

Biography and vitae of

Brian D. Todd, PhD

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EDUCATION

- 2008 **PhD - Ecology.** The University of Georgia, Athens, GA.
Advisor: Dr. J. Whitfield Gibbons.
- 2002 **MS - Conservation Ecology and Sustainable Development.**
The University of Georgia, Athens, GA.
Advisor: Dr. William K. Fitt.
- 2000 **BS - Ecology.** The University of Georgia, Athens, GA. *cum laude*

PROFESSIONAL OBJECTIVES

To conduct research, teach, and direct undergraduate and graduate students in a wildlife sciences program. I also wish to remain involved in the public sector by collaborating with government programs and agencies to foster productive research and conservation projects that reach a wide audience.

FELLOWSHIPS, GRANTS, AND AWARDS

- 2008 **Stoddard-Leigh-Sutton Award in Wildlife Conservation.** Awarded by the Warnell School of Forestry and Natural Resources.
- 2008 **Best Student Paper in Ecology.** Awarded by the Odum School of Ecology.
- 2006-09 **USGS NBII Grant.** Project Title: Scientific Oversight of NBII's online Amphibian Community and Amphibian Malformation Reporting Center. Principal Investigators: B.D. Todd, J.W. Gibbons, J.L. Greene. \$67,000
- 2007-08 **Doctoral Dissertation Completion Fellowship.** Awarded by the University of Georgia. \$17,000
- 2007 **Best Student Paper in Applied Ecology.** Awarded by the Odum School of Ecology.
- 2006 **Best Student Paper in Applied Ecology.** Awarded by the Odum School of Ecology.
- 2006 **Outstanding Oral Presentation.** Awarded by the Odum School of Ecology.
- 2005 **Best Student Presentation.** Awarded by the Savannah River Ecology Lab.
- 2005 **Siebert Conservation Award Honorable Mention.** Awarded by the Society for the Study of Amphibians and Reptiles.
- 2005 **Student Travel Award.** Awarded by the Society for the Study of Amphibians and Reptiles.
- 2002 **Phi Kappa Phi National Honor Society**
- 2002 **Distinguished Teaching Assistant.** Awarded by the Odum School of Ecology.
- 1999 **Golden Key National Honor Society**
- 1999 **Delta Epsilon Iota Honor Society**

1996 **University of Georgia Honor's Program**
1996-2000 **Georgia Governor's Scholar**
1996-2000 **Georgia HOPE Scholar**

PUBLICATIONS (STUDENT ADVISEES/CO-ADVISEES ARE UNDERLINED>)

- Todd, B. D.**, T. M. Luhring, B. B. Rothermel, and J. W. Gibbons. in review. Interspecific effects of upland forest harvesting on amphibian migrations: implications for habitat and population connectivity. **Ecology**
- Tuberville, T. D., Terry M. Norton, **B. D. Todd**, and Jeffrey S. Spratt. in review. Long-term apparent survival of translocated gopher tortoises: a comparison of newly released animals and previously established residents. **Biological Conservation**
- Todd, B. D.**, and K. M. Andrews. 2008. Response of a reptile guild to forest harvesting. **Conservation Biology**, forthcoming.
- Todd, B. D.**, J. D. Willson, C. T. Winne, and J. W. Gibbons. 2008. Aspects of the ecology of the earth snakes (*Virginia valeriae* and *V. striatula*) in the Upper Coastal Plain. **Southeastern Naturalist** forthcoming.
- Todd, B. D.**, J. D. Willson, C. T. Winne, R. D. Semlitsch, and J. W. Gibbons. 2008. Ecology of the Southeastern Crowned Snake, *Tantilla coronata*. **Copeia**, forthcoming.
- Todd, B. D.**, B. B. Rothermel, R. N. Reed, T. M. Luhring, K. Schlatter, L. Trenkamp, and J. W. Gibbons. 2008. Habitat alteration increases invasive fire ant abundance to the detriment of amphibians and reptiles. **Biological Invasions** 10:539-546.
- Todd, B. D.**, C. T. Winne, J. D. Willson, and J. W. Gibbons. 2007. Getting the drift: examining the effects of timing, trap type, and taxon on herpetofaunal drift fence surveys. **American Midland Naturalist** 158(2):292-305.
- Todd, B. D.** 2007. Parasites lost? An overlooked hypothesis for the evolution of alternative reproductive strategies in amphibians. **The American Naturalist** 170(5):793-799.
- Todd, B. D.** and Andrew K. Davis. 2007. Sexual dichromatism in the marbled salamander, *Ambystoma opacum*. **Canadian Journal of Zoology** 85(9):1008-1013.
- Winne, C. T., Willson, J. D., **Todd, B. D.**, Andrews, K. M. and J. W. Gibbons. 2007. Enigmatic decline of a protected population of Eastern Kingsnakes, *Lampropeltis getula*, in South Carolina. **Copeia** 2007(3):507-519.
- B. Baughman and **B. D. Todd**. 2007. The role of substrate cues in habitat selection by juvenile *Bufo terrestris* and *Scaphiopus holbrookii*. **Journal of Herpetology** 41(1):154-157.
- Todd, B. D.** and B. B. Rothermel. 2006. Assessing quality of clearcut habitats for amphibians: effects on abundances versus vital rates in the southern toad (*Bufo terrestris*). **Biological Conservation** 133(2):178-185.
- Gibbons, J. W., Winne, C. T., Scott, D. E., Willson, J. D., Glaudas, X., Andrews, K. M., **Todd, B. D.** et al. 2006. Remarkable amphibian biomass and abundance in an isolated wetland: implications for wetland conservation. **Conservation Biology** 20(5):1457-1465.

