

THOMAS M. LUHRING

ASSISTANT PROFESSOR • DEPARTMENT OF BIOLOGICAL SCIENCES
WICHITA STATE UNIVERSITY • 542 HUBBARD HALL • WICHITA, KS 67260

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EDUCATION

PhD	Biological Sciences – University of Missouri Advisor: Raymond D. Semlitsch (deceased)	2008 - 2013
MS	Ecology – University of Georgia (Savannah River Ecology Lab) Advisor: J. Whitfield Gibbons	2005 - 2008
BS	Ecology – University of Georgia Advisor: Gary W. Barrett (Undergraduate Thesis)	2000 - 2005
BS	Biology – University of Georgia	2000 - 2005

ACADEMIC POSITIONS

Assistant Professor – Wichita State University Department of Biological Sciences	2019 - Present
Postdoctoral Research Fellow – University of Nebraska Program of Excellence in Population Biology School of Biological Sciences Advisor: John P. DeLong	2015 - 2019
Postdoctoral Research Associate – Michigan State University Department of Fisheries and Wildlife Advisor: C. Michael Wagner	2013 - 2015

FELLOWSHIPS, GRANTS, AND AWARDS

2021	Lewis H. Humphreys Charitable Trust (\$112,750) (PI) – Not funded, but \$30,000 matching funds were provided by donor.
2021	Supplementary REU Funding, RII Track-1: Microbiomes of Aquatic, Plant, and Aquatic Soil Systems across Kansas, KS NSF EPSCoR, National Sciences Foundation (\$9,480) (PI)
2020-Present	KS NSF EPSCoR First Award, National Science Foundation, (\$117,096) (PI)
2020-2021	Chickadee Checkoff Small Grants Program, Kansas Department of Wildlife, Parks, and Tourism (\$10,000) (PI)
2015-2019	Population Biology Program of Excellence Postdoctoral Fellowship, University of Nebraska (~\$180,000)
2014	Great Lakes Restoration Initiative Grant – Implementing Trap-based Control of Sea Lamprey in the Great Lakes. U.S. Environmental Protection Agency 2014, (\$495,000) (Co-PI)
2013	Grant - Proof-of concept test of larval sea lamprey responses to alarm cue. Great Lakes Fisheries Commission 2013 (\$10,000) (Co-PI)

- 2012 Student Research Grant – South Atlantic Chapter of the Society of Wetland Scientists (\$750)
- 2012 Henri Seibert Award – Best student oral presentation in Ecology World Congress of Herpetology, Society for the Study of Amphibians and Reptiles
- 2011 Travel Award - Biology Graduate Student Association, University of Missouri (\$211)
- 2010 Trans-World Airlines Scholarship – University of Missouri (\$7,000)
- 2009 First Year Travel Award – Life Sciences Fellowship Program, University of Missouri (\$700)
- 2008-2013 Life Sciences Doctoral Fellowship – Biological Sciences, University of Missouri 2008-2013 (~\$110,000 + tuition)
- 2008 Graduate Research Award Finalist – Herpetologists’ League (Finalist for best oral presentation by graduate student)
- 2007 Theodore Roosevelt Memorial Fund – American Museum of Natural History, \$2000
- 2005 Joshua Laerm Academic Support Award – Georgia Museum of Natural History (\$600)
- 2005 Joshua Laerm Memorial Outstanding Ecology Undergraduate Award – Institute of Ecology, University of Georgia
- 2004 Research Experience for Undergraduates – National Science Foundation
- 2000-2004 H.O.P.E. Scholarship – Georgia Student Finance Commission (~\$12,000)

