Curriculum Vita Stephen C. Richter, PhD

CONTACT INFORMATION

Mailing: Eastern Kentucky University stephen.richter@eku.edu

Division of Natural Areas 859-622-8688

Science Building 3106 http://richterlab.weebly.com

Richmond, KY 40475 ORCID iD: https://orcid.org/0000-0001-6646-2484

EDUCATION

Ph.D., Zoology, University of Oklahoma, 12/04

M.S., Biology, Southeastern Louisiana University, 12/98

B.S., Biology, Berry College, 12/95

ACADEMIC POSITIONS

Executive Director, Institute of Agriculture, Natural Resources, and the Environment, 07/23–present Director, Division of Natural Areas, EKU, 08/19–present

Associate Director, Division of Natural Areas, EKU, 08/12-07/19

Professor, Department of Biological Sciences, EKU, 08/16-present

Associate Professor, Department of Biological Sciences, EKU, 08/11-07/16

Assistant Professor, Department of Biological Sciences, EKU, 01/05–07/11

OTHER POSITIONS

Graduate Research Assistant, University of Oklahoma, 01/01-12/04

Contract Teacher, University of Oklahoma Precollegiate Programs, 01/01–8/04

Graduate Teaching Assistant, University of Oklahoma, 08/98–12/00

Graduate Teaching Assistant, Southeastern Louisiana University, 08/96–12/97

Graduate Research Assistant, Southeastern Louisiana University, 01/96–08/98

Undergraduate Teaching Assistant, Berry College, 08/95–12/95

TEACHING

Course Prefix

and Number	Title	Times Taught
BIO 100	Introductory Biology for non-majors	5
BIO 121L	Principles of Biology Laboratory	3
BIO 315L	Genetics Laboratory	23
BIO 342	Comparative Vertebrate Anatomy	5
BIO 495	Evolutionary Application and Theory	1
BIO 511/711	Experimental Approaches in Molecular Biole	ogy 5
BIO 556/756	Herpetology	9
BIO 598	Independent Research	8
BIO 500/700	Environmental Issues	3
BIO 590/790	Ecology for Teachers	14
BIO 599/799	Field Herpetology	1
BIO 599/799	Current Topics in Ecology and Evolution	1
BIO 599/799	Wetland Design and Restoration Technique	es 1
BIO 802	Speciation Biology	2
BIO 802	Land Use Change and Conservation	1
BIO 802	Wetland Assessment Methods	1
BIO 816	Biogeography	1
BIO 890	Graduate Seminar	6

RESEARCH INTERESTS: Ecology, conservation, and evolution of amphibians and reptiles; Natural history of amphibians and reptiles; Conservation biology; Historical and comparative biology of vertebrates; Wetland ecology; Wildlife management

PUBLISHED WORKS (* = student coauthor)

In Preparation:

Book:

Richter, S.C., S.J. Price, and J.M. MacGregor. *Reptiles and Amphibians of Kentucky*. University Press of Kentucky, Lexington, KY.

Publications:

- Fedders, R.B.*, A. McTaggart, K. Watson, and S.C. Richter. Amphibians as an indicator of wetland restoration need for upland-embedded wetlands on the Appalachian Plateau, Kentucky. To be submitted to Restoration Ecology.
- Fedders, R.B.*, and S.C. Richter. Plant communities of constructed upland-embedded wetlands differ from natural communities on the Cumberland Plateau, Kentucky. To be submitted to Freshwater Science.

Refereed Journal Articles:

- Farrell, T.M., H.C. Gull*, F.S. Boyce, and S.C. Richter. Accepted, pending revisions. Ritualized Male-Male Combat Resulting from Intraspecific Food Competition in Three *Agkistrodon* species. Journal of Ethology.
- Devitt, T.J, K.M. Enge, A.L. Farmer, P. Beerli, S.C. Richter, J.G. Hall, and S.L. Lance. 2023. Population subdivision in the Gopher Frog (*Rana capito*) across the fragmented longleaf pine-wiregrass Savanna of the Southeastern USA. Diversity 15(1):93
- Hutton, J.M., S.C. Richter, and S.J. Price. 2023. Inter- and intra-specific dietary overlap in predacious bi-phasic salamanders, Hydrobiologia 50:3461–3480.
- King, S.S.*, and S.C. Richter. 2022. Reproductive ecology and nesting site characteristics of Fourtoed Salamanders (*Hemidactylium scutatum*) in natural and constructed upland-embedded wetlands on the Appalachian Plateau, Kentucky. Diversity 14(11):995.
- Wade, B.S.*, Kemp, B.H.*, Vininski, M.S.*, R.D. Denton, S.C. Richter, A.N. Drayer, S.J. Price, B.H. Holt*, K.G. Hutcheson*, and B.M. Fitzpatrick. 2021. Kleptogenesis in Kentucky: Genetic analyses of unisexual *Ambystoma* at the southernmost extent of their range. Herpetological Review 52:730–734.
- Hutton, J.M.*, S.J. Price, S.C. Richter, and C.D. Barton. 2021. Diet composition: a proximate mechanism explaining stream salamander declines in surface waters with elevated specific conductivity. Global Ecology and Conservation 29 (2021) e01719.
- Grace, M. et al. 2021. Testing a global standard for quantifying species recovery and assessing conservation impact. Conservation Biology 10.1016/j.biocon.2021.109259, 261 (109259).
- Hutton, J.M.*, A.D. Macedo*, S.C. Richter, R.W. Warne, and S.J. Price. 2021. Does the non-lethal gastric lavage method affect subsequent feeding behavior in adult and larval plethodontid stream salamanders? Herpetological Review 52:511–516.
- Skibbe, J.R.*, J. Farrar*, K. Watson, and S.C. Richter. 2021. Population genetics of wood frogs (*Lithobates sylvaticus*) in a forested ridge-top wetland ecosystem. Herpetological Conservation and Biology 16:1–10.
- Baecher, J.A.*, E. Jones*, and S.C. Richter. 2020. Tail bifurcation in two species of *Desmognathus* salamander (Caudata: Plethodontidae) in southeastern Kentucky, U.S.A. Herpetological Bulletin 150:29–30.
- Dupler, K.*, M. Guidugli-Cook, D.R. Brown, and S.C. Richter. 2020. Rapid assessment of wetland condition reflects amphibian community composition. Wetlands 40:451–464.
- Hutton, J.M.*, S.J. Price, S.J. Bonner, S.C. Richter, and C.D. Barton. 2020. Occupancy and abundance of stream salamanders along a specific conductance gradient. Freshwater Science 39:433–446.

- Baecher, J.A.*, and S.C. Richter. 2018. Environmental gradients in old-growth Appalachian forest predict fine-scale distribution, co-occurrence, and abundance of woodland salamanders. Ecology and Evolution 8:12940-12952.
- Hutton, J.M.*, S.J. Price, and S.C. Richter. 2018. Diet of the Black Mountain Salamander (*Desmognathus welteri*) in southeastern Kentucky. Herpetological Review:12–19.
- Havran, J.C., K. Stowe, T.A. Blanchard, K.L. Kandl, M.E. Kimball, S.C. Richter, H. Swain, F.E. Lohrer, D.D. Angell, and T.M. Terhune II. 2017. Education at field stations and marine laboratories in the southeastern United States. Southeastern Naturalist 16:146–157.
- Calhoun, A.J.K., D.M. Mushet, L.C. Alexander, E.S. DeKeyser, L. Fowler, C.R. Lane, M.W. Lang, M.C. Rains, S.C. Richter, and S.C. Walls. 2017. The significant surface-water connectivity of "geographically isolated wetlands". Wetlands 37:801–806.
- Ecrement, S.M.* and S.C. Richter. 2017. Amphibian use of wetlands created by military activity in Kisatchie National Forest, Louisiana. Herpetological Conservation and Biology 12:321–333.
- Guidugli-Cook, M., S.C. Richter, B.J. Scott, and D.R. Brown. 2017. Field-based assessment of wetland condition, wetland extent, and the National Wetlands Inventory in Kentucky, USA. Wetland Ecology and Management 25:517–532.
- Hutton, J.M.*, S.J. Price, and S.C. Richter. 2017. The diet of the Cumberland Plateau Salamander (*Plethodon kentucki*) in an old-growth forest of southeastern Kentucky. American Midland Naturalist 178:144–150.
- Drayer, A.N.*, and S.C. Richter. 2016. Physical wetland characteristics influence amphibian community composition differently in constructed wetlands and natural wetlands. Ecological Engineering 93:166–174.
- Hinkson, K.M.*, N.L. Henry*, N.M. Hensley*, and S.C. Richter. 2016. Initial founders of captive populations are genetically representative of natural populations in critically endangered dusky gopher frogs, *Lithobates sevosus*. Zoo Biology 35:378–384.
- Hinkson, K.M.*, and S.C. Richter. 2016. Temporal trends in genetic data and effective size support efficacy of management practices in critically endangered dusky gopher frogs (*Lithobates sevosus*). Ecology and Evolution 6:2667–2678.
- Kross, C.S.*, and S.C. Richter. 2016. Species interactions in constructed wetlands result in population sinks for Wood Frogs while benefitting Eastern Newts. Wetlands 36:385–393.
- Yeiser, J.M.*, and S.C. Richter. 2015. Microhabitat conditions influence mesohabitat associations and distribution of larval salamanders in headwater streams. Hydrobiologia 751:175–187.
- Calhoun, A.J.K., J. Arrigoni, R.P. Brooks, M.L. Hunter, and S.C. Richter. 2014. Creating successful vernal pools: a literature review and advice for practitioners. Wetlands 34:1027–1038.
- Richter, S.C., E.M. O'Neil, S.O. Nunziata*, A. Rumments*, E.S. Gustin*, J.E. Young, and B.I. Crother. 2014. Cryptic diversity and conservation of gopher frogs across the southeastern United States. Copeia 2014:231–237.
- Richter, S.C., and S.O. Nunziata*. 2014. Survival to metamorphosis is positively related to genetic variability in a critically endangered amphibian species. Animal Conservation 17:265–274.
- Denton, R.D.*, and S.C. Richter. 2013. Amphibian communities in natural and constructed ridge top wetlands with implications for wetland construction. Journal of Wildlife Management 77:886–896.
- Gustin, E.S.*, and S.C. Richter. 2013. Use of genetic markers to verify the distribution of northern leopard frogs (*Lithobates pipiens*) and southern leopard frogs (*Lithobates sphenocephalus*) in Kentucky. Journal of the Kentucky Academy of Science 74:10–15.
- Nunziata, S.O.*, M.J. Lannoo, J.R. Robb, D.R. Karns, S.L. Lance, and S.C. Richter. 2013. Population and conservation genetics of Crawfish Frogs, *Lithobates areolatus*, at their northeastern range limit. Journal of Herpetology 47:361–368.
- Richter, S.C., A.N. Drayer*, J.R. Strong*, C.S. Kross*, D.L. Miller, and M.J. Gray. 2013. High prevalence of ranavirus infection in permanent constructed wetlands in eastern Kentucky, USA. Herpetological Review 44:464–466.
- Richter, S.C., S.J. Price, C.S. Kross*, J.R. Alexander*, and M.E. Dorcas. 2013. Upland habitat quality and historic landscape composition influence genetic variation of a pond-breeding salamander. Diversity 5:724–733.

