

UNITED STATES GEOLOGICAL SURVEY

Nevada Cooperative Fish and Wildlife Research Unit



BIENNIAL REPORT 2024-2025

Reno, NV
March 2026

EXECUTIVE SUMMARY

The Cooperative Research Units Program

The Cooperative Research Unit (CRU) program is a nationwide program within the U.S. Geological Survey, with cooperators from the U.S. Fish and Wildlife Service, the Wildlife Management Institute, state conservation agencies, and a host university where each Unit is housed.

The CRU Mission is to provide:

- Graduate education to develop the workforce
- Actionable research to meet cooperator science needs
- Technical assistance to cooperators

The Nevada Cooperative Fish & Wildlife Research Unit

The Nevada CRU began in 2021, with cooperators from the University of Nevada Reno, the Nevada Department of Wildlife, the U.S. Fish and Wildlife Service, and the Wildlife Management Institute.

The Nevada Unit currently comprises a Unit Leader, Dr. Jeffrey A. Falke, who specializes in fisheries and aquatic ecology, and Assistant Unit Leader, Dr. Brian Folt, who specializes in wildlife ecology.

The Unit's Administrative Assistant is Ms. Jennifer Grove, who is a University employee; we are also assisted by several other administrative specialists in the Department of Natural Resources and Environmental Science and the College of Agriculture, Biotechnology, and Natural Resources at UNR, and our cooperating agencies.

Research in the Nevada Coop Unit

We conduct research in terrestrial and aquatic ecosystems on a variety of topics. Current research projects include:

- Translocation Habitat Suitability for an Endangered Desert Minnow
- Mapping Ungulate Migration Corridors in Nevada
- Assessing Watershed Drought Sensitivity Across Western Landscapes

Research (Continued)

- Integrated Monitoring Plan Development for Native and Non-Native Fishes at Ash Meadows National Wildlife Refuge, Nevada
- Evaluating the Contributions of Trace Minerals and Space Use to Seasonal Elk Mortality Syndrome in Nevada

Some quick facts about our research budgets and productivity:

- Operating budget ranged from \$440K in 2024 to \$416K in 2025 (including operating funds and salaries of Unit scientists and staff, etc.)
- New research grants totaled more than \$850K from a variety of federal (e.g., USGS, USFWS), and state (NDOW) sources during 2024 and 2025

In 2024 and 2025 we published:

- 14 scientific papers and reports
- 27 presentations at conferences and public meetings
- 4 Data Releases and 1 Software Release
- Collaborators included scientists and managers from 7 state, federal, and private conservation agencies, institutions, and groups

Graduate Education in the NV Coop Unit

During 2024–2025 we:

- Advised or co-advised 2 postdoctoral researchers, 3 PhD students, and 1 MS student
- Provided field and laboratory research experiences to undergraduate student technicians
- Taught graduate courses on Design of Environmental Research Projects and Graduate Environmental Statistics
- Served on 7 graduate committees



Brooke Goins and Dr. Nathan Jackson in the field. Photo by Brian Folt.

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Pyramid Lake, Washoe County, NV
Photo by Jeff Falke

Abbreviations

CRU = Cooperative Research Unit
CRUP = Cooperative Research Units Program
NDOW = Nevada Department of Wildlife
NSF = National Science Foundation
NWR = National Wildlife Refuge
UNR = University of Nevada, Reno
USFWS = US Fish and Wildlife Service
USGS = US Geological Survey
WMI = Wildlife Management Institute
WSU = Washington State University

Cover Photo Credits

Leftmost: Brian Folt
Upper Left: Brian Folt
Lower Left: Michael Logan
Upper Right: Jeff Falke
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NEVADA COOPERATIVE RESEARCH UNIT

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NEVADA COOPERATIVE RESEARCH UNIT

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Collaborating Faculty, Adjuncts, and Cooperators¹

