

Brian David Greene

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EDUCATION

- Orange County Community College. Middletown, New York. Associate of Science, Biology. 1983.
- 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*.

PROFESSIONAL AFFILIATIONS

American Society of Ichthyologists and Herpetologists
Herpetologists' League
International Herpetological Symposium
Society for the Study of Amphibians and Reptiles
Southwestern Association of Naturalists

TEACHING EXPERIENCE

Biology Lecture/Lab Courses—SMSU/MSU:

General Biology II (BIO 122). The second in a two semester series of four credit introductory courses required for biology majors. This course covers biodiversity, phylogeny, structure and function of major taxa, and ecology.

Principles of Biological Science (BIO 102). A comprehensive general biology course for non-majors.

General Ecology (BIO 369). A standard 300-level undergraduate ecology course (lecture and lab) for biology majors.

Principles of Ecology (BIO 269). A sophomore-level non-majors ecology course designed for students seeking an environmental studies minor. Content included a comprehensive introduction to ecology with an applied environmental emphasis presented in a lecture-discussion format.

Biometry (BIO 550). A 500-level introductory course on the concepts, methods, and application of statistics in the biological sciences. Enrollment restricted to upper division undergraduates and graduate students.

Biometry Laboratory (BIO 551). A computer-based course stressing the analysis of biological data using statistical software.

Herpetology (BIO 576). A senior/graduate level course emphasizing the evolutionary history of amphibians and reptiles focusing on the adaptations that explain how they function in biological systems. The laboratory component emphasized identification of local taxa.

Comparative Vertebrate Anatomy Laboratory (BIO 380). Lab component of a 300-level course on the evolutionary history of the vertebrates. Muscular, nervous, digestive, and urogenital systems were compared among mammals, fishes, agnathans, and amphibians. All vertebrate classes were represented in the study of the skeleton.

Field Zoology (BIO 374). A course emphasizing the taxonomy and natural history of the vertebrates. The lab component includes field trips to sample local fauna.

Population Ecology (BIO 563). A graduate-level course on the theory and practice of ecological aspects of population biology. Co-taught with John Havel.

Conservation Biology (BIO 579). A graduate-level course on the theory and practice of conserving biodiversity. Co-taught with Alexander Wait.

Specialty Courses:

Introduction to University Life (IDS 110). Course for new freshmen designed to facilitate assimilation into the university environment.

Desert Ecology (BIO 527). A two-week field course investigating the ecological characteristics of the four desert regions in the southwestern United States. Students conducted projects comparing organisms among the four desert regions. summer 1997.

Graduate seminar (BIO 628). Topic-oriented courses emphasizing discussion and critical evaluation of primary literature. I have been involved with two separate topics: (1) Predator-Prey Ecology of Amphibians and Reptiles, and (2) Life history phenomena in vertebrates.

PROFESSIONAL EXPERIENCE

Fall 2000 - Assistant Professor, Department of Biology, Southwest Missouri State/Missouri State University.

Fall 1995 - summer 2000. Lecturer, Department of Biology, Southwest Missouri State University, Springfield, Missouri.

Fall 1993 - Spring 1995. Adjunct faculty, Drury College, Springfield, Missouri.

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

Edited Volumes: Biology of the Rattlesnakes, chapter on relationships between insolation and rattlesnake hibernacula

Text Books and Professional References:

- Audesirk, T. and G. Audesirk. 1996. Life on Earth. Prentice-Hall Inc., Simon and Schuster, Upper Saddle River, New Jersey. A general biology text intended for non-majors
- Miller and Levine. Non-major's general biology text. Review of evolution chapters for 1st ed. WH Freeman.
- Pough et al. 2nd ed. Herpetology. Prentice Hall.

Grant Proposals:

- National Fish and Wildlife Foundation - Bottomland Forest Cane Stand and Hardwood Restoration in the Lower Ozarks. Submitted by Missouri Dept. of Conservation

Miscellaneous Materials:

- Texas Parks and Wildlife Department endangered species education materials 1994.
- Book Chapter on marking techniques for reptiles. January 2001

Paper session moderation

- Reptile ecology. Annual meeting of the Southwestern Association of Naturalists. Southwest Missouri State University, Springfield, Missouri. 1993.
- General herpetology. Annual meeting of the Southwestern Association of Naturalists. Centenary College, Shreveport, Louisiana. 1995.
- Reptiles and invertebrates. Annual meeting of the Southwestern Association of Naturalists. San Antonio, Texas. 2004.