MENTORED STUDENT FELLOWSHIPS, GRANTS, AND AWARDS

- 2021 Rosa Lee & Alvin Sarachek Award for Scholarly Excellence in Natural Sciences, **Stephanie Bristow** (WSU), Fairmount College of Liberal Arts and Sciences (\$5,490)
- 2021 The Rachel Snyder Memorial Scholarship, Grassland Heritage Foundation, **Krista Ward** (WSU), Spring 2021 (\$1,000)
- 2020-2021 Kansas IDeA Network of Biomedical Research Excellence (K-INBRE) **Stephanie Bristow** (WSU), (\$2,000 scholarship & \$750 for lab supplies/semester) Fall 2020 & Spring 2021 (\$5,500)
- 2020 Kansas Herpetological Society, Alan H. Kamb Grant, **Krista J. Ward** (WSU) (\$300)
- 2020 Kansas Herpetological Society, Howard K. Gloyd-Edward H. Taylor Scholarship, **Jake T. Wright** (WSU) (\$300)
- 2014 Undergraduate Research Program, Michigan State University College of Agriculture and Natural Resources **Katie E. Kierczynski** (\$2,000)

PUBLICATIONS

Coauthors: ¹ Undergraduate, ² Graduate student, ³ Post-Bach, ⁴ WSU Graduate Student
 Google Scholar: <https://scholar.google.com/citations?user=LcKolWUAAAAJ&hl=en>
 Research Gate: https://www.researchgate.net/profile/Thomas_Luhring

- Luhring, TM**, LS Wszola², GM Connette, CM Schalk (*In Review*). Droughts reduce growth and increase demographic vulnerability to drying events for an ectotherm with size-dependent estivation ability. *Oecologia*
- Little, CJ, M Rizzuto, **TM Luhring**, JD Monk, RJ Nowicki, RE Paseka, J Stegen, CC Symons, FB Taub, JD Yen (*In Review*) Movement with Meaning: Integrating Information into Meta-Ecology. *Oikos*
- Ward, KJ⁴, CS Streid⁴, JT Wright⁴, **TM Luhring**. (*In Review*) *Regina grahamii* (Graham's Crayfish Snake). *Herpetological Review*
- Sabal, MC, MS Boyce, CL Charpentier, NB Furey, **TM Luhring**, HW Martin, MC Melnychuk, RB Srygley, CM Wagner, AJ Wirsing, RC Ydenberg, EP Palkovacs (2021) Predation landscapes influence migratory prey ecology and evolution. *Trends in Ecology and Evolution*
- Luhring, TM**, JP DeLong (2020) Trophic cascades alter eco-evolutionary dynamics and body size evolution. *Proceedings of the Royal Society B* 287:20200526. DOI: 10.1098/rspb.2020.0526
- Hume, JB, **TM Luhring**, CM Wagner. (2020) Push, pull, or push-pull? An alarm cue better guides sea lamprey towards capture devices than a mating pheromone during the reproductive migration. *Biological Invasions* DOI: 10.1007/s10530-020-02242-4
- Uiterwaal, S², I Lagerstrom³, **TM Luhring**, ME Salsbery², JP DeLong. (2020) Trade-offs between morphology and thermal niches mediate adaptation in response to competing selective pressures. *Ecology and Evolution* DOI: 10.1002/ece3.5990
- Luhring, TM**, JM Vavra³, CE Cressler, JP DeLong (2019) Phenotypically plastic responses to predation risk are temperature dependent. *Oecologia* 191:709-719. DOI: 10.1007/s00442-019-04523-9
- DeLong, JP, G Bachman, JP Gibert, **TM Luhring**, K Montooth, A Neyer², B Reed² (2018) Habitat, latitude, and body mass influence the temperature dependence of metabolic rate. *Biology Letters* 14:20180442. DOI: 10.1098/rsbl.2018.0442
- Luhring, TM**, JM Vavra³, CE Cressler, JP DeLong (2018) Predators modify the temperature dependence of life-history trade-offs. *Ecology and Evolution* 8:8818-8830. DOI: 10.1002/ece3.4381
- Relyea, RA, et al. (**15th of 25 authors**) (2018) Phylogenetic patterns of trait plasticity evolution: Insights from amphibian embryos. *Evolution* 72:663-678. DOI: 10.1111/evo.13428
- DeLong, JP, **TM Luhring** (2018) Size-dependent predation and correlated life history traits alter eco-evolutionary dynamics and selection for faster individual growth. *Population Ecology* 60:9-20. DOI: 10.1007/s10144-018-0608-7
- Luhring, TM**, JP DeLong (2017) Scaling from metabolism to population growth rate to understand how acclimation temperature alters thermal performance. *Integrative and Comparative Biology* 57:103-111. DOI: 10.1093/icb/ix041
- Luhring, TM**, JP DeLong, RD Semlitsch (2017) Stoichiometry and life-history interact to determine the magnitude of cross-ecosystem element and biomass fluxes.

