

# Zachary A. Mitchell

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## I. Education

2020 Ph.D., Aquatic Resources and Integrative Biology, Department of Biology, Texas State University, San Marcos, Texas

Dissertation: *The role of life history strategies and drying events in shaping mussel communities: a multiscale approach*

2016 M.S., Biological Sciences, Department of Biological Sciences, Eastern Illinois University, Charleston, Illinois

Thesis: *Sampling efficiency, population characteristics, and potential impacts of harvest regulations on three riverine species of catfish*

2014 B.S., *cum laude*, Wildlife, Fisheries, and Aquaculture Science, College of Forestry, Mississippi State University, Starkville, Mississippi

## II. Employment History

2024-present	Assistant Professor, Texas A&M University-Kingsville
Fall 2024	Adjunct Instructor, Eastern New Mexico University- ENMU
Spring 2024	Graduate Coordinator, Eastern New Mexico University
2022-2024	Assistant Professor, Eastern New Mexico University
2020-2021	Postdoctoral Research Associate, Texas State University
2018-2020	Graduate Instructional Assistant, Texas State University
2016-2018	Graduate Research Assistant, Texas State University
2014-2016	Graduate Research Assistant, Eastern Illinois University
2012-2014	Aquaculture Technician, Mississippi State University
2013	Cutthroat Trout Technician, Utah DNR Wildlife Resources

## III. Teaching Experience

*Instructor of Record* (S = spring semester, F = fall semester, Su = summer semester)

- Fisheries Management and Conservation, TAMUK (S `26)
- Marine Ecology, TAMUK (F `25)
- Ichthyology, TAMUK (F `24)

- General Biology II, TAMUK (Every semester since F `24)
- Ichthyology, ENMU (S `23)
- Fisheries Management and Conservation, ENMU (F `22, `24)
- Limnology, ENMU (S `22, `24)
- General Ecology, ENMU (every semester during S `22- S `24)
- General Biology (non-majors), ENMU (Su `24)
- Principles of Biology, ENMU (S `22, F `22)
- Wildlife Biology, ENMU (F `22)
- Mammalogy, ENMU (F `22)
- Aquatic Ecology, TXST (F `21)

*Instructional Assistant*

- General Ecology, TXST (F `18/ S `19, `20)
- Aquatic Biology, TXST (F `19)

*Guest Lecturer:*

- Ecological Data Analysis using R, Landscape Ecology and GIS, ENMU (S `24)
- Welcome to R Studio! Using R for Ecological data analysis, Wildlife Conservation and Management, ENMU (S `23)
- Freshwater Mussel Population Dynamics, Aquatic Biology, TXST (F `18)
- Aquaculture History and Management, Fisheries Management, EIU (S `14)

*Guest Lab Instructor*

- Comparison of fish assemblages of lotic and lentic ecosystems, Fisheries Management, EIU (2014-2015)

**IV. Peer-Reviewed Manuscripts** (student author: \*undergraduate, ^ graduate)

Winemiller, K.O., Perkin, J.S., Trungale, J.F., Hoeninghaus, D.J., Moore, G.W., Schwalb, A.N., **Mitchell Z.A.**, Trimble, A., Reeves, C., T.B., Buzan, D. (2024). Advancing Environmental Flows Science: Monitoring, Hindcasting and Forecasting Flow-Ecology Relationships. *Fisheries*. <https://doi.org/10.1002/fsh.11092>

Cushway, K.C., Harris, A.E., Piercy, C.D., **Mitchell, Z.A.**, Schwalb, A.N. (2024). Go with the flow: impacts of high and low flow conditions on freshwater mussel assemblages and distribution. *PLOS ONE*. <https://doi.org/10.1371/journal.pone.0296861>

Torres, C.G.^, Pollock, D.A., **Mitchell, Z.A.**, Craddock, K.R. (2023). The effects of insect repellent in initial dipteran colonization of decomposing pig remains. *Journal of Medical Entomology*. <https://doi.org/10.1093/jme/tjad148>

**Mitchell, Z.A.**, Cottenie, K., Schwalb, A.N. (2023). Trait-based and multi-scale approach provides insight on responses of freshwater mussels to environmental heterogeneity. *Ecosphere*. <https://doi.org/10.1002/ecs2.4533>

