

Brian David Greene

Department of Biology
Missouri State University
901 South National
Springfield, MO 65897
(417) 836-6379
briangreene@missouristate.edu

EDUCATION

- State University of New York. New Paltz, New York. Bachelor of Science, Biology. 1985.
- Southwest Missouri State University. Springfield, Missouri. 1988. Master of Science, Biology. Thesis: Food habits, conversion efficiency, and reaction to prey stimuli of the copperhead, *Agkistrodon contortrix*.
- Texas A&M University. College Station, Texas. 1993. Ph D. Wildlife and Fisheries Sciences. Dissertation Title: Life history and ecology of the Concho water snake, *Nerodia harteri paucimaculata*.

TEACHING EXPERIENCE

Current Biology Courses:

- **General Ecology (BIO 369)**
- **Herpetology (BIO 576)**
- **Biology seminar (BIO 302)**

Recent Specialty Courses:

- **University Honors Seminar (UHC110)**
- **Graduate seminar (BIO 728)**

PROFESSIONAL ACTIVITIES

Reviewer Service

Journals: African Journal of Herpetology, American Midland Naturalist, Copeia, Herpetological Natural History, Herpetological Review, Journal of Herpetology, Southeastern Naturalist, Southwestern Naturalist, Texas journal of Science, Herpetologica, Ecological Applications, Wetlands, Journal of Zoology, Herpetological Conservation and Biology, The Herpetological Journal

Text Books and Professional References:

- Pough et al. 2nd ed. Herpetology. Prentice Hall.
- Reptile Biodiversity: standard techniques for Inventory and monitoring. 2012. University of California Press.

- Biology of the Rattlesnakes II, chapter on relationships between insolation and rattlesnake hibernacula .
- Chapter 9, marking techniques for reptiles.

Grant Proposals:

- Society for the Study of Amphibians and Reptiles – Grants in Aid of Herpetology, spring 2008.
- E.E. Williams Award Proposal reviewer–graduate student grant proposals, Herpetologists’ League, spring 2016.

Miscellaneous

- IUCN Pit viper Specialist Group
- Associate Editor: *Journal of Herpetology*, March 2010-2015.
- Associate Editor for Herpetology: *American Midland Naturalist*, August 1997-January 2004.
- Concho water snake recovery team. U.S. Fish and Wildlife Service. 1991-1994.
- Consultant to U.S. Fish and Wildlife Service, Concho water snake population viability.

AWARDS

Personal

- Excellence in Teaching, College of Natural and Applied Sciences, 8 November 2001.
- Excellence in Service, College of Natural and Applied Sciences, 22 October 2002.
- Excellence in Service, College of Natural and Applied Sciences, April 2012.
- Outstanding Thesis Mentor, Graduate College, April 2013.
- Honor’s College Director’s Award for Outstanding Faculty Research, 2019

Awards to mentored students

- April Brennan – Boritski Scholarship, 2003
- William Ray – Best oral presentation, SMSU Graduate Interdisciplinary Forum, 2004
- Adam Crane - Best oral presentation and nominee for best teaching assistant, Graduate Interdisciplinary Forum, 2005
- Dan Schepis – Boritski Scholarship, 2010
- Andrew Hoffman – Boritski Scholarship, 2011
- Kacie Myer – CNAS Undergraduate Research Day Poster Presentation, second place (ecology division), 2014.
- Kristen Kohlhepp – MSU Graduate Interdisciplinary Forum, Oral Presentation (Honorable Mention), 2016
- Kari Spivey – MSU Graduate Interdisciplinary Forum, Best Oral Presentation, 2016
- Sabrina Messick – CNAS Undergraduate Research Day Poster Presentation, First place (ecology division), 2016.
- Kari Spivey – Distinguished Thesis Award, Department of Biology, 2016.
- Chelsea Martin – Advising award 2019

INVITED PRESENTATIONS

- Ecology of the Concho water snake: implications for conservation and management. Seminar, Illinois Natural History Survey, University of Illinois, April 1999.
- Conservation Biology of Harter’s Water Snake. Seminar, Department of Zoology, Oklahoma State University, December 1999.
- Conservation Biology of Harter’s Water Snake. Seminar, Department of Biology, University of Arkansas, March 2000.

