

RYAN J. HANSCOM (M.S.)

5500 Campanile Drive, Department of Biology, San Diego State University, San Diego, CA 92182
rhanscom6545@sdsu.edu ▪ 774-214-8547

EDUCATION

Doctor of Philosophy in Biology (Ph.D. Candidate)

Joint Doctoral Program in Evolutionary Biology

San Diego State University, San Diego, CA and University of California, Riverside, CA

Major Advisor: Dr. Rulon Clark (San Diego State University)

Dissertation: Impacts of environmental variability and increasing global temperatures on the behavioral and population ecology of Ord's kangaroo rats (*Dipodomys ordii*) and prairie rattlesnakes (*Crotalus viridis*): a key species interaction in shortgrass prairie ecosystems

Overall GPA: 3.9; Expected Graduation Date: Spring 2024

Master of Science in Biology

Tennessee Technological University, Cookeville, TN

Major Advisor: Dr. Carla Hurt

Thesis: Snapping shrimp species diversification: the role of genome size, geography, and ecology in two genera (*Alpheus* and *Synalpheus*)

Overall GPA: 4.0; Graduation Date: May 2020

Bachelor of Science in Biology with Honors Cum Laude

Framingham State University, Framingham, MA

Major Advisor: Dr. Stephen Dinkelacker

Overall GPA: 3.49; Major GPA: 3.73; GPA in final two years: 3.80; Graduation Date: May 2017

Awards: Dean's List: 6 semesters; President's List: 4 semesters; William H.D. Meier Award

PEER-REVIEWED PUBLICATIONS (*DENOTES MENTEE; ^σDENOTES CORRESPONDENCE)

Casaubon, A., K. M. Hultgren, C. Murray, **R. J. Hanscom**, and C. Hurt. 2023. Application of integrative taxonomy combining phylogenetic and geometric morphometric techniques in a snapping shrimp (*Alpheus* Fabricius, 1798) species complex (Decapoda: Caridea: Alpheidae). *In press in* Journal of Crustacean Biology.

Hill, J. L., M. Grisnik, **R. J. Hanscom**, J. Sukumaran, T. E. Higham, and R. W. Clark. 2023. The past, present, and future of predator-prey interactions in a warming world: using species distribution modeling to forecast ectotherm-endothrm niche overlap. *Accepted in* Ecology and Evolution.

Hanscom, R. J.^σ, J. L. Hill, C. Patterson*, T. Marbach, J. Sukumaran, T. Higham, and R. W. Clark. 2023. Cryptic behavior and activity cycles of a small mammal keystone species revealed through accelerometry: a case study on Merriam's kangaroo rats (*Dipodomys merriami*). *Movement Ecology* 11(1):20.

Hanscom, R. J.^σ, T. E. Higham, D. Ryan, and R. W. Clark. 2023. Ambush hunting in snakes: behavior, function, and diversity. In D. Penning (Ed.), *Snakes: Morphology, Function, and Ecology*. 2023. Hauppauge, New York: Nova Science Publishers.

Hanscom, R. J.^σ, D. L. DeSantis, J. L. Hill, T. Marbach, J. Sukumaran, A. Tipton, M. Thompson, T. E. Higham, and R. W. Clark. 2023. How to study a predator that only eats a few meals a year: high frequency accelerometry to quantify feeding behaviours of rattlesnakes (*Crotalus* spp.). *Animal Biotelemetry* 11(1):20.

Grisnik, M., and **R. J. Hanscom**. 2020. New county records for reptiles and amphibians from middle Tennessee's Cumberland Plateau. *Herpetological Review* 51:282–284.

Hanscom, R. J.^σ, S. Dinkelacker, A. McCall, and A. Parlin. 2020. Demographic traits of freshwater turtles in a maritime forest habitat. *Herpetologica* 76:12–21.

PEER-REVIEWED PUBLICATIONS (IN REVIEW)

Strebler, M.* , M. Grisnik, M. White, and **R. J. Hanscom**^σ. 2023. Herpetofauna of Catoosa Wildlife Management Area and species-area relationships of reptiles and amphibians across Tennessee. *Herpetological Conservation Biology (in review)*.

Remington, M., R. W. Clark, **R. J. Hanscom**, T. E. Higham, and J. Sukumaran. 2023. Uumarrty: agent based simulation model of predator prey interactions in a game theoretical framework. *Frontiers in Ecology and Evolution (in review)*.

