

Curriculum Vitae

Travis D. Marsico, Ph.D.

Arkansas State University
Department of Biological Sciences
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Education

University of Notre Dame, August 2004 through August 2008

Doctor of Philosophy in Biology, emphasis in Ecology, Evolution, and Environment; degree conferred January 2009; Dissertation: Post-glacial migration, limitations to poleward range expansion, and growth responses to future climates of plants in the Garry Oak Ecosystem; Jessica J. Hellmann, advisor

University of Costa Rica, June 2004 through July 2004

Organization for Tropical Studies, Tropical Ecology course (credits transferred to University of Arkansas)

University of Arkansas, August 2001 through June 2004

Master of Science in Biology; degree conferred August 2004; Thesis: Botanical species richness in Montgomery County, Arkansas, and autecology of *Hydrophyllum brownei* (Hydrophyllaceae): A Ouachita Mountain endemic; Johnnie L. Gentry, advisor

Arkansas Tech University, August 1998 through May 2001

Bachelor of Science in Biology; degree conferred May 2001; Honors Thesis: Similarities in seedling and sapling composition between group select cuts and forested areas; George P. Johnson, advisor

Academic Employment History

Jefferson Science Fellow, August 2022 through August 2023

Intelligence Research Specialist, U.S. Department of State, Bureau of Intelligence and Research, Office of the Geographer and Global Issue, Multilateral and Transnational Issues and Human Rights

Accomplishments: Seamlessly integrated into a team that prepares all-source intelligence briefings and written products to U.S. State Department principals and policy clients; to date, wrote or coauthored 10 publications read by policy makers at the highest levels of the U.S. Government (sole author for 3, lead author on 2, and co-author on 5 products); elevated biodiversity, invasive species, and other environmental issues across the intelligence community.

Arkansas State University, July 2020 through August 2022

Associate Chair, Department of Biological Sciences

Accomplishments: Assisted new Biological Sciences Chair in transition to A-State and the department; leading role in course scheduling; as Chair of Assessment Committee, put together a team to reenvision general education assessment and developed with the committee the use of direct, quantitative assessment through the ETS Major Field Exam in Biology; as Chair of Facilities Committee, worked with the Committee and Chair to prioritize facilities upgrades including to the Department of Biological Sciences research annex and purchasing new compound microscopes for teaching laboratories.

Arkansas State University, June 2019 through present

Professor of Botany

Curator, Arkansas State University Herbarium (STAR)

Accomplishments: Awarded the Inaugural Chancellor's Medal for Research and Creative Endeavors, A-State's highest honor bestowed on a faculty member; along with collaborators and students, published 17 peer-reviewed articles in scientific journals of international scope and 1 article in a regional journal; awarded \$2,776,540 in external funds in support of research and graduate student training, including the first National Science Foundation Research Traineeship grant on campus to expand A-State's science doctoral programs; oversaw 6 students in the lab who were awarded \$15,440 to support their research endeavors; served as research mentor for 9 graduate students and effectively served on 14 additional student graduate thesis or dissertation committees; served in leadership roles in three professional society executive boards; served A-State on 14 department, college, and university-level committees.

Arkansas State University, May 2018 through June 2020

Interim Chair, Department of Biological Sciences

Accomplishments: Managed a growing department with 27 faculty and 3 staff members, a \$2,104,260 mean annual budget, and \$1,763,508 expenditures in grants; developed Disease in Nature research thematic emphasis for department strategic vision for the 2020s; hired four tenure-track faculty members and two permanent instructors; effectively implemented faculty annual review; improved curriculum for undergraduate Environmental Science (B.S.) degree program.

Arkansas State University, July 2014 through April 2018

Associate Chair, Department of Biological Sciences

Accomplishments: Updated curriculum for M.S. Biology degree program and created new graduate degree forms for M.A. and M.S. degree programs to assist student progression; reconfigured B.S. Wildlife Ecology and Management degree to B.S. Wildlife, Fisheries, and Conservation with Wildlife and Fisheries emphasis areas; developed Environmental Science (B.S.) and Environmental Studies (B.A.) degree programs.

Arkansas State University, May 2014 through May 2019

Associate Professor of Botany

Curator, Arkansas State University Herbarium (STAR)

Accomplishments: Conducted a 5-month research sabbatical in Nicaragua exploring vascular plant species diversity along the elevation gradient of Volcán Maderas, Isla de Ometepe, and assisted a graduate student in the implementation of her research project; taught Tropical Botany at La Suerte Biological Station, Costa Rica, June 2018; received two university advising awards, the "You Made a Difference" Award and the Outstanding Graduate Faculty Mentor Award; along with collaborators and students, published 9 peer-reviewed articles in scientific journals of international scope and 1 article in a state-level journal; awarded \$4,385,973 in external grants to support research and student training; provided dynamic interaction with off-campus scientists for students and faculty by coordinating the Department of Biological Sciences Science Seminar Series; elected to and effectively served on Biological Sciences Department Promotion, Retention, and Tenure committee.

Arkansas State University, January 2010 through April 2014

Assistant Professor of Botany

Curator, Arkansas State University Herbarium (STAR)

Accomplishments: Along with collaborators and students, published 7 peer-reviewed articles in scientific journals of international scope and 1 article in a state-level journal; awarded \$1,061,858 in external and institutional funds in support of research and student training; served as research mentor for 5 graduate students and effectively served on 8 additional student graduate thesis or dissertation committees; served as a founding editorial board member of the journal *Ecology and Evolution*

Mississippi State University, August 2008 through December 2009

Post-doctoral Research Associate

Collaborative research on phylogeography of cactophagous moths and evolutionary ecology of interactions between these moths (both native and invasive species) and their native pricklypear hosts

Publications**Peer-Reviewed Scientific Literature (undergraduate authors underlined)****In Preparation**

- **T. D. Marsico**, T. Long, and R. D. Lucardi. Are industrial floristic inventories valuable for resolving taxonomic ambiguity? A test case in the genus *Glandularia*: Verbenaceae. For submission to American Journal of Botany.
- Schulz, A. N., R. D. Lucardi, and **T. D. Marsico**. Fighting fire with fire: uncovering the drivers of non-native insect invasions using underutilized biological control datasets. For submission to Ecology Letters.
- Schulz, A. N. and **T. D. Marsico**. Policy challenges and recommendations for detecting and managing high-impact invasive insects and plants in the United States. For submission to Environmental Science and Policy.
- DeRouen, D. P. and **T. D. Marsico**. A vascular plant inventory of Big Lake and Wapanocca National Wildlife Refuges in Northeast Arkansas. For submission to Journal of the Botanical Research Institute of Texas.

In Review

- McCartha, G. L., C. M. Sims, B. J. Kosnik, J. R. Abbott, M. L. Jones, B. E. Benton, S. A. Mangan, and **T. D. Marsico**. Flora of six Lower Mississippi River Islands (U.S.A.). Submitted to Journal of the Botanical Research Institute of Texas.
- Reed, J. N., A. N. Schulz, and **T. D. Marsico**. The vascular flora of Poinsett County, Arkansas, USA: Current knowledge and a historical look at collection bias. Submitted to Journal of the Botanical Research Institute of Texas.

Early View

- Uden, D. R., A. M. Mech, N. P. Havill, A. N. Schulz, M. P. Ayres, D. A. Herms, A. M. Hoover, K. J. K. Gandhi, R. A. Hufbauer, A. M. Liebhold, **T. D. Marsico**, K. F. Raffa, K. A. Thomas, P. C. Tobin, and C. R. Allen. 2023. Phylogenetic risk assessment is robust for forecasting the impact of European insects on North American conifers. *Ecological Applications* e2761. <https://doi.org/10.1002/eap.2761>

Published

43. Bellis, E. S., R. D. Lucardi, K. Saltonstall, and **T. D. Marsico**. 2022. Predicting invasion risk of grasses in novel environments requires improved genomic understanding of adaptive potential. *American Journal of Botany* 109(12): 1965-1968. <https://doi.org/10.1002/ajb2.16079>. Invited submission to "On the Nature of Things."
42. Berrios, H. K., I. Coronado, and **T. D. Marsico**. 2022. High species richness and turnover of vascular epiphytes is associated with water availability along the elevation gradient of Volcán Maderas, Nicaragua. *Ecology and Evolution* 12(11): e9501. <https://doi.org/10.1002/ece3.9501>
41. Worthy, S. J., **T. D. Marsico**, R. D. Lucardi, L. E. Whitehurst, and K. S. Burgess. 2022. Variation in plant traits and phylogenetic structure associated with native and nonnative species in an industrialized flora. *NeoBiota* 77: 101-123. doi: 10.3897/neobiota.77.87307
40. Soteropoulos, D. L., J. A. Ledvina, and **T. D. Marsico**. 2022. An exploration of the vascular flora of Pine City Natural Area, Monroe Co., Arkansas, U.S.A., in comparison to the Mississippi Alluvial Plain in eastern Arkansas. *Journal of the Botanical Research Institute of Texas (JBRI)* 16(1): 165-194. <https://doi.org/10.17348/jbrit.v16.i1.1226>