- Conservation Biology of Harter's Water Snake. Seminar, Department of Biology, University of Mississippi, September 2003.
- Sources of spatial pattern variation of a stream-associated cottonmouth population, Washington University (St. Louis), May 2006.
- Sources of spatial variation of a stream-associated cottonmouth population, University of Missouri, September 2009.
- The cottonmouth as a model organism, Missouri University of Science & Technology, February 2016.
- Using cottonmouths as research subjects, University of Missouri Herpetology Club, October 2018.
- Sources of Variation in Diet and Foraging Behavior of the Northern Cottonmouth, *Agkistrodon piscivorus*, Midwest Herpetological Symposium, October 2025.

RECENT ORAL PRESENTATIONS

Professional Meetings

Shew, J.J., B.D. Greene, and F. Durbian. Spatial ecology and habitat use of the western fox snake (*Elaphe vulpina vulpina*) on Squaw Creek National Wildlife Refuge. Southwestern Association of Naturalists. Southwestern Association of Naturalists, April 2004.

Shew, J.J., B.D. Greene, and F. Durbian. Spatial ecology and habitat use of the western fox snake (*Elaphe vulpina vulpina*) on Squaw Creek National Wildlife Refuge. Snake Ecology Group IV. Southern Illinois University. May 2004.

Shew, J.J., B.D. Greene, and F. Durbian. Spatial ecology and habitat use of the western fox snake (*Elaphe vulpina vulpina*) on Squaw Creek National Wildlife Refuge. Joint meeting of Ichthyologists and Herpetologists. University of Oklahoma, May 2004.

Ray, W. and B.D. Greene. Predatory strike behaviors of the western cottonmouth, *Agkistrodon piscivorus*. Joint meeting of Ichthyologists and Herpetologists. University of Oklahoma, May 2004.

Crane, A. and B.D. Greene. The effect of reproductive condition on the ecology of the cottonmouth (*Agkistrodon piscivorus*). Annual meeting of the Southwestern Association of Naturalists. April 2005.

Crane, A. and B.D. Greene. The effect of reproductive condition on the ecology of the cottonmouth (*Agkistrodon piscivorus*). Joint meeting of Ichthyologists and Herpetologists. University of South Florida, July 2005.

Crane, A. and B.D. Greene. The effect of reproductive condition on the ecology of the cottonmouth (*Agkistrodon piscivorus*). Missouri Herpetological Association, 2005.

Gatewood, J. and B.D. Greene. Diet composition of a stream-associated cottonmouth (*Agkistrodon piscivorus*) population in southwest Missouri. Joint meeting of Ichthyologists and Herpetologists. July 2006.

Menzel, E. A. Crane, and B.D. Greene. Spatial ecology of male cottonmouth snakes (*Agkistrodon piscivorus*) at the northern edge of their range. Joint meeting of Ichthyologists and Herpetologists. July 2006.

Mullich, D.E. and B.D. Greene. Variation in Defensive Behaviors of the Western Cottonmouth, *Agkistrodon piscivorus* in Response to Temperature, Size, Sex, and Reproductive Condition. SWAN Meeting. April 2007.

Greene, B.D., A.L. Crane, and E. Menzel. Population biology of the cottonmouth, *Agkistrodon piscivorus*, in southwest Missouri. SWAN Meeting. April 2007.

Mullich, D.E. Variation in Defensive Behaviors of the Western Cottonmouth, *Agkistrodon piscivorus* in Response to Temperature, Size, Sex, and Reproductive Condition. Joint meeting of Ichthyologists and Herpetologists. July 2007.

Benbow, G. and B. Greene. Effects of temperature on strike-induced chemosensory searching (SICS) of the western cottonmouth (*Agkistrodon piscivorus leucostoma*). Southwestern Association of Naturalists, April 2008.

Presley, M., A. Mathis, and B. Greene. Foraging tactics of the Ozarks Zig Zag Salamander, (*Plethodon angusticlavius*) under predation pressure. Southwestern Association of Naturalists, April 2008.