Smith, N., **R. J. Hanscom**, J. Q. Richmond, R. N. Fisher, and R. W. Clark. 2023. Variation in dietary ecology of two invasive American Bullfrog (*Lithobates catesbeianus*) populations in southern California. *Herpetologica (in review)*.

Applegate, P.* , S. Dinkelacker, A. J. McCall, T. Gmerek, and **R. J. Hanscom**^σ. 2023. Microhabitat use of chicken turtles (*Deirochelys reticularia*) in a barrier island ecosystem with interdune ponds. *Chelonian Conservation and Biology (in review)*.

Romer A., M. Grisnik, W. Sutton, C. M. Murray, J. W. Dallas, R. H. Hardman, T. Blanchard, **R. J. Hanscom**, R. W. Clark, C. Godwin, R. Alexander, K. C. Moe, J. Eaker, R. Colvin, D. Thames, C. Ogle, J. Campbell, C. Frost, R. L. Brubaker, S. D. Snyder, D. W. Ludwig, J. L. Phillips, and D. M. Walker. 2023. Snake Fungal Disease (Ophidiomycosis) induces microbiome dysbiosis across biological scales. *Nature Communications (in review)*.

PEER-REVIEWED NATURAL HISTORY NOTES

Hanscom, R. J.^σ, and R. W. Clark. 2023. *Crotalus viridis* (Prairie Rattlesnake). Scavenging Behavior. *Natural History Notes. Herpetological Review* 54(2): 311.

Hanscom, R. J.^σ, and C. Cranwell. 2023. *Ambystoma tigrinum* (Tiger Salamander). Geographic distribution. *Herpetological Review* 54(1):69.

Hanscom, R. J.^o, and C. Cranwell. 2023. *Pseudacris triseriata* (Weid; Upland Chorus Frog). Geographic distribution. *Herpetological Review* 54(1):69.

Hanscom, R. J.^o, and C. Cranwell. 2023. *Trachemys scripta elegans* (Pond Slider). Geographic distribution. *Herpetological Review* 54(1):72.

Hanscom, R. J.^o, and M. Grisnik. 2023. *Aneides aeneus* (Green Salamander). Geographic distribution. *Herpetological Review* 54(1):66.

Hanscom, R. J.^o, M. White, C. Cranwell, and M. Grisnik. 2023. *Regina Septemvittata* (Queen Snake). Geographic distribution. *Herpetological Review* 54:76.

Grisnik, M., **R. J. Hanscom**, and O. Bowers. 2019. *Desmognathus conanti* (Spotted Dusky Salamander). Parental Care. *Herpetological Review* 50:334–335.

PEER-REVIEWED PUBLICATIONS (IN PREPARATION; DRAFT AVAILABLE UPON REQUEST)

Hill, J. L., **R. J. Hanscom**, T. E. Higham, J. Sukumaran, and R. W. Clark. 2023. Intraspecific variation in the spatial ecology of a widely distributed North American Pitviper (Prairie Rattlesnake, *Crotalus viridis*). *In preparation for Journal of Herpetology*.

SCIENTIFIC REPORTS

Hanscom, R. J., and R. Clark. 2023. Predator-prey interactions between Ord's kangaroo rats and prairie rattlesnakes in Alberta, Canada. *Alberta Fish and Wildlife*.

Alianelli*, D., H. Bahoura*, S. Dano*, A. Egan*, S. Habib*, A. Hernandez-Eleiter*, N. Huynh*, A. Martinez-Padilla*, R. Palomera-Salas*, V. Rodriguez*, D. Romero*, C. Russo*, S. Sabri*, C. Serrano*, A. Soto*, M. Strebler*, C. Summerlin*, K. Wyatt*, and **R. J. Hanscom**. 2022. How is biodiversity impacted within urban agricultural farms using regenerative practices? A case study of the intermediate disturbance hypothesis at Coastal Roots Farm, Encinitas, CA. Coastal Roots Farm Non-Profit Organization.

Hanscom, R. J., and R. Clark. 2022, 2023. Prairie Rattlesnake and Kangaroo Rat predator-prey interactions in the Marathon Grasslands Preserve. The Nature Conservancy.

Hurt, C., K. Hultgren, A. Anker, and **R. J. Hanscom**. 2019. Genomic variation and species diversification in Alpeid snapping shrimp. National Geographic Society.

RESEARCH EXPERIENCE

Doctoral Candidate, San Diego State University, San Diego, CA. 2020 – present.

Wetland Conservation Lead Field Technician, Tennessee Technological University, Cookeville, TN. 2020.

