a decade, evaluating statewide mining and energy projects and providing technical guidance to minimize impacts to wildlife and their habitats. Ron routinely communicates and consults with industry; federal and state agencies, including the U.S. Bureau of Land Management and Energy, Minerals and Natural Resources Department; local governments, communities, and other stakeholders to provide guidance regarding wildlife and wildlife habitats as related to mining and energy development activities. Ron spent ten years as the Raptor Projects Coordinator for a small nonprofit, monitoring raptor populations and reproductive success at several New Mexico coal mines and for the BLM Farmington, Taos and Socorro Resource Areas. Ron was also a commercial salmon fisherman in southeast Alaska for 15 years, while also working seasonally as a biologist for the Washington State Department of Fisheries on sockeye and coho salmon enhancement projects.

#### Brent Powers - Program Manager; Navajo Natural Heritage Program

Mr. Powers is the Program Manager for the Navajo Natural Heritage Program. The Navajo Natural Heritage Program is responsible for the scientific research, management and conservation of Endangered and Threatened flora and fauna on Navajo Nation lands. Which includes the permitting of development projects under Tribal and Federal environmental and wildlife laws, rules and regulations. Mr. Powers holds a BS and MS in Wildlife Ecology and Conservation Biology from the University of New Hampshire. His MS research focused on moose (Alces alces) productivity and calf survival in northern New Hampshire. Prior to coming to the Navajo Nation Mr. Powers worked as an environmental review biologist for the Massachusetts Division of Fisheries and Wildlife, conducting impacting analysis of project development to State and Federally listed flora and fauna. His current research interests are prairie dog conservation and Black-footed Ferret reintroductions, voluntary lead-free ammunition program, and riparian habitat restoration facilitated through beaver activity and/or human created beaver dam analogs.

#### Jon Holst - Senior Policy Advisor, Western Lands; Western Resource Advocates

Jon Holst is a Senior Policy Advisor with Western Resource Advocates (WRA) where he develops policies and regulatory strategies to minimize and mitigate the impacts of energy and transportation development on fish and wildlife populations in the Interior West. Jon spent 14 years working as an Energy Liaison for Colorado Parks and Wildlife (CPW) where he helped shape the state's approach to regulating energy and other types of land use development. He was on a team tasked with implementing the state's initial attempts to regulate the impacts to wildlife from oil and gas development following passage of the Colorado Habitat Stewardship Act of 2007. In 2020, after over a decade of experience implementing that legislation, he was fortunate to have the opportunity to help rewrite the state's oil and gas regulations to better address the needs of wildlife following the passage of SB 19-181. At WRA, Jon is applying his experience regulating oil and gas to inform strategies to minimize and mitigate the impacts of renewable energy development. In 2024, Jon

worked with a coalition of partners and the state to help pass SB 24-212 - the Renewable Energy Projects Act - which aims to provide assistance to local communities to improve the siting of renewable energy projects. Jon holds a Bachelor of Science in Biological Science and a Master of Science in Wildlife Biology from Colorado State University, and a Juris Doctor from the University of Colorado School of Law. Jon grew up and still lives in rural Colorado, and he is an avid hunter and angler.

#### Stephanie Herbert - Wildlife Program Lead; Bureau of Land Management

Kirsten McDonnell – Energy Coordinator, Division of Migratory Birds; US Fish and Wildlife Service