Nevada Department of Wildlife

Mark Beckstrand
Chris Crookshanks
Lee Davis
Amanda Gearhart
Kevin Guadalupe
Travis Hawks
Patrick Jackson
Nate LaHue
Cody McKee
Cody Schroeder
Sam Sedillo
Justin Small

U.S. Forest Service

Rachel Van Horne

Bureau of Land Management

Michelle Crabb
Paul Griffin

U.S. Fish & Wildlife Service

Michael Bower
Ambre Chaudoin
James Harter
Chad Mellison
Mike Schwemm

Wildlife Management Institute

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Jason Dunham
Haley Glassic
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Kate Schoenecker
Matt Young

Conservation Science Partners

Brett Dickson
Elissa Olimpi
Madeline Standen

Utah State University

David Stoner

Washington State University - Pullman

Caren Goldberg

Texas A&M University

Josh Perkin

¹We acknowledge these individuals who have contributed to Unit projects, activities, and/or student scholarship.

A BRIEF HISTORY

The Cooperative Research Units Program

The Cooperative Research Units Program (CRUP) was established in the 1930s to enhance graduate education in fisheries and wildlife sciences and to facilitate research between natural resource agencies and universities on topics of mutual concern. The catalyst for the idea of a cooperative program was the conservationist and political cartoonist, J.N. “Ding” Darling. Darling’s innovative thinking and push for conservation reforms in Iowa led to the first Unit, which was established between Iowa State College and the Iowa Fish and Game Commission in 1932. Paul Errington, a student of Aldo Leopold and a notable wildlife biologist, became the Iowa Unit’s first leader.

In 1935, Darling and others successfully established a national program for Cooperative Research Units, which involved a federal agency (the Bureau of Biological Survey, a precursor to today’s U. S. Fish and Wildlife Service) as well as a land-grant university and a state agency. The CRUP was part of the U. S. Fish and Wildlife Service until the 1990s, when CRUP joined the U. S. Geological Survey.

Today, there are 44 Cooperative Research Units in 41 states. Each Unit consists of 2-5 federal scientists and 1-2 administrative specialists, and each is a partnership among the U.S. Geological Survey, state natural resource agencies, a host university, the Wildlife Management Institute, and in many cases the U. S. Fish and Wildlife Service. A formal Cooperative Agreement specifies the responsibilities of each cooperator, and a Coordinating Committee meets annually and serves to advise and guide the Unit. Staffed by federal personnel, Cooperative Research Units conduct research on applied conservation questions, participate in the education of graduate students, provide technical assistance and consultation on natural resource issues, and provide continuing education for natural resource professionals.

Throughout its history, the primary three-fold mission of the CRUP has remained the same: (1) Graduate Education, (2) Research, and (3) Technical Assistance in matters related to fish and wildlife populations and their habitats.



Photo by Brian Folt

UNIT STAFF



Jeff Falke
Unit Leader - Fisheries

My research focuses on the population and community ecology of freshwater fishes, investigating how environmental stressors such as land use change, wildfire, and drought affect freshwater processes (e.g., stream flows, temperatures, drying) and freshwater fish population and assemblage dynamics across a variety of aquatic ecosystems. This research bridges the gap between basic and applied fisheries ecology, integrating quantitative ecological analyses, spatial statistical methods, landscape ecology and conservation biology to address multiscale conservation and management issues driven by the needs of my cooperators. My current research focuses on developing translocation habitat suitability assessment and population monitoring frameworks for native desert fishes, evaluating the effects of riparian management practices on stream food webs, and building tools to assess watershed condition and drought sensitivity across Western U.S. riverscapes.



Brian Folt
Assistant Unit Leader - Wildlife

My research program includes field research, quantitative methods, and decision analysis approaches to help understand how landscapes influence wildlife populations and support value-based wildlife management decisions. My work often estimates how habitat or landscapes influence demographic vital rates (survival, growth, reproduction) and resulting population dynamics, which allows for building predictive models for how populations function and might be influenced by management options being considered by agencies. I work closely with cooperating agencies to co-produce science that can support the wildlife management decisions that agencies are facing. Current research projects involve applied management problems related to wild horses, Mojave desert tortoises, and ungulates in the Great Basin ecoregion.



