

CURRICULUM VITAE

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David E. Scott

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Education:

- 1979-1983 MS (Environmental Sciences)
University of Virginia, Charlottesville, Virginia.
- 1973-1977 BS (Biology), Phi Beta Kappa, Magna cum laude
Wofford College, Spartanburg, South Carolina.

Employment:

- 1996-2007 Educator with the Savannah River Ecology Laboratory (SREL) Outreach Program. Responsibilities include program presentation, materials and website design, and grant writing to expand program.
- 1984-present Research assistant in the herpetology program at SREL. Research responsibilities include the design and implementation of research on the population ecology of amphibians with the primary focus on salamanders. Currently investigating the factors that influence the metapopulation dynamics of several *Ambystoma* species, including terrestrial dispersal and spatial isolation.
- 1982-1984 Research technician at the Institute of Ecology (University of Georgia, Athens, Georgia) and SREL. Assist with research and statistical analysis on the effects of tillage practices on nutrient cycling in agroecosystems (UGA), and examine the uptake of radioactive contaminants in turtle populations (SREL).
- 1979-1982 Teaching Assistant, University of Virginia. Graduate courses (Terrestrial Ecology and Soil Science) and undergraduate courses (Geology and Introduction to Environmental Sciences).
- 1977-1979 Director, Spartanburg Nature-Science Center, Spartanburg, South Carolina.

Recent Publications (2000-2008):

- Scott, D. E., B. S. Metts, and J. W. Gibbons. 2008. Enhancing amphibian biodiversity on golf courses with seasonal wetlands. Pages 285-292 in *Urban Herpetology*, Jung, R. E. and J. C. Mitchell (eds.) Herpetological Conservation Volume 3, Society for the Study of Amphibians and Reptiles. Salt Lake City, UT.
- Scott, D. E. 2008. Marbled salamander, *Ambystoma opacum*. Pages 139-141 in: Jensen, John, Carlos Camp, Whit Gibbons, and Matt Elliott (eds.), *Amphibians and Reptiles of Georgia*. University of Georgia Press, Athens, GA.
- Scott, D. E. 2008. Eastern Spadefoot Toad, *Scaphiopus holbrookii*. Pages 99-101 in: Jensen, John, Carlos Camp, Whit Gibbons, and Matt Elliott (eds.), *Amphibians and Reptiles of Georgia*. University of Georgia Press, Athens, GA.
- Scott, D. E., E. D. Casey, M. F. Donovan, and T. K. Lynch. 2007. Amphibian lipid levels at metamorphosis correlate to post-metamorphic terrestrial survival. *Oecologia* 153:521-532.
- Gibbons, J. W., C. T. Winne, D. E. Scott, J. D. Willson, X. Glaudas, K. M. Andrews, B. D. Todd, L. A. Fedewa, L. Wilkinson, R. N. Tsaliagos, S. J. Harper, J. L. Greene, T. D. Tuberville, B. S. Metts, M. E. Dorcas, J. P. Nestor, C. A. Young, T. Akre, R. N. Reed, K. A. Buhlmann, J. Norman, D. A. Croshaw, C. Hagen, and B. B. Rothermel. 2006. Remarkable Amphibian Biomass and Abundance in an Isolated Wetland: Implications for Wetland Conservation. *Conservation Biology* 20:1457-1465.
- Croshaw, D. A. and D. E. Scott. 2006. Marbled salamanders (*Ambystoma opacum*) choose nest sites at low elevations when cover availability is controlled. *Amphibia Reptilia* 27:359-364.
- Taylor, B. E., D. E. Scott, and J. W. Gibbons. 2006. Catastrophic reproductive failure, terrestrial survival, and persistence of the marbled salamander. *Conservation Biology* 20:792-801.
- Croshaw, D. A. and D. E. Scott. 2005. Experimental evidence that nest attendance benefits female marbled salamanders (*Ambystoma opacum*) by reducing egg mortality. *American Midland Naturalist* 154:398-411.
- Marcy, B. C., Jr., D. E. Fletcher, F. D. Martin, M. H. Paller, M. J. M. Reichert, and D. E. Scott. 2005. Fishes of the Middle Savannah River Basin. University of Georgia Press, Athens, GA. 500 pp.

- Scott, D. E. 2005. *Ambystoma opacum*, Marbled salamander. Pp. 627-632 in: Amphibian Declines: the Conservation Status of United States Species. M. J. Lannoo (ed.), University of California Press, Berkeley, CA.
- Daszak, P., D. E. Scott, A. M. Kilpatrick, C. Faggioni, J. W. Gibbons, and D. Porter. 2005. Amphibian population declines at the Savannah River Site are linked to hydroperiod, not chytridiomycosis. *Ecology* 86:3232-3237.
- Scott, D. E., B. S. Metts, and J. W. Gibbons. 2003. Seasonal wetlands and golf courses. *Golf Course Management* 2003 (November):85-89.
- Boone, M. D., D. E. Scott, and P. H. Niewiarowski. 2002. Effects of hatching time for larval ambystomatid salamanders. *Copeia* 2002: 511-517.
- Pechmann, J.H.K., R. A. Estes, D. E. Scott, and J. W. Gibbons. 2001. Amphibian colonization and use of ponds created for trial mitigation of wetland loss. *Wetlands* 21:93-111.
- Gibbons, J. W., D. E. Scott, T. J. Ryan, et al. 2000. The Global Decline of Reptiles, Déjà Vu Amphibians. *Bioscience* 50: 653-666.