39. Soteropoulos, D. L. and **T. D. Marsico**. 2022. Community science success for herbarium transcription in Arkansas: Building a network of students and volunteers for Notes from Nature. *Castanea* 87(1): 54-74.
38. Monfils, A. K., E. Krimmel, D. Linton, **T. D. Marsico**, A. B. Morris, and B. Ruhfel. 2022. Collections Education: The extended specimen and data acumen. *BioScience* 72(2): 177-188. <https://doi.org/10.1093/biosci/biab109>
37. Schulz, A. N., A. M. Mech, M. P. Ayres, K. J. K. Gandhi, N. P. Havill, D. A. Herms, A. M. Hoover, R. A. Hufbauer, A. M. Liebhold, **T. D. Marsico**, K. F. Raffa, P. C. Tobin, D. R. Uden, and K. A. Thomas. 2021. Predicting non-native insect impact: focusing on the trees to see the forest. *Biological Invasions* 23(12): 3921-3936. <https://doi.org/10.1007/s10530-021-02621-5>
36. Schulz, A. N., R. D. Lucardi, and **T. D. Marsico**. 2021. Strengthening the ties that bind: an evaluation of cross-disciplinary communication between invasion ecologists and biological control researchers in entomology. *Annals of the Entomological Society of America* 114(2): 163-174. <https://doi.org/10.1093/aesa/saaa052>
35. Monfils, A. K., E. R. Krimmel, J. M. Bates, J. E. Bauer, M. W. Belitz, B. C. Cahill, A. Caywood, N. S. Cobb, J. Colby, S. Ellis, D. M. Krejsa, T. Levine, **T. D. Marsico**, T. J. Mayfield-Meyer, J. Miller-Camp, R. M. (Gil) Nelson, M. A. Phillips, M. A. Revelez, D. R. Roberts, R. A. Singer, and J. M. Zaspel. 2020. Regional collections are an essential component of biodiversity research infrastructure. *BioScience* 70(12): 1045-1047. doi:10.1093/biosci/biaa102
34. **Marsico, T. D.**, E. R. Krimmel, J. R. Carter, E. L. Gillespie, P. D. Lowe, R. McCauley, A. B. Morris, G. Nelson, M. Smith, D. L. Soteropoulos, and A. K. Monfils. 2020. Small herbaria contribute unique biogeographic records to county, locality, and temporal scales. *American Journal of Botany* 107(11): 1577-1587. doi:10.1002/ajb2.1563
33. Lucardi, R. D., E. S. Bellis, C. E. Cunard, J. K. Gravesande, S. C. Hughes, L. E. Whitehurst, S. J. Worthy, K. S. Burgess, and **T. D. Marsico**. 2020. Seeds attached to refrigerated shipping containers represent a substantial risk of nonnative plant species introduction and establishment. *Scientific Reports* 10: 15017. <https://doi.org/10.1038/s41598-020-71954-3>
32. Whitehurst, L. E., C. E. Cunard, J. N. Reed, S. J. Worthy, **T. D. Marsico**, R. D. Lucardi, and K. S. Burgess. 2020. Preliminary application of DNA barcoding toward the detection of viable plant propagules at an initial, international point-of-entry in Georgia, USA. *Biological Invasions* 22: 1585-1606. <https://doi.org/10.1007/s10530-020-02204-w>
31. Schulz, A. N., A. M. Mech, C. R. Allen, M. P. Ayres, K. J. K. Gandhi, J. Gurevitch, N. P. Havill, D. A. Herms, R. A. Hufbauer, A. M. Liebhold, K. F. Raffa, M. J. Raupp, K. A. Thomas, P. C. Tobin, and **T. D. Marsico**. 2020. The impact is in the details: evaluating a standardized protocol and scale for determining non-native insect impact. *NeoBiota* 55: 61-83. <https://doi.org/10.3897/neobiota.55.38981>
30. Lucardi, R. D., C. E. Cunard, K. S. Burgess, J. N. Reed, S. J. Worthy, L. E. Whitehurst, and **T. D. Marsico**. 2020. An initial industrial flora: a framework for botanical research in cooperation with industry for biodiversity conservation. *PLoS One* 15(4): e0230729. <https://doi.org/10.1371/journal.pone.0230729>
29. Mech, A. M., K. A. Thomas, **T. D. Marsico**, D. A. Herms, C. R. Allen, M. P. Ayres, K. J. K. Gandhi, J. Gurevitch, N. P. Havill, R. A. Hufbauer, A. M. Liebhold, K. F. Raffa, A. N. Schulz, D. R. Uden, and P. C. Tobin. 2019. Evolutionary history predicts high-impact invasions by herbivorous insects. *Ecology and Evolution* 9(21): 12216-12230. <https://doi.org/10.1002/ece3.5709>
28. Schulz, A. N., R. D. Lucardi, and **T. D. Marsico**. 2019. Successful invasions and failed biocontrol: the role of antagonistic species interactions. *BioScience* 69(9): 711-724. <https://doi.org/10.1093/biosci/biz075>
27. Ling, T., W. H. Lang, J. Craig, M. B. Potts, A. Budhராஜா, J. Opferman, J. Bollinger, J. Maier, **T. D. Marsico**, and F. Rivas. 2019. Studies of Jatrogossone A as a reactive oxygen species inducer in cancer cellular models. *Journal of Natural Products* 82(5): 1301-1311. <https://doi.org/10.1021/acs.jnatprod.8b01087>

26. Gerdes, C., K. M. Harris, M. Beas-Moix, and **T. D. Marsico**. 2017. The transformative power of student-led natural history collections clubs. *Collection Forum* 31 (1-2): 70-83.
<https://doi.org/10.14351/0831-4985-31.1.70>
25. Sauby, K. E., J. Kilmer, M. C. Christman, R. D. Holt, and **T. D. Marsico**. 2017. The influence of herbivory and weather on the vital rates of two closely related cactus species. *Ecology and Evolution* 7: 6996-7009. <https://doi.org/10.1002/ece3.3232/>
24. Harris, K. M. and **T. D. Marsico**. 2017. Digitizing specimens in a small herbarium: a viable workflow for collections working with limited resources. *Applications in Plant Sciences* 5(4): 1600125.
23. Justus, B. G., D. R. L. Burge, J. M. Cobb, **T. D. Marsico**, and J. L. Bouldin. 2016. Macroinvertebrate and diatom metrics as indicators of water-quality conditions in connected depression wetlands in the Mississippi Alluvial Plain. *Freshwater Science* 35(3): 1049-1061.
22. Foard, M., D. J. Burnette, D. R. L. Burge, and **T. D. Marsico**. 2016. Influence of river channelization and the invasive shrub, *Ligustrum sinense*, on oak (*Quercus* spp.) growth rates in bottomland hardwood forests. *Applied Vegetation Science* 19(3): 401-412.
21. Thigpen, C. S., S. E. Trauth, and **T. D. Marsico**. 2015. A case of frugivory in a green treefrog (*Hyla cinerea*) from northeastern Arkansas. *Journal of the Arkansas Academy of Science* 69: 98-100.
20. Nelson, G., P. Sweeney, L. E. Wallace, R. K. Rabeler, D. Allard, H. Brown, J. R. Carter, M. W. Denslow, E. R. Ellwood, C. C. Germain-Autrey, E. Gilbert, E. Gillespie, L. R. Goertzen, B. Legler, D. B. Marchant, **T. D. Marsico**, A. B. Morris, Z. Murrell, M. Nazaire, C. Neefus, S. Oberreiter, D. Paul, B. R. Ruhfel, T. Sasek, J. Shaw, P. S. Soltis, K. Watson, A. Weeks, A. R. Mast. 2015. Digitization workflows for flat sheets and packets of plants, algae, and fungi. *Applications in Plant Sciences* 3(9): 1500065.
19. Burge, D. R. L., **T. D. Marsico**, and M. B. Edlund. 2015. *Stauroneis kingstonii* sp. nov. (Bacillariophyta: Naviculales), a new diatom species from the Black Swamp, Arkansas, USA. *Phytotaxa* 205(3): 177-186.
18. **Marsico, T. D.**, K. E. Sauby, C. P. Brooks, M. E. Welch, and G. N. Ervin. 2015. Phylogeographic evidence for a Florida panhandle-peninsula discontinuity in the distribution of *Melitara prodenialis* Walker (Lepidoptera: Pyralidae), a native cactus-boring moth. *Insect Conservation and Biodiversity* 8(4): 377-388.
17. Beck, J. J., N. Baig, D. Cook, N. E. Mahoney, and **T. D. Marsico**. 2014. Semiochemicals from ex situ abiotically stressed cactus tissue: A contributing role of fungal spores? *Journal of Agricultural and Food Chemistry* 62: 12273-12276.
16. Stephens, F. A., A. M. Woodard, and **T. D. Marsico**. 2012. Comparison between eggsticks of two cactophagous moths, *Cactoblastis cactorum* and *Melitara prodenialis* (Lepidoptera: Pyralidae). *Florida Entomologist* 95(4): 939-943.
15. Sauby, K. E., **T. D. Marsico**, G. N. Ervin, and C. P. Brooks. 2012. The role of host identity in determining the distribution of the invasive moth *Cactoblastis cactorum* (Lepidoptera: Pyralidae) in Florida. *Florida Entomologist* 95(3): 561-568.
14. Woodard, A. M., G. N. Ervin, and **T. D. Marsico**. 2012. Host plant defense signaling in response to a coevolved herbivore combats introduced herbivore attack. *Ecology and Evolution* 2: 1056-1064.
DOI: 10.1002/ece3.224.
13. Harris, K. M., M. B. Foard, and **T. D. Marsico**. 2012. Understanding floristic diversity through a database of Greene County specimens. *Journal of the Arkansas Academy of Science* 66: 94-105.
12. Stewart, J. M., **T. D. Marsico**, D. Burge, and J. J. Hellmann. 2012. Largest known *Quercus garryana* Douglas ex Hook. clone discovered on a steep slope at the boundary of Larrabee State Park, Washington, USA. *International Oaks* 23: 68-75.
11. Schartel, T. E., **T. D. Marsico**, and C. P. Brooks. 2011. First records of the parasitoid *Temelucha sinuata* Cushman (Hymenoptera: Ichneumonidae) in Mississippi and Florida, U.S.A. *Entomological News* 122: 376-377.
10. **Marsico, T. D.**, L. E. Wallace, G. N. Ervin, C. P. Brooks, J. E. McClure, and M. E. Welch. 2011. Geographic patterns of genetic diversity from the native range of *Cactoblastis cactorum* (Berg) support the documented history of invasion and multiple introductions for invasive populations. *Biological Invasions* 13: 857-868.