- Brown, D.R., and S.C. Richter. 2012. Meeting the challenges to preserving Kentucky's biodiversity. Sustain 25:22–33.
- Denton, R.D.*, and S.C. Richter. 2012. A quantitative comparison of two common amphibian sampling techniques for wetlands. Herpetological Review 43:44–47.
- Nunziata, S.O.*, S.C. Richter, R.D. Denton*, J.M. Yeiser*, D.E. Wells*, K.L. Jones, C. Hagen, and S.L. Lance. 2012. Fourteen novel microsatellite markers for the gopher frog, *Lithobates capito* (Amphibia: Ranidae). Conservation Genetics Resources 4:201–203.
- Richter, S.C., J.A. Jackson*, M. Hinderliter, D. Epperson, C.W. Theodorakis, and S.M. Adams. 2011. Conservation genetics of the largest cluster of federally threatened gopher tortoise (*Gopherus polyphemus*) colonies with implications for species management. Herpetologica 67:406–419.
- Richter, S.C., C.J. St. Andre*, D.S. White, and M.S. Wilder. 2010. A field guide to Kentucky field stations available for education and research. Journal of the Kentucky Academy of Science 71:95–102. 42
- Richter, S.C., R.E. Broughton, and B.I. Crother. 2009. Genetic consequences of population reduction and geographic isolation in the critically endangered frog, *Rana sevosa*. Copeia 2009:801–808.
- McIntosh, A.V.*, and S.C. Richter. 2007. DIGITAL DAISY: an inquiry-based approach to investigating floral morphology and dissection. Science Activities 43:15–21.
- Means, D.B., and S.C. Richter. 2007. Genetic verification of possible gigantism in a southern toad, *Bufo terrestris*. Herpetological Review 38:297–298.
- Graham, C., S.C. Richter, S. McClean, E. O'Kane, P.R. Flatt, C. Shaw. 2006. Histamine-releasing and antibacterial peptides from the skin secretions of the dusky gopher frog, *Rana sevosa*. Peptides 27:1313–131.
- Seigel, R.A., A. Dinsmore, and S.C. Richter. 2006. Using well water to increase hydroperiod as a management option for pond-breeding amphibians. Wildlife Society Bulletin 34:1022–1027.
- Graham, C., A.E. Irvine, S. McClean, S.C. Richter, P.R. Flatt, C. Shaw. 2005. Peptide Tyrosine Arginine, a potent immunomodulatory peptide isolated and structurally characterized from the skin secretions of the dusky gopher frog, *Rana sevosa*. Peptides 26:737–743.
- Richter, S.C., and R.E. Broughton. 2005. Development and characterization of polymorphic microsatellite DNA loci for the endangered dusky gopher frog (*Rana sevosa*) and two closely related species, *Rana capito* and *Rana areolata*. Molecular Ecology Notes 5:436–438.
- Renken, R.B., W.K. Gram, D.K. Fantz, S.C. Richter, T.J. Miller, K.B. Ricke, B. Russell, and X. Wang. 2004. Effects of forest management on amphibians and reptiles in Missouri Ozark forests. Conservation Biology 18:174–188.
- Gram, W.K., P.A. Porneluzi, R.L. Clawson, J. Faaborg, and S.C. Richter. 2003. Effects of experimental forest management on density and nesting success of bird species in Missouri Ozark forests. Conservation Biology 17:1324–1337.
- Richter, S.C., J.E. Young, G.N. Johnson, and R.A. Seigel. 2003. Stochastic variation in reproductive success of a rare frog, *Rana sevosa*: implications for conservation and for monitoring amphibian populations. Biological Conservation 111:171–177.
- Richter, S.C., and L.A. Richter. 2002. Rearing larval anurans in the field: maintenance of equal volumes and ease of multiple sampling using a two-component enclosure. Herpetological Review 33:179–180.
- Richter, S.C., and R.A. Seigel. 2002. Annual variation in the population ecology of the endangered gopher frog, *Rana sevosa* Goin and Netting. Copeia 2002:962–972.
- Richter, S.C., J.E. Young, R.A. Seigel, and G.N. Johnson. 2001. Post-breeding movements of the dark gopher frog, *Rana sevosa* Goin and Netting: Implications for conservation and management. Journal of Herpetology 35:316–321.
- Richter, S.C. 2000. Larval caddisfly predation on the eggs and embryos of *Rana capito* and *Rana sphenocephala*. Journal of Herpetology 34:590–593.

Refereed Book Chapters:

- Richter, S.C., M.L. Guidugli-Cook, and D.R. Brown. 2017. Wetlands of Kentucky: connecting landscapes and waterways. Pp. 151–162 In: B.D. Lee, D.I. Carey, and A.L. Jones (eds.), Water in Kentucky: Natural History, Communities, and Conservation. University Press of Kentucky, Lexington, KY.
- Jensen, J.B., and S.C. Richter. 2005. *Rana capito*, gopher frogs. Pp. 536–538. In: M.J. Lannoo (ed.) Amphibian Declines: The Conservation Status of United States Species. University of California Press, Berkeley.
- Richter, S.C. 2005. *Rana grylio*, pig frogs. Pp. 555–557. In: M.J. Lannoo (ed.) Amphibian Declines: The Conservation Status of United States Species. University of California Press, Berkeley.
- Richter, S.C., and J.B. Jensen. 2005. *Rana sevosa*, dusky gopher frogs. Pp. 584–586. In: M.J. Lannoo (ed.) Amphibian Declines: The Conservation Status of United States Species. University of California Press, Berkeley.

Non-Refereed Journal Articles and Book Sections:

- Stratton, J.B., H.C. Gull, and S.C. Richter. 2022. *Agkistrodon contortrix* (Eastern Copperhead): Diet. Herpetological Review 53:333.
- Hutcheson, K.G*, and S.C. Richter. 2021. Geographic distribution. Yellow-spotted Woodland Salamander, *Plethodon pauleyi*. Herpetological Review 52:789–790.
- Richter, S., J. Hendricks*, J. Sockman*, and H. Gull*. 2021. Copperhead Research and Ecology in Red River Gorge. In: D. Dourson, Amphibians and Reptiles of the Red River Gorge. Goatslug Publications, Stanton KY.
- Lee, J.R., and S.C. Richter. 2014. *Gopherus polypheqmus* (Gopher Tortoise): Predation. Herpetological Review 45:484.
- Richter, S.C. 2012. *Ambystoma opacum* (Marbled Salamander): Unusual larval death. Herpetological Review 43:459.
- McAllister, C.T., C.R. Bursey, and S.C. Richter. 2010. *Pseudotriton montanus diastictus* (Midland Mud Salamander): Parasites. Herpetological Review 41:331.
- Angulo, A., A.C.O.Q. Carnaval, S.C. Richter. 2005. Symposium highlights from "A new generation of research on amphibian declines". Froglog 71:2–3.
- Richter, S.C. 2004. Conservation of amphibians and a peculiar frog of eastern Oklahoma. Newsletter of the Oklahoma Biological Survey. Spring 2004:3.
- Richter, S.C., and D.B. Shepard. 2004. Geographic distribution. Crawfish Frog, *Rana areolata*. Herpetological Review 35:283.

GRANTS & CONTRACTS

Funded Projects as PI

- Building Capacity and Implementing Natural Lands Management in Eastern Kentucky. PI: Stephen Richter, CoPI: Kelly Watson, and David Brown. National Fish and Wildlife Foundation Cumberland Plateau Stewardship Fund via Office of Kentucky Nature Preserves, \$121,642. March 2023. Submitted as part of a larger (\$420,216) proposal submitted with the Office of Kentucky Nature Preserves.
- Recreation and Natural Resource Management in the Daniel Boone National Forest. PI: Stephen Richter, Co-PI: Kelly Watson. United States Forest Service. \$88,390. July 2022.
- Wetland and forest monitoring in the Daniel Boone National Forest. PI: Stephen Richter, Co-PI: Kelly Watson. United States Forest Service. \$14,034. April 2022.
- Partnership to support natural, recreational, and cultural resource management and education on the Daniel Boone National Forest. Pl: Stephen Richter, Co-Pl: Kelly Watson. United States Forest Service. \$50,000. March 2022.
- Population dynamics and feeding ecology of copperheads across varying habitat and environmental conditions. PI: Stephen Richter, CoPI: Henderson Gull. EKU University-Funded Scholarship Program, \$3,000, 2021.
- Leveraging the natural and cultural heritage of EKU's south campus for education, research, recruitment, and public engagement. PI: Stephen Richter, CoPIs: David Brown, Kelly