Ford, N.B. and B. Greene. Life History Traits of Cottonmouths (*Agkistrodon piscivorus*). Joint meeting of Ichthyologists and Herpetologists, Symposium on Cottonmouth Biology, July 2008.

Greene, B and E. Roth. Sources of spatial variation in the cottonmouth, *Agkistrodon piscivorus*. Joint meeting of Ichthyologists and Herpetologists, Symposium on Cottonmouth Biology, July 2008.

Muensch, A, B. Greene, E. Menzel, and A. Crane. Ontogenetic changes in habitat use and spatial patterns in the cottonmouth (*Agkistrodon piscivorus*). Missouri Herpetological Association, 2009.

Greene, B.D. Demography of the cottonmouth (*Agkistrodon piscivorus*) near the northwest range limit. Southwestern Association of Naturalists, 2011.

Greene, B.D. Demography of the cottonmouth (*Agkistrodon piscivorus*) near the northwest range limit. Joint Meeting of Ichthyologists and Herpetologists, June 2011

Schepis, D. and B. Greene. Spatial patterns and habitat selection of *Farancia abacura*. Missouri Herpetological Association, 2011.

Hoffman, A.S. and B.D. Greene. Use of Managed Wetlands at Mingo National Wildlife Refuge in Southeastern Missouri by Salamanders. Missouri Herpetological Association, 2011.

Evans, W. and B.D. Greene. Effects of temperature on foraging success in two semi-aquatic snakes. Missouri Herpetological Association, 2011.

Schepis, J. and B.D. Greene. Spatial patterns and habitat selection of the Mudsnake, *Farancia abacura*, in southeast Missouri. Southwestern Association of Naturalists.

Schepis, J. and B.D. Greene. Spatial patterns and habitat selection of the Mudsnake, *Farancia abacura*, in southeast Missouri. Joint Meeting of Ichthyologists and Herpetologists, Albuquerque, NM. July, 2013.

Schepis D.J. and B.D. Greene. Spatial ecology and habitat selection of Mudsnares (*Farancia abacura*) in southeast Missouri. Missouri Herpetological Association. September, 2013.

Brinkman, L. and B.D. Greene. Natural history and conservation of salamanders in central Panama. Missouri Herpetological Association. September, 2013.

Wrensch, Z. and B.D. Greene. Effects of gestation temperature on neonate phenotypes of the Northern Watersnake, *Nerodia sipedon*. Missouri Herpetological Association. September, 2013.

Brinkman, L., J. Ray, and B.D. Greene. 2014. Natural history and conservation of salamanders in central Panama. Plethodontid salamander conference, May, 2014.

Brinkman, L., J. Ray, and B.D. Greene. 2014. Natural history and conservation of salamanders in central Panama. Annual meeting of the Missouri Herpetological Association, Bull Shoals Field Station, September, 2014.

Churilla J. and B.D. Greene. 2014. Do musk gland secretions function as alarm cues in snakes? Annual meeting of the Missouri Herpetological Association, Bull Shoals Field Station, September, 2014.

Greene, B.D. and N.B. Ford. Geographic variation in reproductive traits in Missouri and Texas populations of the cottonmouth, *Agkistrodon piscivorus*. Society for the Study of Amphibians and Reptiles, University of Kansas, July 2015.

Spivey, K. and B. Greene. The influence of prey type and size on foraging behavior in the cottonmouth, *Agkistrodon piscivorus*. Missouri Herpetological Association, September 19, 2015.

Spivey, K. and B. Greene. Variation in venom expenditure in cottonmouths (*Agkistrodon piscivorus*) across prey sizes, prey types, and snake body temperatures. JMIH–New Orleans, LA, July 2016.

Maag, D. and B. Greene. Preliminary Results on a Radiotelemetry Study on Pygmy Rattlesnakes (*Sistrurus miliarius*) in Southwestern Missouri. Missouri Herpetological Association, September 17, 2016.

Olivia Graves and Brian Greene. Missouri State University, Springfield, MO. Population Ecology of Cave-Dwelling Salamanders from Selected Missouri Ozarks Caves that Vary in Anthropogenic Disturbance. Missouri Herpetological Association, September 17, 2016.

