

Lindsey A. Bruckerhoff

Aquatic Ecology Laboratory
Department of Ecology, Evolution, and Organismal Biology
The Ohio State University

Email: Bruckerhoff.2@osu.edu

RESEARCH INTERESTS

Biotic interactions	Population ecology
Multiple stressors	Riverscape ecology
Community ecology	Imperiled species conservation

EDUCATION

2016- 2020 Kansas State University, PhD in Biology

2013-2016 University of Arkansas, MS in Biology

2008-2012 Missouri State University, BS Wildlife Biology, Minor in Chemistry

APPOINTMENTS

2023- Present **Assistant Professor**, Aquatic Ecology Laboratory, The Department of Ecology, Evolution, and Organismal Biology, The Ohio State University

2021-2023 **Assistant Unit Leader and Assistant Professor**, USGS Oklahoma Cooperative Fish and Wildlife Research Unit, Oklahoma State University

2020-2021 **Postdoctoral Researcher**, Utah State University

2016-2020 **Graduate Research Assistant**, Kansas State University

2016 **Directorate Fellow**, US Fish and Wildlife Service, Flint Hills National Wildlife Refuge

2014-2016 **Science Writing Tutor**, Quality Writing Center, University of Arkansas

2013-2016 **Graduate Teaching Assistant**, University of Arkansas Cooperative Fish and Wildlife Research Unit

2013 **Ecological Flows Research Technician**, University of Arkansas Cooperative Fish and Wildlife Research Unit

2011-2013 **Research Technician**, Missouri State University: 05/2011 - 03/2013

2012 **NSF Long Term Ecological Research Technician**, Trout Lake Research Station, University of Wisconsin

FUNDED PROJECTS

Bruckerhoff, L.A and K.B. Gido. 2023. Intermittent stream risk assessment: Mapping patterns of stream drying and identifying vulnerabilities of stream fish and crayfish communities. South Central Climate Adaptation Science Center. \$428,716.52

- Rosenburg, D., Porse, E. and Bruckerhoff, L.A. 2023. Collaborative Research over Careers: Tackle convergent water problems that neither researchers nor basin actors can alone. Utah Water Research Laboratory Mineral Lease Funds. \$14,6000.
- Bruckerhoff, L.A., M.R. Douglas, M.E. Douglas, C. Brewster, D. Lynch, D. Magoulick, A. Taylor, and Z. Zbinden. 2023. Habitat associations and population genetic structure of the endemic Beaded Darter *Etheostoma clinton* in the upper Ouachita River system. Arkansas Game and Fish Commission State Wildlife Grant. \$253,557.80
- Bruckerhoff, L.A. and D. Fenner. 2023. Synthesizing long-term data to identify drivers of occupancy and abundance of federally-threatened and endemic darters of the Interior Highlands. U.S. Geological Survey Science Support Program. \$148,961
- Bruckerhoff, L.A. 2023. Long-term research plan to identify drivers of stream fish community dynamics and predict responses to management actions in streams of the Ouachita Highlands. U.S. Forest Service. \$25,000.
- Bruckerhoff, L.A. and B. Murray. 2022. Drivers of Occupancy and Updated Range of Threatened and Endangered Aquatic Macroinvertebrates of the Marais des Cygnes and Neosho River Basins. Kansas Department of Parks and Wildlife. \$182,230.
- Bruckerhoff, L.A. 2022. Demographic Models to Predict Smallmouth Bass Population Responses to Reservoir Management and Climate Change. U.S. Geological Survey. \$170,000.
- Long, J.M., Bruckerhoff, L.A., and Lonsinger, R. 2022. Quantifying freshwater mussel abundance and composition in two prairie rivers of northern Oklahoma with the aid of side-scan sonar to identify novel habitat patches. Oklahoma Department of Wildlife Conservation State Wildlife Grants Program. \$89,997.08
- Bruckerhoff, L.A. 2021. Stream fish community dynamics in Oklahoma streams. U.S. Geological Survey. \$15,000.