- Todd, B. D.** and C. T. Winne. 2006. Ontogenetic and interspecific variation in timing of movement and responses to climatic factors during migrations by pond-breeding amphibians. **Canadian Journal of Zoology** 84(5):715-722.
- Todd, B. D.**, Thornhill, D. J. and W. K. Fitt. 2006. Patterns of inorganic phosphate uptake in *Cassiopaea xamachana*: a bioindicator species. **Marine Pollution Bulletin** 52(5):515-521.

BOOK CONTRIBUTIONS

- Todd, B. D.**, J. D. Willson, and J. W. Gibbons. in press. The global status of reptiles and causes of their declines. In: Sparling D, Linder G, Bishop CA, editors. Ecotoxicology of amphibians and reptiles, 2nd edition. SETAC Technical Publications Series. Pensacola, Florida: Society of Environmental Toxicology and Chemistry.
- Todd, B. D.** in press. Area-constrained searches. In Graeter, G. J., K. A. Buhlmann, L. R. Wilkinson, and J. W. Gibbons (Editors). Inventory and Monitoring: Recommended Techniques for Amphibians and Reptiles. Partners in Amphibian and Reptile Conservation Technical Publication Series. Aiken, SC.
- Todd, B. D.** in press. Dipnetting and sweep samples. In Graeter, G. J., K. A. Buhlmann, L. R. Wilkinson, and J. W. Gibbons (Editors). Inventory and Monitoring: Recommended Techniques for Amphibians and Reptiles. Partners in Amphibian and Reptile Conservation Technical Publication Series. Aiken, SC.
- Todd, B. D.** in press. Hand collecting. In Graeter, G. J., K. A. Buhlmann, L. R. Wilkinson, and J. W. Gibbons (Editors). Inventory and Monitoring: Recommended Techniques for Amphibians and Reptiles. Partners in Amphibian and Reptile Conservation Technical Publication Series. Aiken, SC.
- Andrews, K. M., **Todd, B. D.**, and L. A. Fedewa. in press. Threats to amphibians and reptiles of North America. In Graeter, G. J., K. A. Buhlmann, L. R. Wilkinson, and J. W. Gibbons (Editors). Inventory and Monitoring: Recommended Techniques for Amphibians and Reptiles. Partners in Amphibian and Reptile Conservation Technical Publication Series. Aiken, SC.
- Todd, B. D.**, and X. A. Glaudas. in press. Handling live amphibians and reptiles. In Graeter, G. J., K. A. Buhlmann, L. R. Wilkinson, and J. W. Gibbons (Editors). Inventory and Monitoring: Recommended Techniques for Amphibians and Reptiles. Partners in Amphibian and Reptile Conservation Technical Publication Series. Aiken, SC.
- Todd, B. D.**, and P. A. Mason. in press. Preparing scientific specimens. In Graeter, G. J., K. A. Buhlmann, L. R. Wilkinson, and J. W. Gibbons (Editors). Inventory and Monitoring: Recommended Techniques for Amphibians and Reptiles. Partners in Amphibian and Reptile Conservation Technical Publication Series. Aiken, SC.
- Todd, B. D.** in press. Time constrained searches. In Graeter, G. J., K. A. Buhlmann, L. R. Wilkinson, and J. W. Gibbons (Editors). Inventory and Monitoring: Recommended Techniques for Amphibians and Reptiles. Partners in Amphibian and Reptile Conservation Technical Publication Series. Aiken, SC.
- Todd, B. D.** 2008. Northern Cricket Frog, *Acris crepitans*. in J. Jensen, C. D. Camp, J. W. Gibbons, and M. Elliott, editors. *The Amphibians and Reptiles of Georgia*. University of Georgia Press. Athens, GA.