9. **Marsico, T. D.**, J. W. Burt, E. K. Espeland, G. W. Gilchrist, M. A. Jamieson, L. Lindström, G. K. Roderick, S. Swope, M. Szűcs, and N. D. Tsutsui. 2010. Underutilized resources for studying the evolution of invasive species during their introduction, establishment, and lag phases. *Evolutionary Applications* 3: 203-219.
8. **Marsico, T. D.** and J. J. Hellmann. 2009. Dispersal limitation inferred from an experimental translocation of *Lomatium* (Apiaceae) species outside their geographic ranges. *Oikos* 118: 1783-1792.
7. Pelini, S. L., J. D. K. Dzurisin, K. M. Prior, C. M. Williams, **T. D. Marsico**, B. J. Sinclair, and J. J. Hellmann. 2009. Translocation experiments with butterflies reveal limits to enhancement of poleward populations under climate change. *Proceedings of the National Academy of Sciences of the United States of America* 106: 11160-11165.
6. **Marsico, T. D.**, J. J. Hellmann, and J. Romero-Severson. 2009. Patterns of seed dispersal and pollen flow in *Quercus garryana* (Fagaceae) following post-glacial climatic changes. *Journal of Biogeography* 36: 929-941.
5. **Marsico, T. D.** 2006. Life history and environmental factors influence population density and stage structure in *Hydrophyllum brownei*. *American Midland Naturalist* 156(1): 178-188.
4. **Marsico, T. D.** 2005. The vascular flora of Montgomery County, Arkansas. *Sida* 21(4): 2389-2423.
3. MacRoberts, B. R., M. H. MacRoberts, and **T. D. Marsico**. 2005. Preliminary survey of the vascular flora of the Ouachita Mountains Biological Station, Polk County, Arkansas. *Bulletin of the Museum of Life Sciences*, No. 13, Louisiana State University in Shreveport. 19 pp.
2. **Marsico, T. D.** 2004. Vascular plant species inventory of Richardson Bottoms Wildlife Viewing Area. *Journal of the Arkansas Academy of Science* 58: 121-130.
1. **Marsico, T. D.** 2003. On the rare endemic *Hydrophyllum brownei* Kral & Bates (Browne's waterleaf): New population information and a recommendation for change in status. *Journal of the Arkansas Academy of Science* 57: 100-110.

Conference Proceeding

- Mech, A. M., K. A. Thomas, **T. D. Marsico**, D. A. Herms, C. R. Allen, M. P. Ayres, K. J. K. Gandhi, J. Gurevitch, N. P. Havill, R. A. Hufbauer, A. M. Liebhold, K. F. Raffa, A. N. Schulz, D. R. Uden, and P. C. Tobin. 2021. How available data can be used to predict the impact of non-native forest insects. Society of American Foresters 2020 National Convention Proceedings (Supplemental Information). *Journal of Forestry* 119(2), pp. S87, <https://doi.org/10.1093/jofore/fvab002>

Book Review

- **Marsico, T. D.** 2005. The Monarch Butterfly: Biology and Conservation, K. S. Oberhauser and M. J. Solensky, Cornell University Press, 2004. *American Midland Naturalist* 154: 479-480.

Dataset

- Mech, A. M., A. M. Hoover, A. N. Schulz, B. F. Barnes, K. S. Boyd, L. Durden, N. P. Havill, R. A. Hufbauer, A. M. Liebhold, **T. D. Marsico**, K. F. Raffa, C. Singareddy, E. Teach, P. C. Tobin, A. W. Wolf, and K. A. Thomas. 2020. Traits and Factors Catalog (TRAFAC): Hardwood specialists of North America. U.S. Geological Survey data release. <https://doi.org/10.5066/P9FT7C10>

Education Module

- Monfils, A., E. Krimmel, D. Linton, **T. Marsico**, A. Morris, and B. Ruhfel. 2019. Connecting students to citizen science and curated collections. *Biodiversity Literacy in Undergraduate Education*, QUBES Educational Resources. doi: doi:10.25334/Q4DN0M (985 views; 278 downloads)

Educational Pieces for Broad Audiences

- **Marsico, T. D.** (guest contributor). 2022. Using iNaturalist.org in a modern university course. Arkansas Natural Heritage Commission, Natural News Special Edition: iNaturalist: Coming Together for Biodiversity Conservation. <https://www.arkansasheritage.com/blog/dah/2022/02/28/using-inaturalist.org-in-the-modern-university-course>

- **Marsico, T. D.** 2016. Making the most of the legacy: Using Notes from Nature to discover and disseminate specimen label data. *Claytonia* 36(2): 3-7.
- **Marsico, T. D.** 2006. Herbaceous species' northern range margins—Does rarity matter for range shifts? *Friends of Beacon Hill Park Newsletter*. Victoria, British Columbia.

In Memorium

- **Marsico, T. D.** 2016. In Memorium: George Pryor Johnson (20 March 1956-16 December 2015). *Journal of the Botanical Research Institute of Texas* 10(1): 295-298.

Agency reports

- **Marsico, T. D.** and D. Burge. 2011. National Wetland Condition Assessment (NWCA) 2011; Results from the Arkansas Vegetation Laboratory.
- **Marsico, T. D.** and M. Foard. 2011. 2011 Shelby Farms Park Conservancy Vascular Plant Inventory Report. Prepared for Dr. Cheryl Goudie and the University of Memphis Environmental Research Center.
- **Marsico, T. D.** and M. Foard. 2011. 2011 Northern Crowley's Ridge Vascular Plant Inventory Report. Prepared for Theo Witsell at the Arkansas Natural Heritage Commission.

Contributions Noted

- A-State Connections podcast. 2022 (September 15). 'Decode' project garners \$2 million grant from National Science Foundation. Host: Johnathan Reaves; guests: **T. D. Marsico**, E. S. Bellis, and A. Matthews. <https://www.kasu.org/show/a-state-connections/2022-09-15/decode-project-garners-2-million-grant-from-national-science-foundation>
- Jonesboro Sun article. 2022 (September 6). 'Decode' project secures NSF grant.
- A-State News Article. 2022 (August 29). 'Decode' project garners \$2 million grant from National Science Foundation. <https://www.astate.edu/news/decode-project-garners-2-million-grant-from-national-science-foundation>
- Mayer, M. 2021 (February 5). Let's get together: How invasion ecology and biological control can improve collaboration. *Entomology Today*. <https://entomologytoday.org/2021/02/05/invasion-ecology-biological-control-improve-collaboration/>
- Soteropoulos, D. 2020 (December 18). ANHC Herbarium contributes specimen records to recently published research. *Arkansas Natural Heritage Commission Blog*. <https://www.arkansasheritage.com/blog/dah/2021/01/29/anhc-herbarium-contributes-specimen-records-to-recently-published-research>
- USDA Forest Service, Southern Research Station. 2020 (September 14). Hitchhiking seeds pose substantial risk of nonnative plant invasions. *ScienceDaily*. www.sciencedaily.com/releases/2020/09/200914083844.htm
- Duren, L. A., A. N. Schulz, A. Mech, and K. A. Thomas. 2020. A not so sudden impact—historical relations between conifers and insects can help predict damage by nonnative insects. U.S. Department of the Interior, U.S. Geological Survey Fact Sheet 2020-3039. <https://doi.org/10.3133/fs20203039>
- Cobb, K. 2017 (November 23). Marsico, Saunders honored at advisor luncheon. *Jonesboro Sun*.
- Cobb, K. 2017 (October 15). Bioblitzin' at Bearitage. *Jonesboro Sun*. Article is focused on a particular bioblitz event hosted by the Arkansas Center for Biodiversity Collections (ACBC) and the Department of Biological Sciences and attended by A-State students, faculty, and community members. Article also mentions the advantages of having bioblitz events more generally.
- Morris, S. 2017 (September 3) Diversity: Marsico family takes sabbatical in Nicaragua. *Jonesboro Sun*. Article focuses on 5-month sabbatical trip.
- Morris, S. 2016 (October 22). ASU students, faculty catalogue wildlife in first BioBlitz event. *Jonesboro Sun*.
- Morris, S. 2016 (September 5). Profs secure science grants. *Jonesboro Sun*. Article is focused on the biodiversity research by Marsico and collaborator Dr. Brook Fluker funded by two NSF grants totaling \$5.48M.