PUBLICATIONS- published or accepted

- Wolfenkoehler, W., J.M. Long, R. Gary, R.A. Snow, J.D., Schooley, **L.A. Bruckerhoff**, & R.C. Lonsinger (2023). Viability of side-scan sonar to enumerate Paddlefish, a large pelagic freshwater fish, in rivers and reservoirs. *Fisheries Research*, 261, 106639. doi.org/10.1016/j.fishres.2023.106639
- Gido, K.B., S.C. Hedden, **L.A. Bruckerhoff**, C.A. Pennock, C.K. Hedden, G.W. Hopper, E.A. Renner, E.R. Johnson, & B.J. Postlewait. 2023. Removing a perched culvert facilitates dispersal of fishes in an intermittent prairie stream. *Freshwater Science* 42. doi/10.1086/723046
- Pennock, C.A., **Bruckerhoff, L.A.**, Gido, K.B., Barkalow, A.L., Breen, M.J., Budy, P., Macfarlane, W.W. and Propst, D.L., 2022. Failure to achieve recommended environmental flows coincides with declining fish populations: Long-term trends in regulated and unregulated rivers. *Freshwater Biology*, 67(9), pp.1631-1643.
- Schmidt, J.S., **L.A., Bruckerhoff**, H., Salehabadi, and J., Wang. 2022. Chapter 10: The Colorado River. In: *Large Rivers: Geomorphology and Management*. (eds) A. Gupta. Wiley-Blackwell. <https://doi.org/10.1002/9781119412632.ch10>

- Schmidt, J.C., **L. A. Bruckerhoff**, J. Wang, and C.B. Yackulic. 2022. The Colorado River- The Science-Policy Interface. Book Chapter in: *Cornerstone: A century of the Colorado River Compact*. (eds) J.A. Robison. University of Arizona Press. Tucson, AZ.
- Bruckerhoff, L.A.**, K. Wheeler, K. Dibble, B.A. Mihalevich, B.T. Neilson, J. Wang, C.B. Yackulic, and J.C. Schmidt. 2022. Water Storage Decisions and Consumptive Use Constrain Ecosystem Management under Severe Sustained Drought. *Journal of the American Water Resources Association*. doi.org/10.1111/1752-1688.13020
- Bruckerhoff, L.A.**, C.A. Pennock, and K.B. Gido. 2021. Do fine-scale experiments underestimate predator consumption rates? *Journal of Animal Ecology* 90:2391-2403. doi.org/10.1111/1365-2656.13549
- Wheeler, K., E. Kuhn. **L.A. Bruckerhoff**, B. Udall, J. Wang, L. Gilbert, S. Goeking, A. Kasprak, B. Mihalevich, B. Neilson, H. Salehabadi, and J.C. Schmidt. 2021. Alternative Management Paradigms for the Future of the Colorado and Green Rivers. *Quinney college of Natural Resources, Utah State University, Center for Colorado River Studies White Paper No. 6*.
- Bruckerhoff, L.A.**, K.B. Gido, & M. Estey. 2021. Disentangling effects of predators and landscape factors as drivers of stream fish community structure. *Freshwater Biology*. 66: 656-668. doi.org/10.1111/fwb.13668
- Bruckerhoff, L.A.**, L.K. Kamees, A. Holycross, & C. Painter. 2021. Patterns of survival and reproductive status of communally denning *Crotalus viridis*. *Ichthyology and Herpetology* (formerly *Copeia*). 109 (1):64-74. doi.org/10.1643/h2019301
- Hedden, S.C, **L.A. Bruckerhoff**, & K.B. Gido. 2021. Assessing linkages between small impoundments and long-term trajectories of prairie stream fish assemblages. *American Midland Naturalist*. 185:187-200. doi.org/10.1674/0003-0031-185.2.187
- Hopper, G, K.B. Gido, C.A. Pennock, S.C. Hedden, B.D. Frenette, N. Barts, C.K. Hedden, & **L.A. Bruckerhoff**. 2020. Nowhere to swim: interspecific responses of prairie stream fishes in isolated pools during severe drought. *Aquatic Sciences*. 82:1-15. doi.org/10.1007/s00027-020-0716-2
- Bruckerhoff, L.A.**, K. Connell, J. Guinnip, E. Adhikari, A. Godar, K. Gido, A. Boyle, A. Hope, A. Joern, & E. Welti. 2020. Harmony on the prairie? Grassland plant and animal community responses to variation in climate and land management. *Ecology*. doi: 10.1002/ecy.2986
- Hopper, G, K.B. Gido, C.A. Pennock, S.C. Hedden, C.M. Tobler, C.K. Hedden & **L.A. Bruckerhoff**. 2020. Biomass loss and change in species dominance shift stream community excretion stoichiometry during severe drought. *Freshwater Biology*. doi: 10.1111/fwb.13433
- Frenette, B.D., **L.A. Bruckerhoff**, M. Tobler, K.B. Gido. 2020. Temperature effects on performance and physiology of two prairie stream minnows. *Conservation Physiology*. 7:1 coz063. doi.org/10.1093/conphys/coz063
- Pennock, C.A., and **L.A. Bruckerhoff**. 2020. Qualitative Observations of Successful Spawning by Two Species of Small-bodied Minnows Following PIT Tagging. *Western North American Naturalist*. 80: 13. doi.org/10.3398/064.080.0213