**Mitchell, Z.A.**, Schwalb, A.N. (2021). Seasonality of gamete production of *Cyclonaias* species in central Texas. *Freshwater Mollusk Biology and Conservation*. <https://doi.org/10.31931/fmbc-d-20-00013>

Hernandez, B., **Mitchell, Z.A.**, Robertson, C., Schwalb, A.N. (2021). Burrowing behavior of unionid mussels in subtropical rivers: Implications for management and conservation. *Aquatic Conservation: Marine and Freshwater Ecosystems*. <https://doi.org/10.1002/aqc.3525>

**Mitchell, Z.A.**, Burlakova, L., Karatayev, A.Y., Schwalb, A.N. (2021). Changes in community composition of riverine mussels after a severe drought depends on local conditions: A comparative study in four tributaries of a subtropical river. *Hydrobiologia*. <https://doi.org/10.1007/s10750-019-04058-3>

**Mitchell, Z.A.**, McGuire, J., Abel, J., Hernandez, B., Schwalb, A. (2018). Move on or take the heat: Can life history strategies of freshwater mussels predict their physiological and behavioural responses to drought and dewatering? *Freshwater Biology*. <https://doi.org/10.1111/fwb.13187>

Allen, P. J., **Mitchell, Z. A.**, DeVries, R. J., Aboagye, D. L., Ciaramella, M. A., Ramee, S. W., Stewart, H. A. and Shartau, R. B. (2014). Salinity effects on Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus* Mitchill, 1815) growth and osmoregulation. *Journal of Applied Ichthyology*. doi: 10.1111/jai.12542.

**V. Manuscripts in press, revision, and review** (student author: \*undergraduate, ^ graduate)

Cushway, K., **Mitchell, Z.A.**, Morris, T. J., Cottenie, K., Woolnough, D. A., and A. N. Schwalb. (*in review*) Bridge Bias: Is convenience sampling misleading conservation? Submitted to *Journal of Applied Ecology*

**Mitchell, Z.A.**, Schwalb, A.N. (*in review*). Scale invariant patterns of life history strategies of riverine mussels are shaped by hydrologic factors. Submitted to *Freshwater Biology*.

**Mitchell, Z.A.** (*in revision*). Toxicity of wildfire retardants on juvenile Rio Grande Cutthroat Trout in pulsed exposures across thermal regimes. Submitted to *The Southwestern Naturalist*.

**VI. Manuscripts in preparation** (student author: \*undergraduate, ^ graduate)

**Mitchell, Z.A.**, Pulcini, B.^ Understanding fish stranding and mortality in regulated flows: a combined field and experimental approach.

Webb, N.S.^, Pollock, D., Green, C., and **Mitchell, Z.A.** Evaluating the upper thermal tolerance of the Rio Grande Chub (*Gila pandora*).

**VII. Research Grants: \$1,473,253.97 in total** (student author: \*undergraduate, ^ graduate)

**Mitchell, Z.A. (PI).** (*Selected for funding; Estimated start date: November 2026*)

Tracking Southern Flounder Recruitment Timing Using Ichthyoplankton Sampling at Texas Coastal Passes. FY27 State Wildlife Grant, TPWD Coastal Fisheries. Amount awarded: \$91,445.00

**Mitchell, Z.A. (PI),** Portnoy, D. (Co-PI; TAMUCC), Conway, K. (Co-PI; TAMU). (*Selected for funding; Estimated start date: January 2027*). *Linking Habitat Use, Flow Regime, and Genomic Structure to Support Conservation of Dionda Species in Texas*. Texas Comptroller: Texas Endangered Species Management Research FY26. Amount awarded: \$279,994.88.

**Mitchell, Z.A. (PI).** *Aquatic Linkages: How Rain and Water Quantity Drive Crayfish Abundance in South Texas*. April 2026. Texas Ecolab Program. Amount awarded: \$1,350.00.

**Mitchell, Z.A. (PI),** Shartau, R. (Co-PI; WSU). August 2025. *Assessing Distribution, Habitat Use, and Environmental Tolerances of Data-Deficient Texas Crayfish*. Texas Comptroller: Texas Endangered Species Management Research FY25. Amount awarded: \$279,889.18.