Todd, B. D. 2008. Loggerhead Musk Turtle, *Sternotherus minor*. in J. Jensen, C. D. Camp, J. W. Gibbons, and M. Elliott, editors. *The Amphibians and Reptiles of Georgia*. University of Georgia Press. Athens, GA.

Todd, B. D. 2008. Common Ribbon Snake, *Thamnophis sauritus*. in J. Jensen, C. D. Camp, J. W. Gibbons, and M. Elliott, editors. *The Amphibians and Reptiles of Georgia*. University of Georgia Press.

NATURAL HISTORY NOTES

Todd, B. D. *in press*. *Virginia valeriae* (Smooth Earth Snake). Defensive display. *Herpetological Review*

PROFESSIONAL EXPERIENCE

- 2005-present **Project Coordinator.** Partners in Amphibian and Reptile Conservation. Developed and implemented new products to bolster awareness and support for PARC's mission and goals of conserving reptile and amphibian biodiversity.
- 2004-present **Research Consultant and Science Advisor.** USGS NBII amphibian community. Contact: Jean Freeny (jfreeeny@usgs.gov)
- 2003-present **Project Coordinator and Graduate Research Assistant.** The University of Georgia, Savannah River Ecology Laboratory. Designed, implemented, and analyzed collaborative ecological studies. Managed southeastern division of collaborative Landuse Effects on Amphibian Populations study (LEAP) Contact: J. Whitfield Gibbons (gibbons@srel.edu) and Betsie Rothermel (rothermelb@apsu.edu).
- 2000-03 **Biology Teaching Assistant.** The University of Georgia.
- 2000-02 **Ecosystems of South Florida Teaching Assistant.** The University of Georgia.
- 1999-2003 **Research Assistant.** The University of Georgia, Odum School of Ecology. Contact: William K. Fitt (fitt@uga.edu)
- 1999 **Curatorial Intern.** University of Georgia, Museum of Natural History. Contact: M. Elizabeth McGhee (emcghee@uga.edu).

TEACHING EXPERIENCE

Graduate Laboratory Assistant

2000-03 **Principles of Biology.** The University of Georgia.

Graduate Teaching Assistant

2000-02 **Ecosystems of South Florida.** The University of Georgia.

STUDENTS SUPERVISED

Phil Nicodemo. 2006. Summer intern. Rutgers University. Project title: Effects of forest management on movement of recently metamorphosed ambystomatid salamanders.

Brooke Baughman. 2005. High School Senior Thesis. Governor's School of Science and Mathematics, South Carolina. Project title: Habitat choice of newly metamorphosed amphibians.