- Morris, S. 2016 (September 4). ASU faculty a community resource. Article mentions Marsico and the Arkansas State University Herbarium in the context of providing plant identification services to the community. The article focused on the community services the faculty in the Department of Biological Sciences provides.
- Vandagriff, S. 2016 (September 3). Growing goals. Jonesboro Sun. The story focuses on planting of a bald cypress (*Taxodium distichum*) tree at Jonesboro Math and Science Magnet School for which students tossed pieces of compostable paper with their goals written on them into the hole in which the tree was planted. Marsico planted the tree with students.
- Original story by A-State Director of University Communications, Thomas Moore. Posted by Symphonie Privett, Anchor – Reporter, KAIT, Region 8 News. 2016 (September 1). A-State professors head up multi-million dollar research projects. Retrieved from: <http://www.kait8.com/story/32950801/a-state-professors-head-up-multi-million-dollar-research-projects>. This story was picked up by 53 other Raycom television stations throughout the United States.
- Moore, T. 2016 (August 30). News Article: National Science Foundation approves \$5.48 million in grants for biodiversity projects led by A-State researchers. Retrieved from: <http://www.astate.edu/news/national-science-foundation-approves-5-48-million-in-grants-for-biodiversity-projects-led-by-a-state-researchers>. This article is associated with a video clip of Marsico and collaborator Dr. Brook Fluker explaining the projects.
- Moore, T. 2016 (August 30). News Article: Biodiversity projects headed by A-State Researchers. Retrieved from: <http://www.astate.edu/news/biodiversity-projects-headed-by-a-state-researchers>.
- Cobb, K. (Features Editor). 2016 (March 20). Living Section Feature: Later Gator: Students assemble alligator skeleton for educational display. Jonesboro Sun. Retrieved from jonesborosun.com. Article focused on Natural History Collections curation club outreach display project.
- Moore, T. 2016 (March 8). News Article: Students assemble alligator skeleton for educational display. Arkansas State University. Retrieved 11 March 2016 from <http://www.astate.edu/news/students-assemble-alligator-skeleton-for-educational-display>. Article focused on Natural History Collections curation club outreach display project.
- Morris, S. 2014 (August 20). A-State digitizes parts of plant collection with STAR Herbarium. Jonesboro Sun. Article focused on digitization efforts in the Arkansas State University Herbarium and the outreach that the herbarium provides to the local community.
- No author given. 2013 (Fall Newsletter). 2013 Fitzgerald Travel Grant Awardees: Kari Harris. SPNHC Newsletter. Article focused on graduate student Kari Harris receiving the travel award.
- Harris, K. M. 2013 (Fall Newsletter). Emerging Professionals Group. SPNHC Newsletter. Article focused on the new Emerging Professionals group in SPNHC, chaired by Kari Harris.
- No author given. 2013 (September 1). Doctoral student studies cacti to help naturally battle insects, other pests. Jonesboro Sun. Retrieved from jonesborosun.com. Article focused on funding to graduate student Anastasia M.W. Cooper from the Graduate Women in Science.
- No author given. 2013 (August 24). Cooper receives grant for doctoral research. Jonesboro Sun. Retrieved from jonesborosun.com. Article focused on funding to graduate student Anastasia M.W. Cooper from the Graduate Women in Science.
- Pruitt, S. F. 2013 (August 23). Grad student connecting art, science. Jonesboro Sun. Retrieved from jonesborosun.com. Article focused on graduate student Meghan Foard's work in Arkansas State University's Art in Science Club.
- Middleton, A. 2013 (April 24). Westside to build wildlife habitat. Jonesboro Sun. Retrieved from jonesborosun.com. Article focused on a student-driven wildlife habitat project at Westside School, mentioning Marsico and his students who identified some plant species on site.
- Pruitt, S. F. 2013 (March 12). Foard helps teach Harrisburg Middle School pupils. Jonesboro Sun. Retrieved from jonesborosun.com. Article focused on graduate student Meghan Foard's work with the NSF-funded GK12 program in a rural area school.

- No author given. 2012 (September 8). Conservation scholarships given. Jonesboro Sun. Retrieved from jonesborosun.com. The article listed graduate students Meghan Foard and Anastasia Woodard as recipients of the Arkansas Game and Fish Commission Conservation Scholarships.
- No author given. 2012 (September 6). ASU GK12 program continues at Wilson campus. The Osceola Times. Article focused on graduate student Anastasia Woodard's STEM teaching at South Mississippi County Elementary School through the NSF-funded GK12 program.
- University of Notre Dame. 2009 (June 25). Insights into how climate change might impact species' geographic ranges. ScienceDaily. Retrieved 10 July 2009 from www.sciencedaily.com/releases/2009/06/090623150617.htm. Article focused on Hellmann Lab research.
- Rignnette, J. 2007. Test plots on Beacon Hill. In Beacon Hill Park History 1842-2006, Chapter 21. <http://islandnet.com/beaconhillpark/contents/chapter21.htm>. Article focused on graduate student Travis Marsico's research in an urban natural area.
- Witsell, T. 2005. Montgomery County flora inventory yields 1,111 taxa of vascular plants. Claytonia 25(1): 2. Article focused on graduate student Travis Marsico's master's thesis research outcomes and contributions to the knowledge of Arkansas plant species distribution.

Grants

Pending Grants in Review (active requests of \$602,566)

- Toward the recovery of pondberry (*Lindera melissifolia*): combining demography, soil-borne microbes, population genetics, and modeling to inform best management practices (July 2023-June 2026); United State Fish and Wildlife Service; **\$602,566** (\$298,699 requested from sponsor); PI: S. A. Mangan, Co-PIs: **T. D. Marsico**, J. Nowlin, D. L. Soteropoulos, and J. Blackstock

Grant Funding Awarded to Marsico (\$8,239,491 in funding since 2010)

35. NRT-URoL: UandI-DEECoDE: **U**nderstanding **I**nvasion and **D**isease **E**cology and **E**volution through **C**omputational **D**ata **E**ducation (July 2022-June 2026); National Science Foundation (DGE-2151820); **\$1,999,484**; PI: **T. D. Marsico**, Co-PIs: E. S. Bellis, J. Qualls, K. Gustafson, A. Wijeratne, Senior Personnel: C. Brinkley, T. Boves, S. A. Mangan, L. Neuman-Lee, A. Sweet
34. Estimating invasive plant propagule pressure and modeled establishment risk to southern agroforestry (September 2021-August 2026); USDA Forest Service, Southern Research Station (21-JV-11330160-045); **\$193,776**; PI: T. D. Marsico, Co-PIs: E. S. Bellis and R. D. Lucardi
33. Vascular plant species of six Mississippi River islands (March 2021-June 2021); Arkansas Natural Heritage Commission; **\$19,996**; PI
32. Arkansas herbarium digitization (October 2019-December 2019); Arkansas Native Plant Society; **\$1500**; PI
31. Forecasting high-impact insect invasions by integrating probability models with i-Tree from urban to continental scales (June 2019-December 2022); USDA Forest Service, National Urban and Community Forestry Challenge Cost-Share Grant Program; **\$561,784** (50% is cost-share); Project Partner committing salary match to work on project; Ruth Hufbauer PI, Matt Ayres Co-PI; Daniel Herms Co-PI; Scott Maco Co-PI
30. Expanding the network of natural history collections clubs through workshops to broaden participation of students in biodiversity collections (March 2019-February 2023); National Science Foundation (DBI-1908728); **\$49,969**; Co-PI
29. Vascular plant inventory of Big Lake and Wapanocca National Wildlife Refuges (August 2018-September 2019); US Fish and Wildlife Service; **\$25,589**; PI
28. Flora of Poinsett County, Arkansas 2018 (March 2018-June 2018); Arkansas Natural Heritage Commission; **\$20,000**; PI
27. Engaging students in biodiversity collections through a network of natural history collections clubs: A SPNHC 2017 Workshop (July 2017-June 2018); National Science Foundation (DBI-1744392); **\$49,622**; Co-PI

26. Exploring unrecorded species richness in Arkansas's Mississippi Alluvial Plain and Crowley's Ridge Regions through a Poinsett County floristic survey (October 2016-May 2017); Arkansas Natural Heritage Commission; **\$15,000**; PI
25. CSBR: Natural History: Development of the Arkansas Center for Biodiversity Collections to advance biodiversity research and education (September 2016-August 2021); National Science Foundation (DBI-1561743); **\$478,094**; Co-PI
24. Collaborative Research: Upper Delta Region Biodiversity Scholarship (August 2016-July 2023); National Science Foundation (DUE-1564954); **\$3,271,703**; PI and Coordinating PI of Collaborative Project that involves three campuses (A-State, Murray State University, and Southern Illinois University Carbondale) and two awards totaling \$5M
23. Plant species assembly and community turnover along an elevation gradient within cloud forests on Volcán Maderas, Isla de Ometepe, Nicaragua (July 2016-June 2017); Arkansas State University Faculty Research Award; **\$3,038**; PI
22. GRADES SR: Plant species assembly and community turnover along an elevation gradient within cloud forests on Volcán Maderas, Isla de Ometepe, Nicaragua (May 2016-June 2017); Arkansas State University College of Sciences and Mathematics; **\$10,913**; PI
21. Plant species assembly and community turnover along an elevation gradient within cloud forests on Volcán Maderas, Isla de Ometepe, Nicaragua (January 2016); Eleanor Lane Faculty Endowment for International Travel; **\$300**; PI
20. Predicting the next high-impact insect invasion: Elucidating traits and factors determining the risk of introduced herbivorous insects on North American native plants (October 2015-September 2017); USGS John Wesley Powell Center for Analysis and Synthesis; **\$150,819**; Co-PI
19. Morphological identification of plant propagules entering the United States from abroad via the Port of Savannah (May 2015-May 2020); Joint Venture 15-JV-11330129-032 with USDA Forest Service, Southern Research Station; **\$146,420**; PI
18. The role of small natural history collections in contributing to understanding of species distribution (April 2015); Spring 2015 Provost's Faculty Professional Development Award, Arkansas State University; **\$869**; PI
17. Digitization TCN: Collaborative Research: The key to the cabinets: Building and sustaining a research database for a global biodiversity hotspot (August 2014-July 2019); National Science Foundation (EF-1410098); **\$127,553**; PI and Lead of Education and Outreach Team; Total project budget across 12 participating states \$2.5M
16. A meta-analysis of biological control experiments to elucidate mechanisms of herbivorous insect invasions and effective control options (June 2014-June 2019); Cooperative Agreement 14-CA-11330129-036 with the USDA Forest Service, Southern Research Station; **\$51,204**; PI
15. Digitizing Arkansas's tracked plant specimens at the Arkansas State University Herbarium (March 2014-May 2014); Arkansas Natural Heritage Commission; **\$2,000**; PI
14. GRADES SR: Bio-guided screening of Arkansas native plants to identify lead compounds for the treatment of high-risk pediatric hematological cancers (January 2014-June 2014); Arkansas State University College of Sciences and Mathematics; **\$11,798**; Co-PI
13. Plant defense-signaling volatiles from whole plants and hairy root cultures for the development of environmentally-friendly pest control through enhancement of plants' natural defenses (September 2013-June 2015); Arkansas Biosciences Institute; **\$49,941**; PI
12. Mechanisms and consequences of Chinese privet (*Ligustrum sinense* Lour.) invasions in urban and agricultural forested wetlands of the Southeast (August 2013-June 2014); Judd Hill – Environmental Biology Endowment; **\$21,586**; PI
11. Determining influences of stream channelization and an invasive species on rate of canopy tree growth in an urban park (January 2013-January 2014); Tree Fund, Jack Kimmel International Grant Program; **\$6,284**; PI
10. GRADES SR: Preliminary data for research on the role of host-herbivore coevolution in eliciting plant defense responses (March 2013-June 2013); Arkansas State University College of Sciences and Mathematics; **\$5,000**; PI