Graduate Research Technician, Tennessee Technological University, Cookeville, TN. 2018 – 2020.

Tennessee Technological University Natural History Museum: Herpetological Primary Volunteer, Tennessee Technological University, Cookeville, TN. 2020.

Snake Fungal Disease Research Assistant, Middle Tennessee State University, Murfreesboro, TN. May – August 2018, 2019.

Fantail Darter (*Etheostoma flabellare*) Microbiome Research Technician, Middle Tennessee State University, Murfreesboro, TN. May 2019.

Freshwater Turtle Primary Research Technician, The Nature Conservancy, North Carolina. May – August 2015, 2016, and 2017.

American Alligator Survey Research Assistant, Framingham State University, Framingham, MA. Summer 2017.

Herpetological Laboratory Primary Technician, Framingham State University, Framingham, MA. 2014, 2015, 2016, and 2017.

TEACHING EXPERIENCE AND PUBLIC OUTREACH

Instructor of Record: Experimental Ecology, San Diego State University, Fall 2022, 2023

- Designed, lectured, and taught an upper-level undergraduate field course in Experimental Ecology intended to teach students how to conduct research from the field to dissemination.
- Students went on field trips to collect data, analyzed data in R, and wrote reports for the class. Examples of general methods used were mark-recapture, behavioral observations, and biodiversity estimates.

Lead Teaching Assistant: General Biology, San Diego State University, 2020 – 2021

- Administrative duties for large lectures, organizing and leading discussion sections, and at home laboratory experiments.

Lead Teaching Assistant: General Genetics, Tennessee Technological University, 2018 – 2020

- Lectured the following material: Probability, Mendelian Inheritance, Pedigrees, Sex-Linked Genes, Chi-Squared Analysis, and Hardy-Weinberg.
- Lab experiments include the following: Structure of DNA, Gel electrophoresis, and PCR.

Supplemental Instruction Leader: Organismal Biology, Framingham State University, 2017

- Organized and administered lecture content and extra help studying sessions.

General Biology Tutor: All undergraduate biology classes, Framingham State University, 2017

- Provided a one-on-one setting for any student on campus who needed tutoring for a biology course.
- Courses that I assisted students with included Biological Concepts, Human Biology, Intro to Organismal Biology, Intro to Cellular and Molecular Biology, Cell Biology, Processes of Organic Evolution, and Animal Physiological Ecology.

Supplemental Instruction Leader: Introduction to Biology, Framingham State University, 2015 – 2017

- Provided supplemental instruction as a teaching assistant for a specific class with a higher-than-average failure and withdrawal rate. Review sessions were held where student attendance was voluntary.

Outreach and Education Leader: The Freshwater Turtles and Snakes of Nags Head Woods Ecological Preserve, The Nature Conservancy, 2015 – 2017

- Led public outreach events discussing the natural history of freshwater turtles and snakes found on the barrier islands of North Carolina.

Guided Hike Tour Educational Leader: Nags Head Woods Ecological Preserve Ecology and Natural History, The Nature Conservancy, 2015 – 2017

- Designed and implemented a guided hike for visitors done weekly throughout Nags Head Woods Ecological Preserve exploring its natural history and ecology.

Guided Bear Tour Educational Leader: The Natural History of the American Black Bear at Alligator River Wildlife Refuge, 2015 – 2016

- Led public outreach tours to view American black bears (*Ursus americanus*) in their natural habitat and discussed their natural history, along with the overall ecology of the refuge.

CONFERENCE PRESENTATIONS AND INVITED ACADEMIC TALKS

Hanscom, R. J., J. L. Hill, C. Patterson*, T. Marbach, J. Sukumaran, T. E. Higham, and R. W. Clark. 2023. Animal-borne accelerometry to quantify behavior and activity cycles of a nocturnal, small bodied kangaroo rat. 13th International Mammalogical Congress, Anchorage, Alaska.

Goode, M., A. Pawlicki, J. Bauder, and R. J. Hanscom. 2023. Long-Term Research on Species-, Population-, and Community-Level Effects of Urbanization on Snakes and Lizards. Joint Meeting of Ichthyologists and Herpetologists, Norfolk, VA.

Hill, J. L., M. Grisnik, R. J. Hanscom, J. Sukumaran, T. E. Higham, and R. W. Clark. 2023. Using Ecological Niche Models to Examine a Predator-Prey System Over Time: Prairie Rattlesnakes (*Crotalus viridis*) and Ord's Kangaroo Rats (*Dipodomys ordii*). International Association for Landscape Ecology North America Meeting, Riverside, CA.