Jen Grove
Administrative Assistant

I joined the unit in August 2023 and have thoroughly enjoyed learning about the Cooperative Research Unit Program and the collaboration between various agencies. With a background in finance, business administration, and management, being part of a new unit and helping build it from the ground up has been a rewarding experience.

Outside of work, I enjoy camping with my dog and exploring Nevada's vast deserts. I have a passion for uncovering the rich history and hidden gems of the region, whether traveling down remote highways, discovering Nevada's quirkiest landmarks, or delving into the state's unique past. I love immersing myself in nature and adventure.

SERVICE, COURSES, AND STUDENTS

COOPERATOR SERVICE

- UNR Graduate Faculty (Falke, Folt)
- Graduate Committee Member (Falke, Folt)
- NRES Graduate Program Committee (Falke)
- Guest lectures (x3) for Conservation Biology and Herpetology classes at UNR (Folt)

TECHNICAL ASSISTANCE

- Brian Folt helped the Bureau of Land Management Wild Horse and Burro Program by fixing a minor bug with the *PopEquus* application.
- Brian Folt attended the NDOW Game Division's summer meeting and gave a presentation describing advantages of integrated population models (July 2024).

GRADUATE COURSES TAUGHT

- Design of Environmental Research Projects (NRES 701B: Falke), Fall 2024
- Graduate Environmental Statistics (NRES 710; Folt), Fall 2024

GRADUATE STUDENTS AND POST-DOCS (MARCH 2026)

- **Brooke Goins**, laboratory technician (Falke)
- **Chris Frazier**, Ph.D. student (Falke)
- **Nathan Jackson**, post-doctoral researcher (Falke, Folt)
- **Eddy Kapp**, M.S. student (Falke)
- **Mark Kolwyck**, research technician (Falke)
- **Tanner Morgan**, laboratory technician (Falke)
- **Ava Window**, M.S. student (Folt)
- **Dara Yiu**, post-doctoral researcher (Falke)



Photo by Nate LaHue



Photo by Jeff Falke

FISH & AQUATIC ECOLOGY: COMPLETED PROJECTS

Translocation habitat suitability for a threatened desert minnow, Big Spring Spinedace, in Meadow Valley Wash, Nevada

Big Spring Spinedace (*Lepidomeda mollispinis pratensis*) is a small-bodied cyprinid listed as Threatened under the Endangered Species Act since 1985. The original population was extirpated in 1959, rediscovered in 1977, and today persists as a single population within approximately 8 km of habitat in Condor Canyon, Meadow Valley Wash, Lincoln County, Nevada. The species occupies a Great Basin to Mojave desert ecotone characterized by a series of canyons and open valleys fed by precipitation and groundwater, with increasing flow intermittency downstream. Because the species exists as a single isolated population, it faces substantial extinction risk from catastrophic events such as drought, disease, or nonnative species invasions. Establishing refuge populations through translocation is therefore a priority recovery action.

We sought to evaluate potential translocation sites by monitoring environmental conditions and assessing habitat characteristics across six 500-m study reaches: two occupied reaches in Condor Canyon and four potential translocation reaches in Clover Creek and Rainbow Canyon. Thermal habitat was assessed by deploying air and stream temperature loggers that recorded hourly temperatures from March 2024 through February 2025. Warm-season thermal metrics were compared among sites using multivariate statistics, and we applied the Paired Air Stream Temperature Analysis framework to characterize groundwater influence at each reach. Pool habitat was assessed through censuses in spring and fall 2024, recording pool dimensions, substrate composition, vegetation, cover, water quality, and flow connectivity. Differences between occupied and potential translocation reaches were evaluated using permutational multivariate analysis of variance and ordination.