**Mitchell, Z.A. (PI).** *Campus Creatures: Unveiling TAMUK's Hidden Biodiversity*. January 2025. Title V FP2s Grant on Undergraduate Research Course Redesign. Amount awarded: \$2,900.00.

Davis, D.R. (PI), Green, C. (Co-PI), **Mitchell, Z.A. (Co-PI)**. January 2024. *Increasing our understanding of the Rio Grande Cooter to inform future recovery options*. Submitted to the National Fish and Wildlife Foundation: Pecos Watershed Conservation Initiative. Amount awarded: \$235,671.52.

Cabrales-Arellano, C.P. (PI), **Mitchell, Z.A. (Co-PI)**, Ceh-Varela, E. (Co-PI). *Microplastics monitoring of water in the Texas-New Mexico-Chihuahua region*. August 2024. Submitted to the North American Development Bank (BORDER 2025). Amount awarded: \$74,910.00.

Green, C. (PI), **Mitchell, Z.A. (Co-PI)**. August 2024. *Wildfire, Water, and Wildlife: Assessing Beaver Pond's Role in Mitigating Wildfire Impacts on Aquatic Ecosystems and Water Security*. New Mexico Water Resource Research Institute, Faculty Research Grant Program. Amount awarded: \$39,947.00.

Ashlyn Reynolds^, **Mitchell, Z.A. (faculty PI)**. September 2023. *Does beaver presence increase wildfire resistance of streams in New Mexico?* New Mexico Water Resource Research Institute, Student Research Grant Program (NMWRI- SG-FALL2023). Amount awarded: \$7,422.35.

**Mitchell, Z.A. (PI).** May 2023. *Evaluating the thermal tolerance of the Rio Grande Chub (Gila pandora).* ENMU Faculty Research and Instructional Development Program. Amount awarded: \$6,494.00.

Brittany Pulcini<sup>^</sup>, **Mitchell, Z.A. (faculty PI).** December 2022. *Influence of seasonality on the relative importance of abiotic and biotic factors in determining fish survival in isolated pools in New Mexico rivers.* New Mexico Water Resources Research Institute, Student Water Research Grant Program. Amount awarded: \$7,455.00.

Jodie Montgomery\*, **Mitchell, Z.A. (faculty PI).** December 2022. *Effects of catastrophic wildfire on stream macroinvertebrate communities in northern New Mexico.* New Mexico Water Resources Research Institute, Student Water Research Grant Program. Amount awarded: \$7,446.57.

Jodie Montgomery\*, **Mitchell, Z.A. (faculty PI).** September 2022. *Effects of catastrophic wildfire on stream macroinvertebrate communities in northern New Mexico.* New Mexico Alliance for Minority Participation- Undergraduate Research Scholars Program. Amount awarded: \$1,200.00.

Ashlyn Reynolds\*, **Mitchell, Z.A. (faculty PI).** September 2022. *Toxicity of fire retardant in pulsed exposures to Rio Grande Cutthroat Trout under varying temperatures.* New Mexico Alliance for Minority Participation- Undergraduate Research Scholars Program. Amount awarded: \$1,200.00.

**Mitchell, Z.A. (PI).** September 2022. *Drying Rivers: Responses of Riverine Biota in Isolated Pools during Reduced Stream Flow.* New Mexico Water Resource Research Institute, Faculty Research Grant Program. Amount awarded: \$32,673.23.

**Mitchell, Z.A. (PI),** Cradock, K. (Co-PI). July 2022. *Improving Data Literacy in Undergraduate Biology Education.* National Science Foundation; Division of Undergraduate Education. Amount awarded: \$390,794.00.

Justin Schleusner\*, **Mitchell, Z.A. (faculty PI).** June 2022. *Effects of turbidity on fish behavior and community structure in New Mexico Rivers.* New Mexico Water Resource Research Institute, Student Research Grant Program (NMWRRI-SG- 2022). Amount awarded: \$7,470.24.

**Mitchell, Z.A. (PI).** May 2022. *Examining drivers of aquatic ecosystem structure in a disturbance prone river.* ENMU Faculty Research and Instructional Development Program. Amount awarded: \$4,991.00.