Miscellaneous

- 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. August 2000-present.

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

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, SMSU Graduate Interdisciplinary Forum, 2005

INVITED PRESENTATIONS

- The use of bar-coding in snakes. Texas A&M University, Department of Engineering Technology. March 1989.
- Ecology and conservation of the Concho water snake. Department of Biology, The University of Texas at Tyler. April 1992.
- Ecology of the Concho water snake: conservation implications for an endangered species. Seminar, Department of Biology, Southwest Missouri State University. October, 1993.
- Ecology of the Concho water snake: implications for conservation and management. Seminar, Illinois Natural History Survey, The 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.

ORAL PRESENTATIONS

Professional Meetings

Greene, B.D. Food habits of the copperhead, *Agkistrodon contortrix*, in Southwest Missouri. Colloquium on Biology in the Mid-South, Memphis State University. Memphis, Tennessee. March 1988.

Greene, B.D. Studies on conversion efficiency of the copperhead, *Agkistrodon contortrix*. Annual meeting of the Southwestern Association of Naturalists. Angelo State University, San Angelo, Texas. April 1988.

Greene, B.D., and J.R. Dixon. Food habits of the Concho water snake (*Nerodia harteri paucimaculata*). Annual meeting of the Southwestern Association of Naturalists. Arkansas State University, Jonesboro, Arkansas. April 1989.

Greene, B.D., and J.R. Dixon. Reproduction and maturity in the Concho water snake, *Nerodia harteri paucimaculata*. Annual joint meeting of the Herpetologists' League and the Society for the Study of Amphibians and Reptiles. Tulane University, New Orleans, Louisiana. August 1990.

Greene, B.D., and J.R. Dixon. Habitat use and adult home range size of adult Concho water snakes, *Nerodia harteri paucimaculata*. Annual meeting of the Southwestern Association of Naturalists. The University of Texas at El Paso, El Paso, Texas. April 1991.

Greene, B.D., and J.R. Dixon. Feeding Ecology of the Concho water snake, *Nerodia harteri paucimaculata*. Annual joint meeting of the Herpetologists' League and the Society for the Study of Amphibians and Reptiles. Penn State University, State College, Pennsylvania. August 1991.

Greene, B.D., and J.R. Dixon. Growth and reproduction of the Concho water snake. Annual meeting of the Texas Herpetological Society. Trinity University, San Antonio, Texas. November 1991.

Greene, B.D., and J.R. Dixon. Conservation of the Concho water snake. Annual meeting of the Texas Academy of Science. Midwestern University, Wichita Falls, Texas. March 1992.

Greene, B.D., and J.R. Dixon. Growth and sexual dimorphism in the Concho water snake, *Nerodia harteri paucimaculata*. Annual meeting of the Southwestern Association of Naturalists. Texas Tech University field station, Junction, Texas. April 1992.

Greene, B.D. Growth and sexual dimorphism in the Concho water snake, *Nerodia harteri paucimaculata*. Joint meeting of the American Society of Ichthyologists and Herpetologists and the Herpetologists' League. The University of Illinois, Champaign-Urbana, Illinois. June 1992.

Greene, B.D. Conservation and management of the Concho water snake (*Nerodia harteri paucimaculata*). Conservation symposium at annual meeting of the Society for the Study of Amphibians and Reptiles. The University of Texas at El Paso, El Paso, Texas. August 1992.

Greene, B.D. and J.R. Dixon. Seasonal activity patterns of an aquatic snake community in central Texas. Annual meeting of the Southwestern Association of Naturalists. Southwest Missouri State University, Springfield, Missouri. April 1993.

Greene, B.D. Habitat use and spatial ecology of the Concho water snake, *Nerodia harteri paucimaculata*. Joint meeting of the American Society of Ichthyologists and the Herpetologists' League. The University of Texas, Austin, Texas. May 1993.

Greene, B.D. Feeding ecology of an aquatic snake guild in central Texas. Annual meeting of the Southwestern Association of Naturalists. Centenary College, Shreveport, Louisiana. April 1995.

Fobes, T.M., R.F. Wilkinson, and B.D. Greene. Habitat utilization of the Ozark hellbender in Missouri. Annual meeting of the Southwestern Association of Naturalists. Centenary College, Shreveport, Louisiana. April 1995.