Dodds, W.K., **L.A. Bruckerhoff**, D. Batzer, A. Schechner, C. Pennock, E. Renner, F. Tromboni, K. Bigham, S. Grieger. 2019. The freshwater biome gradient framework: predicting macroscale properties based on climate. *Ecosphere* 10. <https://doi.org/10.1002/ecs2.2786>

Bruckerhoff, L.A. & K.B. Gido. 2019. Assessing landscape sampling strategies to evaluate the influence of multiple stressors on stream fish communities. In: American Fisheries Society Symposium Book: *Advances in Understanding Landscape Influences on Freshwater Habitats and Biological Assemblages*.

Bruckerhoff, L.A., D.D. Magoulick, & D. Leasure. 2018. Flow-ecology relationships are spatially structured and differ among flow regimes. *Journal of Applied Ecology* 56: 398-412. doi.org/10.1111/1365-2664.13297

Bruckerhoff, L.A. and D.D. Magoulick. 2017. Hydrologic regimes as potential drivers of morphologic divergence in fish. *Evolutionary Ecology* 31: 517-531. doi.org/10.1007/s10682-017-9897-0

Bruckerhoff, L.A., J.E. Havel, J.E., & S. Knight. 2014. Survival of invasive aquatic plants after air exposure and implications for dispersal by recreational boats. *Hydrobiologia* 746: 1-9. doi.org/10.1007/s10750-014-1947-9

Havel, J. E., **L.A. Bruckerhoff**, M.A. Funkhouser, & A.R. Gemberling. 2014. Resistance to desiccation in aquatic invasive snails and implications for their overland dispersal. *Hydrobiologia* 741: 89-100. doi.org/10.1007/s10750-014-1839-z

PRESENTATIONS-platforms (1st author only) *Invited

***Bruckerhoff, L.A.**, C. Yackulic, D. Eppheimer, K. Bestgen, J. Schmidt. 2023. Identifying demographic uncertainties and vulnerabilities in an invasive Smallmouth Bass population: Implications for reservoir management and mechanical removal efforts. Presentation to FISHBIO Consulting, Virtual.

***Bruckerhoff, L.A.** 2023. The new abnormal: Exploring water management options to conserve native fish in the face of climate change. Oklahoma State University Department of Integrative Biology Department Seminar. Stillwater, OK.

