

JOSHUA ROBERT ENNEN — CURRICULUM VITAE

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EDUCATION

University of Southern Mississippi, Hattiesburg, Mississippi
Doctorate of Philosophy in Biological Sciences, December 2009.

Austin Peay State University, Clarksville, Tennessee
Masters of Sciences Degree in Biology (Honors), August 2005.

Maryville College, Maryville, Tennessee
Bachelor's Degree in Biology (cum laude), May 2003.

EMPLOYMENT HISTORY

- 2019-present **Adjunct Professor**, University of Tennessee at Knoxville, Forestry, Wildlife, and Fisheries, Knoxville, TN 37403
- 2019-present **Adjunct Professor**, University of Tennessee at Chattanooga, Biology, Geology and Environmental Science, Chattanooga, TN 37403
- 2014-2020 **Aquatic Conservation Biologist**, Tennessee Aquarium Conservation Institute, Chattanooga, TN 37405
- 2014 **Environmental Scientist**, ES&H, Inc. Knoxville, TN 37932
- 2013–2014 **Adjunct Scientist**, Tennessee Aquarium Conservation Institute, Chattanooga, TN 37402
- 2012–2014 **Sustainability Coordinator**, TN-SCORE, NSF EPSCoR – University of Tennessee, Knoxville, TN 37996
- 2011–2012 **Visiting Professor of Biology**- Department of Biology, Maryville College, Maryville, TN 37804
- 2010–2011 **Wildlife Biologist** – United States Geological Survey, Southwest Biological Science Center, Flagstaff, Arizona, USA, 86011
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TEACHING & MENTORING EXPERIENCE

- 2019 **Teaching Experience**, University of Tennessee, Chattanooga, TN
- Advance Ecology (graduate level)
- 2019 **George Benz Fellowship**, Triston King, Project “Thermal Preference of larval salamanders”.
- 2019-2020 **Masters Committee Member**, Alexander Romer, Middle Tennessee State University, Murfreesboro, TN
- 2018 **George Benz Fellowship**, Dani Kirsch, Project “Thermal Preference of tadpoles”.
- 2017-2019 **Masters Committee Member**, Saidee Hyder, Southeast Missouri State University, Cape Girardeau, MO

- 2017 *George Benz Fellowship*, Mary Lou Hoffacker, Project “Morphological Study of *Graptemys*”.
- 2016 *George Benz Fellowship*, Madison Herrboldt, Project "Mercury Concentration in Western Tennessee freshwater turtles".
- 2015-2017 *Masters Committee Member*, Dustin Garig, Southeast Missouri State University, Cape Girardeau, MO
- 2009-2014 *Dissertation Committee Member*, Daniel Gaillard, University of Southern Mississippi, Hattiesburg, MS
- 2011–2012 *Teaching Experience*, Maryville College, Maryville, TN
- Comparative Vertebrate Zoology and Lab, Conservation and Human Health, Biodiversity of Vertebrates and Lab, Ecology & Evolution and Lab, Herpetology and Lab
- 2005–2006 *Introductory Biology Lab*, University of Southern Mississippi, Hattiesburg, MS

PUBLICATIONS & REPORTS

PEER-REVIEWED PUBLICATIONS:

Google Scholar: Citations 1099, h-index 17, i10-index 29

2021

60. Karim, S., J. Anderson, D. Kumar, S. Adamson, **J.R. Ennen**, C.P. Qualls, and J.M.C. Ribeiro. 2021. The sialotranscriptome of the gopher-tortoise tick (*Amblyomma tuberculatum*). *Ticks and Tick-Borne Diseases* 12:101560.

2020

59. **Ennen, J.R.**, K.K. Cecala, P. Gould, R. Colvin, J. Denison, D.F. Garig, S. Hyder, L. Recker, and J.M. Davenport. *In press*. Size matters: the influence of trap and mesh size on turtle captures. *Wildlife Society Bulletin*.
58. **Ennen, J.R.**, B.R. Kuhajda, S. Fix, S.C. Sweat, B. Zuber, A.V. Watts, H.T. Mattingly, and K.K. Cecala. *In press*. Assessing the success of conservation efforts for a North American topminnow at risk of extinction from spatially variable mosquitofish invasions. *Freshwater Biology*
57. Kirsch, D. R., S. Fix, J.M. Davenport, K.K. Cecala, and **J.R. Ennen**. *In press*. Body size is related to temperature preference in *Hyla chrysoscelis* tadpoles. *Journal of Herpetology*.
56. Lovich, J.E., T. Edwards, K.H. Berry, S.R. Puffer, K.L. Cummings, **J.R. Ennen**, M. Agha, R. Woodard, K.D. Brundige, and R.W. Murphy. 2020 Refining genetic boundaries for Agassiz’s desert tortoise (*Gopherus agassizii*) in the western Sonoran Desert: the influence of the Coachella Valley on gene flow among populations in southern California. *Frontiers of Biogeography* 12.3: e46888.

55. Cecala, K.K., E.H. Walker, **J.R. Ennen**, S.M. Fix, J.M. Davenport. 2020. Seasonal variation in the strength of interference competition among headwater stream predators. *Freshwater Biology* 65:1440-1449.
54. Stanford, C.B., J.B. Iverson, A.G.J. Rhodin, P.P. van Dijk, R.A. Mittermeier, G. Kuchling, K.H. Berry, A. Bertolero, T.E.G. Blanck, K.A. Bjorndal, K.A. Buhlmann, R. Burke, J. Congdon, T. Diagne, T. Edwards, C. Eisemberg, **J. Ennen**, G. Forero-Medina, M. Frankel, U. Fritz, N. Gallego-Garcia, A. Georges, J.W. Gibbons, S. Gong, E.V. Goode, H.T. Shi, H. Hoang, M.D. Hofmeyr, B.D. Horne, R. Hudson, J. Juvik, P. Koval, R. Kiester, M. Le, P. Lindeman, J.E. Lovich, L. Luiselli, T. McCormack, G. Meyer, V.P. Paez, K. Platt, S.G. Platt, P.C.H. Pritchard, H. Quinn, W. Roosenburg, J. Seminoff, H.B. Shaffer, R. Spencer, J.U. Van Dyke, R.C. Vogt, and A.D. Walde. 2020. Turtles and tortoises are in trouble. *Current Biology* 30:R721-R735.
53. Garig II, D.F., **J.R. Ennen**, and J.M. Davenport. 2020. The effects of common snapping turtles on a freshwater food web. *Copeia* 108(1):132-139.
52. Agha, M., J.E. Lovich, **J.R. Ennen**, and B.D. Todd. 2020. Wind, sun and wildlife: do wind and solar energy development “short-circuit” conservation in the western United States? *Environmental Research Letters* 15: 075004.
51. **Ennen, J.R.**, M. Agha, S.C. Sweat, W.A., J.E. Lovich, A.G.J. Rhodin, J.B. Iverson, and C.W. Hoagstrom. 2020. Turtle biogeography: global regionalization and conservation priorities. *Biological Conservation* 241:108323

2019

50. **Ennen, J.R.**, M.L. Hoffacker, W. Selman, C. Murray, J. Godwin, R.A. Brown, and M. Agha. 2019. The importance of environmental conditions on body size and shape morphology of a freshwater vertebrate. *Copeia* 107:550-559

2018

49. Lovich, J.E., M. Agha, **J.R. Ennen**, T.R. Arundel, and M. Austin. 2018. Agassiz’s desert tortoise (*Gopherus agassizii*) activity areas are little-changed after wind turbine-induced fires in California. *International Journal of Wildland Fire* 27:851-856.
48. Rhodin, A.G.J., C.B. Stanford, P.P. van Dijk, ...**J.R. Ennen**...R.C. Vogt. 2018. Global conservation status of turtles and tortoises (Order Testudines). *Chelonian Conservation and Biology* 17:135-161.
47. Lovich, J.E., **J.R. Ennen**, M. Agha, and J.W. Gibbons. 2018. Where have all the turtles gone, and why does it matter? *BioScience* 68:771-781.