Greene, B.D. Growth patterns in the Concho water snake, *Nerodia harteri paucimaculata*. Annual meeting of the Society for the Study of Amphibians and Reptiles. Boone, North Carolina. August 1995.

Greene, J.S. and B.D. Greene. The use of reptiles and amphibians in the classroom. Annual meeting of the National Association of Biology Teachers. Phoenix, Arizona. October 1995.

Greene, B.D. and S. Mathis. Responses of the blunt-headed tree snake, *Imantodes cenchoa*, to chemical cues from potential prey. Annual meeting of the Southwestern Association of Naturalists. University of Arkansas. April 1997.

Greene, B.D., M.J. Whiting, and J.M. Mueller. Demography and life history of *Nerodia harteri paucimaculata*. 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 Washington. June 1997.

Boeckman, D, M Clark, R. Powell, B. Greene, and J. Lynch. *Eleutherodactylus loki* (Leptodactylidae): Natural history and polymorphism, with notes on the leaf litter frog community of the Los Tuxtlas region, Veracruz, Mexico. Annual meeting of the Missouri Herpetological Association. Jefferson City, Missouri. September 1997.

Roth, T.C. and B.D. Greene. Spatial ecology of the northern water snake (*Nerodia sipedon*) in a southwest Missouri lake. Joint meeting of the American Society of Ichthyologists and Herpetologists, the Herpetologists' League, and the Society for the Study of Amphibians and Reptiles. Penn State University. June 1999.

Greene, B.D. and T. C. Roth III. Habitat use of *Nerodia sipedon* in a southwest Missouri lake. Annual meeting of the Missouri Herpetological Association. Lay Field Station, Louisiana, Missouri. September 1999.

Greene, B.D. Spatial ecology and habitat use of *Nerodia sipedon* in a southwest Missouri lake. Fall meeting of the Texas Herpetological Society; symposium in honor of James R. Dixon, Texas A&M university, October 1999.

Greene, B.D. Ecology of the western cottonmouth in southwest Missouri. Annual meeting of

the Missouri Herpetological Association. Reis Field Station, September 2001.

Greene, B.D. Ecology of the western cottonmouth in southwest Missouri. Annual meeting of the Southwestern Association of Naturalists. Norman, OK, 18 April 2003.

McCloud, K.D. and B.D. Greene. Avoidance of Predator chemical cues by northern water snakes. Annual Meeting of the Southwestern Association of Naturalists. Norman, OK, 18 April 2003.

Lehnhoff, L. and B.D. Greene. Spatial ecology and habitat use of Blanding's turtle at Squaw Creek National Wildlife Refuge. Annual Meeting of the Southwestern Association of Naturalists. Norman, OK, 18 April 2003

Ray W. and B.D. Greene. Effect of prey type on foraging behavior of the cottonmouth, *Agkistrodon piscivorus*. Annual meeting of the Southwestern Association of Naturalists. Norman, OK, 18 April 2003.

Lehnhoff, L., B.D. Greene, and F.L. Durbian. Spatial ecology of Blanding's Turtle at Squaw Creek National Wildlife Refuge. Annual meeting of the Missouri Herpetological Association, Reis Biological Station, September 2003.

Brennan, A. and B.D. Greene. Metabolism in the rat snake, *Elaphe obsoleta*. Annual meeting of the Missouri Herpetological Association, Reis Biological Station, September 2003.

Lehnhoff, L., B.D. Greene, and F.L. Durbian. Spatial ecology and habitat use of Blanding's Turtle at Squaw Creek National Wildlife Refuge. Midwest Regional Fish and Wildlife Conference, Kansas City, MO, December 2003.

Greene, B.D. Ecology of the western cottonmouth in southwest Missouri. 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. 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 the American Society of Ichthyologists and Herpetologists, Herpetologists' League, and Society for the Study of Amphibians and Reptiles. University of Oklahoma, May 2004.

Ray, W. and B.D. Greene. Predatory strike behaviors of the western cottonmouth, *Agkistrodon piscivorus*. Joint meeting of the American Society of Ichthyologists and Herpetologists, Herpetologists' League, and Society for the Study of Amphibians and Reptiles. 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, Sam Houston State University, April 2005.

Crane, A. and B.D. Greene. The effect of reproductive condition on the ecology of the cottonmouth (*Agkistrodon piscivorus*). Joint meeting of the American Society of Ichthyologists and Herpetologists, Herpetologists' League, and Society for the Study of Amphibians and Reptiles. 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, September 2005.