- Watson, Aida Bermudez, and Brian Clark. Eastern Kentucky University Board of Regents Innovation Fund, \$50,000, 2021.
- Research Assistantship for High School Student: Disturbance ecology in central Appalachia, PI: Stephen Richter, Co-PI: David Brown, National Science Foundation Research Experiences for Undergraduates (DBI-1559980) Supplement, \$6,000, 2019.
- Continued validation of wetland assessments for Kentucky wetlands, PI: Stephen Richter, Co-PIs: David Brown and Kelly Watson, Environmental Protection Agency Grant through the Kentucky Division of Water, \$32,607, 2019.
- Ecology and management of copperheads in a human use area of Appalachian Kentucky, PI: Stephen Richter, Co-PI Jocelyn Hendricks, EKU University-Funded Scholarship Program, \$3,000, 2018.
- Continued validation and infrastructure development for level 2 and level 3 assessment of Kentucky wetlands, PI: Stephen Richter, Co-PI: David Brown, Environmental Protection Agency Grant through the Kentucky Division of Water, \$90,900, 2018.
- Partnership for forest inventory and monitoring to inform management on the Daniel Boone National Forest. Pl: Stephen Richter, Co-Pls Kelly Watson and Jonathan Malzone. United States Forest Service. \$22,550. 2017–2018.
- Fine-scale and microhabitat factors influencing terrestrial amphibian occupancy and diversity in a low-elevation old growth forest in central Appalachia PI: Stephen Richter, Co-PI: Alex Baecher. Kentucky Academy of Science. \$1,100. 2016.
- Collaborative wetland inventory, monitoring, and assessment project. PI: Stephen Richter, Co-PIs Kelly Watson and Jonathan Malzone. United States Forest Service. \$32,157. 2015–2018.
- Amphibian disease surveillance in Kentucky. PI: Stephen Richter. Kentucky Department of Fish and Wildlife Resources. \$5,000. 2015.
- Wetland inventory, monitoring, and assessment on the Daniel Boone National Forest, Kentucky. PI: Stephen Richter, Co-PI Kelly Watson. United States Forest Service. \$24,244. 2015–2018.
- Comparison of amphibian communities and diseases of natural and constructed wetlands in eastern Kentucky PI: Stephen Richter. EKU Research Committee, \$8,000. 2015.
- Conservation genetics of gopher frogs in North Carolina. North Carolina Wildlife Resources Division. \$2,000. 2015.
- Examining the impacts of valley fills on stream water quality and amphibian and macroinvertebrate communities in southeastern Kentucky. PI: Stephen Richter, Co-PI John Bourne. Kentucky Water Resources Research Institute. \$3,646. 2015.
- Pesticide occurrence and amphibian species richness in wetlands of the Salt River basin, Kentucky. PI: Stephen Richter, CoPI: Kari Dupler. The Wetland Foundation. \$1,200. 2015.
- Effects of interactions between *Notophthalmus viridescens* and *Lithobates sylvaticus* in a ridge-top wetland ecosystem. PI: Stephen Richter, CoPI: Chelsea Kross. Kentucky Academy of Science. \$1.000. 2014.
- Temporal comparisons of genetic variation in the dusky gopher frog. PI: Stephen Richter. Kentucky NSF EPSCoR. \$7,959. 2013.
- Comparative Landscape Genetics of Amphibians Across a Ridge-Top Wetland Ecosystem. Pl: Stephen Richter. Kentucky NSF EPSCoR. \$4,358. 2013.
- Enhancing research capacity in Appalachia: research facilities for Lilley Cornett Woods Field Station, PI: Stephen Richter, CoPIs: Melinda Wilder, Alice Jones, and Wally Borowski, National Science Foundation (DBI-1318802), \$330,474. 2013.
- Statewide validation of the Kentucky Wetland Rapid Assessment Method (KY-WRAM) and indices of biotic integrity, PI: Stephen Richter, CoPI: David Brown, Environmental Protection Agency Grant through the Kentucky Division of Water, \$255,000. 2013.
- Conservation genetics of gopher frogs in Alabama. PI: Stephen Richter, Alabama Division of Wildlife and Freshwater Fisheries, \$7,045. 2013.
- Enhancement of Energy Conservation, Recycling, and Outdoor Environmental Learning in Two Madison County Schools. PI: Stephen Richter, Co-PI: David Brown, Bluegrass PRIDE, \$8,835. 2012.

- Effects of habitat loss and alteration on amphibian populations in eastern Kentucky streams and wetlands. PI: Stephen Richter, EKU Research Committee, \$8,000. 2011.
- Genetic profiling of captive populations of endangered dusky gopher frogs, PI: Stephen Richter, Memphis Zoo Conservation Action Network, \$3,450. 2008.
- Species integrity and hybridization between two closely related amphibian species, PI: Stephen Richter, EKU Research Committee, \$10,000. 2007.
- Genetic assessment of the effects of military activity on federally threatened gopher tortoises, PI: Stephen Richter, Oak Ridge National Laboratories, \$45,000. 2006.
- Phylogeography and conservation genetics of gopher frogs with implications for management, PI: Stephen Richter, U.S. Fish and Wildlife Service, \$37,000. 2006.
- Genetic associations of environmental degradation: prokaryotic and eukaryotic communities as indicators, PI: Stephen Richter, CoPIs: William Staddon, Charles Elliott, and Michael Foster, Eastern Kentucky Environmental Research Institute, \$11,000. 2006.
- Genetic variation and identity of gopher frogs, PI: Stephen Richter, EKU Research Committee, \$10,200, 2006.
- Inbreeding history, effective population size, and genetic structure of an isolated population of endangered frogs, PI: Stephen Richter, Declining Amphibian Population Task Force, \$1,720 2003.

Funded Projects as CoPI

- Recreation and Natural Resource Management in the Daniel Boone National Forest. PI: Brian Clark, Co-PI: Stephen Richter. United States Forest Service. \$75,000. Aug 2023.
- Promoting agroforestry as a sustainable/alternative regenerative food production option. PI: John Settimi, Co-PIs: Carla Hagan and Stephen Richter. USDA National Institute of Food and Agriculture via Kentucky State University. \$21,300. May 2023.
- Recreation Heritage Engineering Lands (RHELM) Program Student Internships. PI Kelly Watson, Co-PI: Stephen Richter. United States Forest Service. \$12,026. 2021, Sep 2021.
- Genetic comparisons between captive and natural dusky gopher frog (*Lithobates sevosus*) populations, PI: Kristin Hinkson, Co-PI: Sinlan Poo, Stephen Richter, Memphis Zoo Conservation Action Network, \$5,657. 2017.
- Genetic comparisons between captive and natural dusky gopher frog (*Lithobates sevosus*) populations. PI: Kristin Hinkson, Co-PI: Sinlan Poo, Steve Reichling, and Stephen Richter, Amphibian Taxon Advisory Group, \$1,000. 2017.
- Research Experience for Teachers: Disturbance ecology in central Appalachia, PI: David Brown, Co-PI: Stephen Richter. Melinda Wilder, National Science Foundation Research Experiences for Undergraduates (DBI-1559980), \$22,440, 2017.
- Disturbance ecology in central Appalachia, PI: David Brown, Co-PI: Stephen Richter, National Science Foundation Research Experiences for Undergraduates (DBI-1559980), \$308,634, 2015.
- Survey of Kentucky Wetlands: Intensification of the National Wetland Condition Assessment, PI: David Brown, CoPI: Stephen Richter, Environmental Protection Agency Grant through the Kentucky Division of Water, \$335,542, 2015.
- Biological assessments of the Eastern Kentucky Training Site and H.R. Disney Training Site in Kentucky. Pl: Luke Dodd, Co-Pls Stephen Richter and David Brown. Kentucky National Guard. \$79,991. 2014.
- Regional environment-based education: primary through graduate school, PI: Melinda Wilder, CoPIs: Stephen Richter, Billy Bennett, David Brown, Eastern Kentucky University Regional Stewardship Grant, \$29,178. 2013.
- Development of a rapid wetland assessment method for Kentucky, PI: David Brown, CoPI: Stephen Richter, Environmental Protection Agency Grant through the Kentucky Division of Water, \$382,943. 2010.
- Increasing the research and educational capabilities of EKU's natural areas: Crafting a comprehensive strategic plan to create, equip, and maintain a Biological Field Station, PI:

- Wally Borowski, CoPIs: Alice Jones, Stephen Richter, Melinda Wilder, National Science Foundation (DBI-1034521), \$25,000. 2010.
- Workshop: A new generation of research on amphibian declines, PI: Ana Carnaval, CoPI: Stephen Richter, U.S. National Science Foundation, \$18000, 2004.

Proposals not funded as PI

- Leveraging the natural and cultural heritage of EKU's south campus for education, research, recruitment, and public engagement. PI: Stephen Richter, CoPIs: David Brown, Kelly Watson, and Brian Clark. Eastern Kentucky University Board of Regents Innovation Fund, \$40,000, 2020.
- Leveraging the natural and historic capital of EKU's South Campus for education, research, and public engagement. PI: Stephen Richter, CoPIs: David Brown and Kelly Watson. Eastern Kentucky University Board of Regents Innovation Fund, \$128,366, 2019.
- Continued validation of wetland assessments for Kentucky wetlands. PI: Stephen Richter, CoPIs: David Brown and Kelly Watson. Environmental Protection Agency Grant through the Kentucky Division of Water, \$299,691, 2018.
- Shade structure for educational use at EKU's Taylor Fork Ecological Area. PI: Stephen Richter, CoPIs: David Brown and June Settle. American Academy of Dermatology, \$8,000, 2017.
- Connectivity for remote research and education sites of Eastern Kentucky University, PI: Stephen Richter, CoPIs: Betina Gardner, Dustin, Tennill, and Melinda Wilder, National Science Foundation, \$393,897. 2016
- Enhancing research capacity in Appalachia: research facilities for Lilley Cornett Woods Field Station, PI: Stephen Richter, CoPIs: Melinda Wilder, Alice Jones, and Wally Borowski, National Science Foundation, \$350,000. 2013.
- Dynamics and connectivity of amphibian communities across an altered landscape, PI: Stephen Richter, National Science Foundation, \$791,897. 2009.
- Dynamics and connectivity of amphibian communities across an altered landscape, PI: Stephen Richter, National Science Foundation, \$709,846. 2008.
- Landscape genetics and metacommunity ecology of amphibians in altered landscapes, PI: Stephen Richter, National Science Foundation, \$400,087. 2007.
- Geographic distribution and interaction of northern and southern leopard frogs along range margins in Kentucky, PI: Stephen Richter, Kentucky Department of Fish and Wildlife Resources (KDFWR) State and Tribal Wildlife Grant (STWG), \$14,960. 2007.