46. Hoffacker, M.L., K.K. Cecala, **J.R. Ennen**, S. Mitchell, and J.M. Davenport. 2018. Elevated stream temperatures alter interspecific interactions in an Appalachian stream salamander community. *Oecologia* 188:623-631.
45. Lovich, J.E., S.R. Puffer, M. Agha, **J.R. Ennen**, K. Meyer-Wilkins, L.A. Tennant, A.L. Smith, and M.S. Vamstad. 2018. Reproductive output and clutch phenology of female Agassiz's Desert Tortoises (*Gopherus agassizii*) in the Sonoran Desert Region of Joshua Tree National Park. *Current Herpetology* 37:1–18.
44. Agha, M., **J.R. Ennen**, D.S. Bower, J. Nowakowski, S.C. Sweat, and B.D. Todd. 2018. A global review of freshwater turtles in brackish water ecosystems. *Biological Reviews* 93:1634-1648.
43. Aburto-Oropeza, O., A.F. Johnson, M. Agha, E.B. Allen, M.F. Allen, J.A. González, D.M.A. Moreno, R. Beas-Luna, S. Butterfield, G. Caetano, J.E. Caselle, G.C. Gaytán, M.C.N. Castorani, L.A. Cat, K. Cavanaugh, J.Q. Chambers, R.D. Cooper, N.A. Dalmau, T. Dawson, A.D. de la Vega Pérez, J.F.C. DiMento, S.D. Guerrero, M. Edwards, **J.R. Ennen** et al. 2018. Harnessing cross-border resources to confront climate change. *Environmental Science and Policy* 87:128-132.
42. Agha, M., **J.R. Ennen**, J. Nowakowski, J.E. Lovich, S.C. Sweat, and B.D. Todd. 2018. Macroecological patterns of sexual size dimorphism in turtles of the world. *Journal of Evolutionary Biology* 31:336-345.
- 2017**
41. Gaillard, D., **J.R. Ennen**, B.R. Kreiser, C.P. Qualls, S.C. Sweat, R. Birkhead, T.D. Tuberville, M. Aresco, E. McCoy, H. Mushinsky, and T.W. Hentges. 2017. Range-wide and regional patterns of population structure and genetic diversity in the gopher tortoises (*Gopherus polyphemus*). *Journal of Fish and Wildlife Management* 8:1–16
40. Mitchell, S.M., **J.R. Ennen**, K.K. Cecala, and J.M. Davenport. 2017. *Ex-situ* Pit-tag retention study in two *Desmognathus* species. *Herpetological Review* 48:313-315.
39. Lovich, J.E., R.C. Averill-Murray, M. Agha, **J.R. Ennen**, and M. Austin. 2017. Variation in annual clutch phenology of desert tortoises (*Gopherus morafkai*) in the Sonoran Desert of Arizona. *Herpetologica* 73:313-322.
38. **Ennen, J.R.**, W.A. Matamoros, J.E. Lovich, S.C. Hazzard, M. Agha, and C.W. Hoagstrom. 2017. Hierarchical, quantitative biogeographic provinces for all North American turtles and their contributions to the biogeography of turtles and the continent. *Herpetological Monographs* 31:114-140
37. Agha, M., A.L. Smith, J.E. Lovich, D. Delaney, **J.R. Ennen**, J. Briggs, L.J. Fleckenstein, L.A. Tennant, S.R. Puffer, A. Walde, T.R. Arundel, S.J. Price, and B.D. Todd. 2017. Visitation and interactions of mesocarnivores at desert tortoise burrows

in a utility-scale wind energy landscape. *Journal of Wildlife Management* 81:1117-1124.

36. **Ennen, J.R.**, J.E. Lovich, R.C. Averill-Murray, C. Yackulic, M. Agha, C. Loughran, L. Tennant, and B. Sinervo. 2017. The evolution of different maternal investment strategies in two closely related desert vertebrates. *Ecology and Evolution* 7:3177-3189.
35. Liles, L.A., K.K. Cecala, **J.R. Ennen**, and J.M. Davenport. 2017. Elevated temperatures alter body condition and competitive outcomes in Appalachian salamanders. *Animal Conservation* 20:502-510.

2016

34. **Ennen, J.R.**, M. Agha, W.A. Matamoros, S.C. Hazzard, and J.E. Lovich. 2016. Using climate, energy, and spatial-based hypotheses to interpret macroecological patterns of North America chelonians. *Canadian Journal of Zoology* 94:453-461.
33. **Ennen, J.R.**, J.M. Davenport, and K.F. Alford. 2016. Evidence for asymmetric competition among headwater stream vertebrates. *Hydrobiologia* 772:207-213.
32. **Ennen, J.R.**, J. Godwin, J.E. Lovich, B.R. Kreiser, B.P. Folt, and S.C. Hazzard. 2016. Interdrainage morphological and genetic differences in the Escambia Map Turtle, *Graptemys ernsti*. *Herpetological Conservation and Biology* 11:122–131.

2015

31. **Ennen, J.R.**, P.V. Lindeman, and J.E. Lovich. 2015. Intersexual allometry differences and ontogenetic shifts of coloration patterns in two aquatic turtles, *Graptemys oculifera* and *Graptemys flavimaculata*. *Ecology and Evolution* 5:2296–2305.
30. Lovich, J.E., **J.R. Ennen**, C.B. Yackulic, K. Meyer, M. Agha, C. Loughran, C. Bjurlin, M. Austin, and S. Madrak. 2015. Not putting all their eggs in one basket: bet-hedging despite extraordinary annual reproductive output of desert tortoises. *Biological Journal of the Linnean Society* 115: 399-410.
29. Agha, M., J.E. Lovich, **J.R. Ennen**, B. Augustine, T.R. Arundel, M.O. Murphy, D. Delaney, J. Briggs, K. Meyer, C. Bjurlin, M. Austin, S. Madrak, L. Tennant, and S. Price. 2015. Turbines and terrestrial vertebrates: variation in tortoise survivorship between wind energy facility and an adjacent undisturbed wildland area in the desert southwest (USA). *Journal of Environmental Management* 56:332–341.
28. Agha, M.A., M.O. Murphy, J.E. Lovich, **J.R. Ennen**, C.R. Oldham, K. Meyers-Wilkins, C. Bjurlin, M. Austin, S. Madrak, C. Loughran, L. Tennant, and S.J. Price. 2015. The effect of research activities and winter precipitation on defensive voiding behavior of Agassiz's desert tortoise (*Gopherus agassizii*). *Wildlife Research* 41:641–549.