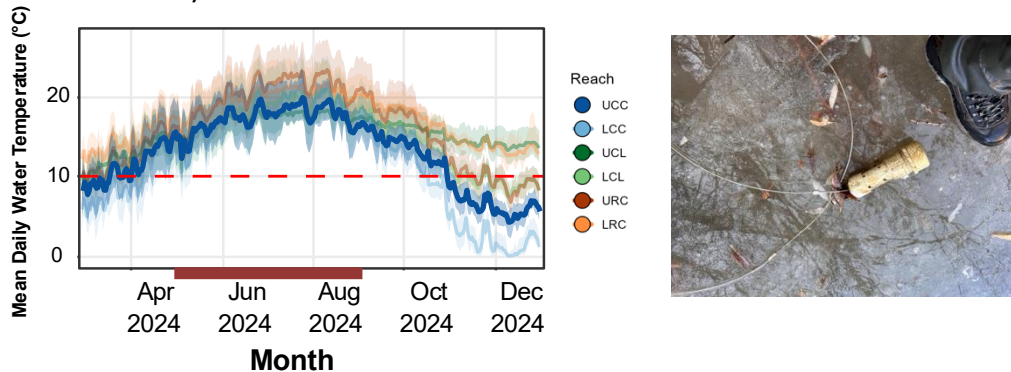


Fig. 1. Mean daily stream temperatures (dark lines) (left panel) for water temperature loggers (right panel) deployed at the six sites in 2024-2025. Ribbons are daily minimum and maximum temperatures. Upper/Lower Condor Canyon (UCC/LCC), Upper/Lower Clover Creek (UCL/LCL), Upper/Lower Rainbow Canyon (URC/LRC)

PERSONNEL Jeff Falke, Mark Kolwyck
FUNDING U.S. Fish and Wildlife Service
COLLABORATORS James Harter
 Mark Beckstrand
 Mike Schwemm

Occupied reaches were generally cooler and more thermally variable than potential translocation sites across the monitoring period (Figure 1), with evidence of freezing and anchor ice at Lower Condor Canyon during winter (see photo); conditions that reflect the strong alluvial groundwater influence characteristic of the occupied core reach. Spring inputs from Big Spring maintained relatively consistent temperatures in Clover Creek through the warm season, while Rainbow Canyon reaches experienced prolonged temperatures exceeding 25°C on multiple occasions. Upper Rainbow Canyon was the most thermally dissimilar relative to the occupied core in ordination space. Pool habitat results reinforced these differences: the occupied core reach supported the greatest number of pools by an order of magnitude and was characterized by silt substrates in contrast to the sand and cobble dominant at most potential sites. Multivariate analyses indicated significant differences in pool habitat between the occupied core and potential translocation reaches in both seasons (Figure 2).

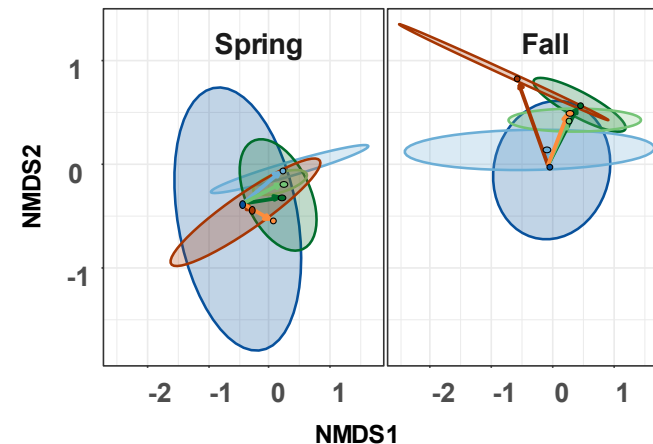


Fig. 2. NMDS ordination of pool habitat variables by sampling reach and season. Vectors are relative to the occupied core habitat in Upper Condor Canyon (UCC). PERMANOVA suggested differences in occupied core (UCC) ($P < 0.02$) vs. potential pool habitat in both seasons

Our results suggest that no single potential reach closely matches the thermal and pool habitat conditions of the occupied core, though Clover Creek showed the most promise given its spring-influenced thermal regime. Key threats including nonnative species, groundwater decline, and flow intermittency remain important considerations in reach prioritization. Critical knowledge gaps remain around basic life history, food web support capacity, and nonnative species interactions. Such information will be useful to incorporate into translocation prioritization frameworks.