#### **VIII. Pending Research Grants (in review)**

#### **IX. Current Graduate Students**

Zoe Mabry. 2025-Current. TAMUK. *Thesis*: Predicting Drought Impacts on South Texas Crayfish Using Field Surveys, Mesocosm Experiments, and Ecological Niche Models.

## X. Previous Graduate Students

Nichole Webb. 2022-2025. ENMU. *Thesis*: Warming waters, rising risks: Unraveling thermal tolerance of freshwater fish in the southwestern USA.

Ashlyn Reynolds. Advised from 2023-2025. ENMU. *Thesis*: Does beaver presence increase wildfire resistance of streams in New Mexico?

Brittany Pulcini. 2022-2024. ENMU. *Non-Thesis Project*: Influence of seasonality on the relative importance of abiotic and biotic factors in determining fish survival in isolated pools in New Mexico rivers.

Ryan Sheppard-Peery. 2022-2024. ENMU. *Non-Thesis Project*: Examining drivers of riverine fish communities in New Mexico.

## XI. Graduate Student Committees

Jodie Montgomery. 2024-2026. (M.S. directed by Dr. Corey Green, ENMU)

Matilda Kaabo. 2023-2024. (M.S. directed by Dr. Mhahabubur Rhaman, ENMU)

Stephen Murphy. 2021-2025. (M.S. directed by Dr. Darren Pollock, ENMU)

Margaret Bass. 2021-2023. (M.S. directed by Dr. Kenwyn Cradock, ENMU)

Cecilia Torres. 2021-2023. (M.S. directed by Dr. Kenwyn Cradock, ENMU)

## XII. Undergraduate Students Mentored

Texas A&M University-Kingsville

Brooklyn Nylander. 2026. *Project*:

Aubry Reyes. 2026. *Project*:

Logan Liesman. 2025. *Project*: Assessing Spatiotemporal Variation in Fish Communities Across South Texas Coastal Watersheds

Eastern New Mexico University

Jodie Montgomery. 2022- December 2023. *Project*: Effects of catastrophic wildfire on stream macroinvertebrate communities in northern New Mexico.

Ashlyn Reynolds. 2022-2023. *Project*: Toxicity of fire retardant in pulsed exposures to Rio Grande Cutthroat Trout under varying temperatures.

Justin Schleusner. 2022- January 2023. *Project*: Effects of turbidity on fish behavior and community structure in New Mexico rivers.

Zane Seidel. 2022-May 2023. *Project*: Examining drivers of aquatic ecosystem structure in a disturbance prone river.

Li Zheng. 2022-September 2023. *Project*: Examining drivers of aquatic ecosystem structure in a disturbance prone river.

Texas State University

Joshua Robledo, 2018. *Project*: Using life history strategies to predict the distribution of freshwater mussels within the San Saba River, TX.

Natalia Montero. 2017. *Project*: Effects of temperature on burrowing behavior of freshwater mussels.

### **XIII. Technical Reports (Final Reports)**

Schwalb, A., Woolam, L., Hernandez, B., **Mitchell, Z.** (2021). Environmental flow assessment and development of monitoring framework: Mussels. Final report for the Texas Water Development Board.

Schwalb, A. N., Hernandez, B., Olson, J., **Mitchell, Z.** (2018). Dispersal and migration of freshwater mussels - Final Report. Texas Parks and Wildlife.

Barnhart, C., Harding, S., Hardy, T., Hernandez, B., **Mitchell, Z.**, Sanchez, B., Seagroves, A., Rodriguez, D., Schwalb, A. (2018). Evaluating Effectiveness of Freshwater Mussel Mitigation Strategies. Final report submitted to the Texas Department of Transportation (TxDot).

**Mitchell Z.A.**, Favata C., Sotola V.A., Smith S., Boone E.C., Kruckman H., (2014). Assessment and management plan for a small agricultural impoundment in east-central Illinois. Fisheries Management Plan. Submitted to the Lowery Family.