27. Agha, M., B. Augustine, J.E. Lovich, B. Sinervo, D. Delaney, M.O. Murphy, **J.R. Ennen**, R. Cooper, and S.J. Cooper. 2015. Using motion-sensor camera technology to infer seasonal activity and thermal niche of the desert tortoise (*Gopherus agassizii*). *Journal of Thermal Biology* 49-50:119-126.

2014

26. Lovich, J.E., M. Agha, C.B. Yackulic, K. Meyer, C. Bjurlin, **J.R. Ennen**, T.R. Arundel, and M. Austin. 2014. Nest site selection and lack of long-term nest fidelity in Agassiz's desert tortoises (*Gopherus agassizii*) at a wind energy facility in southern California. *California Fish and Game* 100:404-416.
25. Godwin, J., J.E. Lovich, **J.R. Ennen**, B.R. Kreiser, B.P. Folt, and C. Lechowicz. 2014. Hybridization of two megacephalic map turtles (Testudines: Emydidae: *Graptemys*) in the Choctawhatchee River drainage of Alabama and Florida. *Copeia* 2014(4):725-742.
24. **Ennen, J.R.**, M.E. Kalis, A.L. Patterson, B.R. Kreiser, J.E. Lovich, J. Godwin, and C.P. Qualls. 2014. Clinal variation or validation of a subspecies? A case study with the *Graptemys nigrinoda* complex (Testudines: Emydidae). *Biological Journal of the Linnean Society* 111:810-822.

2013

23. Lamb, J.Y., **J.R. Ennen**, and C.P. Qualls. 2013. Environmental characterization of nest-sites selected by gopher tortoises (*Gopherus polyphemus*) in southern Mississippi. *Chelonian Conservation and Biology* 12:227-234.
22. **Ennen, J.R.** and A.F. Scott. 2013. Home range characteristics and overwintering ecology of the Stripe-necked Musk Turtle (*Sternotherus minor peltifer*) in Middle Tennessee. *Chelonian Conservation and Biology* 12:199-203.
21. Agha, M., J. Lovich, **J. Ennen**, and E. Wilcox. 2013. Female nest guarding in Agassiz's Desert Tortoise (*Gopherus agassizii*) at a wind energy facility near Palm Springs, California. *The Southwestern Naturalist* 58:256-260.
20. Lovich, J.E., and **J.R. Ennen**. 2013. A quantitative analysis of the state of knowledge of turtles of the United States and Canada. *Amphibia-Reptilia* 34:11-23.
19. Lovich, J.E., and **J.R. Ennen**. 2013. Assessing the state of knowledge of utility-scale wind energy development and operation on non-volant terrestrial and marine wildlife. *Applied Energy* 103:52-60.
18. Kreiser, B.K., **J.R. Ennen**, D.L. Gaillard, and C.P. Qualls. 2013. Isolation and characterization of polymorphic microsatellite loci for the gopher tortoise (*Gopherus polyphemus*) and cross-amplification in other species of *Gopherus*. *Conservation Genetics Resources* 5(1): DOI 10.10078/s12686-012-9781-8.

17. Sorber, J., A. Balasubramanian, M.D. Corner, **J. Ennen**, and C. Qualls. 2013. Tula: Balancing Energy for Sensing and Communication in a Perpetual Mobile System. *IEEE Transactions on Mobile Computing* 12:804-816.

2012

16. Lovich, J., M. Agha, M. Meulblok, K. Meyer, **J. Ennen**, C. Loughran, S. Madrak, and C. Bjurlin. 2012. Climatic variation affects clutch phenology in Agassiz's desert tortoise (*Gopherus agassizii*). *Endangered Species Research* 19:63-74.
15. **Ennen, J.R.**, B.R. Kreiser, C.P. Qualls, et al. 2012. Mitochondrial DNA assessment of the phylogeography of the Gopher Tortoise. *Journal of Fish and Wildlife Management* 3:110-122.
14. Noel, K.M., C.P. Qualls, and **J.R. Ennen**. 2012. A comparison of artificial incubation and natural incubation hatching success of gopher tortoise (*Gopherus polyphemus*) eggs in south Mississippi. *Herpetologica* 68:324–333.
13. **Ennen, J.R.**, J.E. Lovich, K. Meyer, C. Bjurlin, and T. Arundel. 2012. Nesting ecology of a desert tortoise (*Gopherus agassizii*) population at a utility-scale renewable energy facility in Southern California. *Copeia* 2012:223–229.
12. **Ennen, J.R.**, K. Meyers, and J. Lovich. 2012. Female desert tortoise activity at a wind energy facility in Southern California: the influence of an El Niño event. *Natural Science* 4:30–37.

2011

11. Lovich, J., **J.R. Ennen**, S. Madrak, C. Loughran, K. Meyer, T. Arundel, and C. Bjurlin. 2011. Long-term post-fire effects on spatial and reproductive ecology of female desert tortoises (*Gopherus agassizii*) at a wind energy facility near Palm Springs, California. *Journal of Fire Ecology* 7:75–87.
10. Lovich, J.E., and **J.R. Ennen**. 2011. Wildlife conservation and solar energy development in the desert southwest United States. *BioScience* 61:982–992.
9. **Ennen, J.R.**, R. Birkhead, B.R. Kreiser, D. Gillard, J.E. Lovich, and C.P. Qualls. 2011. The effects of isolation on the demography and genetic diversity of long-lived species: implications for conservation and management for the gopher tortoise (*Gopherus polyphemus*). *Herpetological Conservation and Biology* 6:202–214.
8. Lovich, J.E., **J.R. Ennen**, S. Madrak, K. Meyer, C. Loughran, C. Bjurlin, T. Arundel, W. Tuner, C. Jones, and G.M. Groenendaal. 2011. Effects of long-term wind energy production on growth, demography, and survivorship of a desert tortoise (*Gopherus agassizii*) population in southern California with comparisons to natural populations. *Herpetological Conservation and Biology* 6:161–174.

7. Lovich, J.E., **J.R. Ennen**, S.V. Madrak, and B. Gover. 2011. Turtles and culverts: an unreported but potentially significant mortality threat to the desert tortoise (*Gopherus agassizii*). *Chelonian Conservation and Biology* 10:124–129.
6. **Ennen, J.R.** and C.P. Qualls. 2011. Habitat utilization of the Gopher Tortoise Tick (*Amblyomma tuberculatum*) in Southern Mississippi. *Journal of Parasitology* 97:202-206.

2010

5. **Ennen, J.R.**, B. R. Kreiser, C. P. Qualls, and J. E. Lovich. 2010. Morphological and molecular reassessment of *Graptemys oculifera* and *Graptemys flavimaculata*. *Journal of Herpetology* 44:9–12.
4. **Ennen, J.R.**, J.E. Lovich, B.R. Kreiser, W.W. Selman, II, and C.P. Qualls. 2010. Genetic and morphological variation between populations of the Pascagoula Map Turtle (*Graptemys gibbonsi*) in the Pearl and Pascagoula Rivers with description of a new species. *Chelonian Conservation and Biology* 9:98–113.
3. **Ennen, J.R.**, B. R. Kreiser, and C. P. Qualls. 2010. Low genetic diversity in several Gopher Tortoise (*Gopherus polyphemus*) populations in the DeSoto National Forest, Mississippi. *Herpetologica* 66:91–98.