Proposals not funded as CoPI

- Monitoring and assessing biodiversity changes and invasion risks through tracking species distributions using NASA Earth Observation Data. PI: Kate He, NASA EPSCoR, \$675,000. 2016.
- Kentucky forest health research and education initiative. PI: Luke Dodd, Co-PIs: Stephen Richter, Ellen Crocker, David Coyle, Sarah Workman, Tyler Dreaden, William Hubbard, USDA National Institute of Food and Agriculture, \$745,828. 2016
- Disturbance ecology in central Appalachia, PI: David Brown, Co-PI: Stephen Richter, National Science Foundation, \$356,000. 2014.
- Disturbance ecology in central Appalachia, PI: David Brown, CoPI: Stephen Richter, National Science Foundation Research Experience for Undergraduates, \$355,821. 2013.
- Investigation of pre- and post-invasion of hemlock wooly adelgid across trophic levels in eastern Kentucky. PI: Neil Pederson, CoPIs: Sherry Harrel and Stephen Richter, KDFWR STWG, \$301,700. 2007.

ORAL PAPERS PRESENTED/ INVITED LECTURES (* = student coauthor)

<u>Invited:</u> Richter, S.C. Camping with copperheads: reducing human-wildlife conflict through education and management. University of Louisville, Louisville, KY, 11/23.

- Funk, A.T.*, and S.C. Richter. Impacts of hog disturbance on high-elevation terrestrial plethodontid assemblages. Annual Meeting of Southeast Partners in Amphibian and Reptile Conservation (SEPARC), Black Mountain, NC, 02/23.
- Gull H.*, and S.C. Richter. Evidence of non-strike induced chemosensory searching by eastern copperheads (*Agkistrodon contortrix*) during cicada predation. Biology of Pit Vipers 4th Annual Meeting, Rodeo, NM, 07/22.
- Invited: Richter, S.C. Importance of upland-embedded wetlands in conservation and management.

 Annual meeting of the Kentucky Chapter of The Wildlife Society (virtual), 02/22.
- Brown, D., S. Richter, K. Watson, M. Cook. An Overview of Wetland Assessment Methods for Kentucky, Annual Meeting of the Kentucky Chapter of The Wildlife Society, 02/22.
- Invited: Richter, S.C. Management of woodland pools for amphibian habitat. The Habitat Management Symposium (virtual), 03/21.
- Gull H.*, and S.C. Richter. Evidence of non-strike induced chemosensory searching by eastern copperheads (*Agkistrodon contortrix*) during cicada predation. Annual meeting of Association of Southeastern Biologists (ASB), virtual, 03/21.
- Stark, J.L.*, S.C. Richter, D.R. Brown, K. Watson, K. Dupler*, and M. Guidugli-Cook. Development of an amphibian index of biological integrity for Kentucky wetlands. Annual Meeting of SEPARC, Online, 02/21.
- Sockman, J.*, J. Hendricks*, R. Steinberger*, and S.C. Richter. Impacts of climatic variables on annual cicada emergence in relation to seasonal abundance of Eastern Copperheads (*Agkistrodon contortrix*). Annual meeting of ASB, Jacksonville, FL, 03/20.
- Stark, J.L.*, and S.C. Richter. Amphibian species richness as a potential indicator of wetland condition in eastern Kentucky. Annual meeting of ASB, Jacksonville, FL, 03/20.
- <u>Invited Keynote:</u> Richter, S.C. Why a field station is important. Tulane University Field Station Planning Meeting, New Orleans, LA, 05/19.
- <u>Invited:</u> Richter, S.C. Use of ecological research to inform management and conservation in Kentucky. Campbellsville University, Campbellsville, KY, 04/19.
- Fedders, R.B.*, and S.C. Richter. Comparisons of plant communities at natural and constructed upland-embedded wetlands in the Daniel Boone National Forest, Kentucky. Annual meeting of ASB, Memphis, TN, 04/19.
- Jones, E.*, J.A. Baecher*, M. James*, A. Braccia, and S.C. Richter. The influence of salamanders on leaf litter decomposition in Appalachian headwater streams. Annual meeting of ASB, Memphis, TN, 04/19.
- Richter, S.C., R.B. Fedders*, K. Watson, J. Malzone, M. McClure, and L. Dodd. Setting restoration and management goals for upland-embedded wetlands based on research of biological, geospatial, and hydrogeological data in the Daniel Boone National Forest, Kentucky. Annual Meeting of ASB, Memphis, TN, 04/19.
- Sockman, J.C.*, J.J. Hendricks*, A. Owens*, K. Muennich*, and S.C. Richter Copperhead foraging ecology at a recreational site in the Daniel Boone National Forest, KY. Annual meeting of ASB, Memphis, TN, 04/19.
- Hendricks, J.J.*, J.C. Sockman*, A. Owens*, K. Muennich*, and S.C. Richter. Population dynamics and foraging ecology of copperheads in the Red River Gorge, KY. Annual meeting of the Kentucky Academy of Science (KAS), Bowling Green, KY, 11/18.
- Richter, S.C. Opportunities for collaborative research and education at a network of field stations in Kentucky. Annual meeting of the KAS, Bowling Green, KY, 11/18.
- Malzone, J.M., S.C. Richter, K. Watson. Managing and restoring upland embedded depressional wetlands in the Daniel Boone National Forest, Kentucky: A hydrological and geospatial data driven approach to balance conservation, construction, and deconstruction practices. Annual Meeting of the Geological Society of America, Indianapolis, IN, 11/18.
- <u>Session Leader & Presenter:</u> Richter, S.C., P. Hai, M. Kisgen, P. McCartney. Collaborative Networks of Regional Field Stations: Successful Models, Annual meeting of the OBFS, Acadia National Park, Maine, 09/18.
- Baecher, J.A.*, and S.C. Richter. Environmental gradients in old-growth Appalachian forest predict fine-scale distribution, co-occurrence, and abundance of woodland salamanders. Joint

- Meeting of American Society of Ichthyologists and Herpetologists (ASIH), Herpetologists' League (HL), and Society for the Study of Amphibians and Reptiles (SSAR), Rochester, NY, 07/18
- Hutton, J.M.*, S.J. Bonner*, S.C. Richter, and S.J. Price. Occupancy and allochthony threshold responses of plethodontid stream salamanders to stream conductivity. Annual meeting of the Kentucky Academy of Science (KAS), Murray, KY, 11/17.
- Malloy, E., S.C. Richter, D.R. Brown, B. Scott, and M. Cook. Comparison of the Kentucky Vegetation Index of Biotic Integrity (VIBI) to the Kentucky wetland rapid assessment method (KY-WRAM) as part of an intensification of EPA's National Wetland Condition Assessment. Annual meeting of the KAS, Murray, KY, 11/17.
- Hinkson, K.M.*, and S.C. Richter. Success of management practices: genetic diversity and effective size in the endangered dusky gopher frog (*Lithobates sevosus*). Joint Meeting of ASIH, HL, and SSAR, Austin, TX, 07/17.
- Invited Keynote: Richter, S.C. The success and sustainability of a field station— what makes a field station work and what to include in a strong strategic plan. Northern Kentucky University Field Station Planning Meeting, Highland Heights, KY, 01/17.
- Malloy, E., S.C. Richter, D.R. Brown, and B. Scott. Comparison of wetland assessment scores to indicators of disturbance in Kentucky as part of an intensification of EPA's National Wetland Condition Assessment. Annual meeting of the KAS, Louisville, KY, 11/16.
- Richter, S.C., A.N. Drayer*, R.D. Denton*, S.K. King*, C.S. Kross*, A.L. McTaggart*, R.B. Fedders*, and C.R. Wampler. Effects of wetland construction for wildlife management in a national forest on amphibian communities of upland embedded wetlands. Annual meeting of The Wildlife Society, Raleigh, NC, 10/16.
- Bourne, J.*, and S.C. Richter. Examining the impacts of valley fills in stream ecosystems on amphibian and aquatic insect communities in southeastern Kentucky. Kentucky Water Resources Annual Symposium, Lexington, KY. 03/16.
- Dupler, K.*, M.L. Guidugli, D. Brown, and S.C. Richter. Evaluating wetland quality: a comparison of amphibian community composition and the Kentucky Wetland Rapid Assessment Method. Annual meeting of KAS, Highland Heights, KY, 11/15.
- Dupler, K.*, M.L. Guidugli, D. Brown, and S.C. Richter. Evaluating wetland quality: a comparison of amphibian community composition and the Kentucky Wetland Rapid Assessment Method. Society of Wetland Scientists (SWS), Providence, RI, 07/15.
- Richter, S.C., R.D. Denton*, A.N. Drayer*, C.K. Kross. Improving construction and restoration techniques for vernal-pool breeding amphibians. Natural Areas Conference, Dayton, OH, 10/14.
- Kross, C.S.*, and S.C. Richter. Effects of interactions between species in an anthropogenically altered ridge-top wetland ecosystem. Joint Meeting of ASIH, HL, and SSAR, Chattanooga, TN. 07/14.
- Invited: Richter, S.C. Educational and research opportunities in Appalachia and across Kentucky via a network of field stations. Annual Meeting of ASB, Spartanburg, SC, 04/14.
- Polascik, J.A.*, D.R. Brown, T.M. Morris*, S.C. Richter, and M.L. Guidugli. Evaluating a wetland rapid assessment method for Kentucky using forested floodplain wetlands. Annual Meeting of the SWS, Duluth, MN, 06/13.
- Guidugli, M.L., S.C. Richter, and D.R. Brown. Ambient wetland monitoring in Kentucky's Green and Upper Cumberland River Basins. Annual meeting of KAS, Richmond, KY, 10/12.
- Morris, T.M.*, J.A. Polascik*, D.R. Brown, M.L. Guidugli, and S.C. Richter. Developing a vegetation-based index of biotic integrity for assessing the ecological condition of wetlands in Kentucky. Annual meeting of KAS, Richmond, KY, 10/12.
- Polascik, J.A.*, T.M. Morris*, D.R. Brown, M.L. Guidugli, and S.C. Richter. Using vegetation and bird surveys to validate a wetland rapid assessment method for Kentucky's forested riparian wetlands. Annual meeting of KAS, Richmond, KY, 10/12.
- Yeiser, J.M.*, and S.C. Richter. Distribution and habitat associations of two stream salamanders (*Ambystoma barbouri* and *Eurycea cirrigera*) across multiple spatial scales. Annual meeting of KAS, Richmond, KY, 10/12.