Past publications:

- Abercrombie, C. L., D. Davidson, C. A. Hope, and D. E. Scott. 1980. Status of Morelet's crocodile, *Crocodylus moreleti*, in Belize. *Biological Conservation* 17:103-114.
- Abercrombie, C.L., C.A. Hope, J.M. Holmes, D.E. Scott and J.E. Lane. 1982. Investigations into the status of the Morelet's crocodile (*Crocodylus moreletii*) in Belize, 1980. *In: Crocodiles. Proceedings of the 5th Working Meeting of the IUCN/SSC Crocodile Specialist Group*, Gainesville, Florida. 11–30. IUCN, Gland, Switzerland.
- Groffman, P. M., G. J. House, P. F. Hendrix, D. E. Scott, and D. A. Crossley. 1986. Nitrogen cycling as affected by interactions of components in a Georgia Piedmont agroecosystem. *Ecology* 67:80-87.
- Scott, D. E. 1986. Notes on the eastern hognose snake, *Heterodon platyrhinos* Latreille (Squamata:Colubridae), on a Virginia barrier island. *Brimleyana* 9:51-55.
- Scott, D. E., F. W. Whicker, and J. W. Gibbons. 1986. Effect of season on the retention of 137-Cs and 90-Sr by the yellow-bellied slider turtle (*Pseudemys scripta*). *Canadian Journal of Zoology* 64:2850-2853.
- Semlitsch, R. D., D. E. Scott, and J. H. K. Pechmann. 1988. Time and size at metamorphosis related to adult fitness in *Ambystoma talpoideum*. *Ecology* 69:184-192.
- Stinner, B. R., G. J. House, J. H. K. Pechmann, D. E. Scott, and D. A. Crossley. 1988. Phosphorus and cation dynamics of components and processes in conventional and no-tillage soybean agroecosystems. *Agriculture, Ecosystems, and Environment* 20:81-100.
- Pechmann, J. H. K., D. E. Scott, R. D. Semlitsch, and J. W. Gibbons. 1989. Influence of wetland hydroperiod on diversity and abundance of metamorphosing juvenile amphibians. *Wetlands Ecology and Management* 1:1-9.
- Jackson, M. E., D. E. Scott, and R. A. Estes. 1989. Determinants of nest success in the marbled salamander (*Ambystoma opacum*). *Canadian Journal of Zoology* 67:2277-2281.
- Scott, D. E. 1990. Effects of larval density in *Ambystoma opacum*: an experiment in large-scale field enclosures. *Ecology* 71:296-306.
- Hinton, T. G. and D. E. Scott. 1990. Radioecological techniques for herpetology, with an emphasis on freshwater turtles. *In Life History and Ecology of the Slider Turtle*, J. Whitfield Gibbons (ed.). Smithsonian Institution Press. Washington, D.C. pp. 267-287.
- Pechmann, J.H.K., D. E. Scott, R. D. Semlitsch, J. P. Caldwell, L. J. Vitt, and J. W. Gibbons. 1991. Declining amphibian populations: the problem of separating human impacts from natural fluctuations. *Science* 253:892-895.
- Scott, D. E. and R. D. Dueser. 1992. Habitat use by two insular populations of *Mus* and *Peromyscus*: what is the role of competition? *Journal of Animal Ecology* 61:329-338.
- McDiarmid, R. W., D. E. Scott, and A. D. Tucker. 1992. The care and use of amphibians, reptiles, and fish in research: panel on field techniques. *In "Proceedings from the Scientists Center for Animal Welfare Symposium on Care and Use of Amphibians, Reptiles, and Fish"*, D. O. Schaffer, K.M. Kleinow, and L. Krulisch (eds.). pp. 53-61.
- Scott, D. E. 1993. Timing of reproduction of paedomorphic and metamorphic *Ambystoma talpoideum*. *American Midland Naturalist* 129:397-402.
- Semlitsch, R. D., D. E. Scott, J. H. K. Pechmann, and J. W. Gibbons. 1993. Phenotypic variation in the arrival time of breeding salamanders: individual repeatability and environmental influences. *Journal of Animal Ecology* 62:334-340.
- Dodd, C. K. and D. E. Scott. 1994. Drift fences encircling breeding sites. *In "Measuring and Monitoring Biological Diversity: Standard Methods for Amphibians."* W. R. Heyer, M. A. Donnelly, R. W. McDiarmid, L. C. Hayek, and M. S. Foster (eds.). Smithsonian Institution Press, Washington, D. C. pp 125-130
- Krenz, J. D. and D. E. Scott. 1994. Terrestrial courtship affects mating location in *Ambystoma opacum*. *Herpetologica*

50:46-50.