Maag, D. and B. Greene. Spatial ecology and habitat selection in pygmy rattlesnakes (*Sistrurus miliarius*). Missouri Natural Resources Conference. Lake of the Ozarks, MO, 2018

Meinders, A. and B. Greene. Behavioral responses of cottonmouths to conspecific cloacal gland secretions. Missouri Natural Resources Conference. Lake of the Ozarks, MO, 2018

McCoy, C. and B. Greene. Survey of Arboviruses in free-ranging cottonmouths (*Agkistrodon piscivorus*) in Southern Missouri. Southwestern Association of Naturalists. San Marcos, TX, April 2018.

McCoy, C. C. Lupfer, and B. Greene. Survey of Arboviruses in free-ranging cottonmouths (*Agkistrodon piscivorus*) in Southern Missouri. Joint Meeting of Ichthyologists and Herpetologists, Rochester, NY, July 2018.

Meinders, A. and B. Greene. Behavioral responses of cottonmouths to conspecific cloacal gland secretions. Southwestern Association of Naturalists. San Marcos, TX, April 2018.

Martin, C. and B. Greene. Conspecific scent trailing in juvenile cottonmouths (*Agkistrodon piscivorus*). Southwestern Association of Naturalists. San Marcos, TX, April 2018.

Meinders, A. and B. Greene. Behavioral responses of cottonmouths to conspecific cloacal gland secretions. Missouri Herpetological Association, Bull Shoals Field Station. September 2018.

Martin, C. and B. Greene. Behavioral aspects of chemoreception in juvenile cottonmouths. Missouri Herpetological Association, Bull Shoals Field Station. September 2018.

McCoy, C., C. Lupfer and B. Greene. Survey of Arboviruses in free-ranging cottonmouths (*Agkistrodon piscivorus*) in Southern Missouri. Missouri Herpetological Association, Bull Shoals Field Station. September 2018.

Medley, K. and B. Greene. The assessment of behavioral syndromes within juvenile cottonmouths (*Agkistrodon piscivorus*). Missouri Herpetological Association, Bull Shoals Field Station. September 2018.

Recker, L. and B. Greene. Evaluation of home range size, habitat selection and movements of headstarted cottonmouths (*Agkistrodon piscivorus*). Missouri Herpetological Association, Reis Biological Station, September 2019.

Recker, L. and B. Greene. Headstarting success in pit vipers: insight from an abundant species. October 2021.

Greene, B.D. Demographic characteristics of a population of Northern Cottonmouths (*Agkistrodon piscivorus*): insight from a long-term study. Annual meeting of the Southwestern Association of Naturalists, August 2023.

Greene, B.D. Demographic characteristics of a population of Northern Cottonmouths (*Agkistrodon piscivorus*): insight from a long-term study. Annual meeting of the Missouri Herpetological Association, September 2023.

Watson, C., T. Soto, and B. Greene. Evaluation of alarm pheromone function of scent gland secretions in the cottonmouth (*Agkistrodon piscivorus*). Snake Ecology Group VII, Winter, WI.

Lowy, J. and B. Greene. Investigating Individuality and Behavioral Syndromes in a Southwest Missouri Population of Northern Cottonmouth (*Agkistrodon piscivorus*). Snake Ecology Group VII, Winter, WI.

Echele, J. and B. Greene. Ontogeny of prey chemical cue responses in Northern Cottonmouths (*Agkistrodon piscivorus*). Missouri Herpetological Association annual meeting.

Jarrett, B. and B. Greene. Prey Capture Behavior in Cottonmouths (*Agkistrodon piscivorus*) Varies with Prey Type. Missouri Herpetological Association annual meeting.

Watson, C., T. Soto, and B. Greene. Evaluation of alarm pheromone function of scent gland secretions in the cottonmouth (*Agkistrodon piscivorus*). Missouri Herpetological Association annual meeting.

Jarrett, B. and B. Greene. Prey Capture Behavior in Cottonmouths (*Agkistrodon piscivorus*) Varies with Prey Type. Annual meeting of the Kansas Herpetological Society.

Penning, D., N. Piccoli, K. Atkinson, G. Chang, V. Ngyen, and B. Greene. Quantifying strike performance and venom delivery in the Northern Cottonmouth (*Agkistrodon piscivorus*). Society for Integrative and Comparative Biology.