- <u>Invited:</u> Richter, S.C. Increasing the efficacy of constructed wetlands for conservation of amphibians in the Appalachian ridge-top ecosystem. Ohio University's Biology seminar series, 09/12.
- Invited: Richter, S.C., R.D. Denton*, A.N. Drayer*, S.K. King*, and T.R. Biebighauser. Adaptive management and the science behind improving constructed wetlands for amphibians. World Congress of Herpetology, Vancouver, CA, 08/12.
- Invited: Richter, S.C. Comparison of amphibian communities in natural and constructed wetlands with implications for conservation. University of Georgia's Savannah River Ecology Laboratory seminar series, 06/12.
- Invited: Richter, S.C. Conservation of amphibians & reptiles in Kentucky: what you can do to make a difference. Herpetology Weekend. Natural Bridge State Resort Park, KY, 05/12.
- Invited: Richter, S.C. Genetic status of captive and wild populations of gopher frogs. Mississippi Gopher Frog Translocation Workshop. Memphis Zoo, TN, 03/12.
- Denton, R.D.*, and S.C. Richter. Evaluation of amphibian communities in constructed ponds. Student Conference on Conservation Science New York meeting, American Museum of Natural History, New York, 10/11.
- Nunziata, S.O.*, S.C. Richter, S.L. Lance, and M.J. Lannoo. Population genetics of crawfish frogs (*Lithobates areolatus*). Annual Southeastern Population Ecology and Evolutionary Genetics Meeting, Reidsville, NC, 10/11.
- Denton, R.D.*, and S.C. Richter. A comparison of amphibian communities between natural ponds and constructed ponds of multiple ages and construction types. Joint Meeting of ASIH, HL, and SSAR, Minneapolis, MN, 07/11.
- Drayer, A.N.*, and S.C. Richter. Management implications for amphibian communities utilizing constructed ponds of various water depths. Joint Meeting of ASIH, HL, and SSAR, Minneapolis, MN, 07/11.
- St. Andre, C.*, and S.C. Richter. Annual variation of orientation and timing of amphibian movements in south central Kentucky. Joint Meeting of ASIH, HL, and SSAR, Minneapolis, MN, 07/11.
- Denton, R.D.*, A.N. Drayer*, and S.C. Richter. How effective are constructed ponds for conservation of amphibian communities in the Appalachian ridge-top wetland ecosystem? Annual Meeting of the Appalachian Studies Association, Richmond, KY, 03/11.
- Guidugli, M.L., S.C. Richter, and D. Brown. Developing a rapid assessment method for Kentucky's wetlands. Annual Meeting of the Kentucky Chapter of the Wildlife Society (KYTWS). Lake Cumberland, KY, 02/11.
- Denton, R.D.*, A.N. Drayer*, and S.C. Richter. How effective are constructed ponds for conservation of amphibian communities in the Appalachian ridge-top wetland ecosystem? Annual Meeting of the KYTWS. Lake Cumberland, KY, 02/11.
- Drayer, A.N.*, R.D. Denton*, and S.C. Richter. How effective are constructed ponds for conservation of amphibian communities in the Appalachian ridge-top wetland ecosystem? Annual Meeting of Southeast Partners in Amphibian and Reptile Conservation, Louisville, MS, 02/11.
- Bragg, R.*, and S.C. Richter. Amphibian community similarity between natural ponds and constructed ponds of multiple age classes in Daniel Boone National Forest. Annual Meeting of the KAS, Bowling Green, KY, 11/10.
- Guidugli, M.L.*, and S.C. Richter. Reproductive and spatial ecology of an ephemeral pond-breeding amphibian community. Annual Meeting of ASB, Raleigh, NC, 04/10.
- <u>Invited:</u> Richter, S.C. Landscape alteration and persistence of pond-breeding amphibians: barriers, resistance, and opportunities. Department of Biological Sciences, University of South Carolina Upstate, 04/10.
- Richter, S.C. What are the appropriate geographic and temporal scales for management of amphibian populations? Annual Meeting of the KYTWS, Mammoth Cave, KY, 02/10.
- Richter, S.C., N. Henry*, N. Hensley*, and E. Madeen. Conservation genetics of captive and natural populations of the critically endangered dusky gopher frog, *Rana sevosa*. Annual Meeting of the KAS, Covington, KY, 11/09.
- Guidugli, M.L.*, and S.C. Richter. Factors influencing timing and orientation of breeding migrations of a pond-breeding amphibian community. Annual Meeting of the KAS, Covington, KY, 11/09.

- Invited: Richter, S.C. Landscape alteration and persistence of pond-breeding amphibians: barriers, resistance, and opportunities. Department of Biological Sciences, Southern Illinois University Edwardsville, 08/09.
- Richter, S.C., N. Henry*, and E. Madeen*. Conservation genetics of the critically endangered dusky gopher frog, *Rana sevosa*. Joint Meeting of ASIH, HL, and SSAR, Portland, OR, 07/09.
- Walls, S.C., S.C. Richter, and W.J. Barichivich. Ephemeral wetland ecosystems in the face of climate change: an amphibian perspective. Joint Meeting of ASIH, HL, SSAR, Portland, OR, 07/09.
- Jackson, J.A.*, and S.C. Richter. Population genetic analysis of gopher tortoises (*Gopherus polyphemus*) across the landscape of a military training facility. Annual Meeting of KAS, Lexington, KY, 11/08.
- Richter, S.C., J.R. Alexander*, S.J. Price, and M.E. Dorcas. Problems associated with local-scale management of amphibian populations: spotted salamanders across a fragmented landscape. Joint Meeting of ASIH, HL, SSAR, Montreal, Canada, 07/08.
- Alexander, J.R.*, S.C. Richter, S.J. Price, and M. E. Dorcas. The genetic effects of urbanization and habitat fragmentation on spotted salamander populations. Annual Meeting of ASB, Columbia, SC, 04/07.
- <u>Invited:</u> Richter, S.C. Effects of habitat fragmentation on population genetics and demography of rare amphibians. Department of Biology, Davidson College, 04/06.
- <u>Invited:</u> Richter, S.C. Use of molecular genetic data to address ecological and conservation-oriented research questions. Amphibian and Reptile Conservation Course, Davidson College, 04/06.
- <u>Invited:</u> Richter, S.C. Genetic and demographic consequences of landscape alteration on rare amphibians for the Conservation Biology Program, University of Missouri, 03/06.
- <u>Invited:</u> Richter, S.C. Genetic and demographic consequences of landscape alteration on rare amphibians. Department of Biological Sciences, Eastern Kentucky University, 03/06.
- Richter, S.C. Detection of historic population declines using contemporary genetic data: case study of an endangered frog. Annual Meeting of the KAS, Richmond, KY, 11/05.
- <u>Invited:</u> Richter, S.C. Effects of habitat fragmentation on population genetics and demography of rare gopher frogs. Ecolunch Series, Department of Biology, University of Kentucky, 10/05.
- <u>Invited:</u> Richter, S.C. Effects of habitat fragmentation on population genetics and demography of rare gopher frogs. Environmental Sciences Division, Oak Ridge National Laboratory, 08/05.
- Richter, S.C. The use of genetic data to address questions in wildlife biology. Eastern Kentucky University Wildlife Society, 08/05.
- <u>Invited:</u> Richter, S.C. Detection of historic population declines using contemporary genetic data. Joint Meeting of ASIH, HL, and SSAR, Tampa, FL, 07/05.
- <u>Invited:</u> Richter, S.C. Use of ecological and genetic data to study the consequences of humaninduced landscape change on rare amphibians. Department of Biology, Berry College, 03/05.
- Invited: Richter, S.C. Use of ecological and genetic data to study the consequences of human-induced landscape change on rare amphibians. Department of Biology, Shorter College, 03/05.
- Richter, S.C., and R.E. Broughton. Genetic, demographic, and ecological consequences of population reduction in an endangered frog. Joint Meeting of ASIH, HL, and SSAR, Norman, OK, 07/04.
- Broughton, R.E., Reneau, P.C., and S.C. Richter. The view of fish phylogeny from a mountain of mitochondrial sequence data. Joint Meeting of ASIH, HL, and SSAR, Norman, OK, 07/04.
- <u>Invited:</u> Richter, S.C. Genetic and ecological consequences of population reduction in a group of rare amphibians. Department of Biological Sciences, Eastern Kentucky University, 04/04.
- Seigel, R.A., and S.C. Richter. Temporal variation in the population demography of the endangered gopher frog. Annual Meeting of the Society for Conservation Biology. College Park, MD, 07/99.
- Seigel, R.A., C.A. Koenings, G.N. Johnson, and S.C. Richter. Two tropical storms, a hurricane, and a frog: effects of unusual weather patterns on winter-breeding anurans. Joint Meeting of ASIH, HL, and SSAR, College Park, PA, 07/99.