### **XIV. Oral Presentations** (student author: \*undergraduate, ^ graduate)

**Mitchell, Z.A.** Patterns of temporal change in North American stream fish assemblages. Southern Division of the American Fisheries Society. March 2026.  
**Regional**

**Mitchell, Z.A.** Exploring Temporal Trajectories of Stream Fish Communities Across North America. Texas Chapter of the American Fisheries Society. January 2026.  
**State**

**Mitchell, Z.A.**, Schwalb, A. Scale invariant patterns of life history strategies of riverine mussels are shaped by hydrologic factors. Texas Chapter of the American Fisheries Society. January 2026. **State**

**Mitchell, Z.A.** Stranded and Stressed: Seasonal Drivers of Fish Survival in Isolated River Pools. Society of Freshwater Science 2025 Annual Meeting. May 2025.  
**International**

Schwalb, A, **Mitchell, Z.A.**, Cushway, K., Harris, A. Distribution patterns of mussels in relation to flow: An exploration across spatial scales. Society of Freshwater Science 2025 Annual Meeting. May 2025. **International**

Sheppard-Peery, R.^, **Mitchell, Z.A.** Unraveling the impact of dams on hydrology

and fish community structure in the Pecos River mainstem. Student Research and Creativity Conference. April 2024. **University**

Webb, N.<sup>^</sup>, **Mitchell, Z.A.** Evaluating the upper thermal tolerance of the Rio Grande Chub (*Gila pandora*). Student Research and Creativity Conference. April 2024. **University**

Pulcini, B.<sup>^</sup>, **Mitchell, Z.A.** Influence of seasonality on the relative importance of abiotic and biotic factors in determining fish survival in isolated pools in New Mexico. Student Research and Creativity Conference. April 2024. **University**

**Mitchell, Z.A.** Drying Rivers: responses of fish in isolated pools during reduced stream flow. Eastern New Mexico Faculty Lectureship. October 2023. **University**

**Mitchell, Z.A.** Responses of riverine biota in isolated pools during reduced stream flow. 2023 American Fisheries Society Annual Meeting. August 2023. **National**

Schwalb, A.N., Cushway, K.C., **Mitchell, Z.A.**, Martinski, M.E., Hayes, K., Cottenie, K., Perkin, J.S., Perez Rocha, M. Gaining insights on responses of freshwater mussels to environmental heterogeneity and on their distribution. 2023 Freshwater Mollusk Conservation Society Symposium. April 2023. **National**

Cushway, K.C., Harris, A.E., Piercy, C.D., **Mitchell, Z.A.**, Schwalb, A.N. Holding their ground: impacts of high and low flows on freshwater mussel assemblages and distribution. 2023 Freshwater Mollusk Conservation Society Symposium. April 2023. **National**

**Mitchell, Z.A.** Trait-based and multi-scale approach provides insight on responses of freshwater mussels to environmental heterogeneity. Eastern New Mexico Faculty Lectureship. March 2023. **University**

Schwalb A., Burlakova, L. E., Ford, D., Geist, J., Karatayev, A. Y., **Mitchell Z.A.**, Tarter A. Assessing the effects of extreme climatic events on unionid mussels. Freshwater Mollusk Conservation Society Survey guidelines and techniques workshop. August 2022. **National**

Rocha M., Cottenie K., Elkins K., Kline C., Mangold R., **Mitchell Z.A.**, Nowlin W., Perkin J., Schwalb A. Differential responses of riverine communities to environmental heterogeneity: a comparison between different groups of organisms and across different spatial scales. Joint Aquatic Sciences Meeting. May 2022. **National**

**Mitchell Z.A.**, Schwalb, A. Combining taxonomic and functional approaches to examine how riverine communities respond to environmental heterogeneity at different scales: a freshwater mussel case study. Society of Freshwater Science Annual Meeting. May 2021. **National**

**Mitchell Z.A.**, Schwalb, A. Comparing convenience and probability sampling designs for describing riverine mussel communities. Freshwater Mollusk Conservation Society Virtual Symposium. April 2021. **National**

**Mitchell Z.A.**, McGuire J, Abel J, Hernandez B, Schwalb A. Move on or take the heat. 19<sup>th</sup> Biennial Freshwater Mollusk Conservation Society Symposium, San Antonio, TX. April 2019. **National**

**Mitchell Z.A.**, Burlakova, L.E., Schwalb A.N. Impacts of severe drought on freshwater mussels in Central Texas. 65<sup>th</sup> Annual Meeting of the Southwestern Association of Naturalists, San Marcos, TX. April 2018. **Regional**