2009

2. Selman, W. II, **J.R. Ennen**, B. R. Kreiser, and C. P. Qualls. 2009. Cross-species amplification of Emydidae microsatellites loci in three *Graptemys* species and their utility as a conservation tool. *Herpetological Review* 40:32-37

2008

1. **Ennen, J.R.** and A. F. Scott. 2008. Diel behavior of the Stripe-necked Musk Turtle (*Sternotherus minor peltifer*) in Middle Tennessee. *American Midland Naturalist* 160:278-288.

BOOK CHAPTERS:

4. George, A.L., **J.R. Ennen**, and B.R. Kuhajda. (2019). Scientific Foundations of Zoos and Aquariums: Their Role in Conservation and Research. Pp. 64-90. In Kaufman, A.B., Bashaw, M.J., and Maple, T.L. (eds) *Protecting an Underwater Rainforest: Freshwater Science in the Southeastern United States*. Cambridge University Press, Cambridge.
3. Cecala, K.K., J. Davenport, **J.R. Ennen**, and W. Fields. 2017. Amphibians and Reptiles. Pp. 335-376. In Hauer, F.R. and Lamberti, G.A. (eds) *Methods in Stream Ecology* 3rd Edition.
2. Lovich, J.E. and **J.R. Ennen**. 2017. Reptiles and Amphibians. In Perrow, M. (ed.) *Wildlife and Wind Farms, Conflict and Solutions*, Volume 1. Pelagic Publishing, Exeter, UK. (Cover photo of Volume 2 was taken by **J.R. Ennen**)

1. Lovich, J.E. and **J.R. Ennen**. 2015. Energy development. Pp. 31-34. In Jones, L.L.C., Halama, H.K., Halama, K.J., and Lovich, R.E. (eds) *Habitat Management Guidelines for Amphibians and Reptiles of the Southwestern United States*. Partners in Amphibian and Reptile Conservation Technical Publication HMG-5, Birmingham, Alabama.

MISCELLANEOUS PUBLICATIONS:

2019

34. Garig, D.F., S. Hyder, R. Colvin, J. Dennison, B. Harris, J. Akers, and **J.R. Ennen**. 2019. New reptile distributional records from West Tennessee, USA. *Herpetological Review* 50(4):754-755.

2018

33. McFerrin, M.A, and **J.R. Ennen**. (2018). Geographic Distribution: *Thamnophis sirtalis* (Eastern Gartersnake). *Herpetological Review* 49:80.
32. McFerrin, M.A, and **J.R. Ennen**. (2018). Geographic Distribution: *Trachemys scripta* (Pond Slider). *Herpetological Review* 49:73

2017

31. McFerrin, M.A, and **J.R. Ennen**. 2017. Geographic Distribution: *Sceloporus undulatus* (Eastern Fence Lizard). *Herpetological Review* 48:390.
30. McFerrin, M.A, and **J.R. Ennen**. 2017. Geographic Distribution: *Eurycea longicauda* (Long-tailed Salamander). *Herpetological Review* 48:381.
29. McFerrin, M.A, and **J.R. Ennen**. 2017. Geographic Distribution: *Diadophis punctatus* (Ring-necked Snake). *Herpetological Review* 48:391
28. McFerrin, M.A, and **J.R. Ennen**. 2017. Geographic Distribution: *Ambystoma tigrinum* (Tiger Salamander). *Herpetological Review* 48:117.
27. McFerrin, M.A, and **J.R. Ennen**. 2017. Geographic Distribution: *Storeria dekayi* (Dekay's Brownsnake). *Herpetological Review* 48:131.

2016

26. **Ennen, J.R.**, N.S. Ennen, and B.F. Ennen. 2016. Geographic Distribution: *Storeria occipitomaculata* (Red-bellied Snake). *Herpetological Review* 47:429.
25. **Ennen, J.R.**, J.E. Lovich, and R.L. Jones. 2016. *Graptemys pearlensis* Ennen, Lovich, Kreiser, Selman, and Qualls 2010 - Pearl River Map Turtle. In: A.G.J. Rhodin, P.C.H. Pritchard, P.P. van Dijk, R.A. Saumure, K.A. Buhmann, J.B. Iverson, and R.A. Mittermeier (Eds.). *Conservation Biology of Freshwater Turtles and Tortoises: A Compilation Project of the IUCN/SSC Tortoise and Freshwater Turtle Specialist Group*. *Chelonian Research Monographs* 5(9):094.1–8.

24. Kuhajda, B.R., D.A. Neely, and **J.R. Ennen**. 2016. Geographic Distribution: *Gyrinophilus porphyriticus* (Spring Salamander). *Herpetological Review* 47:245.

2015

23. **Ennen, J.R.** 2015. Geographic Distribution: *Lithobates palustris* (Pickerel Frog). *Herpetological Review* 46:562.
22. **Ennen, J.R.**, B.R. Kuhajda, K.F. Alford, and S.C. Hazzard 2015. Natural History Note: *Desmognathus quadramaculatus* (Black-bellied Salamander). Predation. *Herpetological Review* 46:226–227.

2014

21. **Ennen, J.R.**, B.R. Kuhajda, and B. Albanese. 2014. Geographic Distribution: *Apalone spinifera* (Spiny Softshell). *Herpetological Review* 45:656
20. Lovich, J.E., and **J.R. Ennen**. 2014. *Graptemys gibbonsi* Lovich and McCoy Pascagoula Map Turtle. *Catalogue of American Amphibians and Reptiles* 901.1-

2012

19. **Ennen, J.R.**, J.E. Lovich, and R. Birkhead. 2012. *Graptemys pearlensis* Ennen et al. Pearl River map turtle. *Catalogue of American Amphibians and Reptiles* 889.1-889.4.

2011

18. Loughran, C.L., **J.R. Ennen**, and J.E. Lovich. 2011. *Gopherus agassizii* (Desert Tortoise). Burrow Collapse. *Herpetological Review* 42:593
17. **Ennen, J.R.**, C. L. Loughran, and J. E. Lovich. 2011. Natural History Note: *Gopherus agassizii* (Desert Tortoise). Non-native seed dispersal. *Herpetological Reviews* 42:266-267.

2009

16. **Ennen, J.R.**, J. Lamb, and C. P. Qualls. 2009. Natural History Note: *Gopherus polyphemus*. Nesting. *Herpetological Review* 40: 77-78

2008

15. **Ennen, J.R.** and B. R. Kreiser. 2008. Geographic Distribution: *Acris crepitans*. *Herpetological Review* 39:104
14. **Ennen, J.R.** and B. R. Kreiser. 2008. Geographic Distribution: *Hyla cinerea*. *Herpetological Review* 39:105
13. Mohrman, T. J. and **J.R. Ennen**. 2008. Natural History Note: *Nerodia clarkii clarkii*. Predation. *Herpetological Review* 39:355-356

2007

12. **Ennen, J.R.**, W Selman, and B. R. Kreiser. 2007. Natural History Note: *Graptemys gibbonsi*. Diet. *Herpetological Reviews* 38:200