- Frontiers in Microbiology* 8:814 DOI: 10.3389/fmicb.2017.00814 (**Special Research Topic: Progress in Ecological Stoichiometry**)
- DeLong, JP, JP Gibert², **TM Luhring**, G Bachman, B Reed², A Neyer², KL Montooth (2017) The combined effects of reactant kinetics and enzyme stability explain the temperature dependence of metabolic rates. *Ecology and Evolution* 7:3940-3950. DOI: 10.1002/ece3.2955
- Luhring, TM**, TD Meckley², JB Hume, N Johnson, M Siefkes, CM Wagner (2016) A semelparous fish continues upstream migration when exposed to alarm cue, but adjusts movement speed and timing. *Animal Behaviour* 121:41-51.
- Wagner, CM, KE Kierczynski¹, JB Hume, **TM Luhring** (2016) Exposure to a putative alarm cue reduces downstream drift in larval sea lamprey (*Petromyzon marinus*) in the laboratory. *Journal of Fish Biology* 89:1897-1904.
- Luhring, TM**, JP DeLong (2016) Predation changes the shape of thermal performance curves for population growth rate. *Current Zoology* 62:501-505.
- Luhring, TM**, GC Connette, CM Schalk² (2016) Trap characteristics and species morphology explain size-biased sampling of two salamander species. *Amphibia-Reptilia* 37:79-89.
- Luhring, TM**, RM Holdo (2015) Trade-offs between age at reproduction and body size; drought survival in stochastic aquatic environments. *Oecologia* 178:723-732.
- Hume, JB, TD Meckley², NS Johnson, **TM Luhring**, MJ Siefkes, CM Wagner (2015) Application of putative alarm cue hastens the arrival of invasive sea lamprey (*Petromyzon marinus*) at a trapping location. *Canadian Journal of Fisheries and Aquatic Sciences* 72:1799-1806.
- Ousterhout, B. ^{2*}, **TM Luhring*, RD Semlitsch (2014) No evidence of natal habitat preference induction in juveniles with complex life-histories. *Animal Behaviour* 93:237-242 (***Equal Authorship**)**
- Luhring, TM** (2013) Auditory surveys. In: GJ Graeter, KA Buhlmann, LR Wilkinson, JW Gibbons, eds. *Inventory and Monitoring: Recommended Techniques for Reptiles and Amphibians, with application to the United States and Canada*. PARC Technical Report. Aiken, South Carolina.
- Luhring, TM** (2013) Leaf-litterbag surveys. In: GJ Graeter, KA Buhlmann, LR Wilkinson, JW Gibbons, eds. *Inventory and Monitoring: Recommended Techniques for Reptiles and Amphibians, with application to the United States and Canada*. PARC Technical Report. Aiken, South Carolina.
- Luhring, TM** (2013) Trashcan traps. In: GJ Graeter, KA Buhlmann, LR Wilkinson, JW Gibbons, eds. *Inventory and Monitoring: Recommended Techniques for Reptiles*