Gatewood, J. and B.D. Greene. Diet composition of a stream-associated cottonmouth (*Agkistrodon piscivorus*) population in southwest Missouri. Joint meeting of the American Society of Ichthyologists and Herpetologists, Herpetologists' League, and Society for the Study of Amphibians and Reptiles. 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 the American Society of Ichthyologists and Herpetologists, Herpetologists' League, and Society for the Study of Amphibians and Reptiles. July 2006.

Poster Presentations

Greene, B.D. and T.C. Roth. Habitat choice of the northern water snake (*Nerodia sipedon*) in a southwest Missouri lake. Joint meeting of the American Society of Ichthyologists and Herpetologists, the Herpetologists' League, and the Society for the Study of Amphibians and Reptiles. June 1999.

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.

Informal Presentations

Summary of water snake ecology study. Presented to staff and volunteer naturalists at the Springfield Conservation Nature Center. September 1996.

Herpetological studies at Southwest Missouri State University. Monthly meeting of the Southwest Missouri Herpetological Society. April 1999.

Life Without Legs: The ecology of snakes. Monthly meeting of the Tri Beta student biological society. Southwest Missouri State University, April 2001.

Aquatic snake ecology. Monthly meeting of the Southwest Missouri Herpetological Society, July 2001.

Cottonmouth Ecology. Monthly meeting of the Southwest Missouri Herpetological Society, 16 March 2003.

Aquatic snakes of Missouri. Southwest Missouri Herpetological Society, June 2004

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. Thermal and spatial ecology of male cottonmouth snakes. Projected graduation: May 2007.

Brandy Williamson. An assessment of defensive behaviors in the cottonmouth snake. Quit program due to illness.

Diana Mullich. Sources of variation in defensive behavior in the cottonmouth. Projected graduation: August 2007.

Gene Benbow. Thermal effects on strike-induced chemosensory searching in the cottonmouth. Projected graduation, May 2008.

Morgan Presley. Spatial ecology and habitat selection of the Great Plains Rat Snake, *Elaphe emoryi*. Projected graduation, May 2008.

Alexander Muensch. Spatial ecology and habitat selection of juvenile cottonmouth snakes (*Agkistrodon piscivorus*). New student, fall 2007.

Graduate student committee service:

Fobes, Timothy M. Thesis title: Habitat analysis of the Ozark Hellbender, *Cryptobranchus alleganiensis bishopi*, in Missouri. May 1995.

Davis, Stacy D. Thesis title: Reproduction and diet of *Kinosternon odoratum* Inhabiting a Cold Water Reservoir in Southwest Missouri. May 1996.

Gray, Ginger, I. Thesis title: Conservation knowledge and attitudes of Missouri sixth grade students: the Missouri conservation survey 1995-1996. August 1996.

Mayers, Deborah M. Thesis title: An evaluation of knowledge gained by eighth grade students using project wet activities. August 1996.

Hadley, Bradley. Thesis title: Estimation of time of death of white-tailed deer: a comparison of three indicators. August 1997.

Wilson, Timothy B. Thesis title: Reproduction and movement patterns of the common snapping turtle, *Chelydra serpentina*, inhabiting a hypothermic reservoir in southwest Missouri. May 1999.

Maksimowicz, Daria. Thesis title: A role for parasites in the behavior of the Ozarks zigzag salamander, *Plethodon angusticlavius*. August 1998.

Ford, Dawn. Thesis title: Foraging ecology and demography of *Sternotherus odoratus* in a

southwestern Missouri population. August 1999.

Witham, Dana J. Thesis title: Latitudinal versus subspecific life history variation in *Chrysemys picta*. August 1999.

Solberg, Lisa. Thesis: Comparative toepad morphology in chorus frogs (Genus *Pseudacris*): semiarboreal, terrestrial, and fossorial species. December 1999.

Sullivan, Aaron M. Thesis: Diet and life history characteristics of sirens (*Siren intermedia*), in southeast Missouri. August 1999.

Wheeler, Benjamin A. Thesis: Status of the Ozark Hellbender (*Cryptobranchus alleganiensis bishopi*): A long-term assessment. August 1999.

Prosen, Ethan. Status of the eastern hellbender (*Cryptobranchus alleganiensis alleganiensis*) in Missouri: A comparison of past and present populations. August 1999.

Carlisle, Joshua. Topic: The use of visual and chemical cues to in identification of a piscine predator by *Eurycea multiplicata*. Dropped out.