2006

11. **Ennen, J.R.**, J. M. Davenport, and W. M. Thurman. 2006. Geographic Distribution: *Ambystoma maculatum*. Herpetological Review 37:481
10. **Ennen, J.R.**, J. M. Davenport, and W. M. Thurman. 2006. Geographic Distribution: *Ambystoma maculatum*. Herpetological Review 37:481
9. Davenport, J. M., **J.R. Ennen**, and W. M. Thurman. 2006. Geographic Distribution: *Ambystoma opacum*. Herpetological Review 37:481-482
8. Thurman, W. M, **J.R. Ennen**, and J. M. Davenport. 2006. Geographic Distribution: *Desmognathus fuscus fuscus*. Herpetological Review 37:482
7. Thurman, W. M, **J.R. Ennen**, and J. M. Davenport. 2006. Geographic Distribution: *Eurycea cirrigera*. Herpetological Review 37:483
6. **Ennen, J.R.**, J. M. Davenport, and W. M. Thurman. 2006. Geographic Distribution: *Eurycea lucifuga*. Herpetological Review 37:483-484
5. Thurman, W. M, **J.R. Ennen**, and J. M. Davenport. 2006. Geographic Distribution: *Rana sylvatica*. Herpetological Review 37:490

2005

4. Davenport, J. M., **J.R. Ennen**, and A. F. Scott. 2005. New records for amphibian from counties in South-Central Tennessee. Herpetological Review 36:209-210

2004

3. Sutton, S., T. Brown, **J. Ennen**, and J. Maloney. 2004. Geographic Distribution: *Hyla cinerea*. Herpetological Review 35:403
2. **Ennen, J.** and J. Maloney. 2004. Geographic Distribution: *Rana sylvatica*. Herpetological Reviews 35:407

2001

1. W. B. Cash, **J.R. Ennen**, and J. O. Webb. 2001. Smoky Mountains Reptiles. ATBI Quarterly, Autumn Newsletter Vol. 2.

PRESENTATIONS (* = INVITED OR KEYNOTE SPEAKER)

- ***Ennen, J.R.** 2020. Turtles all the way down: the conservation and biogeography of turtles. Departmental Seminar, Austin Peay State University, Clarksville, Tennessee.
- Ennen, J.R.**, M. Agha, J.B. Iverson, S.C. Sweat, W.A. Matamoros, A.G.J. Rhodin, and C.W. Hoagstrom. 2020. Turtles all the way down: global conservation priorities at the sub-basin level. Southeastern Partnership of Amphibian and Reptile Conservation. Camp McDowell, AL.

- Cragg, S.L., **J.R. Ennen**, S.M. Mitchell, K.K. Cecala, and J.M. Davenport. 2019. Cohabitation patterns between stream salamanders and crayfish in the southern Appalachians. 25th Annual Meeting of the Tennessee Herpetological Society, Gray, Tennessee.
- Agha, M., **J.R. Ennen**, and B.D. Todd. 2019. Use of saline environments by freshwater turtles: implications of sea level rise. Turtle Survival Alliance, Tucson, AZ.
- Walker, E., K. Cecala, **J.R. Ennen**, and J. Davenport. 2019. Exploring mechanisms regulating interspecific interactions in headwater vertebrate communities. Southeastern Partnership of Amphibian and Reptile Conservation. Black Mountain, NC.
- Davenport, J., K. Cecala, D. Garig, S. Hyder, L. Recker, R. Colvin, J. Denison, A. Feltmann, M. Herrboldt, C. Weible, T. Simmonds, and **J.R. Ennen**. 2019. Alligator snapping turtles (*Macrochelys temminckii*): Where are they now in West Tennessee. Southeastern Partnership of Amphibian and Reptile Conservation. Black Mountain, NC.
- Godwin, J. and **J.R. Ennen**. 2018. Map turtle (*Graptemys*) studies in Alabama. Annual Symposium on the Conservation and Biology of Tortoises and Freshwater Turtles. Turtle Survival Alliance, Fort Worth, Texas.
- Ennen, J.R.**, D. Garig, and J. Davenport. 2018. Can temporary visits from a common snapping turtle cause legacy effects in freshwater food webs? Annual Symposium on the Conservation and Biology of Tortoises and Freshwater Turtles. Turtle Survival Alliance, Fort Worth, Texas.
- Ennen, J.R.** 2018. Overview of the turtle research at the Tennessee Aquarium Conservation Institute. Annual Symposium on the Conservation and Biology of Tortoises and Freshwater Turtles. Turtle Survival Alliance, Fort Worth, Texas.
- Averill-Murray, R.C., J.E. Lovich, M. Agha, **J.R. Ennen**, and M. Austin. 2018. Variation in annual clutch phenology of Sonoran desert tortoises (*Gopherus morafkai*) in Central Arizona. Annual Symposium on the Conservation and Biology of Tortoises and Freshwater Turtles. Turtle Survival Alliance, Fort Worth, Texas.
- Simmonds, T., S. Hyder, M. Herrboldt, C. Weible, D. Garig, A. Feltmann, R. Colvin, J. Denison, R. Brasso, **J. Ennen**, and J. Davenport. 2018. Preliminary investigation of Hg concentrations in two freshwater turtle species of west Tennessee. Association of Southeastern Biologists, Myrtle Beach, South Carolina.
- Recker, L., K. Cecala, S. Hyder, **J. Ennen**, D. Garig, R. Colvin, J. Denison, A. Feltmann, M. Herrboldt, C. Weible, T. Simmonds, and J. Davenport. 2018. Alligator snapping turtle (*Macrochelys temminckii*): Where are they now in western Tennessee? Association of Southeastern Biologists, Myrtle Beach, South Carolina.
- Garig, D., **J. Ennen**, and J. Davenport. 2018. The legacy effects of a transient predator in a freshwater food web. Association of Southeastern Biologists, Myrtle Beach, South Carolina.
- Hyder, S., J. Davenport, and **J. Ennen**. 2018. Preliminary assessment of movement ecology in a West Tennessee population of Alligator Snapping Turtles (*Macrochelys temminckii*). Association of Southeastern Biologists, Myrtle Beach, South Carolina.
- Puffer, S.R., J.E. Lovich, M. Agha, **J.R. Ennen**, K. Meyer-Wilkins, L.A. Tennant, A.L. Smith, K.L. Cummings, M.S. Vamstad. 2018. Reproductive ecology of desert tortoises (*Gopherus agassizii*) in the Sonoran Desert region of Joshua Tree National Park and the nearby Orocopia Mountains. Annual Meeting and Symposium of the Desert Tortoise Council; Las Vegas, Nevada.