Bruckerhoff, L.A., C. Yackulic, D. Eppheimer, K. Bestgen, J. Schmidt. 2022. Identifying demographic uncertainties and vulnerabilities in an invasive Smallmouth Bass population: Implications for reservoir management and mechanical removal efforts. Desert Fishes Council Annual Meeting. St George, UT.

***Bruckerhoff, L.A.** 2022. Working at the Confluence: Freshwater Conservation in a Changing World. The Ohio State University Department of Ecology, Evolution, and Organismic Biology Departmental Seminar. Columbus, OH.

Bruckerhoff, L.A., C. Yackulic, D. Eppheimer, K. Bestgen, B. Neilson, B. Mihalevich, J. Schmidt, J. Wang, K. Wheeler. 2022. Multi- species population models predict native fish responses to interactive effects of climate change and non-native fish in the Colorado River basin. Joint Aquatic Sciences Meeting, Grand Rapids, MI.

***Bruckerhoff, L.A.** 2022. The new abnormal: Exploring water management options to conserve native fish in the face of climate change. Texas Tech University Natural Resources Management Departmental Seminar. Virtual.

- Bruckerhoff, L.A.,** K. Wheeler, K. Dibble, B.A. Mihalevich, B.T. Neilson, J. Wang, C.B. Yackulic, and J.C. Schmidt. 2021. Water Storage Decisions and Consumptive Use Constrain Ecosystem Management under Severe Sustained Drought. Desert Fishes Council Annual Meeting. Virtual.
- Bruckerhoff, L.A.,** C.A. Pennock, & K.B. Gido. 2021. Scale-dependent patterns of prey aggregation and spatial overlap with predators mediate consumption rates. Oklahoma State Chapter of the American Fisheries Society Annual Meeting, Hulbert, OK.
- Bruckerhoff, L.A.,** Yackulic, C., Bestgen, K., & Schmidt, J. 2020. Will changes to water storage policy facilitate or hamper recovery of native fishes? Upper Colorado River Basin Biological Committee Meeting. Virtual.
- Bruckerhoff, L.A.,** C.A. Pennock, & K.B. Gido. 2020. Scale-dependent patterns of prey aggregation and spatial overlap with predators mediate consumption rates. American Fisheries Society Annual Meeting, Virtual.
- Bruckerhoff, L.A.,** C.A. Pennock, & K.B. Gido. 2020. Scale-dependent patterns of prey aggregation and spatial overlap with predators mediate consumption rates. Kansas Natural Resource Conference, Manhattan, KS.
- Bruckerhoff, L.A.** 2019. Untangling relationships between landscapes, community structure, and biotic interactions. Invited Webinar, US. Fish and Wildlife Service Regional Office, Lakewood, CO.
- Bruckerhoff, L.A.** 2019. Untangling relationships between landscapes, community structure, and biotic interactions. Invited Seminar, Biology Department, Pittsburg State University, KS.
- Bruckerhoff, L.A.,** K.B. Gido, & M. Estey. 2019. Untangling effects of predators and landscape factors as drivers of stream fish community structure. Joint Meeting of American Fisheries Society and The Wildlife Society. Reno, NV.
- Bruckerhoff, L.A.** 2019. Life is a Highway: Mapping barriers to stream fish movement. Google Geo for Good Summit. Sunnyvale, CA.
- Bruckerhoff, L.A.,** K.B. Gido, & M. Estey. 2019. Untangling effects of predators and landscape factors as drivers of stream fish community structure. Society for Freshwater Science. Salt Lake City, UT.
- Bruckerhoff, L.A.,** K. Connell, J. Guinnip, E. Adhikari, A. Godar, K. Gido, A. Boyle, A. Hope, A. Joern, & E. Welti. 2019. Grassland plant and animal communities respond uniquely to variation in climate and land management. Kansas Natural Resource Conference. Manhattan, KS.
- Bruckerhoff, L.A. & K.B. Gido.** 2018. Untangling relationships between landscapes, community structure, and biotic interactions. Invited Ecology and Evolutionary Biology Seminar, Division of Biology, Kansas State University.
- Bruckerhoff, L.A. & K.B. Gido.** 2018. Assessing landscape sampling strategies to evaluate the influence of multiple stressors on stream fish communities. American Fisheries Society Annual Meeting. Atlantic City, NJ.