9. Selection of hairy root cultures to optimize production of plant defense compounds (July 2012-June 2013); Arkansas State University Faculty Research Award; **\$8,733**; PI
8. The Experiential Learning Fellowship (ELF) Program (August 2011-July 2017); National Science Foundation (DUE-1060209); **\$567,185**; PI (October 2012-July 2017), Co-PI (August 2011-October 2012)
7. Mechanisms and impacts of Chinese privet invasion in the Southeast United States (July 2011-June 2012); Judd Hill Foundation; **\$5,560**; PI
6. Identification of biological methods for evaluating wetland water quality conditions in Arkansas (May 2011-September 2013); United States Environmental Protection Agency; **\$317,661**; Co-PI
5. Next-generation sequencing pilot award (January 2011-September 2011); Arkansas Plant Powered Production Center; **\$7,250**
4. Crowley's Ridge botanical inventory (April 2010-May 2011); Arkansas Natural Heritage Commission; **\$20,000**; PI
3. The phylogeography of *Cactoblastis cactorum* in its native Argentina as a baseline for predicting local adaptation and species invasion (July 2010-June 2011); Arkansas State University Faculty Research Award; **\$3,860**; PI
2. Botanical inventory of Shelby Farms Park Conservancy (July 2010-May 2011); subcontract from the University of Memphis; **\$5,000**
1. Arkansas Biosciences Institute faculty grant (January 2010-June 2010); Arkansas State University; **\$30,000**; PI

Lab-Related Grant Funding Awarded to Marsico Students (\$45,427 in funding since 2011)

22. A-State Student Research and Creativity Grant (2022); Awardee: Brendan Kosnik; **\$1,000**
21. Delzie Demaree Research Grant from the Arkansas Native Plant Society (2022); Awardee: Benjamin Benton; **\$2,000**
20. Delzie Demaree Research Grant from the Arkansas Native Plant Society (2022); Awardee: Brendan Kosnik; **\$2,000**
19. Botanical Society of America Public Policy Award (2022); Awardee: Brendan Kosnik; **\$440**
18. Aileen McWilliam Scholarship from the Arkansas Native Plant Society (2021); Awardee: Diana Soteropoulos; **\$2,000**
17. Delzie Demaree Research Grant from the Arkansas Native Plant Society (2021); Awardee: Mathew Jones; **\$2,000**
16. Delzie Demaree Research Grant from the Arkansas Native Plant Society (2020); Awardee: Grace McCartha; **\$2,000**
15. Delzie Demaree Research Grant from the Arkansas Native Plant Society (2020); Awardee: Caitlyn Sims; **\$2,000**
14. Delzie Demaree Research Grant from the Arkansas Native Plant Society (2019); Awardee: Diana Soteropoulos; **\$2,000**
13. Delzie Demaree Research Grant from the Arkansas Native Plant Society (2018); Awardee: Dylan DeRouen; **\$2,000**
12. Great Lakes National Scholarship (2016); Awardee: Ashley Schulz; **\$2,500**
11. Aileen McWilliam Scholarship from the Arkansas Native Plant Society (2015); Awardee: Jennifer Reed; **\$2,000**
10. John Kingston Diatom Fellowship (2013); Iowa Lakeside Laboratory; Awardee: David Burge; **\$800** plus room and board
9. Characterization of Temporal and Spatial Aspects of Defense Transfer between Defending and Non-Defending Host Plants (July 2013-June 2014); Graduate Women in Science Eloise Gerry Fellowship; Awardee: Anastasia Cooper; **\$8,330**
8. The Fitzgerald Travel Grant (2013); Society for the Preservation of Natural History Collections; Awardee: Kari Harris; **\$957**
7. Spatial and Temporal Characterization of Plant-to-Plant Signaling of *Opuntia humifusa* (January 2013-May 2013); Arkansas Department of Higher Education Student Undergraduate Research Fellowship (SURF); Awardee: Kassandra Riley; **\$5,000**

6. Iowa Lakeside Laboratory General Scholarship (2012); Awardee: David Burge; **\$900**
5. Mechanisms and Impacts of Chinese Privet Invasion (2012); Arkansas Native Plant Society Delzie Demaree Research Grant; Awardee: Meghan Foard; **\$1,000**
4. Aileen McWilliam Scholarship from the Arkansas Native Plant Society (2012); Awardee: David Burge; **\$1,000**
3. Aileen McWilliam Scholarship from the Arkansas Native Plant Society (2012); Awardee: Kari Harris; **\$1,000**
2. Cactus-Derived Volatile Organic Compounds as a Potential Control Agent of the Invasive Cactus Borer *Cactoblastis cactorum* (Lepidoptera: Pyralidae) (April 2011-March 2014); Garden Club of America Award in Desert Studies; Awardee: Anastasia Woodard; **\$4,000**
1. The Women in Science Travel Grant (2011); Botanical Society of America; Awardee: Kari Harris; **\$500**

Honors / Awards

Fellowships

- Jefferson Science Fellowship, The National Academies of Science, Engineering, and Medicine and the U.S. Department of State (2022-2023)
- National Academies Education Fellow in the Life Sciences, The National Academies (2013-2014)
- Arthur J. Schmitt Presidential Fellowship, University of Notre Dame (2004-2008)
- Biology Department Senior Fellowship, Arkansas Tech University (2001)

Scholarships

- Arkansas Native Plant Society Aileen McWilliam Scholarship (2000, 2002)
- Arkansas Tech University Honors Scholarship (1998-2001)
- Arkansas Academic Challenge Scholarship (1998-2001)

Awards

- Chancellor's Medal for Research and Creative Activities, Arkansas State University (2021). This is A-State's highest honor for a faculty member.
- "You Made a Difference" Advisor Award, Wilson Advising Center, Arkansas State University (2017-2018)
- Outstanding Graduate Faculty Mentor, presented by the Arkansas State University Graduate Student Council (2015-2016)
- Great Lakes Climate Change Summit Travel Award (2007)
- Certificate of Academic Excellence, Arkansas Tech University's School of Physical and Life Sciences (2001)

Professional Activities

Languages

English: Fluent / Native speaker
Spanish: Intermediate / Proficient

Contract / Consulting Work

United States Geological Survey / US Environmental Protection Agency, March 2011 to December 2011
Botanist, Arkansas unit of National Wetlands Condition Assessment

Teaching

Courses Taught at Arkansas State University

- Biology of Plants (undergraduate)
- Biology of Plants Laboratory (undergraduate)
- Community Ecology and Phylogenetics (undergraduate / graduate)—course developed by Marsico
- Curation of Collections (undergraduate / graduate)—course developed by Marsico

- Dendrology (undergraduate / graduate)—course developed by Marsico
- Evolutionary Biology (graduate)
- Global Change Biology (graduate)—course developed by Marsico
- Making Connections Biology (first-year-experience undergraduate)
- Mechanisms of Speciation (graduate)
- Natural History Collections Research Design (undergraduate / graduate)—course developed by Marsico
- Plant Physiology (undergraduate / graduate)
- Plant Systematics (undergraduate / graduate)—course developed by Marsico
- Wetland Plant Ecology and Laboratory (undergraduate / graduate)

Course Taught at Mississippi State University

- Global Change Biology (graduate)—course developed by Marsico

Students Advised

Graduate Students

Research Advisor

Benjamin Benton (August 2021-present), Biology program, expected graduation August 2023 (co-advised with Dr. Scott Mangan)

THESIS TOPIC: Prairie pimple mount plant community composition in a western Arkansas remnant prairie

Hazel K. Berríos Alvarez (August 2015-May 2019), M.S. Biology

THESIS: Species Richness Patterns and Plant Size of Vascular Epiphytes along an Elevation Gradient in the Tropical Montane Forest of Volcán Maderas, Nicaragua

David R. L. Burge (June 2011-August 2014), M.S. Environmental Science

THESIS: Relations of Water Quality, Land-Use Buffers, and Diatom Communities of Connected Depressions within the Cache River Watershed, Arkansas, USA

Anastasia M. W. Cooper (formerly A. M. Woodard) (May 2010-January 2014), Ph.D. student,

Molecular Bioscience program; completed Biology M.A., May 2014 under the supervision of Dr. Tanja McKay

Dylan DeRouen (August 2017-May 2020), M.A. Biology

MAJOR PROJECT: A Vascular Plant Inventory of Big Lake and Wapanocca National Wildlife Refuges in Northeast Arkansas

MINOR PROJECT: Adaptations of wetland plants to wetland conditions; a lesson plan presentation for an undergraduate botany curriculum

Meghan B. Foard (August 2010-August 2014), M.S. Environmental Science

THESIS: Causes and Consequences of Chinese Privet (*Ligustrum sinense* Lour.) Invasion in Hydrologically Altered Forested Wetlands

Kari M. Harris (January 2012-August 2014), M.A. Biology

MAJOR PROJECT: Digitizing Specimens in a Small Herbarium: A Viable Workflow for Collections Working with Limited Resources

MINOR PROJECT: STAR Herbarium Policy

India Hughes (August 2022-present), M.S. student, Biology program, expected graduation August 2024 (co-advised with Dr. Emily Bellis)

THESIS TOPIC: Untangling the complex genomics of *Saccharum* species and hybrids, important in agricultural production and as federal noxious weeds.