ONGOING COLLABORATIVE PROJECTS

- ◆ Landuse Effects on Amphibian Populations Study (LEAP).
Project website: <http://www.leap.missouri.edu/LEAPsite.htm>
Examining the effects of forest management on terrestrial ecology of pond-breeding amphibians. Scaling from effects on individuals (migratory movement, habitat choice, and survival) and population demography (reproductive success and recruitment) to landscape-level persistence (metapopulation ecology and dispersal). Collaborators: J. Whitfield Gibbons (UGA-SREL), Ray Semlitsch (U. Missouri-Columbia), James Gibbs (SUNY-ESF), Malcolm Hunter (U. Maine-Orono), and Betsie Rothermel (Austin Peay State Univ.)
- ◆ Estimating survivorship and population demography of free-ranging, native gopher tortoise populations (*Gopherus polyphemus*). Collaborators: Tracey Tuberville (SREL) and Craig Guyer (Auburn).
- ◆ Estimating population size, vital rates, and detectability of aquatic snakes using mark-recapture techniques. Collaborators: John D. Willson and Chris Winne (both at UGA-SREL).
- ◆ Estimating population size, vital rates, and detectability of rare salamanders using mark-recapture techniques. Collaborator: Thomas Luhring (UGA-SREL).

CONFERENCE PRESENTATIONS (FIRST-AUTHORED)

- 2007 Ecological Society of America. San Jose, CA. *Paper*: Effects of timber management on forest habitat and small-bodied snakes of the southeastern Coastal Plain.
- 2007 Joint Meeting of Ichthyologists and Herpetologists. St Louis, MO. *Paper*: Effects of timber management on forest habitat and small-bodied snakes of the southeastern Coastal Plain.
- 2007 Association of Southeastern Biologists. Columbia, SC. *Paper*: Sexual dichromatism in the marbled salamander, *Ambystoma opacum*.
- 2006 Joint Meeting of Ichthyologists and Herpetologists. New Orleans, LA. *Paper*: It's raining caudates and frogs: ontogenetic and interspecific variation in migratory responses to climatic factors among pond-breeding amphibians.
- 2006 3rd Annual SREL Graduate Student Symposium. Aiken, SC. *Paper*: It's 's raining caudates and frogs: ontogenetic and interspecific variation in migratory responses to climatic factors among pond-breeding amphibians.
- 2006 12th Annual Institute of Ecology Graduate Student Symposium. Athens, GA. *Paper*: Abundances versus vital rates: determining the quality of clearcut habitats for amphibians
- 2005 2nd Annual SREL Graduate Student Symposium. Aiken, SC. *Paper*: Forest clearing reduces growth and survival of recently metamorphosed southern toads (*Bufo terrestris*).
- 2005 Joint Meeting of Ichthyologists and Herpetologists. Tampa, FL. *Paper*: Forest clearing reduces growth and survival of recently metamorphosed southern toads (*Bufo terrestris*)
- 2005 2nd Annual Southeastern Ecology and Evolution Conference. Athens, GA. *Paper*: The effect of forest alteration on survival of recently metamorphosed southern toads (*Bufo terrestris*)
- 2005 11th Annual Institute of Ecology Graduate Student Symposium. Athens, GA. *Paper*: Does forest alteration affect survival of ambystomatid salamanders?

PROFESSIONAL SERVICE AND AFFILIATIONS

Referee: *Amphibia-Reptilia*, *Biological Conservation*, *Biology Letters*, *Herpetological Review*, *Journal of Hazardous Materials*, *Journal of Wildlife Management*, National Geographic Society, National Wildlife Federation, U.S. Department of Interior

Memberships: Ecological Society of America, Herpetologists' League, Partners for Amphibian and Reptile Conservation, Society for Conservation Biology, Society for the Study of Amphibians and Reptiles

TECHNICAL SKILLS

- ◆ Amphibian and Reptile inventory and monitoring
- ◆ Mark-recapture (capture-recapture) techniques and modeling
- ◆ Program MARK usage and interpretation
- ◆ Statistical Programming (SAS and Statistica)
- ◆ Database management
- ◆ Endnote and Reference Manager
- ◆ Web Design and use of Macromedia Dreamweaver, Fireworks, and Contribute
- ◆ Digital Photography and use of Adobe Photoshop
- ◆ Adobe Acrobat
- ◆ NASDS Open Water SCUBA certified
- ◆ IANTD Nitrox Diving certified
- ◆ Small watercraft operation

REFERENCES

Dr. J. Whitfield Gibbons

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Division of Biological Sciences
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Dr. Betsie B. Rothermel

Assistant Professor
Austin Peay State University
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