

A. Rachel Ritchie
Curriculum Vitae
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Education

- 2017** M.S. Zoology
Oklahoma State University
Stillwater, Oklahoma 74074
Advisor: Karen McBee
Thesis Title: Acoustic and Netting Surveys of Western Ozark Highlands Bats with Habitat Suitability Models of Three Threatened and Endangered Species
- 2015** B.S. General Biology
Concentration: Organismal Biology
Abilene Christian University
Abilene, Texas 79699

Interests

Instruction, mentoring, Chiropteran ecology and natural history, mammalogy, animal behavior, wildlife ecology, and wildlife conservation.

Honors and Awards

- 2017** The Honor Society of Phi Kappa Phi Acceptance, Oklahoma State University
- 2017** **Student Mentee:** Burtrum, Taylor: Outstanding Project, 8th grade Environmental Sciences. Oklahoma Regional Science Fair, University of Central Oklahoma. Edmond, Oklahoma.
- 2015** Graduate Teaching Assistantship, Oklahoma State University
- 2015** Rollin H. Baker Award for Best Undergraduate Presentation, Texas Society of Mammalogists
- 2015** Outstanding Oral Presentation in STEM, Undergraduate Research Festival, Abilene Christian University
- 2014** Meals on Wheels Plus, Inc. Volunteer of the Month, Abilene, Texas
- 2014** Biology Researcher of the Year, Abilene Christian University
- 2012** ACU in Leipzig Study Abroad Acceptance, Abilene Christian University
- 2011** Phi Eta Sigma National Freshman Honor Society Acceptance, Abilene Christian University

- 2011** St. Paul UMC Bass Foundation Scholarship, Abilene Christian University
- 2010** Houston Livestock Show Scholarship, Abilene Christian University
- 2010** Rev. Dr. Karen Laymen Gift of Hope Scholarship, Abilene Christian University

Teaching Experience

- 2016-2017** Graduate Teaching Assistant, Mammalogy Laboratory (ZOOL 4174), Oklahoma State University.
Duties: Independent instruction of 1-2 laboratory sections per week, preparing and delivering weekly lectures, prepare and facilitate lab practicals and quizzes.
Content: Anatomy, physiology, life history, behavior, and taxonomy of North American Mammals as well as a strong emphasis on the handling and care of museum specimens.
- 2015- 2016** Graduate Teaching Assistant, Introductory Biology Laboratory (BIOL 1114), Oklahoma State University
Duties: Independent instruction of two laboratory sections per week, weekly TA meetings, manuscript grading, provide feedback to students.
Content: Experimental design, hypothesis formation, and manuscript writing. BIOL 1114 students who produce quality manuscripts are published in the Journal of Introductory Biology Investigations. My students have been published 11 times.
- 2015** Teaching Assistant, Marine Biology (BIOL 403), Abilene Christian University
Duties: Assist preparation and facilitation of weekly laboratory section. Attend field trip to Roatan, Honduras to assist with research projects and student field experience.
Content: Anatomy and taxonomy of marine organisms.
- 2014** Teaching Assistant, Cornerstone (CORE 110), Abilene Christian University
Duties: Assisted professor with lecture and grading as requested, mentor and befriend freshman students, provide support and advice about college success.
Content: Introduction to a Liberal Arts degree, college success skills, how to conduct literary research, how to write an annotated bibliography.
- 2012** Peer Mentor and Academic Coach, Learning Strategies (UNIV 011), Abilene Christian University
Duties: Academic coaching and support for freshman students admitted on probation.
Content: Time management, studying, note taking, and other skills required for college success.

Refereed Publications

- 2015** Lee, T., **Ritchie, A.R.**, Vaca-Puente, S., Brokaw, J.M., Camacho, A., Burneo, S.F. Small Mammals of Guandera Biological Reserve, Carchi Province, Ecuador and Comparative Andean Small Mammal Ecology. *Museum of Texas Tech University Occasional Papers*. **334**:1-17.

Oral Presentations

- 2017** **Ritchie**, Lovett, Koch, McBee. Preliminary Results of an Acoustic Bat Survey, Camp Gruber Training Center, Braggs, Oklahoma. American Society of Mammalogists. University of Idaho. Moscow, Idaho.
- 2017** **Ritchie**, Lovett, Koch, McBee. Preliminary Results of an Acoustic Bat Survey, Camp Gruber Training Center, Braggs, Oklahoma. Southwestern Association of Naturalists, Cameron University. Lawton, Oklahoma.
- 2016** **Ritchie**, Lovett, Koch, McBee. Preliminary Results of an Acoustic Bat Survey, Camp Gruber Training Center, Braggs, Oklahoma. Oklahoma State University Zoology Graduate Student Society Lunchtime Seminar. Stillwater, Oklahoma.
- 2015** Lee, **Ritchie**, Vaca. Small Mammals of Guandera Biological Reserve, Carchi Province, Ecuador And Comparative Andean Small Mammal Ecology. American Society of Mammalogists. Jacksonville, Florida.
- 2015** Lee, **Ritchie**, Vaca. Small Mammals of Guandera Biological Reserve, Carchi Province, Ecuador And Comparative Andean Small Mammal Ecology. Texas Society of Mammalogists. Junction, Texas.
- 2015** Lee, **Ritchie**, Vaca. Small Mammals of Guandera Biological Reserve, Carchi Province, Ecuador And Comparative Andean Small Mammal Ecology. Abilene Christian University Undergraduate Research Festival. Abilene, Texas.