- Bruckerhoff, L.A. & K.B. Gido.** 2018. Assessing landscape sampling strategies to evaluate the influence of multiple stressors on stream fish communities. Great Plains Limnology Conference. Lawrence, KS.
- Bruckerhoff, L.A., K.B. Gido, M. Estey, & P. Moore.** 2018. How do predators and landscape factors at multiple spatial scales drive fish community structure in the Flint Hills of Kansas?. Kansas Natural Resource Conference. Manhattan, KS.
- Bruckerhoff, L.A., K. Connell, J. Guinnip, E. Adhikari, A. Godar, C. Carson, R. Estes, P. Moley, & K. Gido.** 2017. Integrating responses among plant and animal communities to variation in climate and land management on Konza Prairie. Annual Konza Prairie LTER Workshop. Manhattan, KS.
- Bruckerhoff, L.A. & M. Estey.** 2016. Steps toward recovery: Identifying landscape factors influencing the distribution of Topeka Shiners (*Notropis topeka*) in the Flint Hills ecoregion of Kansas. USFWS Directorate Fellowship Program Symposium. Denver, CO.
- Bruckerhoff, L.A., D. Leasure, & D. Magoulick.** 2016. Spatial-auto-correlation of fish traits across hydrologic regimes and implications for developing ecological-flow relationships. American Fisheries Society Annual Meeting. Kansas City, MO.
- Bruckerhoff, L.A., D. Leasure, & D. Magoulick.** 2016. Spatial auto-correlation of fish traits across hydrologic regimes and implications for developing ecological-flow relationships. Joint Meeting of Ichthyologists and Herpetologists. New Orleans, LA.
- Bruckerhoff, L.A., D. Magoulick, & D. Leasure.** 2015. Trait Composition of Fish Communities across Hydrologic Regimes. American Fisheries Society Annual Meeting. Portland, OR.
- Bruckerhoff, L.A. & D. Magoulick.** 2015. Morphological variation in *Campostoma anomalum* across hydrologic regimes. Society for Freshwater Science. Milwaukee, WI.
- Bruckerhoff, L.A. & D. Magoulick.** 2015. Morphological variation in *Campostoma anomalum* across hydrologic regimes. Arkansas Chapter of the American Fisheries Society. Little Rock, AR.
- Bruckerhoff, L.A., J. Havel, & S. Knight.** 2013. Management and control of Eurasian Watermilfoil and Curlyleaf Pondweed. Upper Midwest Invasive Species Conference. Madison, WI.
- Bruckerhoff, L.A., J. Havel, & S. Knight.** 2012. Air tolerance of aquatic invasive species. Trout Lake Research Symposium. Boulder Junction, WI.
- Bruckerhoff, L.A. & J. Havel.** 2011. Distribution of invasive snails and the potential roles of substrate preference and competition. Trout Lake Research Symposium. Boulder Junction, WI.

PRESENTATIONS-posters (1st author only)

- Bruckerhoff, L.A., K. Connell, J. Guinnip, E. Adhikari, A. Godar, C. Carson, R. Estes, P. Moley, & K. Gido.** 2017. Integrating responses among plant and animal communities to variation in climate and land management on Konza Prairie. Konza Prairie Long Term Ecological Research Meeting. Manhattan, KS.

Bruckerhoff, L.A., K.B. Gido, M. Estey, & P. Moore. 2016. Steps toward Recovery: Identifying Landscape Factors Influencing the Distribution of Topeka Shiners (*Notropis topeka*) in the Flint Hills Ecoregion of Kansas. Kansas Natural Resource Conference. Wichita, KS.

Bruckerhoff, L.A. & D. Magoulick. 2015. Morphological variation across hydrologic regimes. American Fisheries Society Annual Meeting. Portland, OR.