Hine E.C., Moody-Carpenter C., **Mitchell Z.A.**, Colombo R.E. A diel comparison of pulsed DC electrofishing methods in the lower Wabash River. 147<sup>th</sup> Annual Meeting of the American Fisheries Society, Tampa, FL. August 2017. **National**

**Mitchell Z.A.**, Moody-Carpenter C., Frankland L.D., Bollinger E.K., Colombo R.E. Population status and potential impacts of harvest regulations on three exploited species of Catfish in the Wabash River, IL. 54<sup>th</sup> Annual meeting of the Illinois American Fisheries Society, Springfield, IL. February 2016. **State**

**Mitchell Z.A.**, Moody-Carpenter C., Frankland L.D., Bollinger E.K., Colombo R.E. Demographics and harvest of three commercially exploited species of Catfish in a large Midwestern River. 76<sup>th</sup> Midwest Fish & Wildlife Conference, Grand Rapids, MI. January 2016. **Regional**

**Mitchell Z.A.**, Moody-Carpenter C., Frankland L.D., Bollinger E.K., Colombo R.E. Seasonal effects of DC pulse frequency on collection of fish in the Wabash River, IL. 145<sup>th</sup> Annual Meeting of the American Fisheries Society, Portland, Oregon. August 2015. **National**

**Mitchell Z.A.**, Moody-Carpenter C., Frankland L.D., Bollinger E.K., Colombo R.E. Fish assemblages within the Wabash River, IL. 53<sup>rd</sup> Annual meeting of the Illinois American Fisheries Society, Grafton, IL. March 2015. **State**

**XV. Poster Presentations** (student author: \*undergraduate, ^ graduate)

Mabry, Z.^, McGovern, J. ^, Sweeten, L. ^, Donkor, M. ^, Green, C. ^, Thompson, C. ^, Watson, E. ^, **Mitchell, Z.A.** Functional Community Resilience to Extreme Weather Events Using a Long-term Dataset. Texas Chapter of the Wildlife Society. February 2026. **State**

Mabry, Z.^, **Mitchell, Z.A.** Drought impact assessment on freshwater communities: responses of South Texas crayfish. Texas Chapter of the Wildlife Society. February 2026. **State**

Liesman, L.\*, **Mitchell, Z.A.** Historical fish assemblages and resampling priorities in south Texas. Texas Chapter of the Wildlife Society. February 2026. **State**

Mabry, Z.^, **Mitchell, Z.A.** Drought impact assessment on freshwater communities: responses of South Texas crayfish. Texas Chapter of the American Fisheries Society. January 2026. **State**

Mabry, Z.^, McGovern, J. ^, Sweeten, L. ^, Donkor, M. ^, Green, C. ^, Thompson, C. ^, Watson, E. ^, **Mitchell, Z.A.** Functional Community Resilience to Extreme Weather Events Using a Long-term Dataset. Texas Chapter of the American Fisheries Society. January 2026. **State**

**Mitchell, Z.A.** Assessing Distribution, Habitat Use, and Environmental Tolerances of Data-Deficient Texas Crayfish. 155<sup>th</sup> Annual Meeting of the American Fisheries Society, San Antonio, TX. August 2025. **National**

Montgomery, J., Green, C., and **Mitchell, Z.A.** Assessing the Impact of Severe Wildfires on Stream Macroinvertebrate Communities: Evaluating Beaver Ponds as a Natural Mitigation Strategy in Northern New Mexico. 45th Annual Society of Environmental Toxicology and Chemistry. October 2024. **National**

Salazar, A.\*, Lucero, A.\*, **Mitchell, Z.A.** Temporal dynamics of riverine catfish in the Wabash River, Illinois. Student Research and Creativity Conference. April 2024. **University**

Reynolds, A.^, **Mitchell, Z.A.** Does beaver presence increase wildfire resistance of streams in New Mexico? Student Research and Creativity Conference. April 2024. **University**

Montgomery, J.\*, **Mitchell Z.A.** Effects of catastrophic wildfire on stream macroinvertebrate communities in northern New Mexico. 68<sup>th</sup> Annual New Mexico Water Conference. November 2023. **State**

Reynolds, A.^, **Mitchell Z.A.** Does beaver presence increase wildfire resistance of streams in New Mexico? 68<sup>th</sup> Annual New Mexico Water Conference. November 2023. **State**