- and Amphibians, with application to the United States and Canada*. PARC Technical Report. Aiken, South Carolina.
- Reed, RN, **TM Luhring**, AD Tucker (2013) Appendix III: Determination of age, sex and reproductive condition. *In*: GJ Graeter, KA Buhlmann, LR Wilkinson, JW Gibbons, eds. *Inventory and Monitoring: Recommended Techniques for Reptiles and Amphibians, with application to the United States and Canada*. PARC Technical Report. Aiken, South Carolina.
- Luhring, TM**, JW Gibbons, PW Gibbons (2013) *Siren* sp. predation. *Herpetological Review* 44:491-492.
- Luhring, TM**, ZD Ross¹ (2012) *Gastrophryne carolinensis* (Eastern Narrow-mouthed Toad). Predation. *Herpetological Review* 43(1):118.
- Crawford, BA¹, CR Hickman², **TM Luhring** (2011) Testing the threat-sensitive hypothesis with predator familiarity and dietary specificity. *Ethology* 117:1-8.
- Earl, JE², **TM Luhring**, BK Williams, RD Semlitsch (2011) Biomass export of salamanders and anurans from ponds is affected differentially by changes in canopy cover. *Freshwater Biology* 56:2473-2482.
- Luhring, TM**, JD Willson², CT Winne² (2011) *Nerodia fasciata*. Inter-Wetland Movement. *Herpetological Review* 42:100-101
- Schalk, CM¹, **TM Luhring**, BA Crawford¹ (2010) Summer microhabitat use of the greater siren (*Siren lacertina*) and two-toed amphiuma (*Amphiuma means*) in an isolated wetland. *Amphibia-Reptilia* 31:251-256.
- Schalk, CM¹, **TM Luhring** (2010) Vagility of aquatic salamanders: Implications for wetland connectivity. *Journal of Herpetology* 44:104-109.
- Luhring, TM** (2010) *Siren* sp (Siren) predation. *Herpetological Review* 41:470
- Luhring, TM**, BD Todd² (2010) *Siren intermedia* (Lesser Siren). Drought survival. *Herpetological Review* 41:60.
- Luhring, TM** (2010) Predation by a Green Heron (*Butorides virescens*) on a Greater Siren (*Siren lacertina*). *Bulletin of the Chicago Herpetological Society* 45:33.
- Luhring, TM** (2009) Using PIT tags to evaluate non-individual-specific marks under field conditions: a case study with Greater Siren (*Siren lacertina*). *Herpetological Review* 40:170-173.
- Todd, BD², **TM Luhring**, BR Rothermel, JW Gibbons (2009) Effects of forest removal on amphibian migrations: implications for habitat and landscape connectivity. *Journal of Applied Ecology* 46:554-561.

- Gibbons, JW, **TM Luhring** (2009) Reptiles. Pages 497-505. *In*: GE Likens, ed. *Encyclopedia of Inland Waters*. Volume 3. Oxford: Elsevier.
- Schalk, CM¹, BA Crawford¹, **TM Luhring** (2009) *Siren lacertina* (greater siren) Predation. *Bulletin of the Chicago Herpetological Society* 44:56.
- Luhring, TM**, CA Jennison¹ (2008) A new stratified aquatic sampling technique for aquatic vertebrates. *Journal of Freshwater Ecology* 23:445-450.
- Todd, BD², BR Rothermel, RN Reed, **TM Luhring**, K Schlatter¹, T Trenkamp¹, JW Gibbons (2008) Habitat alteration increases invasive fire ant abundance to the detriment of amphibians and reptiles. *Biological Invasions* 10:539-546.
- Luhring, TM** (2008) “Problem species” of the Savannah River Site such as Brimley’s chorus frog, *Pseudacris brimleyi*, demonstrate the hidden biodiversity concept on an intensively-studied government reserve. *Southeastern Naturalist* 7:371-373.
- Luhring, TM** (2007) Reptiles and amphibians of boy scout camp Linwood-Hayne: Results from an undergraduate-initiated three year opportunistic inventory. *Georgia Journal of Science* 65:104-111.
- Luhring, TM**, GW Barrett (2007) Nesting ecology of the golden mouse: An *oikos* engineer. Pages 151-165. *In*: GW Barrett, GA Feldhamer, eds. *The Golden Mouse: Ecology and Conservation*. Springer. New York, NY.
- Luhring, TM** (2007) *Siren lacertina* (greater siren) Diet. *Herpetological Review* 38:317.
- Luhring, TM**, CA Young² (2006) Innovative techniques for sampling stream salamanders. *Herpetological Review* 37:181-183.
- Darley, M, A Howard, C Flaute², K Miller, **TM Luhring**, L Martin, C Ketter (2006) *A laboratory manual for principals of biology II: Biology 1108L*. Fourth Edition. Contemporary Publishing Company of Raleigh. Raleigh, NC.
- Rothermel, BR, **TM Luhring** (2005) Burrow availability and desiccation risk of mole salamanders (*Ambystoma talpoideum*) in harvested versus unharvested forest stands. *Journal of Herpetology* 39:619-626.