Majors, Tommie. Research in progress. An evaluation of trapping arrays used to monitor small vertebrates at National Guard camps in Missouri.

Drysdale, Li Anne. Science Museum Education: the effects of assessments and facility educational goals on visitor perceived-learning. August 2001.

Dyke, Fara. Topic: An evaluation of educational programs used by commercial caves in Missouri.

Frese, Paul. Spatial activity, growth, and population characteristics of *Siren intermedia* in an intensively managed wetland. April 2000.

Watson, R. Todd. The influence of predation on foraging and mating behavior in Ozark zigzag salamanders (*Plethodon angusticlavius*). August 2001.

Hickman, Caleb. Effects of predation risk on the aggressive behavior of the graybelly salamander, *Eurycea multiplicata*. May 2003.

Stone, Matt. Comparative digestive performance of three-toed and ornate box turtles. December 2002.

Barrett, R. Kyle. Lizards as indicators of the effect of allochthonous input on species density and diversity on desert islands. August 2002.

Hoffman, Michelle. An evaluation of interpretive programs at Prairie State Park. December 2002.

Unger, Shem. Reproductive biology and conservation of the hellbender in Missouri. Summer 2003.

Kimmons, Jeffrey. Seed dispersal by two species of aquatic turtles. December 2003.

Kiger Jeremy. Turtle community structure in an urbanized pond system in southwest Missouri.

Rapp, Whitney. Student attitudes toward amphibians and amphibian declines in middle school.

Windell, Nathan. The effects of stressful stimuli on metabolism in the southern redback salamander, *Plethodon serratus*.

Fields, Kim. Effects of environmental education activities on learning in high school ecology classes.

Milam-Dunbar, Miranda. Thermoregulation and arousal patterns of hibernating eastern red bats (*Lasiurus borealis*)

Morman, Brad. Winter habitat use of red bats at the Drury Conservation Area, Taney County, Missouri

Erickson, Scotti. Validation of fecal steroid metabolites in West Indian Rock Iguanas. Dept. of Agriculture. Dennis Schmitt, advisor

Green, Mathew. Nest emergence and predator-mediated avoidance: two studies of behavior in the red-eared slider (*Trachemys scripta*). May 2006.

Combs, Ryan. Phylogeography of the western cottonmouth. In progress.

Dazet, Neil. A test of antipredator qualities of Rathke's Gland secretions of the musk turtle *Sternotherus odoratus*. In progress.

Anders, Ben. Map turtle development. In progress.

Flinn, Josh. Factors affecting the winter roosting behavior of Eastern Red Bats, *Lasiurus borealis*, in a managed forest landscape. In progress.

Carl, Jackie. Something related to environmental education.

Shull, Kyle. Behavior of plethodontid salamanders. In progress.

Gall, Brian. Responses of hellbender larvae to fish predators. In progress.

Woods, David. Uncertain topic.

Etheridge, Holly. A test of stinkpot turtle Rathke's Gland secretions as an alarm pheromone. In progress.

Garrison, Christopher. Salamander behavior. In progress.

Fobian, Todd. Reproductive biology of the rabbitsfoot mussel (*Quadrula cylindrical*) in the upper Arkansas River system and the Quachita River system. In progress.

Braun, Josh. The behavior of white-tailed deer at scrapes. In progress.

Day, Katie. Effects of temperature on winter energetics of the female Indiana Bat (*Myotis sodalis*). In progress.

Allen, Dylan. In progress.

Sam Jones. Interbasin transfer of invasive crayfish via bait bucket dumping. In progress.

Jake Waters. Evaluation of the index of biological integrity for the James River. In progress.

Undergraduate research:

Research Experiences for Undergraduates Program. Summer 1996. Coadvisor for 10 students conducting field research projects during a 10-week three credit course entitled "Natural History of a Tropical Fauna". Funded by an REU grant awarded to the Southwest Missouri State University biology department by the National Science Foundation.

Jeremy C. Kiger 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. **Kelli 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.