- Scott, D. E. 1994. The effect of larval density on adult demographic traits in *Ambystoma opacum*. *Ecology* 75:1383-1396.
- Fischer, R. U., D. E. Scott, J. D. Congdon, and S. A. Busa. 1994. Mass dynamics during embryonic development and parental investment in cottonmouth neonates. *Journal of Herpetology* 28:364-369.
- Scott, D. E. and M. R. Fore. 1995. The effect of food limitation on lipid levels, growth, and reproduction in the marbled salamander, *Ambystoma opacum*. *Herpetologica* 51:462-481.
- Whiteman, H. H. T. M. Mills, D. E. Scott, and J. W. Gibbons. 1995. Confirmation of a range extension for the pine woods snake (*Rhadinaea flavilata*). *Herpetological Review* 26:158.
- Scott, D. E., R. U. Fischer, J. D. Congdon, and S. A. Busa. 1995. Lipid dynamics in the eastern cottonmouth, *Agkistrodon piscivorus*. *Herpetologica* 51:472-487.
- Chazal, A. C., J. D. Krenz, and D. E. Scott. 1996. Relationships of larval density and heterozygosity to growth and survival of juvenile marbled salamanders (*Ambystoma opacum*). *Canadian Journal of Zoology* 74:1122-1129.
- Houck, L. D., M. T. Mendonca, T. K. Lynch, and D. E. Scott. 1996. Courtship behavior and plasma levels of androgens and corticosterone in male marbled salamanders, *Ambystoma opacum* (Ambystomatidae). *General and Comparative Endocrinology* 104:243-252.
- Semlitsch, R. D., D. E. Scott, J. H. K. Pechmann, and J. W. Gibbons. 1996. Structure and dynamics of an amphibian community: evidence from a 16-yr study of a natural pond. Pages 217-248 In "Long-term Studies of Vertebrate Communities." M. L. Cody and J. D. Smallwood (eds.). Academic Press, New York.
- Taylor, B. E. and D. E. Scott. 1997. Effects of larval density dependence on population dynamics of *Ambystoma opacum*. *Herpetologica* 53:132-145.
- Scott, D. E. 1997. Review of Dinosaurs, Diamonds, and Things From Outer Space by David Brez Carlisle. *Copeia* 1997:237-239.
- Scott, D. E. 1998. A Breeding Congress. *Natural History* 107(8):26-28.
- Ott, J. and D. E. Scott. 1999. Effects of toe-clipping and PIT tagging on growth and survival in metamorphic *Ambystoma opacum*. *J. Herp.* 33:344-348.
- Scott, D. E. 1999. Review of The Salamanders of the United States and Canada by James W. Petranka. *Copeia* 1999:845-847.

Research Funding and Management History:

Co-PI on:

- 1999-2001 Determining Significant Endpoints for Ecological Risk Analysis (\$900,000 DOE EMSP grant to T. G. Hinton, J. D. Congdon, C. Rowe, and D. Scott (Savannah River Ecology Laboratory) and J. Bedford and F. W. Whicker (Colorado State University))
- 2000-2002 Enhancing Amphibian Biodiversity on Golf Courses through Use of Seasonal Wetlands (\$30,000/yr for three years; USGA funding to D. Scott, B. Metts, and J. W. Gibbons).
- 2002-2005 A Primary Understanding of the Environment: Teaching Kids the Science of Ecology (\$65,000/yr for three years; The Christensen Fund and the American Honda Foundation educational funding to D. Scott, L. L. Janecek, J. W. Gibbons, and K. W. McLeod).
- 2006-2007 Watershed Restoration and Education in Aiken County, South Carolina (\$15,720 from National Fish and Wildlife Foundation Five Star Program — Scott, Casey, Harper)

Other Professional Interests:

Photography--Cover photos: *Science* (two issues), *Bioscience*, Boy Scout Handbook for Reptiles and Amphibians (all photos), Handbook of Turtles, Fundamentals of Ecotoxicology, Amphibian Behavior (back cover), Urban Herpetology (back cover), Environmental Techniques and Analysis, Poisonous Plants and Venomous Animals of Alabama, *Herpetologica*, and others.

Photos also in: *Discover* magazine, *Natural History*, *National Geographic Magazine*, *Beginnings of Life* (textbook), *Principles of Conservation Biology* (textbook), *Fundamentals of Ecotoxicology* (textbook), *Nature South*, *EnviroSouth*, *Discover South Carolina*, *Aiken County Magazine*, *Encyclopedia Britannica*, *New Georgia Guide*, *Vivarium*, *Augusta Magazine*, *Georgia Wildlife*, *Georgia Outdoor News*.