# Friday February 7 Poster Session - Enchantment Courtyard

Poster	Title
1	Hybridization dynamics and range expansion across environmental variables in spadefoot toads Noelle Mason*
2	Effectiveness of high school students ground truthing Gunnison prairie dog burrows Lucy Pockman*
3	Tarahumara frog conservation in Arizona Ian M. Latella
4	Evaluating wildlife use of small wildlife crossing structures on the US/Mexico border wall in Organ Pipe National Monument Eduardo Gracia Escalante*
5	Abundance and diversity of birds in three habitat conditions in the Altiplano Potosino-Zacatecano, Mexico <b>Luis D. García-Ángeles*</b>
6	Reproductive and nutritional interaction of white-tailed deer in Zacatecas, Mexico Raúl Peralta-Pardo*
7	Occupancy and detectability model of Montezuma quail in southern Zacatecas, Mexico Martha Susana Bautista De Luna*
8	Influence of anthropogenic structures on pronghorn movements and habitat selection in the Chihuahuan Desert Lucas J. Begeman*
9	Prevalence of blood biomarkers as indicators of environmental contamination in anatids from Durango, Mexico Andres Saucedo-Rentería*
10	Assessing individual variation in the territorial rattles of Mount Graham red squirrels ( <i>Tamiasciurus fremonti grahamensis</i> ) Nikki Reck*
11	Trash removal by urban birds in Arizona Simone Vega Rabelo*
12	Evaluating the merits of environmental DNA to assess pollinator biodiversity Ellen F. Liebig*
13	Urbanization effect on endoparasites of the burrowing owl at Ciudad Juárez, Chihuahua Diana L. Terrazas-Esparza*
14	Shell disease, pathogen prevalence and body condition of turtles in rural and urban settings across New Mexico Alyssa Girard*
15	Edible insects in north-central Mexico: A key stakeholders perspective Humberto Romero-Jiménez*
16	Assessing the effects of White Nose Syndrome probiotic treatment on the gut microbiota of <i>Myotis</i> bats <b>Robyn Montelongo*</b>
17	Genetic structure and connectivity of the lowland leopard frogs, <i>Lithobates yavapaiensis</i> , in Southeastern, Arizona. <b>Beth Hasl*</b>
18	An examination of long-term population trends and demographics of a cavity nesting songbird in the American Southwest <b>Samantha Aguilar*</b>
19	Landscape's impact on the genomic structure of the Great Plains toad in New Mexico Sophia R. Rivera*

20	Population genetics of a plethodontid salamander distributed along an urban area Yamilex Rodriguez*
21	Evaluating co-occurrence of cattle and Mexican gray wolves in the Apache and Gila National Forests Helena Garza*
22	Assessing the effectiveness of movement-based methods to detect pronghorn parturition Samuel D. Lisak
23	Rattlesnake traditional uses, human conflicts and conservation in Zacatecas, Mexico J.L. Lara-Galván*
24	Ecological impacts of off-highway vehicle use on Arizona wildlife: a review of current literature and management recommendations Cassidy A. Klovanish
25	MHC Class II Gene Association with chytrid fungus in populations of lowland leopard frogs Greta N. Gurdikian*
26	Saltcedar biocontrol effects on herpetofauna abundance, diversity, and habitat in Sonoran riparian forests Hal Ward
27	Gray fox rabies spillover transmission and future host shift preventative measures in Arizona Emi McGuire*
28	Evaluating the effect of large herbivores and human activity on riparian health <b>Hayden K. Hutcherson</b>
29	Reproduction in captive narrow-headed gartersnakes Abbie M. Brozich*
30	Assessing wildlife connectivity in urban Tucson Joao L. Weisshaupt*
31	Understanding the distribution of and threats to imperiled western ribbonsnakes ( <i>Thamnophis proximus</i> ) in eastern New Mexico Sebastian D. Summo Elias*
32	Innate immune system fluctuations of white-crowned sparrows at nonbreeding grounds in New Mexico Grace M. Salmon*
33	Development of a qPCR assay for the detection of the endangered black-footed ferret Anna L. Riley*
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35	Understanding North American deer mouse diet across a riparian to upland gradient Jaiden Lee*
36	Herpetological pilot surveys of the Grand Canyon: Species distributions, body conditions, and implications for hydrological impacts on assemblage composition Caleb L. Loughran
37	Comparing Bird Species Composition in Historically Burned and Unburned Sites in the Rio Grande Bosque Ecosystem Eleanor McArthur*
38	Bushbuck and Common duiker's distributions in Niokolo Koba National Park, in Senegal Grace Soechting*
39	Mapping bat activity through sound: acoustic monitoring and heat map analysis of lesser long-nosed bat visitation to <i>agave palmeri</i> Madilyne T. Von Rotz*
40	Beetles on squirrel islands on a sky island Leighanna Olaker*
41	What's for Lunch? Diet of the Invasive American Bullfrog ( <i>Lithobates catesbeianus</i> ) in Southwestern New Mexico <b>Grace A. Laskey*</b>

#### **Fisheries Posters**

42	Patterns in Growth and condition of striped bass ( <i>Morone saxatilis</i> ) and white bass ( <i>Morone chrysops</i> ) in Arizona reservoirs Caroline Mallinson
43	Age and growth of warm water sportfish in three Arizona reservoirs Crystal Castillo
44	Weather impacts on angler usage of Lees Ferry rainbow trout fishery in northern Arizona Mattie Diedrick*
45	Observations of Habitat and Water Quality at La Llorona Park Wastewater Effluent Site before Restoration <b>Paulino F. Emmeline*</b>

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