Bruckerhoff, L.A., J. Havel, & S. Knight. 2013. Survival of invasive aquatic plants after air exposure and implications for dispersal by recreational boats. Ecological Society of America Annual Meeting. Minneapolis, MN.

Bruckerhoff, L.A., J. Havel, & S. Knight. 2012. Survival of invasive aquatic plants after air exposure. Missouri Natural Resource Conference. Branson, MO.

TEACHING EXPERIENCE

- 2023 **Instructor:** Organismal Diversity, 44 students, undergraduate
- 2022 **Instructor:** Advanced Community Ecology, 14 students, graduate
- 2018-2020 **Instructor:** Introduction to Wildlife, Fisheries, and Conservation Biology, lecture, ~70 students, undergraduate
- 2019 **Guest Lecture:** Analysis of Ecological Gradients, lecture, ~ 10 students, graduate
- 2018 **Guest Lecture:** Ecology, lecture, ~70 students, undergraduate
- 2018 **Guest Lecture:** Fisheries Management, paper discussion, ~10 students, undergraduate
- 2018 **Guest Lecture:** Aquatic Ecology, lecture, ~15 students, undergraduate
- 2017 **Teaching Assistant:** Organismic Biology, laboratory, ~ 35 students, undergraduate
- 2017 **Guest Lecture:** Ecology, lecture, ~70 students, undergraduate
- 2017 **Teaching Assistant:** Principles of Biology, studio format, ~ 50 students, undergraduate
- 2014-2016 **Teaching Assistant:** Human Physiology, laboratory, ~ 20 students, undergraduate
- 2013 **Teaching Assistant:** Principles of Biology, laboratory, ~ 20 students, undergraduate

GRADUATE AND UNDERGRADUATE MENTORING

- 2022-present **Vanessa Rendon, Undergraduate, Oklahoma State University.**
Project: *Variation in crayfish community structure across intermittent streams*
- 2021-present **Benjamin Kelly, Graduate (MS), Oklahoma State University**
Project: *Synchrony of fish community responses to drying across a gradient of intermittency*
- 2021-present **Jamie Eastep, Undergraduate, Oklahoma State University.**
Project: *Influence of stream size and body size on diet variability.*
- 2019-2020 **Jaden Reed: Undergraduate, Kansas State University**
Project: *Variability in Green Sunfish diets along environmental gradients*

- 2018- 2020 Emily Samuel: Undergraduate, Kansas State University
Project: *Stream macroinvertebrate diversity along longitudinal gradients*
- 2018-2019 Kristin Kersten: Undergraduate, Kansas State University
Project: *How does fish morphology respond to stream size in the Kansas River Basin?*
- 2017-2020 Andrew Hagemann: Undergraduate, Kansas State University
Project: *Patterns of nuptial color variation in grassland stream fish*
- 2018 Donovan Michael: Undergraduate, Kansas State University
Project: *Culvert effects on fish communities within the Kansas River drainage basin*
- 2013-2014 Allison Yarra: Undergraduate, University of Arkansas Research Experience for Undergraduates Program
Project: *Crayfish occupancy in response to hydrologic regime and geomorphology in Ozark streams*

GRADUATE COMMITTEES

- 2023-present Madeline Schumacher (MS), Committee Chair
- 2023-present Abigail Shake (MS), Committee Chair
- 2021-present Benjamin Kelly (MS), Committee Chair
- 2023-present Kylee Wilson (Phd), Committee Member
- 2022-present Benjamin Murley (MS), Committee Member
- 2021-2023 Daniel Longue (MS), Committee Member