Pulcini, B.^, **Mitchell Z.A.** Influence of seasonality on the relative importance of abiotic and biotic factors in determining *Cyprinella lutrensis* survival in isolated pools in the Pecos River. 68<sup>th</sup> Annual New Mexico Water Conference. November 2023. **State**

**Mitchell, Z.A.**, Cradock, K. Improving Data Literacy in Undergraduate Ecology Education. Annual Meeting of the Ecological Society of America. August 2023. **National**

Pulcini, B.^, **Mitchell Z.A.** Influence of Seasonality on the Relative Importance of Abiotic and Biotic Factors in Determining Fish Survival in Isolated Pools in NM Rivers.

ENMU Student Research and Creativity Conference. April 2023.

**University**

Webb, N.<sup>^</sup>, **Mitchell Z.A.** Evaluating the Upper Thermal Tolerance of the Rio Grande Chub (*Gila pandora*). ENMU Student Research and Creativity Conference. April 2023.

**University** (*Best Student Poster Award*)

Sheppard-Peery, R.<sup>^</sup>, **Mitchell Z.A.** Trait-Environment Relationships in Stream Fish Assemblages in The Pecos River Basin. ENMU Student Research and Creativity Conference. April 2023. **University**

Montgomery J.\*, **Mitchell Z.A.** Effects of Catastrophic Wildfire on Stream Macroinvertebrate Communities in Northern NM. ENMU Student Research and Creativity Conference. April 2023. **University**

Reynolds A.\*, **Mitchell Z.A.** Toxicity of fire retardant in pulsed exposures to Rio Grande Cutthroat Trout under varying temperatures. ENMU Student Research and Creativity Conference. April 2023. **University**

Reynolds A.\*, **Mitchell Z.A.** Toxicity of fire retardant in pulsed exposures to Rio Grande Cutthroat Trout under varying temperatures. 56th Joint Annual Meeting of the Arizona-New Mexico Chapter of the American Fisheries Society. February 2023. **State**

**Mitchell, Z.A.**, Cradock, K. Improving Data Literacy in Undergraduate Biology Education. New Mexico Higher Education Assessment and Retention Conference. February 2023. **State**

Schleusner, J.\*, **Mitchell Z.A.** Effects of turbidity on fish behavior and community structure in New Mexico Rivers. 67<sup>th</sup> Annual New Mexico Water Conference. October 2022. **State**

Hayes K.J., **Mitchell Z.A.**, Schwalb A.N. Growth and age structure estimates for mussel populations in central Texas. 19<sup>th</sup> Biennial Freshwater Mollusk Conservation Society Symposium, San Antonio, TX. April 2019. **National**

Robeldo J.T., **Mitchell Z.A.**, Schwalb A.N. Distribution of mussels can be explained with life history strategies in the San Saba River. Undergraduate research symposium, San Marcos, TX. August 2018. **University**

**Mitchell, Z.A.**, Burlakova L.E., Schwalb A.N. Response of freshwater mussels to drought in central Texas. 147<sup>th</sup> Annual Meeting of the American Fisheries Society, Tampa, FL. August 2017. **National**

**Mitchell Z.A.**, Moody-Carpenter C., Frankland L.D., Bollinger E.K., Colombo R.E. Effects of DC Electrofishing pulse frequency on collection of fish in the Wabash

River, IL. Graduate Expo Research Exhibit, Charleston, IL. April 2015. **University**

**Mitchell Z.A.**, Moody-Carpenter C., Frankland L.D., Bollinger E.K., Colombo R.E. Standardized sampling protocols for fish communities in the Wabash River, IL. 75<sup>th</sup> Midwest Fish & Wildlife Conference, Indianapolis, IN. February 2015. **Regional**

**Mitchell Z.A.**, Moody-Carpenter C., Frankland L.D., Bollinger E.K., Colombo R.E. Effects of gear type on collection of Catfish in the Wabash River, IL. 144<sup>th</sup> Annual Meeting of the American Fisheries Society, Quebec City, Quebec. August 2014. **National**

**Mitchell Z. A.**, DeVries R. J., Allen P. J. Salinity effects on Atlantic sturgeon growth and osmoregulation. Undergraduate research symposium, Mississippi State University, Starkville, MS. March 2014. **University**