- Ennen, J.R.*** 2017. Can renewable energy developments and wildlife coexist? Departmental Seminar, University of Southern Mississippi, Hattiesburg, Mississippi.
- Ennen, J.R.*** 2017. Can renewable energy developments and wildlife coexist? Departmental Seminar, Southeast Missouri State University, Cape Girardeau, Missouri.
- Ennen, J.R.** 2017. Overview of Turtle Research at the Tennessee Aquarium. Turtle Survival Alliance Conference, Charleston, South Carolina.
- Ennen, J.R.,** M. Agha, J.E. Lovich, C. Drost, M. Puffer, and P.C. Rosen. 2017. Habitat-associated morphology divergence physically constrains reproductive output in a mud turtle. Turtle Survival Alliance Conference, Charleston, South Carolina.
- Herrboldt, M.A., C.M. Weible, D.F. Garig, A.J. Feltman, R.L. Colvin, J.S. Dennison, **J.R. Ennen**, J.M. Davenport, and R.L. Brasso. 2016. Mercury concentrations in three freshwater turtle species of West Tennessee.). Tennessee Herpetological Society, Knoxville, Tennessee.
- Garig, D.F., J.M. Davenport, **J.R. Ennen**, R.L. Colvin, J.S. Dennison, A.J. Feltmann, M.A. Herrbody, and C.M. Weible. 2016. Preliminary survey of two west Tennessee River drainages results in two population of the Alligator Snapping Turtle (*Macrochelys temminckii*). Tennessee Herpetological Society, Knoxville, Tennessee.
- Ennen, J.R.***. 2016. Understanding the Where and Why of Turtles. Departmental Seminar, Tennessee Tech University, Cookeville, Tennessee.
- Lovich, J.E, M. Agha, D. Delaney, and **J.R. Ennen**. 2016. Recent findings from 20 years of research on Agassiz's desert tortoises at an operating wind energy facility. 2016 Desert Symposium.
- Ennen, J.R.*** 2015. The where and why of North American turtles. Tennessee Herpetological Society, Savannah, Tennessee.
- Ennen, J.R.,** J.M. Davenport, and K.F. Alford. 2015. Interspecific competition among headwater stream vertebrates. Tennessee Herpetological Society, Savannah, Tennessee.
- Ennen, J.R.*** 2015. Can renewable energy developments and wildlife coexist? Departmental Seminar, University of Tennessee at Chattanooga, Chattanooga, Tennessee.
- Ennen, J.R.,** W. Matamoros, S.C. Hazzard, M. Agha, and J.E. Lovich. 2015. The where and why of North American turtles: An explanation of species richness patterns. Tennessee Chapter of American Fisheries Society, Chattanooga, Tennessee.
- Yates, W.T., M. Agha, **J.R. Ennen**, J.E. Lovich, C.H. Ernst, E.M. Ernst, and S.J. Price. 2015. Delayed emergence dynamics in emydid neonates turtles of North America, Association of Southeastern Biologist, Chattanooga, Tennessee.
- Agha, M., B. Augustine, J.E. Lovich, D. Delaney, B. Sinervo, M.O. Murphy, **J.R. Ennen**, R. Cooper, and S.J. Price. 2015. Using motion-sensor camera technology to infer seasonal activity and thermal niche of the desert tortoise (*Gopher agassizii*), Association of Southeastern Biologist, Chattanooga, Tennessee.
- Agha, M., J.E. Lovich, **J.R. Ennen**, B. Augustine, T. Arundel, and S.J. Price. 2015. Exploring the spatial dynamics of tortoise burrow placement in a human-dominated landscape, Association of Southeastern Biologist, Chattanooga, Tennessee.
- Ennen et al.** 2015. The where and why of North American turtles: an explanation of species richness patterns. Association of Southeastern Biologist, Chattanooga, Tennessee.
- Ennen et al.** 2014. Sexual dichromatism in turtles: an understudied facet of turtle evolution. Turtle Survival Alliance, Orlando, Florida.

- Ennen** et al. 2014. Intradrainage morphological and pigmentation variation and the potential for sexual dichromatism within several *Graptemys* species. Joint Meeting of Ichthyologists and Herpetologists, Chattanooga, Tennessee.
- Sinervo, B, J.E. Lovich, **J.R. Ennen**, R. Huey, R. Cooper, and D. Miles. 2014. Prospects for *Gopherus*: Demographic and physiological models of climate change from 65 million years ago to the future prospects in the face of solar. North American Congress for Conservation Biology, Missoula, Montana.
- Lovich, J.E., and **J.R. Ennen**. 2014. Perspectives for solar energy development and wildlife conservation in North America. North American Congress for Conservation Biology, Missoula, Montana.
- Lovich, J.E., and **J.R. Ennen**. 2013. Renewable Energy Development and Terrestrial and Aquatic Wildlife Conservation: The New Frontier. Effects of Energy Development on Herps Symposium, Joint Meeting of Ichthyologists and Herpetologists, Albuquerque, New Mexico.
- Sinervo, B., J. Lovich, **J. Ennen**, D.B. Miles, R.B. Cooper, and R.B. Huey. 2013. The Impacts of Solar Farms and Wind Farms on Population Persistence and Extinction of the Desert Tortoises, *Gopherus agassizii*. Effects of Energy Development on Herps Symposium, Joint Meeting of Ichthyologists and Herpetologists, Albuquerque, New Mexico.
- ***Ennen, J.R.**, and J.E. Lovich. 2013. Utility-scale Renewable Energy Developments and Terrestrial Wildlife: Can They Coexist? Spring Seminar Series, Gulf Coast Research Laboratory, Ocean Springs, Mississippi.
- ***Ennen, J.R.**, and J.E. Lovich. 2012. Utility-scale Renewable Energy Developments and Terrestrial Wildlife: Can They Coexist? Invited Seminar for Ecology and Evolutionary Biology and Forestry, Wildlife and Fisheries departments at University of Tennessee Knoxville, Tennessee.
- Lovich, J.E., and **J.R. Ennen**. 2011. Freshwater Turtle and Tortoise Symposium: 31st Annual Symposium on Sea Turtle Biology and Conservation. “A quantitative analysis of the state of knowledge and life history traits of turtles of the United States.” San Diego, California.
- Lovich, J.E., and **J.R. Ennen**. 2011. Assessing the long-term survival and reproductive output of desert tortoises at a wind energy facility near Palm Springs. California Energy Commission staff workshop: Reducing the impacts of energy infrastructure on wildlife. Sacramento, California.
- Lovich, J.E., and **J.R. Ennen**. 2011. A quantitative analysis of the state of knowledge of turtles of the United States and Canada: how much do we really know. Southwest Chapter of Partners in Amphibian and Reptile Conservation. Tucson, Arizona.
- Lovich, J.E., and **J.R. Ennen**. 2011. Terrestrial wildlife conservation and renewable energy development in the desert southwest United States: a review. Current Research on Herpetofauna of the Sonoran Desert. Tucson, Arizona.
- Lovich, J.E., and **J.R. Ennen**. 2011. Terrestrial wildlife conservation and renewable energy development in the desert southwest United States: a review. The Wildlife Society. Waikaloa, Hawaii.
- Lovich, J.E., and **J.R. Ennen**. 2012. Climatic variation predictably affects clutch phenology in Agassiz’s desert tortoise (*Gopherus agassizii*). 7th World Congress of Herpetology, Vancouver, Canada.