- Richter, S.C., and R.A. Seigel. Intra-populational variation in demographic patterns and reproductive traits of gopher frogs (*Rana capito*) in Mississippi. Joint Meeting of ASIH, HL, and SSAR, Guelph, Ontario, 07/98.
- <u>Invited:</u> Richter, S.C. Variation in reproduction and population demography of gopher frogs, *Rana sevosa*. U.S.D.A. Forest Service, Southern Institute of Forest Genetics (USFS SIFG), 04/98.
- Richter, S.C., J.E. Young, J.S. Doody, G.N. Johnson, R.A. Seigel. Variation in breeding and survival of gopher frogs, *Rana capito*, in southern Mississippi. Joint meeting of ASIH, HL, and SSAR, Seattle, WA, 07/97.
- Invited: Richter, S.C. Conservation and ecology of gopher frogs in Mississippi. USFS SIFG, 03/97.
- Richter, S.C., J.E. Young, J.S. Doody, G.N. Johnson, R.A. Seigel. The status and ecology of gopher frogs: Implications for monitoring and surveying for anuran populations. Tennessee Herpetology Conference, Murfreesboro, TN, 09/96.
- Richter, S.C., J.E. Young, J.S. Doody, G.N. Johnson, R.A. Seigel. Implications of differential breeding of the gopher frog, *Rana capito*, in southern Mississippi. Annual meeting of SSAR, Lawrence, KS, 07/96.
- <u>Invited:</u> Richter, S.C. Natural history and ecology of gopher tortoises, *Gopherus polyphemus*. Department of Biology, Berry College, 12/94.

POSTERS PRESENTED (* = student coauthor)

- Hutcheson, K.G.*, and S.C. Richter. Nose To the shale stone: a distribution wide search of *Plethodon pauleyi*. Annual Conference of Biology of Plethodontid Salamanders, Hammond, LA, 05/23.
- Brown, D., K. Watson, and S.C. Richter. Developing successful ecological research experiences for undergraduates. Annual meeting of Association of Southeastern Biologists (ASB), Jacksonville, FL, 03/20.
- Irihamye, I.*, J. Hendricks*, J. Sockman*, P. Blair*, and S.C. Richter. Morphology of the Eastern Copperhead and Recurrence at a Campsite. Annual meeting of Association of Southeastern Biologists (ASB), Jacksonville, FL, 03/20.
- Hendricks, J.J.*, J.C. Sockman*, A. Owens*, K. Muennich*, and S.C. Richter. Population dynamics and unique foraging ecology of copperheads in the Red River Gorge, KY. Annual meeting of ASB, Memphis, TN, 04/19.
- McNamara, C.E.*, C.R. Hayes*, S. Coles*, K. Watson, L.E. Dodd, and S.C. Richter. Bat activity at upland-embedded wetlands in the Daniel Boone National Forest, Kentucky. Annual Meeting of the Southeastern Bat Diversity Network and Annual Colloquium on the Conservation of Mammals in the Southeastern US, Jacksonville, FL, 02/19.
- Owens, A.*, and S.C. Richter. The effect of sex, physiology, and temperature on foraging site visitation in a population of Copperheads (*Agkistrodon contortrix*). Posters at the Capitol, Frankfort, KY, 02/19.
- Fedders, R.B.*, and S.C. Richter. Differences in plant communities at natural and constructed upland-embedded wetlands in the Daniel Boone National Forest. Annual meeting of the Kentucky Academy of Science (KAS), Bowling Green, KY, 11/18.
- Jones, E.*, J.A. Baecher*, A. Braccia, and S.C. Richter. The influence of salamanders on leaf litter decomposition in Appalachian headwater streams. Annual meeting of the KAS, Bowling Green, KY, 11/18.
- Koskelainen, M.*, K. Watson, E. Malloy, D.R. Brown, and S.C. Richter. Comparing accuracy of supervised image classification of wetlands in the Kentucky River Basin to the NLCD. Annual meeting of the KAS, Bowling Green, KY, 11/18.
- Malloy E., S.C. Richter, D.R. Brown, K. Watson, M. Cook. Verification of the Kentucky Vegetation Index of Biotic Integrity (KY-VIBI) and the Kentucky Rapid Wetland Assessment (KY-WRAM) in the Four Rivers region of Kentucky. Annual meeting of the KAS, Bowling Green, KY, 11/18.
- Folkerts, J.D.*, and S.C. Richter. Relationship between amphibian diversity and wetland condition based on a rapid assessment method in western Kentucky. Annual Meeting of ASB, Myrtle Beach, SC, 03/18.

- Patrick, R.*, K. Watson, and S.C. Richter. Using GIS to predict the occurrence of natural ridgetop wetlands in the Cumberland Ranger District of the Daniel Boone National Forest. Kentucky Quarterly meeting of the Association of Mapping Professionals, Richmond, KY, 03/18.
- Hutton, J.M.*, S.J. Price, and S.C. Richter. Diet of the Black Mountain Salamander (*Desmognathus welteri*) in southeastern Kentucky. Annual meeting of the Kentucky Organization of Field Stations, Bowling Green, KY, 02/18.
- Dupler, K.*, D.R. Brown, and S.C. Richter. The effect of historic land-use on wetland condition and amphibian richness. Annual meeting of the Society of Wetland Scientists. San Juan, Puerto Rico, 06/17.
- Baecher, J.A.*, and S.C. Richter. Modeling occupancy and abundance of terrestrial salamanders across natural environmental gradients in old growth forest. Annual Meeting of SEPARC, Fern Park, Arkansas, 02/17.
- Enge, K., T. Devitt, S. Lance, A. Farmer, and S. Richter. A Genetic assessment of gopher frog populations in Florida. Annual Meeting of the Gopher Tortoise Council. Palatka, FL, 1/17.
- Fedders, R.B.*, and S.C. Richter. Amphibian and plant communities at natural and constructed ridge-top wetlands in the Daniel Boone National Forest. Annual meeting of the KAS, Louisville, KY, 11/16.
- Brown, D.R., B. Ruhfel, and S.C. Richter. Forty years of vegetation changes in an old-growth forest inform predictions of current bird and amphibian populations. Annual meeting of The Wildlife Society, Raleigh, NC, 10/16.
- McTaggart, A.*, and S.C. Richter. Amphibian community composition in ridge-top wetlands of the Daniel Boone National Forest. Annual Meeting of the Kentucky Academy of Science (KAS), Highland Heights, KY, 11/15.
- McTaggart, A.*, and S.C. Richter. Amphibian community composition in ridge-top wetlands of the Daniel Boone National Forest. Annual meeting of the Society for the Study of Amphibians and Reptiles (SSAR). Lawrence, KS. 08/15.
- Bourne, J.C.*, A. Braccia, and S.C. Richter. The structure and distribution of stream salamander and macroinvertebrate communities across southeastern Kentucky. Natural Areas Conference, Dayton, OH, 10/14.
- Dupler, K.*, M.L. Guidugli, J. MacGregor, D.R. Brown, and S.C. Richter. Developing an amphibian index of biotic integrity and validating a rapid assessment method for Kentucky's wetlands. Natural Areas Conference, Dayton, OH, 10/14.
- Bourne, J.C.*, and S.C. Richter. The structure and distribution of stream salamander and macroinvertebrate communities across southeastern Kentucky. Joint Meeting of American Society of Ichthyologists and Herpetologists (ASIH), Herpetologists' League (HL), and SSAR, Chattanooga, TN, 07/14.
- Guidugli, M.L, K. Dupler*, J. MacGregor, S.C. Richter, and D. Brown. Developing an amphibian index of biotic integrity and validating a rapid assessment method for Kentucky's wetlands. Joint Meeting of ASIH, HL, and SSAR, Chattanooga, TN, 07/14.
- Hinkson, K.M.*, and S.C. Richter. Temporal Comparisons of Genetic Variation in the Dusky Gopher Frog, *Lithobates sevosus*. Joint Meeting of ASIH, HL, and SSAR, Chattanooga, TN, 07/14.
- Kross, C.S.*, and S.C. Richter. Interactions between species in an anthropogenically altered ridgetop wetland ecosystem. Annual Meeting of ASB, Spartanburg, SC, 04/14.
- Leigh, D.*, and S.C. Richter. Conservation genetics of crawfish frogs at Big Oaks National Wildlife Refuge. EKU Undergraduate Presentation Showcase, Richmond KY, 04/14.
- Leigh, D.*, and S.C. Richter. Conservation genetics of crawfish frogs at Big Oaks National Wildlife Refuge. Posters at the Capitol, Frankfort, KY, 02/14.
- Strong, J.R.*, C.S. Kross*, A.N. Drayer*, an S.C. Richter. High prevalence of ranavirus infection in permanent constructed wetlands in eastern Kentucky, USA. Annual Meeting of KAS, Morehead, KY, 11/13.
- Kross, C.S.*, and S.C. Richter. Interactions between species of different communities in a ridge-top wetland ecosystem in eastern Kentucky, USA. Annual Meeting of KAS, Morehead, KY, 11/13.