TEACHING EXPERIENCE

- Instructor – Experimental Design**, (BIOL 740), Wichita State University, Fall 2021 (Enrollment: **12**; 4 Graduate Students, 8 Undergraduate Students)
- Instructor – Field Vertebrate Zoology**, (BIOL 640CB), Wichita State University, Summer 2021 (Enrollment: **8** Undergraduate Students)
- Instructor – Herpetology**, (BIOL 640CA), Wichita State University, Spring 2021 (Enrollment: **33**; 2 Graduate Students, 31 Undergraduate Students)
- Instructor – Herpetology Lab [2 sections]**, (BIOL 640CL), Wichita State University, Spring 2021 (Enrollment: **19**; 1 Graduate Student, 18 Undergraduate Students)
- Instructor – Experimental Design**, (BIOL 740), Wichita State University, Fall 2020 (Enrollment: **15**; 11 Graduate Students, 4 Undergraduate Students)

Instructor – Vertebrate Zoology, (BIOL 524), Wichita State University, Spring 2020 (Enrollment: **40** Undergraduate Students)

Instructor – Biology Colloquium, (BIOL 497/797), Wichita State University, Fall 2019 (Enrollment: **24**; 6 Graduate Students, 18 Undergraduate Students)

Instructor – Climate Change and Ectotherms, Graduate Student Seminar, University of Nebraska, Spring 2018 (Enrollment: 5 graduate and undergraduate science majors)

Instructor – R Stats Workshop, Undergraduate Workshop for REUs, Kellogg Biological Station, July 2015

Instructor – Statistics for Ecologists, Kellogg Biological Station, Michigan State University, Summer 2015 (Enrollment: 10 mostly 1st-year undergraduate science majors)

Instructor – Statistics for Ecologists, Michigan State University, Spring 2015 (Enrollment: 106 mostly 1st and 2nd-year undergraduate science majors)

Instructor – Statistics for Ecologists (Lab), Michigan State University, Spring 2015 (Enrollment: Lab section of 25 students)

Co-Instructor – Introduction to Science, Technology, Environment, and Public Policy, Michigan State University, Fall 2013 (Enrollment: 54 undergraduate science majors)

Graduate Teaching Assistant – Biology (Introductory Biology: Majors), University of Missouri, Fall 2012 and Spring 2013 (2 lab sections per semester, 24 students per section).

Graduate Laboratory Assistant – Biology (Introductory Biology: Majors), University of Georgia, Fall 2005 and Spring 2006 (2 lab sections per semester, 24 students per section).

MENTORSHIP

GRADUATE STUDENTS (MAJOR ADVISOR)

Stephanie Bristow	MS – Biological Sciences (WSU)	Fall 2021 – Present
Samantha Skerlec	MS – Biological Sciences (WSU)	Fall 2021 – Present
Christine Streid	MS – Biological Sciences (WSU)	Fall 2019 – Summer 2021
Jake Wright	MS – Biological Sciences (WSU)	Fall 2019 – Spring 2021
Krista Ward	MS – Biological Sciences (WSU)	Summer 2020 - Present

GRADUATE STUDENT COMMITTEES

Jackie Baum	MS – Biological Sciences (WSU)	Fall 2019 – Present
Hannah Samaniego	MS – Geology (WSU)	Fall 2020 – Present