Owens, A. and B. Greene. Social buffering in snakes: investigating social attenuation of the stress response in cottonmouth snakes (*Agkistrodon piscivorus*). Southwestern Association of Naturalists, Albuquerque, NM. April, 2025.

Jarrett, B. and B. Greene. Variable prey handling behaviors and effects of body temperature variation on strike-induced chemosensory searching in Northern Cottonmouth snakes (*Agkistrodon piscivorus*). Missouri Herpetological Association annual meeting. Southwestern Association of Naturalists, Albuquerque, NM. April, 2025.

Jarrett, B. and B. Greene. Variable prey handling behaviors and effects of body temperature variation on strike-induced chemosensory searching in Northern Cottonmouth snakes (*Agkistrodon piscivorus*). Missouri Herpetological Association annual meeting. Missouri State University Education Center. September 2025.

Jarrett, B., O. Hoffner, S. Walker-Schaefer, and B. Greene. Circadian rhythm's influence on behavioral and physiological performance of the Northern Cottonmouth (*Agkistrodon piscivorus*). Missouri Herpetological Association annual meeting. Missouri State University Education Center. September, 2025.

Poster Presentations

Brennan, A.M., B.D. Greene, and T.E. Tomasi. The effects of temperature and digestion on metabolic rate in the rat snake *Elaphe obsoleta*. Joint meeting of the American Society of Ichthyologists and Herpetologists, the Herpetologists' League, and the Society for the Study of Amphibians and Reptiles. University of Oklahoma, May 2004.

Brennan, A.M., B.D. Greene, and T.E. Tomasi. The effects of temperature and digestion on metabolic rate in the rat snake *Elaphe obsoleta*. Joint meeting of the American Society of Ichthyologists and Herpetologists, the Herpetologists' League, and the Society for the Study of Amphibians and Reptiles. Society for Integrative and Comparative Biology,

2005.

Menzel, E., A. Crane, and B. Greene. Thermoregulation of Field Active Male *Agkistrodon piscivorus leucostoma*. Joint meeting of the American Society of Ichthyologists and Herpetologists, the Herpetologists' League, and the Society for the Study of Amphibians and Reptiles. 2007.

Benbow, G. and B. Greene. Thermal Effects on Strike-induced Chemosensory Searching in the Cottonmouth, *Agkistrodon piscivorus*. Joint meeting of Ichthyologists and Herpetologists July 2008.

Greene, B.D. An empirical test of PIT tag retention in juvenile snakes. JMIH 2011.

Friesen, R. and B.D. Greene. Associative learning in the cottonmouth, *Agkistrodon piscivorus*. Southwestern Association of Naturalists. April, 2013.

Friesen, R. and B.D. Greene. Associative learning in the cottonmouth, *Agkistrodon piscivorus*. Joint Meeting of Ichthyologists and Herpetologists, Albuquerque, NM. July, 2013.

Evans, W.*, A. Mathis, and B. Greene. Discrimination of substrate cues from predatory and non-predatory snakes by Ring-necked Snakes. Animal Behavior Society. Boulder, Colorado. July, 2013.

Meyer, K.D. and B.D. Greene. Feeding ecology of a stream-associated population of the Cottonmouth. CNAS Undergraduate Research Day, May 2014.

Churilla, J. and B.D. Greene. Do snake musk gland secretions function as a alarm cues? Conflicting evidence from behavioral and physiological responses in the cottonmouth, *Agkistrodon piscivorus*. Biology of the Pitvipers II, Tulsa, OK. June 2014.

Kohlhepp, K. and B. Greene. Behavioral Responses by Cottonmouths (*Agkistrodon piscivorus*) to Olfactory and Visual Predatory Cues. JMIH–New Orleans, LA, July 2016.

Meinders, A. and B. Greene. Behavioral responses of cottonmouths to conspecific cloacal gland secretions Animal Behavior Society 2018.

Martin, C. and B. Greene. Conspecific scent trailing in juvenile cottonmouths (*Agkistrodon piscivorus*). Animal Behavior Society 2018.