- Ecrement, S.M.*, and S.C. Richter. Amphibians using man-made pools created by military activity on Kisatchie National Forest, Louisiana. Annual Meeting of the Louisiana Association of Professional Biologist, Baton Rouge, LA, 06/13.
- Guidugli, M.L., J. MacGregor, S.C. Richter, and D.R. Brown. Developing a rapid assessment method and amphibian index of biotic integrity for Kentucky's wetlands. Annual Meeting of SEPARC, Fall Creek Falls, TN, 02/12.
- Nunziata, S.O.*, M.J. Lannoo, J.R. Robb, D.R. Karns, S.L. Lance, and S.C. Richter. Population and conservation genetics of crawfish frogs, *Lithobates areolatus*, at their northeastern range limit. Annual Meeting of SEPARC, Fall Creek Falls, TN, 02/12.
- King, S.S.*, and S.C. Richter. Four-toed salamander (*Hemidactylium scutatum*) nest site characteristics in natural and artificial wetlands. Annual Meeting of Sigma Xi, the Scientific Research Society, Raleigh, NC, 11/11.
- Guidugli, M.L.*, M. Smith, and S.C. Richter. Pattern of reproductive and post-metamorphic movements in relation to meteorological factors for two ephemeral pond-breeding amphibians (*Ambystoma jeffersonianum* and *A. maculatum*). Joint Meeting of ASIH, HL, and SSAR, Minneapolis, MN, 07/11.
- Richter, S.C., and Nunziata, S.O.* Relationship between genetic variability and survival in a critically imperiled amphibian species. Joint Meeting of ASIH, HL, and SSAR, Minneapolis, MN, 07/11.
- Yeiser, J.*, A.L. Jones, and S.C. Richter. Salamanders are useful bioindicators of water quality and watershed health in eastern Kentucky. Annual Meeting of ASB, Huntsville, AL, 04/11.
- Yeiser, J.*, A.L. Jones, and S.C. Richter. Salamanders are useful indicators of water quality and watershed health in eastern Kentucky. Posters at the Capitol, Frankfort, KY, 02/11.
- St. Andre, C.J.*, M.L. Guidugli, and S.C. Richter. Management recommendations based on timing and orientation of movements and upland habitat use by pond-breeding salamanders.

 Annual Meeting of the Kentucky Chapter of the Wildlife Society (KYTWS). Lake Cumberland, KY, 02/11.
- Denton, R.D.*, and S.C. Richter. Comparison of two common amphibian survey techniques for wetlands. Annual Meeting of SEPARC, Louisville, MS, 02/11.
- Guidugli, M.L.*, Smith, M., and S.C. Richter. Pattern of Reproductive and Post-Metamorphic Movements in Relation to Meteorological Factors for Two Ephemeral Pond-Breeding Amphibians (*Ambystoma jeffersonianum* and *A. maculatum*). Annual Meeting of SEPARC, Louisville, MS, 02/11.
- Yeiser, J.*, A.L. Jones, and S.C. Richter. Salamanders are useful indicators of water quality and watershed health in eastern Kentucky. Annual Meeting of KAS, Bowling Green, KY, 11/10.
- St. Andre, C.*, and S.C. Richter. Pond orientation and terrestrial microhabitat use by *Ambystoma jeffersonianum* and *A. maculatum* in south central Kentucky. Annual Meeting of the KAS, Bowling Green, KY, 11/10.
- Bragg, R.*, and S.C. Richter. A comparison of amphibian communities between natural ponds and constructed ponds of multiple age classes. Joint Meeting of ASIH, HL, and SSAR, Providence, RI, 07/10.
- Drayer, A.N.*, and S.C. Richter. Comparison of amphibian communities in artificial and natural ponds in forested ecosystems. Joint Meeting of ASIH, HL, and SSAR, Providence, RI, 07/10.
- Guidugli, M.L.*, and S.C. Richter. Reproductive and spatial ecology of an ephemeral pond-breeding amphibian community. Joint Meeting of ASIH, HL, and SSAR, Providence, RI, 07/10.
- Drayer, A.N.*, and S.C. Richter. Comparison of amphibian communities in artificial and natural ponds in forested ecosystems. Annual Meeting of ASB, Asheville, NC, 04/10.
- Gilbreath, E.*, and S.C. Richter. Factors affecting amphibian community composition in ponds across an altered landscape. Posters at the Capitol, Frankfort, KY, 02/10.
- Drayer, A.N.*, and S.C. Richter. Comparison of amphibian communities in artificial and natural ponds in forested ecosystems. Annual Meeting of SEPARC, Ocala, FL, 02/10.
- Gilbreath, E.*, and S.C. Richter. Factors affecting amphibian community composition in ponds across an altered landscape. National Collegiate Honors Council, Washington, D.C., 11/09.

- Drayer, A.N.*, and S.C. Richter. Comparison of amphibian communities in artificial and natural ponds in forested ecosystems. Annual Meeting of the KAS, Covington, KY, 11/09.
- Downey, C.M.*, and S.C. Richter. The impact of mining and residential pollutants on stream salamanders in eastern Kentucky. Undergraduate Poster (UP) Showcase, EKU, 04/09.
- Henry, T.*, E. Madeen*, and S.C. Richter. Evolutionary and conservation genetics of gopher frogs, *Rana capito* and *Rana sevosa*. UP Showcase, EKU, 04/09.
- Williams, J.S.*, A.K. Rumments*, and S.C. Richter. Conservation genetics of gopher tortoises (*Gopherus polyphemus*). UP Showcase, EKU, 04/09.
- Madeen, E.*, and S.C. Richter. Phylogeography of rare gopher frogs *Rana sevosa* and *Rana capito*. National McNair Scholars Research Conference, Baltimore, MD, 03/09.
- Downey, C.M.*, and S.C. Richter. The impact of mining and residential pollutants on stream salamanders in eastern Kentucky. Posters at the Capitol, Frankfort, KY, 02/09.
- Henry, T.*, E. Madeen*, and S.C. Richter. Conservation genetics and molecular analysis of rare gopher frogs. Posters at the Capitol, Frankfort, KY, 02/09.
- Gustin, E.S.*, and S.C. Richter. Genetic analysis of the distribution of *Rana pipiens* and *Rana sphenocephala* across a zone of sympatry. Annual Meeting of KAS, Lexington, KY, 11/08.
- Downey, C.M.*, and S.C. Richter. The impact of mining and residential pollutants on stream salamanders in eastern Kentucky. Annual Meeting of KAS, Lexington, KY, 11/08.
- Williams, J.S.*, C.M. Buker*, and S.C. Richter. Evolutionary Pattern of Mitochondrial Genome Order in Amphibians. Annual Meeting of KAS, Lexington, KY, 11/08.
- Alexander, J.R.*, M. Pierce, and S.C. Richter. Modernizing the science classroom: an introduction to RNA interference. Annual Meeting of KAS, Louisville, KY, 11/08.
- Alexander, J.R.*, S.C. Richter, S.J. Price, and M. E. Dorcas. The genetic effects of urbanization and habitat fragmentation on spotted salamander populations. Posters on the Hill, Washington, D.C., 04/08.
- Williams, J.S.*, C.M. Buker*, A.H. Kokwaro*, and S.C. Richter. Evolutionary pattern of mitochondrial genome order in amphibians. UP Showcase, EKU, 04/08.
- Jackson, J.A*, and S.C. Richter. Genetic variation and viability of gopher tortoise populations at a military installation in southern Mississippi. Annual Meeting of ASB, Spartanburg, SC, 04/08.
- Williams, J.S.*, C.M. Buker*, A.H. Kokwaro*, and S.C. Richter. Evolutionary pattern of mitochondrial genome order in amphibians. Annual Meeting of ASB, Spartanburg, SC, 04/08.
- Alexander, J.R.*, M. Pierce, and S.C. Richter. Modernizing the science classroom: an introduction to RNA interference. Posters at the Capitol, Frankfort, KY, 02/08.
- Gustin, E.S.*, and S.C. Richter. Genetic analysis of the distribution of *Rana pipiens* and *Rana sphenocephala across* a zone of sympatry. Joint Meeting ASIH, HL, SSAR, St. Louis, MO, 07/07.
- Hensley, N.M.*, and S.C. Richter. Population history and genetic affinity of populations of the US endangered dusky gopher frog. UP Showcase, EKU, 04/07.
- Alexander, J.R.*, S.C. Richter, S.J. Price, and M.E. Dorcas. Molecular genetic assessment of the effects of urbanization on salamander populations in the greater Charlotte, North Carolina area. UP Showcase, EKU, 04/07.
- Hensley, N.M.*, and S.C. Richter. Population status and genetic variability of two remaining populations of endangered dusky gopher frogs. Annual Meeting of ASB, Columbia, SC, 04/07.
- Alexander, J.R.*, S.C. Richter, S.J. Price, and M.E. Dorcas. Genetic effects of urbanization and habitat fragmentation on spotted salamander (*Ambystoma maculatum*) populations. Posters at the Capitol, Frankfort, KY, 02/07.
- Hensley, N.M.*, and S.C. Richter. Population status and genetic variability of two remaining populations of endangered dusky gopher frogs, *Rana sevosa*. Posters at the Capitol, Frankfort, KY, 02/07.
- Alexander, J.R.*, S.C. Richter, S.J. Price, and M.E. Dorcas. Molecular genetic assessment of the effects of urbanization on salamander populations in the greater Charlotte, North Carolina area. Annual Meeting of the KAS, Morehead, KY, 11/06.

Best, K.L.*, and S.C. Richter. A survey of the amphibians and reptiles of Muddy Creek, Madison County, Kentucky. Annual Meeting of the KAS, Richmond, KY, 11/05.

Renken, R.B., S.C. Richter, and W.K. Gram. Landscape and local scale effects of forest management on amphibians and reptiles in Missouri Ozark forests. Joint Meeting of ASIH, HL, and SSAR, Kansas City, MO, 07/02.

PROFESSIONAL MEETINGS/WORKSHOPS

"A new generation of research on amphibian declines", American Society of Ichthyologists and Herpetologists, Co-organizer and Co-chair of symposium, Tampa, FL, 07/05.