FISH & AQUATIC ECOLOGY: ONGOING PROJECTS

Watershed Condition and Drought Sensitivity Assessment Across Western Landscapes

Climate warming and persistent drought have drawn increasing attention to declining availability of water across western landscapes. However, a knowledge gap in our understanding of ecological drought effects in dryland ecoregions is how watershed conditions (e.g., instream habitat conditions, riparian and upland vegetation health) and hydrology (e.g., stream flows, water temperatures and quality) interact to affect the flow of energy from aquatic to terrestrial habitats and vice versa. Our assessment framework will include a fully integrated, social-ecological assessment of drought vulnerability within watersheds in the Great Basin and Western U.S. Such an assessment is designed with the specific intent of informing drought adaptation actions in the face of increasing concerns over drought and climate change. The project is a collaboration of researchers across USGS including the Cooperative Research Units, Northern Rocky Mountain Science Center, and Forest and Rangeland Ecosystem Science Center.



Meadow Valley Wash (Jeff Falke)

STUDENT ADVISOR	Christopher Frazier (PhD)
FUNDING	Jeff Falke
COLLABORATORS	USGS
	Jason Dunham
	Robert Al-Chokhachy
	Haley Glassic
	Tom Dilts

Integrated Monitoring Plan Development for Native and Non-Native Fishes at Ash Meadows National Wildlife Refuge, Nevada)

Monitoring for population status and trends is a critical component to successful conservation and management of freshwater fishes. However, integrated status and trend monitoring efforts for native and invasive fishes that combine traditional active and passive capture methods with single- and multiple-species eDNA assays have yet to be developed for desert ecosystems. A modern, formalized sampling design, analysis, and reporting framework is needed to institutionalize science-based management and advance our understanding of native and nonnative fishes at Ash Meadows National Wildlife Refuge (AMNWR), Nevada. The project is a collaboration of researchers across multiple agencies and includes the U.S. Geological Survey, University of Nevada, Reno, Washington State University, U.S. Fish and Wildlife Service Desert Refuge Complex, and the Nevada Department of Wildlife. We will develop a peer reviewed integrated status and trend monitoring plan for native and non-native aquatic taxa at AMNWR that incorporates eDNA assays, traditional fish sampling, and structured decision making.



Ash Meadows National Wildlife Refuge (Jeff Falke)

POST DOC ADVISOR	Dr. Dara Yiu
FUNDING	Jeff Falke
COLLABORATORS	U.S. Fish and Wildlife Service
	Michael Bower
	Ambre Chaudoin
	Caren Goldberg

TERRESTRIAL WILDLIFE: ONGOING PROJECTS

Mapping Ungulate Migration Corridors in Nevada

Large-scale land-use changes may fragment habitats for large ungulates and disrupt seasonal migration corridors that are important to population growth and persistence. By identifying important habitats and migration corridors for ungulate populations in Nevada, land-use planning might accommodate requirements for ungulates in addition to other multiple uses on landscapes. To this end, we are participating in a large-scale research project that aims to identify important habitats and migration corridors for ungulate populations across Nevada. We are collaborating with Nevada Department of Wildlife (NDOW) to analyze existing GPS-collar data describing seasonal movement patterns of Mule Deer, Pronghorn, and Elk and provide maps estimating seasonal ranges and migration corridors for different populations across the state. Land-use planning decisions across Nevada could benefit from the resulting spatial information describing key habitats and migration corridors for ungulates in the state. Such habitat might represent essential landscapes to protect to conserve big-game populations. Additionally, we are developing a decision-support product to help the state prioritize where to conduct future projects on ungulate migration and survival in the state.