Martin C. and B. Greene. Conspecific scent trailing in juvenile cottonmouths (*Agkistrodon piscivorus*). Biology of Pitvipers 3, Rodeo, NM. July 2019.

Meinders, A. and B. Greene. Tests of antipredator and alarm cue functions for musk gland secretions in Northern Cottonmouths (*Agkistrodon piscivorus*). Biology of Pitvipers 3, Rodeo, NM. July 2019.

Medley, K. and B. Greene. Repeatable patterns of behavioral traits are correlated with sprint speed but not thermal preference in Northern Cottonmouths (*Agkistrodon piscivorus*). Biology of Pitvipers 3, Rodeo, NM. July 2019.

Maag, D., S. Maher and B. Greene. Spatial ecology and microhabitat selection of pygmy rattlesnakes in southwest Missouri. Biology of Pitvipers 3, Rodeo, NM. July 2019.

Echele, J. and B. Greene. Ontogeny of prey chemical cue responses in Northern Cottonmouths (*Agkistrodon piscivorus*). Annual meeting of the Kansas Herpetological Society.

Echele, J. and B. Greene. Ontogeny of prey chemical cue responses in Northern Cottonmouths (*Agkistrodon piscivorus*). Annual meeting of the Southwestern Association of Naturalists, Albuquerque, NM. April 2025.

Informal Presentations

- Biology of the Cottonmouth in southwest Missouri. Missouri Department of Conservation Master Naturalist Program, June 2008.
- Biology of the Cottonmouth in southwest Missouri. Southwest Missouri Herpetological Society, May 2009.
- Biology of the Cottonmouth in southwest Missouri. Springfield Conservation Nature Center Volunteer Training Program, January 2010.
- Biology of the cottonmouth. GLADE workshop, Bull Shoals Field Station, June 2011.
- The role of endurance running in the evolutionary history of humans. CNAS Public Lecture Series, February 2013.
- Why do we fear snakes? CNAS Public Lecture Series, February 2015.
- Why do we fear snakes? Southwest Missouri Herpetological Society, April 2015.
- Why do we fear snakes? Springfield Rotary Club, December 2015.
- Research with snakes. MSU Wildlife Biology Club, January 2019.

- Research with venomous snakes. Audubon Society, January 2019.
- Research with venomous snakes. Dickerson Park Zoo, April 2019.
- The Biology of Missouri Snakes. GLADE (High School Academy at Bull Shoals Field Station), June 2019.
- The Biology of Cottonmouths. Master Naturalists, August 2019.
- Snake biology presentation. GLADE (High School Academy), June 2023.
- Snake biology presentation. GLADE (High School Academy), June 2024.
- Snake biology presentation. GLADE (High School Academy), June 2025.

STUDENT RESEARCH ACTIVITIES

Chair of advisory committee:

- Timothy C. Roth II.** Habitat choice and spatial ecology of *Nerodia sipedon*, the northern water snake. August 1999.
- April Brennan.** The effects of temperature and digestion on metabolism in the rat snake, *Elaphe obsoleta*. May 2004.
- Lisa Lehnhoff.** Spatial ecology and habitat use of Blanding's turtle (*Emydoidea blandingii*) at Squaw Creek National Wildlife Refuge. May 2004.
- William Ray.** Predatory strike behaviors of the Western Cottonmouth, *Agkistrodon piscivorus leucostoma*. August 2004.
- Justin Shew.** Spatial ecology and habitat selection in the western fox snake, *Elaphe vulpina vulpina*. May 2004
- Adam Crane.** The influence of reproductive condition on the thermal and spatial ecology of female cottonmouth snakes. May 2005.
- Evan Menzel.** Habitat use and spatial patterns of a cottonmouth snake (*Agkistrodon piscivorus leucostoma*) population and thermoregulation of male cottonmouth snakes in southwest Missouri. Master's Thesis, Missouri State University, December 2008.
- Brandy Williamson.** An assessment of defensive behaviors in the cottonmouth snake. Quit program due to illness.
- Diana Mullich.** Variation in defensive behaviors of the western cottonmouth (*Agkistrodon piscivorus*) as a result of temperature, size, and reproductive condition. December 2007.
- Gene Benbow.** Thermal effects on strike-induced chemosensory searching in the cottonmouth. August 2008.
- Morgan Presley.** Response of the Ozark Zig Zag Salamander (*Plethodon angusticlavius*) to high and low level threats May 2008. Initiated research in my lab and switched to A. Mathis.
- Alexander Muensch.** Spatial ecology and habitat selection of juvenile cottonmouth snakes (*Agkistrodon piscivorus*). New student, fall 2007.
- Maria Fatemi.** Effects of lead contamination on behavioral performance measures in the watersnake *Nerodia sipedon*. Projected graduation - fall 2010.
- Amber Logan.** Arrived fall 2008 and quit the program before finishing.
- Dan Schepis.** Spatial ecology and habitat selection of the mudsnake (*Farancia abacura*) at Mingo National Wildlife Refuge. August, 2013.
- Andrew Hoffman.** Occupancy and detection rates of salamanders in association with altered water regimes at Mingo National Wildlife Refuge in southeastern Missouri. August 2012.
- Wendy Evans.** Effects of temperature on foraging, endurance, and sprint speed in *Agkistrodon piscivorus* and *Nerodia sipedon*. August 2012.
- Zachary Wrensch.** Effects of gestation temperature on neonate phenotypes and performance in the Northern Watersnake, *Nerodia sipedon*. May, 2014.
- Joey Churilla.** A comparison of spatial patterns and habitat selection in resident and introduced captive-raised juvenile cottonmouth snakes. August, 2015.
- Leslie Brinkman.** Natural history and conservation of *Bolitoglossa* in Panama. May 2016.
- Kristen Kohlhepp.** Responses of cottonmouth snakes to chemical and visual cues of predators. May 2016.
- Kari Spivey.** Sources of variation in venom expenditure in foraging cottonmouths. May 2016.
- Olivia Graves.** Population ecology and conservation of the grotto salamander (*Eurycea spelaeus*). Projected graduation May 2017.
- Dylan Maag.** Spatial ecology and microhabitat selection of pygmy rattlesnakes. December 2017.
- Rhyan Friesen.** The effect of visual cues on learning in the cottonmouth. Projected graduation December, 2016.
- Alex Meinders.** An evaluation of competing hypotheses for musk gland secretion function in cottonmouth snakes. Anticipated graduation in May 2025.

Chelsea Martin. Use of chemical information by cottonmouths. December 2019.

Ciera McCoy. Variation in arbovirus incidence in cottonmouths from different environmental circumstances. Projected graduation date, Graduated May 2025.

Kenzie (Joel) Medley. Describing behavioral syndromes in cottonmouths. Anticipated graduation, never.

Amanda Baranowski. A Tale of Two Internships: Lions and Tigers and Birds, oh my!

Lewis Recker. Comparing spatial patterns and habitat selection of resident and head-started cottonmouth snakes. Graduated May 2025.

Bryce Jarrett. Variable prey handling behaviors and the effects of body temperature on strike-induced chemosensory searching in cottonmouth snakes (*Agkistrodon piscivorus*). May 2026.

John Echele. Ontogeny of responses to prey-derived chemical cues and ambush site selection in northern cottonmouths (*Agkistrodon piscivorus*). Anticipated to graduate sometime in 2026.

Chris Watson. Evidence for cloacal scent gland secretions as an alarm cue in northern cottonmouth snakes (*Agkistrodon piscivorus*). Anticipated graduation May 2026.

Josh Lowy. Investigating the presence of individuality and behavioral syndromes in a southwest Missouri population of cottonmouths (*Agkistrodon piscivorus*). December 2025.

Alyssa Owens. Assessing social attenuation of the stress response in juvenile northern cottonmouths (*Agkistrodon piscivorus*). December 2025.

Jaden Just. Effects of sensory manipulation on northern cottonmouths foraging on endothermic and ectothermic prey. Anticipated graduation, December 2026.

Megan Caddy. Physiological and behavioral performance effects of inhaled anesthetics on juvenile northern cottonmouths (*Agkistrodon piscivorus*). Anticipated graduation, December 2026.