Patterson*, C., R. J. Hanscom, J. Hill, T. Marbach, J. Sukumaran, T. Higham, and R. W. Clark. 2023. Using accelerometry to quantify cryptic behaviors of a small nocturnal mammal. The Wildlife Society, Evenstad Chapter, Evenstad, Norway.

Hanscom, R. J., J. Hill, T. Marbach, C. Patterson, J. Sukumaran, T. Higham, and R. W. Clark. 2023. Using accelerometry to hop into the behavioral classification of a small nocturnal mammal. Society of Integrative and Comparative Biology Meeting, Austin, TX.

Hill, J., M. Grisnik, **R. J. Hanscom**, J. Sukumaran, T. Higham, and R. W. Clark. 2023. Describing a predator-prey system using ecological niche models: rattlesnakes and kangaroo rats. Society of Integrative and Comparative Biology Meeting, Phoenix, AZ.

Hanscom, R. J. 2022. Becoming a biologist: ecology, evolution, and academia. Invited Guest Lecture in Animal Behavior, San Diego State University, CA.

Hanscom, R. J., D. DeSantis, J. Hill, T. Marbach, J. Sukumaran, A. Tipton, M. Thompson, T. Higham, and R. W. Clark. 2022. Rattlesnake feeding ecology: using high frequency accelerometry to capture feeding events across *Crotalus*. Biology of Pitvipers Conference, Rodeo, NM.

Hill, J., M. Grisnik, **R. J. Hanscom**, and R. W. Clark. 2022. Determining the potential for geographic range expansion of pitvipers at northern latitudes in the context of climate change. Biology of Pitvipers Conference, Rodeo, NM.

Goode, M., A. Pawlicki, and **R. J. Hanscom**. 2022. Tiger Rattlesnake (*Crotalus tigris*) population demography based on 20 years of capture-recapture data. Biology of Pitvipers Conference, Rodeo, NM.

DeSantis, D., A. Tipton, M. Thompson, **R. J. Hanscom**, R. W. Clark, V. Mata-Silva, J. Johnson, and J. Diosdado. 2022. Integrating radio-telemetry and accelerometry to monitor the spatial and temporal movement patterns of snakes. Biology of Pitvipers Conference, Rodeo, NM.

Hanscom, R. J., J. Hill, C. A. Patterson*, T. Marbach, J. Sukumaran, T. Higham, and R. W. Clark. 2022. Using animal-borne accelerometers to characterize detailed behavioral traits of a nocturnal rodent (Merriam's Kangaroo Rat, *Dipodomys merriami*). Southern California Animal Behavior Meeting, Riverside, CA.

Hill, J., **R. J. Hanscom**, T. Marbach, J. Sukumaran, T. Higham, and R. W. Clark. 2022. Quantifying cryptic behaviors using high frequency accelerometry in reptiles: feeding ecology of rattlesnakes. Southern California Animal Behavior Meeting, Riverside, CA.

Hanscom, R. J., J. Hill, C. Patterson*, T. Marbach, J. Sukumaran, T. Higham, M. Remington, and R. W. Clark. 2022. Quantifying cryptic behaviors using high frequency accelerometry in reptiles: feeding ecology in rattlesnakes. Society of Integrative and Comparative Biology Meeting, Phoenix, AZ.

Hill, J., **R. J. Hanscom**, C. Patterson*, T. Marbach, J. Sukumaran, T. Higham, and R. W. Clark. 2022. Using animal-borne accelerometers to characterize detailed behavioral traits of a secretive, nocturnal rodent (Merriam's Kangaroo Rat, *Dipodomys merriami*). Society of Integrative and Comparative Biology Meeting, Phoenix, AZ.

Hanscom, R.J. 2020. Snapping shrimp species diversification: the role of genome size, geography, and ecology in two genera (*Alpheus* and *Synalpheus*), M. S. Thesis Seminar, Cookeville, TN.

Hanscom, R. J. 2019. Freshwater turtle populations are resilient to the impacts of anthropogenically caused habitat loss: a case study on the barrier islands of North Carolina. Department of Biology, Tennessee Technological University, TN.

Hanscom, R. J. 2019. Genome size may contribute to reproductive isolation of sympatric species pairs within the snapping shrimp genus *Alpheus*. Department of Biology, Tennessee Technological University, TN.