- Lovich, J.E., and **J.R. Ennen**. 2012. Climate predictably affects clutch phenology in a population of Agassiz's desert tortoise (*Gopherus agassizii*) in southern California. First author on multi-author paper. Turtle Survival Alliance, Tucson, Arizona.
- Lovich, J.E., M.M. Agha, M. Liszewski, **J.R. Ennen**, K. Meyer, C. Loughran, S. Madrak, and C. Bjurlin. 2012. Climatic variation affects clutch phenology in Agassiz's Desert Tortoises (*Gopherus agassizii*). 37th Annual Desert Tortoise Symposium, Las Vegas, Nevada.
- Lovich, J.E., M.M. Agha, M. Liszewski, **J.R. Ennen**, K. Meyer, C. Loughran, S. Madrak, and C. Bjurlin. 2012. Climatic variation affects clutch phenology in Agassiz's Desert Tortoises (*Gopherus agassizii*). 26th Annual Desert Symposium, Zzyzx, NA.
- Lovich, J.E., M.M. Agha, M. Liszewski, **J.R. Ennen**, K. Meyer, C. Loughran, S. Madrak, and C. Bjurlin. 2012. Climatic variation affects clutch phenology in Agassiz's Desert Tortoises (*Gopherus agassizii*). Symposium for the Conservation and Biology of Tortoises and Freshwater Turtles, co-hosted by Turtle Survival Alliance and International Union for Conservation of Nature, Tucson, AZ.
- Gaillard, D.L., **J.R. Ennen**, B.R. Kresier, and C.P. Qualls. 2012. Range-wide Population Genetic Structure of the Gopher Tortoise (*Gopherus polyphemus*). Southeastern Partners in Amphibian and Reptile Conservation, Fall Creek Falls State Park, Pikeville, TN
- Ennen, J.R.** 2011. Reproductive Ecology and Conservation Genetics of Gopher Tortoises (*Gopherus polyphemus*). Tennessee Herpetological Society, Cumberland College, Lebanon, TN
- ***Ennen, J.R.** 2011. Genetic and Demographic Studies on the Conservation of the Gopher Tortoise (*Gopherus polyphemus*). Brown Bag Seminar, Southwest Biological Science Center, USGS, Flagstaff, AZ
- Ennen, J.R.** and J.E. Lovich. 2011. What do we know about the effects of utility-scale renewable energy (USRE) development on terrestrial wildlife in the desert Southwest with the emphasis on the desert tortoise? The 31st Annual Symposium on Sea Turtle Biology and Conservation, San Diego, CA
- ***Ennen, J.R.** and J.E. Lovich. 2010. What do we know about the effects of utility-scale renewable energy (USRE) development on terrestrial wildlife in the desert Southwest with the emphasis on the desert tortoise? Wildlife Society Conference, Snowbird, UT
- ***Ennen, J.R.** 2009. Genetic and Demographic Studies on the Conservation of the Gopher Tortoise (*Gopherus polyphemus*). Department of Biology, Maryville College, Maryville, TN
- Ennen, J.R.**, B.K. Kreiser, and C.P. Qualls. 2009. A Reassessment of the Phylogeography of *Gopherus polyphemus*. Alabama PARC Meeting, Solon Dixon Center, AL
- Ennen, J.R.**, B.R. Kreiser, and C.P. Qualls. 2009. A Reassessment of the Phylogeography of *Gopherus polyphemus*. Gopher Tortoise Council Meeting, Gainesville, FL
- Ennen, J.R.**, B.R. Kreiser., C.P. Qualls. 2009. Genetic and Demographic Studies on the Conservation of the Gopher Tortoise (*Gopherus polyphemus*). Biological Sciences Departmental Seminar, University of Southern Mississippi, Hattiesburg, MS
- Ennen, J.R.**, B.R. Kreiser, and C.P. Qualls. 2009. Low Genetic Diversity in Several *Gopherus polyphemus* Populations in the DeSoto National Forest, Mississippi. Graduate Student Forum Symposium, Hattiesburg, MS

- Ennen, J.R.**, B.R. Kreiser, and C.P. Qualls. 2008. Low Genetic Diversity in Several *Gopherus polyphemus* Populations in the DeSoto National Forest, Mississippi. Gopher Tortoise Council Meeting, Jekyll Island, GA
- Ennen, J.R.**, and A.F. Scott. 2007. Diel Movement Behavior of *Sternotherus minor peltifer* (Stripe-necked Musk Turtle) in Central Tennessee. American Society of Ichthyologists and Herpetologists annual meeting, St. Louis, MO
- Ennen, J.R.**, B.R. Kreiser, C.P. Qualls, and W.W. Selman. 2007. A Molecular Assessment of *Graptemys gibbonsi* Populations in the Pearl and Pascagoula Rivers.” American Society of Ichthyologists and Herpetologists annual meeting, St. Louis, MO (poster)
- Ennen, J.R.**, B.R. Kreiser, C.P. Qualls, and W.W. Selman. 2006. Molecular Comparison of *Graptemys gibbonsi* Populations in the Pearl and Pascagoula Rivers. American Society of Ichthyologists and Herpetologists annual meeting, New Orleans, LA (poster)
- Ennen, J.R.**, and A.F. Scott. 2005. Movements and Diel Activity of *Sternotherus minor peltifer* in Whiteoak Creek, Houston and Humphreys Counties, Tennessee: a preliminary report. American Society of Ichthyologists and Herpetologists annual meeting, Tampa Bay, FL (poster)
- Ennen, J.R.**, and A.F. Scott. 2005. Movements and Diel Activity of *Sternotherus minor peltifer* in Whiteoak Creek, Houston and Humphreys Counties, Tennessee: a preliminary report. 11th Symposium on the Natural History of Lower Tennessee and Cumberland River Valleys, Brandon Springs, Land Between The Lakes, TN (poster)
- Ennen, J.R.**, and A.F. Scott. 2004. Movements and Diel Activity of *Sternotherus minor peltifer* in Whiteoak Creek, Houston and Humphreys Counties, Tennessee: a preliminary report. Tennessee Academy of Science Conference, Columbia State Community College, Columbia, TN (poster)
- Ennen, J.R.**, and A.F. Scott. 2004. Movements and Diel Activity of *Sternotherus minor peltifer* in Whiteoak Creek, Houston and Humphreys Counties, Tennessee: a preliminary report. Tennessee Herpetological Society Meeting, Maryville College, Maryville, TN

GRANTS

2018

- Aquarium and Zoo Facilities Association Clark Waldram Conservation grant. "Climate Change Impacts on Headwater Stream Vertebrates in the Southeastern United States " \$1,471.11

2017

- Aquarium and Zoo Facilities Association Clark Waldram Conservation grant. "Amphibian conservation: understanding the effects of invasive species on native amphibians in headwater streams" \$1,445

2016

- Aquarium and Zoo Facilities Association Clark Waldram Conservation grant. "Amphibian conservation: understanding the effects of invasive species on native amphibians in headwater streams" \$1,500.
 - Columbus Zoo Conservation Grant. "Movement Ecology of Juvenile Alligator Snapping Turtles to Determine Conservation Value of Sites in West Tennessee for Future Release of Propagated Individuals" \$4,961.
- 2015
- Tennessee Wildlife Resource Agency, "Status of Alligator Snapping Turtle, *Macrochelys temminckii*, in Tennessee" \$83,790
- 2014
- Aquarium and Zoo Facilities Association Clark Waldram Conservation grant. "Amphibian Conservation: Understanding Mudpuppy Tolerances and Behavior." \$1,600.
- 2013
- National Science Foundation, 23rd NSF EPSCoR National Conference, "Education, Innovation, and Entrepreneurship: EPSCoR as a Vehicle for Delivering on National Priorities" \$420,119
- 2011
- Southwestern Biological Science Center, USGS, Internal Grant, "A preliminary assessment of the arsenic cycle in the Montezuma Well food web and its possible role in the disappearance of the Sinagua people in the Verde Valley." \$15,800
- Past 10 years
- US Fish and Wildlife Service, "Conservation genetics of *Gopherus polyphemus* at the Southeastern scale: genetic isolation between eastern and western populations." \$3,949
 - US Fish and Wildlife Service, "Range-wide assessment of population structure and conservation genetics of Gopher tortoises, *Gopherus polyphemus*, using DNA microsatellites." \$25,000
 - Mississippi Department of Wildlife, Fisheries, and Parks. "Conservation genetics of *Gopherus polyphemus* at the Southeastern scale: genetic isolation between eastern and western populations." \$15,000
 - Larry Landers Student Research Award, Gopher Tortoise Council "Conservation Genetics of *Gopherus polyphemus*: Identifying Distinct Population Segments." \$800
 - Chelonian Research Foundation Linnaeus Fund, "Molecular Comparison of *Graptemys gibbonsi* Populations between the Pearl and Pascagoula Rivers \$1,900