Justice Hoyt. Assessing threat sensitivity of ringneck snakes (*Diadophis punctatus*) exposed to chemical cues from snake predators. Anticipated graduation, May 2027.

Nathan Wendland. A Comparison of Spatial Patterns, Habitat Selection, and Survivorship in Northern Cottonmouths: Residents vs. Head-Starts. Anticipated graduation, May 2027

Historical graduate student committee service:

Committee member for 54 students completing theses between 1995 and 2011.

Recent student committee service (2012 – 2025)

Committee member for 45 students.

Undergraduate research:

Kiger, Jeremy C. Special topics in biology. Ecology of the northern water snake, *Nerodia sipedon*, at the Springfield Conservation Nature Center. Spring-summer 1996.

Berger, Julie. Special topics in biology. Quantification of structural and climatic habitat variables at randomly chosen sites at the Springfield Conservation Nature Center. Summer 1998.

Ingle, Mary L. Special topics in biology. A survey of glade reptiles at the Mincy Wildlife Area. Summer 2000.

Kelly McCloud. Chemical recognition of a snake predator by the northern water snake, *Nerodia sipedon*. Special Honors Project, spring 2003.

Larry Stuart. Thermal preferences in the black rat snake, *Elaphe obsoleta*. Special topics in biology. Summer 2003.

Lindsay Hughs. Preliminary microscopic identification of small mammal hairs from southwest Missouri. Special topics in biology. Spring 2004.

Jessica Gatewood. Identification of small mammal hairs in fecal material of the cottonmouth (*Agkistrodon piscivorus*). Special topics in biology. Fall 2005.

Maria Fatemi. Metabolic responses to chemical stimuli in the water snake *Nerodia sipedon*. Special Topics in Biology. Fall 2006.

Aaron Poulignot. Trailing behavior of neonatal cottonmouth snakes in response to chemical stimuli from conspecific and heterospecific snakes. Spring 2007.

Kristin Legg. Thermal dependencies on locomotion in juvenile cottonmouths (*Agkistrodon piscivorus*), Spring 2008.

Kacie Meyer. Feeding ecology of a stream-associated population of cottonmouth in southwest Missouri, Spring 2014. 2nd place – Undergraduate Research Day poster.

Sabrina Messick. Toxicity of cottonmouth venom across prey types. BIO 499, Spring 2016

Alex Meinders. Responses of cottonmouths to sympatric snakes posing different levels of predatory threat. UHC 398, Spring 2016.

Keslie Naffa. Predator recognition of kingsnakes by cottonmouth snakes. Spring 2017.

Tristan Soto. Venom expenditure in cottonmouth snakes exposed to musk gland secretions. Spring 2020.

Andrew Berndt. Bibliography of cottonmouth biology. BIO 499. Spring 2023.

Olivia Hoffner and Sam Walker-Schaeffer. Time-of-day effects on feeding latency and swimming performance in juvenile northern cottonmouth snakes. Spring and fall 2025.

PUBLICATIONS

Refereed publications:

Greene, B.D. 1988. Geographic Distribution, *Ambystoma opacum*. Herpetological Review 19(3):60.

Whiting, M.J., B.D. Greene, J.R. Dixon, A.L. Mercer, and C.C. Eckerman. 1992. Observations on the foraging ecology of the western coachwhip snake, *Masticophis flagellum testaceus*. The Snake 24:157-160.

Greene, B.D., J.R. Dixon, J.M. Mueller, O.W. Thornton Jr., and M.J. Whiting. 1994. Feeding ecology of the Concho water snake, *Nerodia harteri paucimaculata*. J. Herpetol. 28(2):165-172.

Whiting, M.J., J.R. Dixon, and B.D. Greene. Measuring snake activity patterns: the influence of habitat heterogeneity on catchability. Amphibia-Reptilia 17:47-54.

Whiting, M.J., J.R. Dixon, and B.D. Greene. Movement ecology of the Concho water snake (*Nerodia harteri paucimaculata*) in a large lake system, with comments on two sympatric *Nerodia*. J. Herpetol.

Greene, B.D., R.F. Wilkinson, Jr., and R. Powell. *Micrurus limbatus* (Fraser): Tuxtlan coral snake. Cat. Am. Amphib. Rept.

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