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.*
- Greene, B.D., J.R. Dixon, M.J. Whiting, and J.M. Mueller.** 1999. Reproductive ecology of the Concho water snake, *Nerodia harteri paucimaculata*. *Copeia* 1999(3) 701-709.
- Whiting, M.J., J.R. Dixon, and B.D. Greene.** Notes on the spatial ecology and habitat use of three sympatric *Nerodia* (Serpentes: Colubridae). *The Snake* 28(1-2):44-50.
- Birt, R.D., R. Powell, and B.D. Greene.** 2001. Natural history of the lizard *Anolis barkeri* in southern Mexico. *J. Herpetol.* 35:161-166.
- Greene, J.S. and B.D. Greene.** 2001. Using amphibians and reptiles to learn the process of science. *Science Activities* 37(4): 29-32.
- Roth, T.C. III and B.D. Greene.** Spatial ecology of the northern water snake (*Nerodia sipedon*) in a southwest Missouri lake. *Copeia* 2006:543-550.
- Whiting, M.J., J. R. Dixon, B. D. Greene, J.M. Mueller, O.W. Thornton, Jr., J.S. Hatfield, J.D. Nichols, and J.E. Hines.** Modelling Annual Survival and Population Stability for Multiple Populations of the Concho Water Snake in Natural and Artificial Habitats. *Copeia*, In Press
- Crane, A.L. and B.D. Greene.** The effect of reproductive condition on thermoregulation in female *Agkistrodon piscivorus* in southwest Missouri. *Herpetologica*. In revision.

Manuscripts in Review:

- Lehnhoff, L., B.D. Greene, and F. Durbian.** Habitat use and spatial ecology of Blanding's Turtle (*Emydoidea blandingii*) at Squaw Creek National Wildlife Refuge. *Chelonian Conservation and Biology*.
- Brennan, A.M., B.D. Greene, and T.A. Tomasi.** The effects of temperature and digestion on metabolism in the black rat snake, *Elaphe obsoleta obsoleta*. *Journal of Herpetology*.
- Roth, T.C. III and B.D. Greene.** Habitat utilization of the northern water snake (*Nerodia sipedon*): a multivariate approach. rejected in *Herpetologica* 2004, under revision for submission to *Journal of Herpetology*.

Manuscripts in preparation:

Shew, J.J., B.D. Greene, and F. Durbian. Habitat use and spatial ecology of the western fox snake (*Elaphe vulpina vulpina*) at Squaw Creek National Wildlife Refuge. Planned submission to Journal of Herpetology.

Greene, B.D., J.R. Dixon, and M.J. Whiting. Seasonal activity patterns of a riverine aquatic snake assemblage in central Texas. Planned submission to: American Midland Naturalist

Ray, W. and B.D. Greene. Prey handling behavior of the cottonmouth is not influenced by prey type. Planned submission to Ethology.

Greene, B.D. and S.A. Mathis. Prey odor discrimination by the snake *Imantodes cenchoa*. Planned submission to: Journal of Chemical Ecology

Greene, B.D., J.R. Dixon, and M.J. Whiting. Spatial ecology of the Concho water snake, *Nerodia harteri paucimaculata*, in riverine habitats. Planned submission to: Biological Conservation.

GRANTS AND CONTRACTS

Contracts:

Schnake-Greene, J and B D Greene. Reptiles and Amphibians: A thematic unit. Missouri Department of Conservation. June 1997, \$2,500.

Grants:

Greene, B D and R F Wilkinson. Spatial ecology and habitat selection of the northern water snake, *Nerodia sipedon*. Southwest Missouri State University, Faculty Research Grant. \$ 6,357.

Mathis, S and B D Greene. Natural History of a Tropical Herpetofauna. Research experiences for undergraduates, National Science Foundation. Submitted September 1997, rejected.

Wilkinson, R F, B D Greene, and S Mathis. Age, growth, and densities of Niangua River hellbenders. Missouri Department of Conservation. \$18,757.

Greene, B D, G A Saunders, and J S Greene. Increasing student interest and participation in biology for non-majors using small-group activities during lecture meetings. Funding for Results. Fall 2000. \$2, 398.

Greene, B D. A herpetofaunal survey of Prairie State Park, Barton Co., Missouri. Missouri Department of Natural Resources, Jefferson City, Missouri. Spring 2001. \$1,500.

Greene, B D. A herpetofaunal survey of Big Oak Tree State Park, New Madrid Co., Missouri. Missouri Department of Natural Resources, Jefferson City, Missouri. Spring 2001. \$2,000.

Greene, J.S. and B.D. Greene. Field Instructional Experiences for Lesson Development in Science. Missouri Eisenhower Program. Spring 2002. \$32, 261.

Greene, B.D. Effects of Reproductive Condition on Thermal and Spatial Ecology of Female Cottonmouth Snakes. SMSU Faculty Research Grant. \$5,780.00. April 2004.