AWARDS AND HONORS

- Outstanding Young Alumni, Maryville City Schools Foundation (2014)
- Graduate Student Award, University of Southern Mississippi (2010)
- Awarded the University of Southern Mississippi Graduate Assistantship Fellowship (2006)

PROFESSIONAL SOCIETIES, ORGANIZATIONS, SERVICE ACTIVITIES

SOCIETIES & MEMBERSHIPS:

- Society for the Study of Amphibians and Reptiles, Turtle Survival Alliance, The Herpetologist League, Tortoise and Freshwater Turtle Specialist Group

JOURNAL REVIEWER:

- Journal of Wildlife Management, Biological Journal of the Linnean Society, Ecology and Evolution, Southeastern Naturalist, Biologia, Chelonian Conservation and Biology, Journal of Herpetology, Copeia, Herpetological Conservation and Biology, Herpetological Monograph, Herpetological Review, PLOS ONE, BioScience, and Evolutionary Biology, Biology Letters, Journal of Animal Ecology, and Revista Biología Tropical

SERVICE/ OUTREACH ACTIVITIES:

- *Sargeant-at-Arms*, Tennessee Herpetological Society (2018 – present)
- *Co-Editor*, Chelonian Conservation and Biology (2019 – present)
- *Guest lecturer*, “Biogeography of Turtles”, Herpetology class at University of the South: Sewanee, Sewanee, TN (April 5 2016).
- *Guest presenter*, Baylor Journal Club, Chattanooga, TN (March 3 2016)
- *Salamander Day*, Nature Nuts, an education and outreach program at the TN Aquarium (February 13 2016)
- *Turtle Day*, Nature Nuts, an education and outreach program at the TN Aquarium, TN River Gardens, TN (August 27 2015)
- *Local Host Committee*, 2014 Joint Meeting of Ichthyologists and Herpetologists (JMIH), Chattanooga, TN (Sept 2013 – July 2014)
- *Renewable Energy Day*, Boys Scouts of America, Camp Buck Toms, Rockwood, TN (July 2013)
- *Workshop Presenter*, American Society for Engineering Education Southeastern Section Annual Conference, Tennessee Tech University, Cookeville, TN (Mar 2013)
- *Associate Editor*, Chelonian Conservation and Biology (2013 – 2019)
- *Renewable Energy Day*, Sweetwater High School, Sweetwater, TN (Feb 2013)
- *Engineering Challenges*, Tennessee STEM Leadership Academy, Memphis, TN, (Feb 2013)
- *Engineering Challenges*, Tennessee STEM Leadership Academy, Oak Ridge, TN (July 2012 and 2013)
- *Vice President*, Graduate Student Forum, University of Southern Mississippi, Hattiesburg, MS (2008 – 2009)
- *Volunteer*, Exotic Species Removal Program, Warner Park Nashville, TN (2004)
- *Volunteer Representative*, Austin Peay Day, Austin Peay State University, Clarksville, TN (2003)
- *Science Olympia Volunteer Instructor*, Maryville College, Maryville, TN (2002)
- *Amphibian and Reptile Presentation*, Great Smoky Mountains Institute at Tremont, Summer Science Camp (2001)

- *Volunteer*, Dream to Read Program, Sam Houston Elementary, Maryville, TN (2001)

PROFESSIONAL DEVELOPMENT

- “*Finding Funding*” Workshop, University of Tennessee, Knoxville, TN (2013)
- “*Success with Proposal Development*” Workshop, University of Tennessee, Knoxville, TN (2013)
- “*Building the NSF Grant Proposal*” Workshop, University of Tennessee, Knoxville, TN (2013)
- “*Secrets to Building a Stellar Research Program: Why networking is Key*” Webinar, Principal Investigators Association (2013)
- “*ArcGIS Basic I*” Workshop, University of Tennessee, Knoxville, TN (2013)
- “*ArcGIS Basic II*” Workshop, University of Tennessee, Knoxville, TN (2013)
- NSF “*Science: Becoming the Messenger*” Workshop, University of Tennessee, Knoxville, TN (2012)
- “*Intermediate-Level Program MARK*” Workshop, Colorado State University, Fort Collins, CO (2011)

MEDIA COVERAGE (SELECTED)

- “Scientific study suggests climate change could lead to fatter salamanders”, The Chattanooga, (2017). <http://chattanooga.com/2017/3/14/343845/Scientific-Study-Suggests-Climate.aspx>. (This story was picked up by 38 websites)
- “Tennessee Aquarium Researchers Study Alligator Snappers”, News Channel 9 Chattanooga (2017). <http://newschannel9.com/sports/outdoors/tennessee-aquarium-researchers-study-alligator-snappers>. (This story was picked up by 40 websites)
- “Researchers head into West Tennessee in hopes of tracking alligator snapping turtles”, Times Free Press (2017). <http://www.timesfreepress.com/news/local/story/2017/jul/01/researchers-head-west-tennessee-hopes-trackin/436238/>. (This story was picked up by 46 websites)
- “Tennessee Aquarium Researchers Create First Map of North American Turtle Communities”, MySA.com (San Antonio), (2017). <https://www.mysanantonio.com/business/press-releases/article/Tennessee-Aquarium-Researchers-Create-First-Map-12201369.php>. (This story was picked up by 44 websites)
- “Tennessee Aquairum’s New Study May Help Declining Gopher Tortoises”, Seattlepi.com (2018), <https://www.seattlepi.com/business/press-releases/article/Tennessee-Aquarium-s-New-Study-May-Help-Declining-12540274.php>. (This story was picked up by 43 websites)
- “Weighing In: What Natural Forces Determine Gender Size Differences in Turtles?”, Hawaii newsnow.com, (2018) <http://www.hawaii newsnow.com/story/37499405/weighing-in-what-natural-forces-determine-gender-size-differences-in-turtles>. (This story was picked up by 43 websites)
- “Josh Ennen, MC Alumnus, Discovers and Names New Turtle Species”, Maryville College Focus, Maryville, TN (2010). <http://www.maryvillecollege.edu/news/1274/>
- “Scientists Say New Turtle Species Found”, FoxNews.com (2010) <http://www.foxnews.com/tech/2010/09/04/scientists-say-new-turtle-species/>

- “Scientists Bring New Species of Turtle out of Its Shell”, ScienceDaily (2010) <http://www.sciencedaily.com/releases/2010/08/100826210203.htm>
- “NAU Scientists Bring New Species of Turtle out of Its Shell”, Inside NAU, Northern Arizona University, Flagstaff, AZ (2010) http://www4.nau.edu/insidenau/bumps/2010/8_11_10/turtles.html
- “New Turtle Species Discovered in Mississippi”, GulfLive.com, The Mississippi Press (2010) http://blog.gulflive.com/mississippi-press-news/2010/09/new_turtle_species_discovered.html
- “Former APSU Graduate Student Discovers New Turtle Species”, Clarksville Online, Clarksville, TN (2011) <http://www.clarksvilleonline.com/tag/josh-ennen/>