## **XVI. Service**

### Professional

- Session Moderator and Student Presentation Judge, Annual Meeting Texas Chapter of the American Fisheries Society, January 2026.
- Review Editor for *Frontiers in Mollusk Science: Ecology, Biogeography and Conservation* section (2023-2024)
- AZ/NM American Fisheries Society Newsletter Committee Chair (2023- 2024)
- New Mexico Alliance for Minority Participation Faculty Member (2023- 2024)
- Manuscript Reviewer: *Ecology, Biological Reviews, Scientific Reports, River Research and Applications, Aquatic Conservation: Marine and Freshwater Ecosystem, Life: The Excitement of Biology*

### Academic

- Biology Hiring Committee Chair (Spring 2026)
- Biology Curriculum Committee (TAMUK, 2025-present)
- Faculty Advisory Council Member (TAMUK, 2025-present)
- Faculty advisor to the TAMUK Fishing Club (TAMUK, 2024-present)
- Faculty Senate Members (ENMU, Spring 2025)
- Director of the Gennaro Natural History Museum Live Exhibit (ENMU, 2022-2024)
- Curator of fish at the Gennaro Natural History Museum (ENMU, 2022-2024)
- Institutional Animal Care and Use Committee (ENMU, 2023-2024)
- Department of Biology Website Coordinator (ENMU, 2022-2024)
- University Museums and Gallery Advisory Committee (ENMU, 2023-2024)
- CLAS Recruitment and Retention Committee (ENMU, Fall 2022-2024)

- Arc GIS license manager for ENMU (Fall 2022)
- Departmental search committee member (ENMU, Spring 2022, Fall 2022, Spring 2023, Spring 2024)
- College grade review committee member (Spring 2022)
- Student Research and Creativity Conference, judge (Spring 2022, 2023)
- ENMU Scholarship Committee member (Spring 2022, 2024)

#### Community

- Science Fair Judge. 2025 Texas A&M University-Corpus Christi Coastal Bend Regional Science Fair. (Feb. 2025)
- Friends of Oasis, volunteer cleaner, Oasis State Park, Portales, NM (2022- 2024)

### **XVII. Professional Societies**

#### Memberships

- American Fisheries Society, 2011- present
- Texas Chapter of the American Fisheries Society, 2024 - present
- Society of Freshwater Science, 2016 – present
- Texas Academy of Science, 2025 - present
- Southwestern Naturalist Association 2025 - present
- Ecological Society of America, 2019-2024
- AZ/NM Chapter American Fisheries Society, 2022-2024
- Freshwater Mollusk Conservation Society, 2018-2022
- Illinois Chapter American Fisheries Society, 2014- 2016
- Mississippi Chapter American Fisheries Society, 2012- 2016

#### Offices Held

- President, Biological Sciences Graduate Student Association. EIU. 2015-2016

### **XVIII. Awards, Scholarships, and Honors**

- Early Career Researcher Faculty Award (University, TAMUK, \$2,000.00)
- COAS Faculty Travel Award 2026 (University, TAMUK, \$1,985.00)
- Glen Longley/San Marcos Lions Club Scholarship 2019 (University, TXST, \$2,000)
- Departmental Travel Award 2019 (University, TXST, \$400)
- Fred and Yetta Richan Aquatic Biology Award 2017 (University, TXST, \$2,000)
- Departmental Travel Award 2017 (University, TXST, \$475)
- Williams Travel Award 2016 (University, EIU, \$500)
- Graduate Student Investigator Award 2015-2016 (University, EIU)

**May 12, 2026**

- Williams Travel Award 2015 (University, EIU, \$400)
- Research and Creative Activities Grant 2015 (University, EIU, \$700)
- COS Travel Award, EIU College of Sciences 2015 (National, \$350)
- Award of Excellence, EIU Graduate School 2015 (University)
- Illinois American Fisheries Society Travel Grant 2015 (State, \$100)
- Joan Duffy Travel Award 2015 (Regional, \$400)
- Williams Travel Award 2014 (University, EIU, \$300)
- Scholar Award, EIU BSGSA (University, EIU, \$500)
- Deans Scholar, MSU 2012/2014 (University)
- Presidents Scholar, MSU 2013 (University)