Tagged Mule Deer (NDOW)

POST DOC Dr. Nathan Jackson
ADVISORS Brian Folt and Jeff Falke
FUNDING NDOW, USGS
COLLABORATORS Cody Schroeder

Evaluating the Contributions of Trace Minerals and Space Use to Seasonal Elk Mortality Syndrome in Nevada

Elk in northern Nevada are experiencing unusually high mortality during the spring, a pattern now referred to as Seasonal Elk Mortality Syndrome (SEMS). Despite nearly a decade of monitoring and investigation, the cause remains unknown, threatening a key wildlife population that supports recreational hunting and generates substantial economic benefits for rural communities. Preliminary findings suggest potential links to trace mineral deficiencies, disease, and landscape-scale factors, but these relationships have not been fully tested. This project will evaluate trace minerals in elk and their environments, assess spatial and individual-level drivers of survival, and identify management options to mitigate mortality. The results will directly inform wildlife management decisions and help protect an economically and ecologically valuable resource. This research is conducted in close partnership with the Nevada Department of Wildlife and leverages their long-term radiocollar data, field expertise, and management priorities.



Rocky Mountain Elk (NDOW)

STUDENT Ava Window (MS)
ADVISOR Brian Folt
FUNDING NDOW
COLLABORATORS Cody McKee
Nate LaHue

DATA AND SOFTWARE RELEASES

Delbecq, CE, **Falke, JA**, & Whitney, EJ. 2024. Riverine carbon form and flow data from a temperate forested watershed in Southeast Alaska. U.S. Geological Survey data release, ScienceBase.

Falke, JA and JD Paul. 2024. Spatial and tabular datasets supporting the “Freshwater Habitat Potential for Chinook Salmon in the Yukon and Kuskokwim River Basins, Alaska” Project. U.S. Geological Survey data release, ScienceBase

Fitzgerald, KA, and **Falke, J**. 2024. Juvenile coho salmon growth differences track biennial pink salmon spawning patterns: U.S. Geological Survey data release, ScienceBase.

Schoenecker, KA, **B Folt**, M Crabb, and D Stoner. 2025. Population size of horses in five Herd Areas in Nevada, 2022 to 2025. U.S. Geological Survey data release, ScienceBase.

Software Releases

Falke, JA, and JD Paul. 2024. Code to support “Chinook Salmon Freshwater Habitat Potential Modeling and Mapping for the Yukon and Kuskokwim River Basins in Alaska”. 2024. Version 1.0.0. U.S. Geological Survey software release, GitHub.

PUBLICATIONS

Cathcart CN, **Falke JA**, Fox J, Henszey R, Lininger K. 2024. Multiscale processes drive formation of logjam habitats and use by juvenile Chinook salmon across a boreal stream network in Alaska. *River Research and Applications* 41:593–608.

<https://doi.org/10.1002/rra.4387>

Delbecq C, Fellman JB, Bellmore JR, Whitney EJ, Hood E, Fitzgerald K, **Falke JA**. 2024. Seasonal patterns in riverine carbon form and export from a temperate forested watershed in Southeast Alaska. *Biogeochemistry* 167:1353–1369. <https://doi.org/10.1007/s10533-024-01175-7>

<https://doi.org/10.1007/s10533-024-01175-7>

Falke JA, Dunham JB, Rosenberger AE, Thurow RF, Dolloff A, Howell PJ, Saunders WC. 2024. Coldwater fish in wadeable streams. In Bonar S, Pope K, Silva-Mercado N, editors. *Standard Methods for Sampling North American Freshwater Fishes*. American Fisheries Society, Bethesda, MD.