SERVICE

- 2022-Present **Associate Editor**, Canadian Journal of Fisheries and Aquatic Sciences
- 2023 **Workshop Co-Organizer**, Occupancy Modeling, Oklahoma State University
- 2022 **Steering Committee and Workshop Organizer**, Prairie Fishes and Streams Collaborative
- 2022 **Judge, Natural Resource Ecology and Management 3-Minute Thesis Symposium**, Oklahoma State University.
- 2022 **Technical Advisor**, Kiamichi River Environmental Flows Sustainable Rivers Program
- 2013-Present **Ad Hoc Reviewer**
Journal of Applied Ecology, Freshwater Biology, Hydrobiologia, Biological Invasions, Southwestern Naturalist, Aquatic Sciences, Freshwater Science, Ecology of Freshwater Fish, Environmental Monitoring and Assessment, Western North American Naturalist, Freshwater Biology, Environmental Management, Fisheries Research, Science of the Total Environment, Ecology Letters

2020 **John E. Skinner Memorial Award Judge for the American Fisheries Society**

2017-2018 **Kansas State University Faculty Search Committee**

AWARDS, HONORS, SCHOLARSHIPS, FELLOWSHIPS

2020 Chris Edler Award for Outstanding Research on Konza Prairie \$250

2019 John E. Skinner Memorial Award- American Fisheries Society \$800

2019 Biology Graduate Student Training Grant \$500

2019 Kansas Chapter of the American Fisheries Society Professional Development Grant \$250

2019 Best Student Paper Award- Kansas Chapter of The Wildlife Society

2019 Otto Tiemeier-Frank Cross Scholarship- Kansas Chapter of the American Fisheries Society \$300

2019 Best Student Paper Award- Kansas Chapter of the American Fisheries Society

2018 Kansas State University Graduate School Travel Award \$400

2016-2018 Timothy R. Donoghue Graduate Scholarship \$10,000

2017,2019 Kansas State University College of Arts and Sciences Travel Award \$1,600

2016 Directorate Fellowship Program \$5,000

2015 American Fisheries Society (Arkansas Chapter) Outstanding Student Member Award \$100

2014,2015 University of Arkansas Graduate School Travel Grant \$1,200

2012 ITW Scholarship \$3,000

2010 University of Tasmania High Distinction Research Award

2008-2012 Board of Governor's Scholarship, Tuition ~\$28,000

2008-2012 Missouri State University Honors College

SCIENCE COMMUNICATION

2019 **Led Workshop: Blogging and Presenting Your Research Digitally Professional Development Event.**
I presented a talk entitled, "Science Blogging: Starting and managing a science" and participated in panel discussion at this workshop provided by the Kansas State Graduate Student Council.

2019 **ART(ifacts): SciComm 2019 Presenter**
I presented my research to the public using fisheries gear instead of a traditional scientific poster. This event put on through the SciComm 2019 conference gave both conference goers and the city of Manhattan, KS the opportunity to speak to scientists and learn about their research.

2018-2019 **Blog Manager and Contributor:** *Science Snapshots* <https://sciencesnapshots.com/>
I managed and helped establish a science blog created as a collaborative effort by graduate students at Kansas State University

2017-Present **NPR Friends of Joe's Big Idea Office Hours Reviewer**

Review blog posts submitted to NPR's science communication initiative. This program encourages scientists to develop online science communication pieces to be published on popular platforms.

2017 **Improv for Scientists Workshop: Kansas Science Communication Initiative**
I participated in this workshop held during Kansas State University's Science Communication Week. We learned how to use improvisation techniques to help communicate complicated ideas and relate to audiences.

2017 **Science Communication Training: Sunset Zoo and Kansas State University**
This 3-part workshop focused on audience assessment, written communication for public audiences, and visual communication techniques. Included both in class activities as well as out of classroom interviews and writing.

PROFESSIONAL MEMBERSHIPS AND LEADERSHIP

American Fisheries Society (2011-present), Student Subunit Leadership: **President and Secretary**

Society for Freshwater Science (2014-present)

American Society of Ichthyologists and Herpetologists (2014-present)

Desert Fishes Council (2020-present)

Biology Graduate Student Association (2018-2019), **Treasurer**

Wildlife Society (2011-2012), Student Chapter Leadership; **Public Relations Chair**