*UNDERGRADUATE STUDENTS (RESEARCH FOR CREDIT WSU) *GRADUATION SEMESTER*

Mitch Baker	Summer 2021, Fall 2021
Stephanie Bristow	Spring 2020 (Summer 2020 Fieldwork), Fall 2020, *Spring 2021
Shania Burkhead	Spring 2020, Fall 2020, *Spring 2021
Ashley Carpenter	Fall 2021
Sydney Falcon	Fall 2021
Jessica Gulaskey	Summer 2021
Phi Long Huang	Spring 2020, *Fall 2020
Tiffani Holman	Summer 2020, *Fall 2020
Jacob Kearns	Summer 2021, Fall 2021

Ariel Langenberger Fall 2020, Spring 2021
Zane Liu Fall 2020
Justin Oettle Spring 2020, Fall 2020, Summer 2021 (***NSF REU***)
Annie Pham Spring 2020, *Fall 2020
Sarah Pulliam *Spring 2020
Morgan Simon Fall 2020, *Spring 2021
Emily Stybr Spring 2020 (Summer 2020 Fieldwork), Fall 2020, *Spring 2021
Jessica Tran Fall 2020, Spring 2021

HIGH SCHOOL TEACHERS (WATKINS SUMMER FELLOWSHIP)

Traci Kalloff Summer 2021 (Southeast High School, USD 259, Wichita, KS)
Ethan Oltean Summer 2021 (North High School, USD 259, Wichita, KS)

FIELD AND LAB ASSISTANTS TRAINED PRIOR TO WSU

Rachel Allen, Lucas Baker, Greg Byford, Nicholas Chartier, Margaret Cleveland, Elisha Cole[‡], **Brian Crawford**[‡], Carlos Fernandez^{‡*}, Ron Hruska, Andrew Huber, Chad Jennison[‡], Katie Kierczynski[‡], Carrie Kozel, Hope Meadows, Benjamin Morris[‡], Phil Nicodemo[‡], Amanda Pomaranke, Steven Ripley, Zach Ross[‡], **Christopher Schalk**[‡], Karen Schlatter[‡], Keenan Scribner, Jacob Shea, Luke Shea, Leslie Smith^{‡^}, Nicholas Snowgold, Kirsten Sullivan, Ryan Taylor, Stella Uiterwaal, Chelsea Urbaer, Michelle Wiggins.

Total: 31 trained, 11 mentored[‡], ***NSF REU***, NSF UMEB student[^], ESA SEEDS mentee*

I directly mentored or supervised more than 30 undergraduates including 2 ***REU students*** (1 REU for 2 summers), resulting in 8 co-authored publications (4 with undergraduates as lead authors) and presentations by undergraduate mentees at the university, national, and international level. One of my former mentees (Christopher Schalk) is now an assistant professor at Stephen F. Austin University.

SELECTED RECENT PRESENTATIONS (SINCE 2012)

¹Invited Speaker, ²Presented by Coauthor, ³Graduate Student Mentee, Undergraduate Mentee

TM Luhring, LS Wszola, GM Connette, CM Schalk (2021) Larger animals that are more resilient to drought also require more good years to get there. **Joint meeting of Ichthyologists and Herpetologists.**

^{2,3}KJ Ward, ³JT Wright, ³CS Streid, **TM Luhring** (2021) Fish Presence, Species Richness, and Spatial Distribution in Intermittent Stream Pools. **Joint meeting of Ichthyologists and Herpetologists.**

^{2,3}KJ Ward, ³JT Wright, ³CS Streid, **TM Luhring** (2021) Fish distribution, species richness, and species abundances in intermittent stream pools. **Society for Freshwater Science Annual Meeting.**

^{2,3}JT Wright, ³CS Streid, ³KJ Ward, **TM Luhring** (2021) Larval amphibian distribution across intermittent stream pools in the Flint Hills. **Society for Freshwater Science Annual Meeting.**