STUDENT SUPERVISION

Graduate students supervised:

Alex Funk, Henderson Gull, 08/19-present Jacob Stark, 08/18-present Jesse Sockman, 08/18-06/20 Josh Hendricks, 08/17-05/19 Jeff Folkerts, 08/16-12/19 Rachel Fedders, 08/15-12/18 Alex Baecher, 08/15-12/17 Kari Dupler, 08/14-05/16 Audrey McTaggart, 08/14-05/16 John Bourne, 08/13-08/15 Kristin Hinkson, 08/13-05/15 Chelsea Kross. 08/12-08/14 Jennifer Strong, 08/12-12/14 Doug Mott, 08/12-05/14 John Yeiser, 08/11-05/13 Britney Huron, 08/10-08/13 Susan King, 08/10-07/12 Rob Denton, 08/09-06/11 Schyler Nunziata, 08/09-12/11 Chris St. Andre, 08/09-06/12 Andrea Drayer, 08/08-07/11 Michelle Guiduali. 08/07-12/09 Emily Gustin, 08/06-12/09 Jeffrey Jackson, 08/06-06/09

Undergraduate students supervised:

Jordan Stanton, 02/20-present

Kayla Stone, 08/19-present Callie Boggs, 09/17-present Sarah Phillips, 08/18-12/19 Emily Jones, 08/15-07/19 Ivy Irihamye, 05/19-07/19 Antwanai Seay-Moreland, 05-19-07/19 Austin Owens, 05/18-07/19 Kyle Muennich, 03/18-12/18 Myesha James, 05/18-08/18 Cody Able, 09/17-12/18 Raymond Little, 08/17-12/17 Peyton Blair, 05/17-08/17 Alex Gibson, 03/17-08/17 Jordan Kenniston, 04/16-05/17 Kirstine Brown, 08/16-12/16 Morgan Bahl, 05/16-8/16 Ryan Fortenberry, 05/16-8/16 Elisha Henson, 05/16-8/16 Jamie Farrar, 09/15-05/16 Glen Kalisz, 08/15-05/16 Lameace Hussain, 09/14-05/16 Logan Phelps. 03/14-08/16 Natasha Taylor, 11/13-08/15 Tyler Sole, 03/14-12/14 Dana Leigh, 01/12-05/14 Alex Phillips, 03/11-05/14 Kearstin Edmonds, 01/11-05/14 Jesse Godbold, 08/10-05/14 Cory Abrams, 08/12-05/13 David Cravens, 08/10-12/11 John Yeiser, 02/10-06/11 Danielle Wells, 01/10-06/11 Emily Gilbreath, 02/09-05/10 Chad Downey, 3/08-5/09 Andrew Rumments, 03/08-7/10 Natochia Henry, 03/08-05/09 Erin Madeen, 02/08-05/09 Carol Buker, 09/07-05/08

Alfred Kokwaro, 09/07-05/08 Joshua Williams, 08/07-05/09 Cynthia Carter, 03/07-12/08 David Logan, 03/07-/7/07 Alisha Lykins, 01/07-05/07 Nina Hensley, 01/06-05/07 Chris Porter, 01/06-12/06 Jeremiah Alexander, 03/05-05/09 Kristina Best, 02/05-12/05

INSTITUTIONAL SERVICE

University Committees

Policy Drafting Team for Faculty-led field experiences, 08/15-05/16
Division of Natural Areas Research Advisory Committee, 01/08-present
Eastern Committee on Responsible Environmental Stewardship, 08/07-06/11
Division of Natural Areas Advisory Board, 08/07-present
University representative to the Council on Undergraduate Research, 08/07-06/11

College Committees

Search Committee, Assistant Professor, Science Education, 01/19-present Search Committee, Chemical Storage Facility Manager, 01/19-04/19 Promotion and Tenure Committee, Dept of Chemistry, 08/18-02/19 Peer Mentor for Dr. Brad Ruhfel, 08/12-05/15 Search Committee, Assistant Professor, Department of Chemistry, 08/14-05/15 Search Committee, Assistant Dean of College of Arts and Sciences, 01/11-05/11 Search Committee, Eastern Kentucky Environmental Research Institute (EK-ERI) Laboratory Technician, 01/06-05/06 Search Committee, EK-ERI Postdoctoral Associate, 08/06-12/06 New Science Building Committee, 07/05-08/06

Department Committees

Honors and Awards, 08/07-05/08, 08/18-05/19; **Chairperson** 08/19-pres Third Year Faculty Review, 08/17-present Curriculum, 08/17-05/19
Graduate Affairs Committee, 08/06-05/08, 08/16-05/18
Advisor, Biological Organization of Graduate Students, 08/15-05/18

Faculty Annual Review Policy, 08/16-05/17

Special Events, 08/16-05/17

Biological Collections, 08/16-05/17

Strategic Planning and Assessment, 08/15-05/16

Seminars and Speakers, 08/05-08/09, 08/12-05/16; Chairperson 08/12-05/14

Web Page Coordination, 08/05-05/17; Chairperson 08/05-05/08

Search Committee, Community Ecologist 08/14-05/15

Recruitment, Retention, and Academic Advising, 08/07-12/09; 08/13-05/14

Promotion and Tenure, 08/13-05/15

Chairperson, Search Committee, Community Ecologist, 08/12-05/13

Ad hoc Graduate Science and Ethics Course, 01/11-05/12

Executive Decisions Assistance, 08/12-05/13

Newsletter and Alumni Affairs, 0812-05/12

Search Committee, Lecturer, 02/11-05/11

Ad hoc Evolution Course Committee, 8/10-05/13

Safety, 08/10-05/13

Graduate Orientation and Evaluation, 08/09-05/11

Animal Care and Use, 08/08-05/09

Search Committee, Molecular Biologist, 08/07-05/08

Planning, 01/06-05/11; Chairperson 08/07-05/08

Search Committee, Behavioral Endocrinologist, 08/06-05/07

Computer Applications, 01/05-05/07

Career Information and Placement, 01/05-08/05

Space, Facilities, and Equipment, 08/05-05/07

Undergraduate Research Coordinator, Dept. Biological Sciences, 01/07-05/10

SERVICE TO THE PROFESSION

Offices and Committees in professional societies

President, Kentucky Society of Natural History, beginning 07/19

Councilor, Executive Council, Herpetologists' League, 01/18-pres

Past President, Kentucky Organization of Field Stations, 11/17-11/18

President and Founder, Kentucky Organization of Field Stations, 11/15-10/17

Board of Governors, American Society of Ichthyologists and Herpetologists, 08/10-07/15 Nominating Committee of ASIH, 05/12- 05/13

Education Committee, Association of SE Biologists, 01/11-present; **Chairperson** 07/17-06/18

Board of Governors, Society for the Study of Amphibians and Reptiles (SSAR), 01/07-12/10

Student Support Committee of the SSAR, 08/07-08/08

Conservation Union Species Survival Commission, Amphibian Specialist Group, 08/07-pres SSAR, Conservation Committee, **Chairperson** 01/05-05/08, member 01/2005-present ASIH, Conservation Committee, 08/05-present

Review/editorial boards

Associate Editor, Herpetological Conservation and Biology, 01/11-02/18

Other Service to the Profession

Member of the US Endangered Dusky Gopher Frog Recovery Team, which includes US Fish and Wildlife Service, US Forest Service, US Geological Survey, Mississippi Department of Wildlife Fisheries and Parks, The Nature Conservancy, and other university-associated scientists, created to develop a recovery plan for the frog. Spring 2005-present

Co-chair & organizer & moderator, symposium for 2005 Annual Meeting of the American Society of Ichthyologists and Herpetologists (ASIH), 2005

Judge of student oral presentations for the Annual Meeting of Society for the Study of Amphibians and Reptiles (SSAR), 2005

Judge of student poster presentations at Sigma Xi Natural Sciences Graduate and Undergraduate Research Poster Day competition for EKU chapter of Sigma Xi, 2005

Maintained and helped create the website of the Conservation Committee of SSAR.

Judge of student oral presentations for 2006, 2007, 2008, 2011 Eugene P. Odum Award of the Southeastern Chapter of the Ecological Society of America at the Annual Meeting of the Association of Southeastern Biologists

Judge of student poster presentations for EKU Chapter of Sigma Xi at the EKU Undergraduate Poster (UP) Showcase, Spring 2006

Reviewer for proposed symposia for the 2006 Annual Meeting of the SSAR, 2005

Judge of student research proposals for 2008 SSAR Grants in Herpetology, Laboratory Research Proposals, 2008

Served as moderator for the "Herp Conservation" session of oral presentations at the Joint meeting of the ASIH, SSAR, and Herpetologists League (HL), 2008

Was selected and served as representative of regional university faculty positions in a student workshop entitled "How to get a job after graduation: advice from experts" that was held at the 2009 joint meeting of the ASIH, SSAR, and HL, 2009

- Submitted expert-opinion letter to the US Fish and Wildlife Service regarding the status review of the federally endangered dusky gopher frog, 2009
- Served as moderator for the "Herp Conservation" session of oral presentations at the 2009 joint meeting of the ASIH, SSAR, and HL, 2009

PROFESSIONALY RELATED COMMUNITY SERVICE

- Secretary and Board Member, Sheltowee Environmental Education Coalition, Olive Hill, KY, Spring 2015 to present.
- Activity Coordinator, Committee Member, Boy Scout Troop 2014, Richmond, KY, 01/15-pres Peer Reviewer, United States Fish and Wildlife Service, Rule proposing designation of critical habitat for the US endangered dusky gopher frog, *Rana sevosa*, Fall 2010
- Participated in wetland creation and education about wetlands at Kirksville Elementary School, sponsored the US Forest Service, 2009
- Served on the Steering Committee of Kentucky's Streams and Wetlands Conservation Planning Process as an expert and as a concerned citizen, Spring 2009
- Work with local schools to visit and teach about biology (ecology, amphibians, wetlands, etc.).

 Burrier program, Model Lab School, and Kirksville, Glenn Marshall Elementary.

PROFESSIONAL MEMBERSHIPS

Sigma Xi, Phi Kappa Phi, American Society of Ichthyologists and Herpetologists, Association of Southeastern Biologists, Gopher Tortoise Council, Herpetologists' League, Kentucky Academy of Science, and Society for the Study of Amphibians and Reptiles, Society of Wetland Scientists

HONORS AND AWARDS

- 2011 Outstanding Early Career in Post-Secondary Education Award, Kentucky Academy of Science
- 2013 Excellence in Research Award, College of Arts and Sciences, Eastern Kentucky University
- 2014 Citation from the House of Representatives of the Commonwealth of Kentucky recognizing my National Science Foundation grant for research facilities, for directing an active research lab, and for my "views of the impact of undergraduate research, scholarship, and service opportunities in enhancing the education of students."