Hanscom, R. J., K. Hultgren, and C. Hurt. 2019. Genome size may contribute to reproductive isolation of sympatric species pairs within the snapping shrimp genus *Alpheus*. Southeastern Population Ecology and Evolutionary Genetics Meeting, Clemson, SC.

Hanscom, R. J., S. A. Dinkelacker, A. Parlin, and A. McCall. 2019. Demographic traits of freshwater turtles in a maritime forest habitat. Joint Meeting of Ichthyologists and Herpetologists, Snowbird, UT.

Hanscom, R. J. 2017. Undergraduate research in wildlife biology. Accepted Students Day: STEM, Framingham State University, MA.

Hanscom, R. J. 2016. Undergraduate research in wildlife biology. Accepted Students Day: STEM, Framingham State University, MA.

Hanscom, R. J. 2016. Freshwater turtle population demography research. Board of Trustees Meeting: *Student Spotlight*, Framingham State University, MA.

RESEARCH GRANTS AND ACADEMIC AWARDS (~ \$72,000 AWARDED)

Hanscom, R. J. The cost of predator presence: quantifying heightened vigilance state using novel biologging tools. Lewis and Clark Fund for Exploration and Field Research, \$4700 (*pending*).

Clark, R. W., C. Fischer, and **R. J. Hanscom**. 2023. Developing bio-logging tools for informed conservation of a Colorado Desert flagship species, the flat-tailed horned lizard. Bureau of Reclamation, \$55,000.

Hanscom, R. J. 2023. Achievement Rewards for College Scientists (ARCS) San Diego Chapter Scholarship. San Diego State University, \$10,000.

- ARCS Foundation advances science and technology in the United States by providing financial awards to academically outstanding doctoral students studying to complete degrees in science, engineering, math, technology, and medical research.

Hanscom, R. J. 2023. Charlotte Magnum Student Award. Graduate student travel award for the Society of Integrative and Comparative Biology Meeting, ~\$1,000.

Hanscom, R. J. 2022. Achievement Rewards for College Scientists (ARCS) San Diego Chapter Scholarship (Finalist). San Diego State University.

Hanscom, R. J. 2022. Donald W. and Glennis A. Kaufman Research Award. Impacts of environmental variability on the behavioral ecology of a keystone species (*Dipodomys ordii*) using miniaturized animal-borne movement and temperature sensors. American Society of Mammalogists, \$2,500.

Hanscom, R. J. 2022. Charlotte Magnum Student Award. Graduate student travel award for the Society of Integrative and Comparative Biology Meeting, ~\$1,000.

Hanscom, R. J. 2019. Clark Hubbs' Student Travel Award. Graduate student travel award for the Joint Meeting of Ichthyologists and Herpetologists, \$1,000.

Hanscom, R. J. 2017. William H.D. Meier Award.

- This award is presented to a senior in Biology who has shown outstanding ability and interest in the field of Natural Science and holds the promise of continuing that interest in a leadership role. Framingham State University.

Hanscom, R. J. 2016. Undergraduate Research Award. Demographic traits of freshwater turtles in a maritime forest habitat. Framingham State University, \$1,000.

Hanscom, R. J. 2016 – 2017. President's List. Awarded to an undergraduate student carrying a minimum of 3 course-credits and earns a place on this honor roll in which the student earns a GPA of 3.75 to 4.00. Framingham State University, 4 semesters.

Hanscom, R. J. 2015 – 2017. Dean's List. Awarded to an undergraduate student carrying a minimum of 3 course-credits and earns a place on this honor roll in which the student earns a GPA of 3.30 to 3.74. Framingham State University, 6 semesters.

ACADEMIC SERVICE & TRAINING

Professional Service

- Student Affairs Committee Member: *Herpetologists' League*
- Diversity, Equity, and Inclusion Committee Member: *Society for the Study of Amphibians and Reptiles*
 - Currently developing a workshop for incoming graduate students of diverse backgrounds in herpetology.
- Urban Evolutionary Biologist Faculty Student Search Committee: *San Diego State University*
- California State University System-wide Student Research Competition: *Judge of the Biological and Agricultural Sciences Graduate Level Final*

Specialized Training

San Diego IRACDA: *Institutional Research and Academic Career Development Award Program*

- The IRACDA program aims specifically to develop a diverse group of highly trained biological scientists.
- San Diego IRACDA is committed to diversity and inclusion and welcomes all people including individuals from underrepresented racial/ethnic backgrounds, women, and persons with disabilities.