Fitzgerald KA, Bellmore JR, Fellman JB, Cheng MLH, Boyles-Muehleck N, Delbecq CE, **Falke JA**. 2024. Juvenile coho salmon growth differences track biennial pink salmon spawning patterns. *Freshwater Biology* 69:1583–1595. <https://doi.org/10.1111/fwb.14328>

Folt B, Marshall M, Emanuel JA, Dziadzio M, Cooke J, Mena L, Hinderliter M, Hoffmann S, Rankin N, Tupy J, McGowan CP. 2024. Strengths and opportunities in gopher tortoise population modeling: Reply to Loope et al. *Global Ecology and Conservation* e03093.

<https://doi.org/10.1016/j.gecco.2024.e03093>

Grimm KE, **Folt B**, Collins A, Standen M, Spangler M, Olimpi E, Dickson B. 2025. Applying knowledge co-production to identify Mojave desert tortoise stressors across time, space, and agency mission. *Conservation Science and Practice* 7:e70073.

<https://doi.org/10.1111/csp2.70073>

PUBLICATIONS (CONT.)

Guyer C, Goessling JM, **Folt B**. 2024. Annual and lifetime home ranges reveal movement patterns within and among local populations of gopher tortoises. *Chelonian Conservation and Biology* 23:81–91. <https://doi.org/10.2744/CCB-1603.1>

Krohn AR, **Folt B**, Apodaca JJ, Guyer C, Goessling J. 2024. Using genomic data to estimate population structure and health for gopher tortoises. *Conservation Genetics* 25:755–770. <https://doi.org/10.1007/s10592-024-01601-1>

Robillard M, Standen M, Giebink N, Spangler M, Collins AC, **Folt B**, Maguire A, Olimpi EM, Dickson B. 2025. Application of computer vision for off-highway vehicle route detection: A case study in Mojave desert tortoise habitat. *Remote Sensing in Ecology and Conservation* 11:510–523. <https://doi.org/10.1002/rse2.70004>

Samuel WT, Yancy LE, Hinkle EG, **Falke JA**. 2024. Validating morphometrics as a non-lethal tool to determine Arctic Grayling sex. *North American Journal of Fisheries Management* 44:70–78. <https://doi.org/10.1002/nafm.10956>.

Strohm DD, Sergeant CJ, Paul JD, **Falke JA**. 2025. Streamflow regime characterization in the changing boreal ecosystem: wildfire impacts from stream-to-regional scales. *Science of the Total Environment* 991:179770. <https://doi.org/10.1016/j.scitotenv.2025.179770>

PRESENTATIONS

Invited or Noteworthy Presentations

Falke JA, Dunham JB, Rosenberger AE, Thurow RF, Dolloff A, Howell PJ, Saunders WC. 2024. Standardized sampling of coldwater fish in wadeable streams in North America. World Fisheries Congress, 3–9 March 2024, Seattle, WA.

Falke JA, Dunham JB, Rosenberger AE, Thurow RF, Dolloff A, Howell PJ, Saunders WC. 2024. Standardized sampling of coldwater fish in wadeable streams in North America. American Fisheries Society Annual Meeting, 15–19 September 2024, Honolulu, HI.

Falke JA, Schoen E, Paul J, Strohm D. 2024. Implications of wildfire on stream thermal regimes and juvenile salmon growth in interior Alaska boreal streams. American Fisheries Society Annual Meeting, 15–19 September 2024, Honolulu, HI.

Falke JA, Schoen E, Paul J, Strohm D, Hinkle E. 2025. Implications of wildfire on stream thermal regimes and juvenile salmon growth in interior Alaska boreal streams. Western Division American Fisheries Society Annual Meeting, 11–15 May 2025, Westminster, CO.

Falke JA, Schoen E, Paul J, Strohm D, Hinkle E. 2025. Implications of wildfire on stream thermal regimes and juvenile salmon growth in interior Alaska boreal streams. Society for Freshwater Science Annual Meeting, 19–24 May 2025, San Juan, PR.

Folt B, Stoner DC, Schoenecker KA, Jackson P, Iacono P. 2024. Influence of predation by mountain lions on horse population growth rates. Free-roaming Equid and Ecosystem Sustainability Network Summit, 16–18 April 2024, Elko, NV.