John Kilmer (January 2013-August 2016), M.S. Biology

THESIS: Characterization of Chemical Profiles Produced by *Opuntia humifusa* in Response to Herbivory and Exogenous Methyl Jasmonate in Comparison to Hairy Root Cultures

Brendan Kosnik (August 2021-present), M.S. student, Biology program, expected graduation August 2023

THESIS TOPIC: Species distribution modeling of rare *Carex* species in the Mississippi Alluvial Plain

Grace McCartha (January 2020-December 2022), M.S. Biology

THESIS: Plant community patterns and a flora of six Lower Mississippi River islands

Jennifer N. Reed (January 2016-December 2022), M.A. Biology

MAJOR PROJECT: Flora of Poinsett County, Arkansas

MINOR PROJECT: Floristic comparison over 50 years of inventory

Ashley Schulz (August 2015-May 2020), Ph.D. Environmental Science

DISSERTATION: Nonnative insect invasions in natural ecosystems: Impacts, policy, and evaluation of drivers using underutilized biocontrol datasets

Caity Sims (January 2020-present), M.S. student, Biology program, expected graduation May 2023

THESIS TOPIC: Relations of seasonal flood disturbance with plant flowering phenology

Diana Soteropoulos (August 2017-present), Ph.D. student, Environmental Science program, expected graduation May 2024

DISSERTATION TOPIC: Floristics in Arkansas: surveying and quantifying management impact of rare ecosystems, launching floristic quality assessment, and predicting rare plant distribution

Thesis Committee Member

Melissa Bobowski (graduated August 2013), M.S. Biology

Lee Bryant (graduated May 2018), M.S. Biology

Jignesh Chandarana (graduated December 2010), M.S. Biology

Jennifer Cobb (graduated December 2013), M.S. Environmental Sciences

Ann Marie Coile (graduated May 2013), M.S. Biology

Emily Field (graduated December 2022), M.S. Biology

Peridot Galloway (graduated December 2022), M.S. Biology

Crystal Griffin (graduated December 2020), M.S. Biology

Brook Hale (graduated August 2016), M.S. Biology

Sara Harrod (graduated December 2020), Ph.D. Environmental Sciences

Daniel Itsvanko (graduated May 2015), M.S. Environmental Sciences

Praneeth Kamana (graduated May 2011), M.S. Biology

Abbas Karouni (graduated August 2018), M.A. Biology

John Kelly (graduated December 2013), M.S. Biology

Mary K. Kilmer (graduated May 2017), Ph.D. Environmental Sciences

Rebecca Lett (present), M.S. student, Biology program

Emma Martin (graduated May 2020), M.S. Environmental Sciences

Alix Matthews (present), Ph.D. student, MBS program

Brittany McCall (present), Ph.D. student, EVS program

Amber McCammon (present), Ph.D. student, EVS program

Alexsis Mross (graduated May 2021), M.A. Biology

Nirman Nepal (graduated December 2019), Ph.D. Molecular Biosciences

Dinesh Neupane (graduated May 2017), Ph.D. Environmental Sciences

Doug Raybuck (graduated December 2016), M.S. Biology
Nathan Stephens (graduated August 2011), M.S. Biology
Arin Vann (graduated December 2021), M.S. Biology
Rachel Welicky (graduated December 2015), Ph.D. Environmental Sciences
Jacob Wessels (graduated May 2020), M.S. Biology
Lauren Whitehurst (graduated May 2019), M.S. Biology at Columbus State University, Columbus, GA
Jennifer Wilcox (graduated December 2017), M.S. Biology
Amy Wynia (graduated December 2013), M.S. Biology
Joe Youtz (graduated May 2020), M.S. Biology

Undergraduate Honors Theses

Research Advisor

Nathan Baggett (graduated May 2019): Putting Sedges on the MAP: Georeferencing and Analyzing Cyperaceae Specimens in Eastern Arkansas
Kari Harris (graduated December 2011): Understanding Floristic Diversity through a Database of Greene County Specimens

Thesis Committee Member

Hannah Blair (graduated May 2013): Comparative Lipid Synthesis and Acyl Saturation of Psychrophilic and Psychrotolerant *Geomyces* spp. Fungi
W. Jordan Brockway (graduated May 2015): Introduction of Florida Bass Alleles into Largemouth Bass Inhabiting Northeast Arkansas Stream Systems
Cheyenne Gerdes (graduated May 2013): Biochemical and Biomechanical Effects of *Geomyces destructans* Proteases on Bat Wing Tissue
Gregory Phelps (graduated May 2015): DNA Barcoding to Identify Arkansas Plants with Potential Anti-Leukemia Activity
Devin Reed (graduated May 2014): Long-term Stocking Effects of Florida Bass in Two Southern Arkansas Lakes: Lake Chicot and Upper White Oak Lake
Jeremiah Salinger (graduated May 2012): Current Status and Anthropogenic Management Concerns of the Caribou (*Rangifer tarandus*) in North America

Undergraduate Students in the Laboratory

Arkansas State University; ^products resulted in peer-reviewed publication; *products resulted in conference presentation

Candace Arnold (September 2010-December 2010), volunteer
*Nathaniel Baggett (August-December 2016), volunteer; collections assistant (January 2017-December 2018)
Hannah Blair (September 2010-May 2011)
Jennifer Blanchard (September 2013-January 2014)
*Jennifer Bryant (August 2017-May 2020), SUPERB Scholarship Program
*Christopher Burkhart (January 2012-December 2013), ELF Program
*Crystal Davis (September 2013-May 2017), ELF Program
Nikki Davis (March 2013-April 2013)
Elizabeth Etkorn (April 2014-May 2014)
^*Jarron Gravesande (October 2016-May 2020)
Eddie Hampton (March 2014-April 2014)
^*Kari Harris (June 2010-December 2011), McNair Scholar, University Honors
Ashley Hart (March 2014-May 2014)
*Alexandra Hook (March 2014-May 2014)
Mathew Jones (August 2019-May 2022), SUPERB Scholarship Program
*Rebecca Kennedy (January 2012-May 2013), ELF Program
*Starlene Loerch (January 2012-December 2013), ELF Program
Tyler Long (August 2019-May 2021), SUPERB Scholarship Program

Taylor Mackey (May 2012-June 2012)
Eric Maxwell (February 2010-May 2010)
Luke Methvin (January 2015-December 2015)
Angelique Morris (January-May 2016), volunteer; collections assistant (June 2016-May 2018)
Emily Mizell (September 2010-June 2012)
Catherine Mull (June 2013-August 2013), P3 Fellow
*Katie Nelson (December 2013-June 2015)
Hunter Nunnally (December 2013-May 2014), ELF Program
Christopher Owen (August 2017-May 2018), SUPERB Scholarship Program
*Lysbeth Perez (June 2010-August 2010), NSF REU RISE student
Cassie Phillips (November 2013-December 2013)
Jennifer Reed (January 2015-December 2015)
*Kassandra Riley (February 2012-May 2013), P3 Fellow, SURF student
Bradley Rogers (September 2013-December 2013)
Arizona Smith (September 2013-December 2013)
^*Faye Stephens (June 2010-August 2010), NSF REU RISE student
^Justin Stewart (August 2010-May 2011)
Elisha Throesch (March 2013-April 2013)
Hunter Whitehurst (March 2013-December 2013)
*Alexander Worm (January 2012-December 2013), ELF Program

Mississippi State University
Elizabeth Stepp (January 2009-May 2009)

University of Notre Dame
Ashley Braun
Mary Kate Claiborne
James Giordano
Cynthia Sulzbach

Laboratory Volunteer (non-student)

Arkansas State University
Rick Bray (February 2012-May 2012)

Non-Student Researchers

Arkansas State University
Martina Garda (May 2012-August 2012)
Jaimie Teel (June 2013-July 2013), Arkansas STRIVE Fellow

Professional Organizations

Association of Southeastern Biologists (life member)
Botanical Society of America
Society of Herbarium Curators (life member)

Service to Professional Organizations

Member, Public Policy Committee, Botanical Society of America (July 2022 – July 2025)
Past President, Southeast USA Chapter of the Society of Herbarium Curators (April 2022 - March 2024)
President, Southeast USA Chapter of the Society of Herbarium Curators (April 2020 – March 2022)
President Elect, Southeast USA Chapter of the Society of Herbarium Curators (2019)
Professional Development Committee Member, Society for the Preservation of Natural History Collections
(May 2015-June 2022); Mentorship Subcommittee Chair (June 2017-June 2022)
Executive Council Member-at-Large, Southeast USA Chapter of the Society of Herbarium Curators
(2016-2019)

Herbarium Assistance Committee, Society of Herbarium Curators (2017-2022)
 Best Practices Committee Member, Society for the Preservation of Natural History Collections (June 2016-June 2017)
 Advisory Board Member, Ouachita Mountains Biological Station (September 2011-March 2016)