- ^{2,3}JT Wright, ³CS Streid, ³KJ Ward, **TM Luhring** (2020) Larval amphibian distribution across intermittent stream pools in the Flint Hills. **Kansas Herpetological Society Annual Meeting.**
- ¹**TM Luhring** (2020) Context, constraints, & trade-offs in organismal responses to environmental change. **Wichita State University** (Department of Geology)
- ²HZ Zbeeb, MD Joad, HH Zayed, A Mahdi, AF Al Soudi, **TM Luhring**, F Chen, BC Clark, MA Schneegurt (2020) Extreme bacterial growth tolerances to brines relevant to Mars. Abstracts and Program, **120th Annual Meeting of the American Society for Microbiology.**
- ¹**TM Luhring** (2020) Context, constraints, & trade-offs in organismal responses to environmental change. **Kansas State University**
- ¹ **TM Luhring** (2019) Drought & warming; context & trade-offs. **Oklahoma State University**
- TM Luhring** (2019) Predation alters aquatic-terrestrial exchange of biomass and nutrients. **Kansas Herpetological Society.**
- ¹ **TM Luhring** (2019) Predation alters aquatic-terrestrial exchange of biomass and nutrients. **American Fisheries Society and The Wildlife Society Joint Annual Conference. Special Symposium – “The interface of predation and migration in aquatic and terrestrial ecosystems”**
- ^{1,2} CM Wagner, **TM Luhring**, J Bals, G Byford, T Meckley, J Hume, M Hanson (2019) Context-specific selection of anti-predator tactics during the return migration of sea lamprey in response to a chemical alarm cue. **American Fisheries Society and The Wildlife Society Joint Annual Conference. Special Symposium – “The interface of predation and migration in aquatic and terrestrial ecosystems”**
- ¹ **TM Luhring** (2019) Integrative Thermal Ecology. **Kansas State University (EPSCoR, MAPS)**
- ¹ **TM Luhring** (2018) Climate change, trade-offs, and context in organismal ecology. **Wichita State University**
- ¹**TM Luhring** (2018) Thermal ecology is context dependent. **Duke University**
- TM Luhring**, J Vavra, CE Cressler, JP DeLong (2018) The presence and timing of predation risk changes the temperature dependence of fitness. **Gordon Research Conference on Unifying Ecology Across Scales (Poster)**
- TM Luhring** (2017) Thermal ecology is context-specific. **University of Nebraska, (EEB Seminar Series)**
- TM Luhring**, J Vavra, CE Cressler, JP DeLong (2017) Temperature and predation risk interact to change population growth rate. **Ecological Society of America**
- ²JP DeLong, JP Gibert, **TM Luhring** & 4 others (2017) The combined effects of reactant kinetics and enzyme stability explain the temperature dependence of metabolic rates. **The Society for Integrative and Comparative Biology**
Part of Symposium: Indirect effects of global change: from physiological and behavioral mechanisms to ecological consequences.
- TM Luhring**, JP DeLong (2016) Effects of Acclimation on *Paramecium bursaria* Thermal Performance Curves for Intrinsic Growth Rate. **Gordon Research Conference on Unifying Scales in Ecology (Poster)**

- ²JP DeLong, JP Gibert, **TM Luhring** & 4 others (2016) The combined effects of reactant kinetics and enzyme stability explain the temperature dependence of metabolic rates. **Gordon Research Conference on Unifying Scales in Ecology** (Poster)
- ¹**TM Luhring** (2015) Complex life-histories and biogeochemical cycles. **University of Nebraska** (EEB Seminar Series)
- TM Luhring**, CM Wagner (2014) Chemical Risk Information Guides Migratory Movements of Semelparous Sea Lamprey: Implications for Control and Conservation. **Joint Meeting of Ichthyologists and Herpetologists**
- ²KE Kierczynski, **TM Luhring**, CM Wagner (2014) The Effect of Alarm Cue on Sea Lamprey Larvae Behavior. **Joint Meeting of Ichthyologists and Herpetologists** (Poster)
- ¹**TM Luhring**, C.M. Wagner (2014) Work on the East Jordan River: Investigations of a Natural Repellent for Sea Lamprey Control. **Friends of the Jordan River**. East Jordan, MI
- ¹**TM Luhring** (2013) Sea lamprey management and alarm cue. **Kalamazoo Valley Trout Unlimited**. Grayling, MI (Live animal presentation)
- TM Luhring**, C.M. Wagner (2013) Research Report **Great Lakes Fishery Commission Trapping Task Force**. Manistique, MI
- TM Luhring**, JE Earl, RD Semlitsch (2012) Island in the sun: Nutrient cycling by amphibians in isolated wetlands. **World Congress of Herpetology** ***Seibert Award: Best Oral Presentation*** (Ecology)
- TM Luhring**, RD Holdo (2012) Body size as an adaptation for drought survival in stochastic aquatic environments: An age/size-structured approach. **World Congress of Herpetology** (Poster)