PRESENTATIONS (CONT.)

Invited or Noteworthy Presentations (cont.)

Lowrey B, Kauffman M, Begay J, Bergen S, Blecha K, Bundick S, Cain JW III, Cowardin M, Duvuvei O, Ehrhart A, **Folt B**, Fort J, Gagnon J, Gelzer E, Greenspan E, Hagler E, Hanson M, Hinojoza-Rood VD, Jakes A, Kolek J, McKee C, McKee KL, Merkle JA, Merrell J, Oates BA, Reddell C, Ritson R, Russo BM, Sawyer H, Schroeder C, Sprague S, Tatman N, Whittaker D, Wiechman S. 2024. Mapping big game migrations across the western states: science support for management and conservation. The Wildlife Society Annual Meeting, 20–24 October 2024, Baltimore, MD.

Shaftel R, Feddern M, Schoen E, Cunningham C, von Biela V, McAfee S, **Falke JA**. 2024. Modeled streamflow and stream temperature inform conditions affecting Chinook Salmon in Alaska. American Fisheries Society Annual Meeting, 15–19 September 2024, Honolulu, HI.

Stoner DC, **Folt B**, Schoenecker KA. 2025. Can mountain lion predation suppress population growth of feral horses in the American West? International Wild Equids Conference, 8–11 April 2025, Nanyuki, Kenya.

Strohm DD, **Falke JA**, Sergeant C. 2024. Hydrologic regime characterization for wildfire-impacted streams in changing boreal ecosystems. Western Division American Fisheries Society Annual Meeting, 15–19 September 2024, Honolulu, HI.

Contributed Presentations

Falke JA. 2024. What is the Nevada Cooperative Fish and Wildlife Research Unit? Graduate education, collaborative research, and technical assistance for fish and wildlife conservation and management in Nevada and beyond. California-Nevada Chapter American Fisheries Society Biennial Meeting, 9–12 April 2024, Redding, CA.

Folt B. 2025. Population estimation and modeling to support wild horse management. University of Nevada Reno Department of Natural Resources and Environmental Sciences Seminar Series, Reno, NV.

Folt B, Crabb ML, Schoenecker KA. 2024. Population growth of wild horse populations across the western United States. The Wildlife Society Annual Meeting, 20–24 October 2024, Baltimore, MD.

Folt B, Crabb ML, Schoenecker KA. 2025. Management and population density influence wild horse population growth in the western United States. Nevada Chapter of The Wildlife Society Science Symposium, 8–9 January 2025, Las Vegas, NV.

Harings MAB, Schoen E, Kamermans B, Reece K, **Falke JA**, Matter A, McKenna B, Farnham N, Walter ST, López JA. 2024. Evaluating environmental DNA as a complementary technique for assessing Yukon River salmon. American Fisheries Society Annual Meeting, 15–19 September 2024, Honolulu, HI.

Harings MAB, Schoen E, Kamermans B, Reece K, **Falke JA**, Matter A, McKenna B, Farnham N, Walter ST, López JA. 2025. Evaluating environmental DNA as a complementary technique for assessing Yukon River salmon. Alaska Chapter American Fisheries Society Annual Meeting, 17–21 March 2025, Ketchikan, AK.

Hermus JH, Muehlbauer JD, Rinella DJ, von Biela VR, **Falke JA**. 2024. The effects of water temperature and heat stress on juvenile Chinook and Coho Salmon growth in the Deshka River watershed. Alaska Chapter American Fisheries Society Annual Meeting, 25–29 March 2024, Seward, AK.

Hermus JH, Muehlbauer JD, Rinella DJ, von Biela VR, **Falke JA**. 2024. The effects of heat stress on juvenile Chinook and Coho Salmon growth in the Deshka River. Mat-Su Salmon Science and Conservation Symposium, 18–19 November 2024, Palmer, AK.

PRESENTATIONS (CONT.)

Contributed Presentations (cont.)

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THANK YOU.