Community Organization

Arkansas Native Plant Society

Symposia and Workshops Organized at Professional Meetings

Natural History Collections Club Network Workshop, Society for the Preservation of Natural History Collections 2019, Chicago, Illinois (26 May 2019), Organized with Kari Harris
 Broadening Participation of Students in Biodiversity Collections through a Network of Student Clubs, Society for the Preservation of Natural History Collections 2019, Chicago, Illinois (30 May 2019), Organized with Kari Harris
 Advantages and Challenges of Starting a Natural History Collections Club (NHCC) at your Institution, Association of Southeastern Biologists 2018, Myrtle Beach, South Carolina (29 March 2018), Organized with Kari Harris
 Engaging Students in Biodiversity Collections through a Network of Natural History Collections Clubs: A SPNHC 2017 Workshop, SPHNC 2017, Denver, Colorado (18 June 2017), Co-organizer with Kari Harris
 Special Botany Symposium, 100th Annual Meeting of the Arkansas Academy of Science, Fayetteville, Arkansas (1-2 April 2016), Session Chair for both Botany Symposium Sessions
 Small Herbarium Digitization Workshop, Botany 2014, Boise, Idaho (31 July 2014), Co-Organized with Gil Nelson, Pam Soltis, Ed Gilbert, Emily Gillespie, Kari Harris, George Johnson, Anna Monfils, and Ashely Morris
 Organized Oral Session, Community Context of Species' Range Expansions: Novel Community Associations in Response to Biological Invasions and Climate Change, 97th Annual Meeting of the Ecological Society of America, Portland, Oregon (5-10 August 2012), Co-Organized with Kirsten Prior
 Ethnobotany, 3rd Annual Meeting of the American Council for Medicinally Active Plants, Jonesboro, Arkansas (22-25 May 2012)

Publication Editorial Boards

Environmental Entomology (April 2014-July 2017), Associate Editor in Plant-Insect Interactions Subject Area
 Ecology and Evolution (April 2011-May 2016), Associate Editor and founding member of editorial board

Funding Proposal Reviews

NSF Panel (2013, 2015)
 NSF ad hoc reviewer
 Marsden Fund Council (New Zealand) (2011)
 EPA Review Panel (2011)

Ad Hoc Manuscript Reviews

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|---|-------------------------------|--|
| ▪ Agricultural and Forest Entomology | ▪ Diversity and Distributions | ▪ Florida Entomologist |
| ▪ American Biology Teacher | ▪ Ecological Economics | ▪ Food Webs |
| ▪ Biological Conservation | ▪ Ecological Entomology | ▪ Global Ecology and Biogeography |
| ▪ Biological Journal of the Linnean Society | ▪ Ecology and Evolution | ▪ Insect Science |
| ▪ BioScience | ▪ Economic Entomology | ▪ Insects |
| ▪ Botany | ▪ Ecosphere | ▪ Journal of Biogeography |
| ▪ Conservation Biology | ▪ Environmental Entomology | ▪ Journal of the Arkansas Academy of Science |
| | ▪ Evolutionary Applications | |

- Journal of the Botanical Research Institute of Texas (BRIT Journal, formerly Sida)
- Molecular Ecology
- Rhodora
- Silvae Genetica
- Southeastern Naturalist

University Service

Member, Search Committee for ASU Museum Director (October 2021-April 2022)
 Secretary, University Faculty Research Awards Committee (September 2021-August 2022)
 Chair, Department of Biological Sciences Assessment Committee (August 2020-August 2022)
 Chair, Department of Biological Sciences Facilities Committee (August 2020-August 2022)
 Member, Department of Biological Sciences Long-range Planning Committee (August 2020-August 2022)
 Member, University Centers of Excellence Review Committee (November 2019-August 2022)
 Member, ASU Museum Advisory Council (January 2015-present)
 Faculty Advisor, Natural History Collections Curation Club (NHC3) (February 2013-present)
 Chair, Department of Biological Sciences ad hoc Program Viability Committee (August 2021-November 2021)
 Department of Biological Sciences Biotech Committee (August 2018-July 2020)
 Chair, Department of Biological Sciences Teaching Schedule Committee (September 2013-July 2020)
 Department of Biological Sciences, Botany Program Committee (January 2010-July 2020)
 Department of Biological Sciences, Biology of Plants Laboratory Co-Coordinator (January 2010-July 2020)
 Academic Calendar Committee (university level) (2019-2020)
 Waitlist Taskforce (university level) (Spring 2019)
 Graduate School Taskforce (university level) (November 2018-February 2019)
 University Faculty Senator, Department of Biological Sciences representative (August 2017-August 2018)
 Elected Member, Department Promotion, Retention, and Tenure Committee (September 2014-August 2018)
 Department of Biological Sciences Website Committee (August 2014-August 2018)
 Department of Biological Sciences Seminar Series Coordinator (September 2014-May 2018)
 Department of Biological Sciences Curriculum Committee (August 2014-August 2017)
 Institutional Biosafety Committee (April 2012-August 2017)
 Faculty Advisor, Delta Zeta Sorority (August 2012-December 2016)
 Molecular Biosciences Ph.D. Program Committee (February 2011-December 2015)
 Chair, Department of Biological Sciences Long-Term Strategic Planning Group (September 2013-September 2014)
 College of Sciences and Mathematics Science Seminar Committee; Biology and EVS representative (August 2012-August 2014)
 Plant Powered Production, Next-generation Sequencing Committee (October 2010-June 2011; February 2013-December 2013)
 Search Committee member, Ornithologist/Conservation Biologist, Department of Biological Sciences (Fall 2012-Spring 2013)
 Search Committee member, Research Development Specialist, Office of Research and Technology Transfer (Spring/Summer 2012)
 Search Chair, Cell/Molecular Biologist, Department of Biological Sciences (Spring 2012)

Professional Meetings (undergraduate authors underlined; presenters italicized)

Presented

166. *Hughes, I.*, S. C. Hughes, R. D. Lucardi, **T. D. Marsico**, and E.S. Bellis. (Poster). Analyzing the potential spread of invasive sugarcane throughout the United States. Arkansas Biosciences Institute Fall Research Symposium, Fayetteville, Arkansas (4 October 2022)
165. *Bellis, E. S.*, S. C. Hughes, R. D. Lucardi, and **T. D. Marsico**. Genomic characterization of wild sugarcane (*Saccharum spontaneum*) in the southeastern United States. Botany 2022, Anchorage, Alaska (24-27 July 2022)

164. *Schulz, A. N., N. P. Havill, C. F. Aoki, M. P. Ayres, K. J. K. Gandhi, D. A. Herms, A. M. Hoover, R. A. Hufbauer, A. M. Liebhold, S. Maco, T. D. Marsico, K. F. Raffa, K. A. Thomas, P. C. Tobin, D. R. Uden, and A. M. Mech. Adelges, Agrilus, and Archips, oh my! Factors driving impact and how we can predict the next high-impact insect invaders in North American forests. Joint Annual Meeting of the Entomological Societies of America, Canada, and British Columbia. Vancouver, British Columbia, Canada (13-16 November 2022)*
163. *Soteropoulos, D. L., J. A. Ledvina, and T. D. Marsico. An exploration of the vascular flora of Pine City Natural Area, Monroe Co., Arkansas, U.S.A. Arkansas Native Plant Society Fall meeting, Stuttgart, Arkansas (7-9 October 2022)*
162. *Schulz, A. N., N. P. Havill, C. F. Aoki, M. P. Ayres, K. J. K. Gandhi, D. A. Herms, A. M. Hoover, R. A. Hufbauer, A. M. Liebhold, S. Maco, T.D. Marsico, K. F. Raffa, K. A. Thomas, P. C. Tobin, D. R. Uden, and A. M. Mech. i-Tree Pest Predictor: Challenges and triumphs using models to predict the next high-impact insect invaders in forests. International Union of Forest Research Organizations (IUFRO) All Division 7 "Forest Health" Congress, Lisbon, Portugal (6-9 September 2022)*
161. *Soteropoulos, D. L., J. A. Ledvina, and T. D. Marsico. An exploration of the vascular flora of Pine City Natural Area, Monroe Co., Arkansas, U.S.A. 2022 Natural Areas Conference, Duluth, Minnesota (6-9 September 2022)*
160. *Thomas, K. A., A. N. Schulz, A. M. Liebhold, A. M. Mech, C. F. Aoki, M. P. Ayres, R. A. Hufbauer, N. P. Havill, D. A. Herms, K. J. K. Gandhi, A. M. Hoover, T. D. Marsico, K. F. Raffa, P. C. Tobin, and D. R. Uden. Predicting the impact of non-native forest insects prior to arrival or establishment. International Congress of Entomology 2022, Helsinki, Finland (17-22 July 2022)*
159. *Schulz, A. N., N. P. Havill, A. M. Hoover, M. P. Ayres, K. J. K. Gandhi, D. A. Herms, R. A. Hufbauer, A. M. Liebhold, T. D. Marsico, K. F. Raffa, K. A. Thomas, P. C. Tobin, D. R. Uden, and A. M. Mech. Wicked woodborers: A closer look at the introduced insects that pose the biggest threat to North American hardwoods. Southern Forest Insect Work Conference (SFIWC), Lexington, Kentucky (21-23 June 2022)*
158. *Schulz, A. N., N. P. Havill, T. D. Marsico, C. F. Aoki, M. P. Ayres, K. J. K. Gandhi, D. A. Herms, A. M. Hoover, R. A. Hufbauer, A. M. Liebhold, S. Maco, K. F. Raffa, K. A. Thomas, P. C. Tobin, D. R. Uden, and A. M. Mech. From Adelges to Zeugophora: A look at the factors driving impact and how we can predict the next high-impact introduced forest insects in North America. Southern Forest Insect Work Conference (SFIWC), Lexington, Kentucky (21-23 June 2022)*
157. *Harris, K. M., T. D. Marsico, and K. Krajcir. Updates on the Natural History Collections Club Network (NHCCN). Society for the Preservation of Natural History Collections annual meeting: SPNHC 2022, Edinburgh, Scotland, United Kingdom (5-10 June 2022)*
156. *Marsico, T. D. (Virtual, recorded presentation) Natural History Collections Research Design: A discussion course for research applications using collections and differentiating hypotheses from predictions. Society for the Preservation of Natural History Collections annual meeting: SPNHC 2022, Edinburgh, Scotland, United Kingdom (5-10 June 2022)*
155. *Benton, B. E., S. A. Mangan, and T. D. Marsico. (Poster). Arkansas pimple mounds as a study system to test how plant community assembly mechanisms change across a landscape. International Biogeography Society, Vancouver, British Columbia, Canada (2-6 June 2022)*
154. *Jones, M. L., G. L. McCartha, C. M. Sims, B. J. Kosnik, B. E. Benton, S. A. Mangan, and T. D. Marsico. (Poster). The influence of soil on plant communities on six Lower Mississippi River islands. International Biogeography Society, Vancouver, British Columbia, Canada (2-6 June 2022)*
153. *Kosnik, B., D. L. Soteropoulos, and T. D. Marsico. (Poster). Assessing species distribution models' abilities to locate unknown populations of rare sedges in eastern Arkansas. International Biogeography Society, Vancouver, British Columbia, Canada (2-6 June 2022)*
152. *Marsico, T. D., E. S. Bellis, and R. D. Lucardi. (Poster). Biogeographical insights into hitchhiking plant propagules on the exterior of refrigerated shipping containers at the Port of Savannah, Georgia, USA. International Biogeography Society, Vancouver, British Columbia, Canada (2-6 June 2022)*