OUTREACH

Outreach Presenter, Savannah River Ecology Laboratory Outreach Program. 2004 – 2012. Gave presentations on conservation and natural history of reptiles, amphibians and mammals with live animals to general public at schools (K-12 and University Level), libraries, churches, etc. **Approximately 60 talks to >5,200 individuals.**

Other Selected Outreach

TM Luhring. Outreach, Teaching & Research at WSU Field Stations

2020 – 220 person-days (including 184 student-days)

2021 – 531 person-days (including 401 student-days)

TM Luhring. Save the frogs! (2019) Expanding Your Horizons Conference, Wichita State University. 2 Hands-on 45-minute workshops for middle school girls.

TM Luhring. Salamanders + Ostrich Burger = ??? (2017) University of Nebraska **Science Slam Finalist**. [Link to presentation](#).

JP DeLong, **TM Luhring**. Predators (2016) Morrill Hall - Sunday with a Scientist Program, University of Nebraska

TM Luhring, C.M. Wagner (2014) Alarming Developments: Investigations of a Natural Repellent for Sea Lamprey Control. Michigan Fish-Producers Association. Traverse City, MI

TM Luhring (with L. Holbrook) (2013) Sea lamprey exhibit at Michigan Free Fishing Weekend Event. Cheboygan, MI. June 2013. Invited Exhibitor. Live animal demonstrations

TM Luhring. Wildlife in photography, photography in wildlife (2007) The Wildlife Society, University of Georgia Student Chapter. Athens, Georgia. Invited speaker.
TM Luhring. Marking techniques for lizards, snakes and crocodilians. Inventory and Monitoring Workshop, Partners in Amphibian and Reptile Conservation (PARC). Aiken, South Carolina. September 23, 2006.
TM Luhring. Undergraduate research and graduate school. Junior Seminar, Institute of Ecology, University of Georgia. Invited speaker. Fall 2005 and 2006 semesters.

SERVICE AT WSU (2019 – PRESENT)

Graduate Research Award, Herpetologists League Judge, Joint Meeting of Ichthyologists and Herpetologists, 2021
Departmental Affairs Committee, Biological Sciences, WSU, 2020 – present (Chair 2021)
Field Station Committee, Biological Sciences, WSU, 2019 - present

Reviewer

American Midland Naturalist	Herpetological Review
Amphibia-Reptilia	Journal of the Arkansas Academy of Science
Applied Herpetology	Journal of Evolutionary Biology
Belgian Journal of Zoology	Journal of Herpetology
Canadian Field-Naturalist	Landscape Ecology
Canadian Journal of Fisheries & Aquatic Sciences	Limnology & Oceanography
Copeia	Northeastern Naturalist
Current Opinion in Insect Science	Oikos
Diversity & Distributions	Organisms Diversity & Evolution
Ecology & Evolution	Population Ecology
Functional Ecology	Proceedings of the Royal Society B
Herpetologica	Science of the Total Environment
Herpetological Conservation & Biology	Southeastern Naturalist

CURRENT MEMBERSHIPS

Ecological Society of America (ESA) • Herpetologists League • Kansas Herpetological Society (KHS) • Partners in Amphibian and Reptile Conservation (PARC) • Society for the Study of Amphibians and Reptiles (SSAR)