

Mentoring and Research Supervisory Experience

Current advisees

Lacy D. Chick, *Ph.D. committee, U Tennessee, Knoxville*

Lacy is interested in the factors that limit the distribution of ant species, and the possible effects of climatic warming on these species distributions. I have been mentoring Lacy for four years now and we often meet to discuss data-analysis techniques and to review the recent literature on climate change and thermal tolerance. I have truly enjoyed helping her develop her ideas into a well-thought-out dissertation.

Jessica Welch, *Ph.D. committee, U Tennessee, Knoxville*

Jessica Welch is a graduate student in EEB. Her interests are in conservation of bats and the management of invasive species on islands. I have been advising Jessica by exposing her to the recent literature on Pacific island biogeography and conservation issues, and helped her plan her field study in the Northern Marianas. Jessica has also served as a TA for me in General Ecology. In 2011, while she was still an undergraduate at UTK, Jessica also worked with me on a project examining the effects of the recent recession on conservation organizations.

Rachel Fovargue, *Ph.D. committee, U Tennessee, Knoxville*

Rachel is a 2013 NSF Graduate Research Fellowship recipient. She studies biodiversity prioritization and land acquisition behavior by conservation groups. Rachel is in the proposal stage of her dissertation.

Melquisedec Gamba Rios, *Ph.D. committee, U Tennessee, Knoxville*

Melqui is a graduate student interested in the ecology and behavior of tropical American tent-making bats.

Maria Daniela Rivarola, *Ph.D. committee, U Tennessee, Knoxville*

Daniela is interested in invasion and conservation. Her research focuses on small mammal communities in Patagonia.

Ivan Haworth, *undergraduate research, U Tennessee, Knoxville*

Ivan is studying the effects of human environmental impacts on vertebrate diversity. He is currently working to build a database of extinct, threatened, and endangered birds of the West Indies, with the goal of examining the characteristics of communities before and after human colonization of the islands. He is also learning R and data management tools.

Past advisees

A.G. Boyer

A. Michelle Lawing, *NIMBioS Postdoctoral Fellow, U Tennessee, Knoxville*

I am co-advised Michelle's postdoctoral work in species and community responses to environmental change through time. She is now faculty at Texas A&M University.

Colby Brooks, Ian Herrell, and Olivia Harber, *undergraduate research (Fall 2013), U Tennessee*

These students took EEB 400 for course credit. They assembled a global-scale database of island birds from literature and web sources and learned some R and ArcGIS. We also held a weekly journal club to discuss the current literature in island biogeography.

Morgan Douglas, *M.S. committee (graduated Spring 2013), U Tennessee, Knoxville*

Morgan graduated with a M.S. in EEB in 2013. Her thesis examined the biological traits related to extinction risk in darters (Fishes family Percidae) in the Southeastern US.

Ethan Fulwood, *undergraduate research (Fall 2011- Spring 2012), U Tennessee, Knoxville*

Ethan completed osteological analysis of a large collection of fossil bird bones that I excavated from a small cave in New Caledonia (South Pacific). His self-designed study examined the anatomical composition of the bone assemblage and compared it to other owl-pellet-derived assemblages, both ancient and modern. He presented this work in a poster at the annual meeting of the Southeast section of the Geological Society of America in April 2012. We are currently preparing his manuscript for submission to the journal *Paleobiology*.

Ricki Draper, *undergraduate research (Summer 2013), U Tennessee, Knoxville*

Ricki worked with me over the summer to build a database of all introduced birds of the West Indies. This data will be instrumental in determining how human activities have changed island bird communities. Ricki is interested in working for a conservation organization when she finishes her degree.

Kate DeVries, *undergraduate research (Spring 2013), U Tennessee, Knoxville*

Kate is a pre-vet student who worked in my lab for a semester classifying and sorting vertebrate skeletal remains from the Boa Cave site in New Caledonia. She learned a lot about comparative vertebrate anatomy!

Cynthia Valenzuela, *undergraduate research (Fall 2011), U Tennessee, Knoxville*

Cynthia is interested in the effects of invasive vertebrates on native species. She took my Community Ecology class and later contacted me about the possibility of conducting research in my lab. Cynthia chose to examine the effects of invasive species on extinction risk in island birds. Using data from the International Union for the Conservation of Nature (IUCN) web database on invasive species, she tested the influence of invasive species on past and current extinction risk for native island birds. We met for about 1 hour per week to discuss an article from the scientific literature and to develop her skills in data analysis and statistics.

A.G. Boyer

High-school outreach

I mentored two high-school students on individual research projects for entry in the Tennessee Junior Science and Humanities Symposium (Summer 2012).