Ad Hoc Reviewer

- Functional Ecology (1)
- Frontiers in Amphibian and Reptile Science (1)
- Sensors (1)

Mentoring Experience

- Throughout my professional career thus far in academia, I have mentored and guided multiple students to further their careers in biology in both field and laboratory environments.
 - I have mentored several undergraduate/post-graduate students during my time as a Ph. D. Candidate at San Diego State University
 - Emma McAndrews – mentee; M.S. student leading efforts to develop biologging tools for the California species of special concern, the red diamond rattlesnake
 - Marissa Strebler – lab assistant/mentee; leading a first-author publication as my student, which is currently *in review* at Herpetological Conservation Biology
 - Parker Applegate – field assistant/mentee; leading a first-author publication as my student, which is currently *in review* at Chelonian Conservation and Biology.
 - Charlotte Patterson – field assistant/mentee; currently pursuing her M. S. in carnivore biology and is a co-author for a publication in Movement Ecology.
 - Leah Carpenter – lab assistant/mentee; hired as an M.S. student to develop biologging tools for the flat-tailed horned lizard and is funded through a grant acquired by R. W. Clark, C. Fischer, and myself.
 - Camryn Bowling – lab and field assistant/mentee
 - Dominic Alianelli – lab and field assistant/mentee
 - Chelsey Assor – field assistant/mentee
 - Andrew Powers – field assistant/mentee
 - Sebastian Mendoza – field assistant/mentee
 - Bryan Meraz – field assistant/mentee
 - Brynn Sablan – field assistant/mentee
 - Hana Koyoma – lab assistant/mentee
 - Alexis Harris – lab assistant/mentee
 - Jackeline Hurtado Soto – lab assistant/mentee
 - Olivia Hillger – lab assistant/mentee
 - Peter Weiss – lab assistant/mentee
 - Briana Aldrete – lab assistant/mentee
 - Daniela Martinez Zazuata – lab assistant/mentee
 - Darren Romero – lab assistant/mentee
 - Jordan Paulson – lab assistant/mentee
 - Valeria Gutierrez Lemus – lab assistant/mentee
 - Taylor Kallman – lab assistant/mentee

Ryan J. Hanscom – Curriculum Vitae

- Matthew Bazzi – lab assistant/mentee
- Savannah Silva – lab assistant/mentee
- Shannon Michel – lab assistant/mentee
- Xochitl Lopez – lab assistant/mentee
- Erica Noe – lab assistant/mentee
- John Carlo Dizon – lab assistant/mentee
- Joshua Mayo – lab assistant/mentee
- Mariana Padilla – lab assistant/mentee
- Rachel Restrepo – lab assistant/mentee
- Lea Sanders – lab assistant/mentee
- Vanessa Tyler – lab assistant/mentee
- Talon Weck – lab assistant/mentee
- Makena Macias – lab assistant/mentee
- Mariana Montiel – lab assistant/mentee
- Nicole Tristan Udan – lab assistant/mentee
- Fiorella Dongo – lab assistant/mentee
- Justin Cole Murakawa – lab assistant/mentee
- Roman Mammo – lab assistant/mentee
- Veronica Bravo – lab assistant/mentee
- Vincent Marcantonio – undergraduate mentee
- Kylie Neubauer – undergraduate mentee
- Adam Guss – undergraduate mentee
- I have mentored several undergraduate students during my time as a Teaching and Research Assistant at Tennessee Technological University
 - Parker Hildreth – lab and field assistant/mentee; completed his M. S. in biology with my former M. S. advisor, described a new species of crayfish, and is currently a biologist for Tennessee Wildlife Resources Agency.
 - Tanner Thomas – lab assistant/mentee
 - Alexandra Thornton – mentee
 - Joshua Bean – mentee
 - Aaron Schoch – mentee

Field and Academic Skills

- Certified scuba diver, extensive backcountry, kayak, canoe, 4WD, and boating experience.
- Proficiency in R, ArcGIS Pro, Program MARK, MEGA, Sequencher, Python, Mesquite, and Microsoft Office.
- Experience handling and catching potentially dangerous animals (e.g., American alligators (*Alligator mississippiensis*), alligator snapping turtles (*Macrochelys temminckii*), reticulated pythons (*Python reticulatus*), and venomous snakes (*Crotalus* spp. and *Agkistrodon* spp.)).

Professional Memberships

- American Society of Mammologists
- American Society of Ichthyologists and Herpetologists
- Herpetologists' League
- Society for the Study of Amphibians and Reptiles
- Society of Integrative and Comparative Biology