Poster Presentations

- 2017** Gunnars, **Ritchie**, McBee. Model of *Trichechus manatus* Mortality by Age Class and Location. Oklahoma Louis Stokes Alliance for Minority Participation Annual Research Symposium. Stillwater, Oklahoma.
- 2017** Gunnars, **Ritchie**, McBee. Model of *Trichechus manatus* Mortality by Age Class and Location. Oklahoma State University Karen L. Smith Undergraduate Research Symposium.
- 2017** Gunnars, **Ritchie**, McBee. Model of *Trichechus manatus* Mortality by Age Class and Location. Southwestern Association of Naturalists, Cameron University. Lawton, Oklahoma.

- 2017** Burtrum, **Ritchie**, McBee. Post-summer Acoustic Survey of Bats in Central Oklahoma. Oklahoma Regional Science Fair, University of Central Oklahoma. Edmond, Oklahoma.
- 2014** **Ritchie**, Moore, Brokaw: Application of cpDNA Sequences to the Biogeographical Study of *Mentzelia thompsonii* (Loasaceae). Southwestern Association of Naturalists, Oklahoma State University. Stillwater, Oklahoma.

Other Employment

- 2017** Student Manager for Mammals and Birds, Collection of Vertebrates, Department of Integrative Biology, Oklahoma State University.
Duties: Day-to-day upkeep of mammal and bird collections. Specimen preparation, loan preparation, data requests, tours, and other curatorial duties as required.
- 2008-2015** Instructor: Turning Pointe Academy of Performing Arts. Abilene, Texas.
Duties: Independent instruction of dance and creative movement classes for students aged 2-16.
- 2013** Veterinary Assistant: Mobile Veterinary Clinic. Abilene, Texas.
Duties: Assisted Dr. Jim Wilson, DVM in surgeries, routine appointments, general clinic upkeep, and customer care.
- 2012-2013** Receptionist: Center for International Education, Abilene Christian University. Abilene, Texas.
Duties: Assisted both Study Abroad and international students, provided support to staff where required.

Relevant Coursework

- 2017** Population Ecology (BIOL 5523), Oklahoma State University
- 2017** Natural Resources Admin. & Policy (NREM 4043), Oklahoma State University
- 2016** Ecological Niche Modeling (BIOL 5643), Oklahoma State University
- 2016** Ornithology (ZOOL 4464), Oklahoma State University
- 2015** Advanced Herpetology (ZOOL 5020), Oklahoma State University
- 2014** General Mammalogy (BIOL 380), Abilene Christian University
- 2014** Plant Systematics (BIOL 481), Abilene Christian University
- 2013** Marine Biology (BIOL 403), Abilene Christian University
- 2013** Field Biology Skills (BIOL 370), Abilene Christian University
- 2013** Ecology (BIOL 362), Abilene Christian University

Professional Outreach and Volunteer Work

- 2017** Presentation Judge. Undergraduate Research Symposium. Oklahoma State University. Stillwater, Oklahoma.

- 2017** 9th Grade Presentation Judge. Junior Sciences and Humanities Symposium, Oklahoma State University. Stillwater, Oklahoma.
- 2016-2017** Mentor to local middle school student for regional science fair project: Post-summer acoustic survey of bats in central Oklahoma.
- 2015** Frankenstein Friday at Oklahoma Wondertorium: Halloween-themed outreach event teaching young children about science and nature.
- 2014** President: Service Action Leadership Team, a student community service club, Abilene Christian University
- 2014** Coordinated “Trick or Feed.” 200 volunteers raised 10,000lbs of food for the elderly and disabled clients of Meals on Wheels Plus, Abilene, Texas.
- 2012-2015** Meals on Wheels Plus Delivery Driver. Abilene, Texas.
- 2013** Treasurer: Service Action Leadership Team, Abilene Christian University.
- 2012** Inspirata Children’s Math and Science Center. Leipzig, Germany. Translated and wrote English descriptions for exhibits and games.
- 2011-2012** Hendrick Equine Rehabilitation Opportunities (HERO). Abilene, Texas. Equine therapy for children with mental and physical disabilities.

Professional Affiliations

- 2017-present The Honor Society of Phi Kappa Phi
- 2015-present Oklahoma State University Zoology Graduate Student Society
- 2015-present American Society of Mammalogists
- 2014-present Southwestern Association of Naturalists
- 2015-2016 Texas Society of Mammalogists
- 2014-2015 Biology Research Club, Abilene Christian University
- 2011-2015 Phi Eta Sigma Freshman Honor Society