151. *McCartha, G. L., C. M. Sims, B. J. Kosnik, J. R. Abbott, M. L. Jones, B. E. Benton, S. A. Mangan, and T. D. Marsico.* (Poster). Plant community composition of six Lower Mississippi River islands. International Biogeography Society, Vancouver, British Columbia, Canada (2-6 June 2022)
150. *Sims, C. M., G. L. McCartha, B. J. Kosnik, M. L. Jones, B. E. Benton, S. A. Mangan, and T. D. Marsico.* (Poster). Influence of seasonal flooding on plant reproductive phenology on Buck Island, a Lower Mississippi River island. International Biogeography Society, Vancouver, British Columbia, Canada (2-6 June 2022)
149. *Benton, B. E., B. Kosnik, G. McCartha, C. Sims, T. Marsico, and S. Mangan.* (Poster). Quantifying differences in plant community composition and soil nutrients between pimple mounds and matrix of a remnant prairie. Association of Southeastern Biologists 83rd Annual Meeting, Little Rock, Arkansas (30 March-2 April 2022)
148. *Jones, M., G. McCartha, C. Sims, B. Kosnik, B. Benton, S. Mangan, and T. Marsico.* (Poster). The influences of soil on plant communities on six Lower Mississippi River islands. Association of Southeastern Biologists 83rd Annual Meeting, Little Rock, Arkansas (30 March-2 April 2022)
147. *Kosnik, B., D. Soteropoulos, E. Bellis, and T. D. Marsico.* (Poster). Building and testing species distribution models to locate rare sedge populations in eastern Arkansas. Association of Southeastern Biologists 83rd Annual Meeting, Little Rock, Arkansas (30 March-2 April 2022)
146. *McCartha, G., C. Sims, B. Kosnik, J. R. Abbott, M. Jones, B. Benton, S. Mangan, and T. Marsico.* (Poster). Plant community composition of six Lower Mississippi River islands. Association of Southeastern Biologists 83rd Annual Meeting, Little Rock, Arkansas (30 March-2 April 2022)
145. *Sims, C., G. McCartha, B. Kosnik, M. Jones, B. Benton, S. Mangan, and T. Marsico.* (Poster). Influence of seasonal flooding on plant reproductive phenology on Buck Island Wildlife Management Area, a Lower Mississippi River island. Association of Southeastern Biologists 83rd Annual Meeting, Little Rock, Arkansas (30 March-2 April 2022)
144. *Soteropoulos, D., W. Holimon, J. Ledvina, T. Marsico, and T. Witsell.* (Red-cockaded Woodpeckers) In the pines, in the pines, where the sun always shines at Pine City Natural Area, Monroe Co., Arkansas. Association of Southeastern Biologists 83rd Annual Meeting, Little Rock, Arkansas (30 March-2 April 2022)
143. *Schulz, A.N., R. A. Hufbauer, C. F. Aoki, M. P. Ayres, K. J. K. Gandhi, N. P. Havill, D. A. Herms, A. M. Hoover, A. M. Liebhold, S. Maco, T. D. Marsico, K. F. Raffa, K. A. Thomas, P. C. Tobin, D. R. Uden, and A. M. Mech.* (Virtual Poster). i-TPP: A New i-Tree Tool to Predict Impact of Non-Native Insects on North American Trees. Society of American Foresters 2021 National Convention, Virtual Conference (3-6 November 2021)
142. *Thomas, K. A., A. N. Schulz, A. M. Mech, N. P. Havill, A. M. Hoover, R. A. Hufbauer, A. M. Liebhold, T. D. Marsico, K. F. Raffa, and P. C. Tobin.* (Poster) The Traits and Factors Catalog: A data compendium of non-native forest insects on North American trees. 69th Annual Meeting of the Entomological Society of America, Denver, Colorado (31 October-3 November 2021)
141. *Schulz, A. N., N. P. Havill, C. F. Aoki, M. P. Ayres, K. J. K. Gandhi, D. A. Herms, A. M. Hoover, R. A. Hufbauer, A. M. Liebhold, S. Maco, T. D. Marsico, K. F. Raffa, K. A. Thomas, P. C. Tobin, D. R. Uden, and A. M. Mech.* i-Tree Pest Predictor: A new, forthcoming tool to forecast impact of non-native insects on North American tree species. 69th Annual Meeting of the Entomological Society of America. Denver, Colorado (31 October-3 November 2021)
140. *Marsico, T. D., E. S. Bellis, and R. D. Lucardi.* Hitchhiking plant propagules represent real invasive species risk at international seaports. International Union of Forest Research Organizations (IUFRO) Biological Invasions in Forests: Trade, Ecology, and Management, Prague, Czech Republic (20-24 September 2021), remote attendees and presenter
139. *Schulz, A. N., R. A. Hufbauer, C. F. Aoki, M. P. Ayres, K. J. K. Gandhi, N. P. Havill, D. A. Herms, A. M. Hoover, A. M. Liebhold, S. Maco, T. D. Marsico, K. F. Raffa, K. A. Thomas, P. C. Tobin, D. R. Uden, and A. M. Mech.* Synthesis and utilization of big data for forecasting the impacts of non-native forest insects in North America. North American Forest Insect Work Conference, Virtual Conference (25-28 May 2021)
138. *Schulz, A. N., A. M. Mech, C. F. Aoki, M. P. Ayres, K. J. K. Gandhi, N. P. Havill, D. A. Herms, A. M. Liebhold, S. Maco, T. D. Marsico, K. F. Raffa, K. A. Thomas, P. C. Tobin, D. R. Uden, and R. A.*

- Hufbauer. Forecasting impact of non-native, phytophagous insects relies on different factors based on host tree specialization. 2021 International Association for Landscape Ecology – North America Annual Meeting, Virtual Conference (12-16 April 2021)
137. *Thomas, K. A., A. N. Schulz, A. M. Mech, C. F. Aoki, M. P. Ayres, K. J. K. Gandhi, N. P. Havill, D. A. Herms, A. M. Liebhold, S. Maco, T. D. Marsico, K. F. Raffa, P. C. Tobin, D. R. Uden, and R. A. Hufbauer.* (Virtual Poster) The impact of non-native insects on forest trees relies on different factors based on host tree specialization. Entomological Society of America Pacific Branch Meeting, Virtual Conference (5-7 April 2021)
 136. *Schulz, A. N., A. M. Mech, M. P. Ayres, K. J. K. Gandhi, N. P. Havill, D. A. Herms, A. Hoover, A. M. Liebhold, T. D. Marsico, K. F. Raffa, K. A. Thomas, P. C. Tobin, D. R. Uden, and R. A. Hufbauer.* Which factors drive impact of introduced insects feeding on North American conifers and woody angiosperms? The data speak. Entomology 2020, Virtual Meeting (11-25 November 2020)
 135. *Mech, A. M., K. A. Thomas, T. D. Marsico, D. A. Herms, C. R. Allen, M. P. Ayres, K. J. K. Gandhi, J. Gurevitch, N. P. Havill, R. A. Hufbauer, A. M. Liebhold, K. F. Raffa, A. N. Schulz, D. R. Uden, and P. C. Tobin.* How available data can be used to predict the impact of non-native forest insects. Society of American Foresters National Convention, Virtual Conference (29-31 October 2020)
 134. *Thomas, K. A., A. M. Mech, P. C. Tobin, D. A. Herms, M. P. Ayres, N. P. Havill, C. R. Allen, K. J. K. Gandhi, J. Gurevitch, A. Hoover, R. A. Hufbauer, A. M. Liebhold, K. F. Raffa, A. N. Schulz, D. R. Uden, and T. D. Marsico.* Predicting the impact of non-native insects on forest trees: the data speak. 2020 NAISMA Annual Conference, Virtual Conference (6-8 October 2020)
 133. *Thomas, K. A., A. M. Mech, M. P. Ayres, P. C. Tobin, D. A. Herms, N. P. Havill, D. R. Uden, A. N. Schulz, C. R. Allen, K. J. K. Gandhi, J. Gurevitch, A. Hoover, R. A. Hufbauer, A. M. Liebhold, K. F. Raffa, and T. D. Marsico.* Predicting the impact of non-native insects: the data speak. 105th Annual Ecological Society of America Meeting, Virtual Conference (3-6 August 2020)
 132. *Schulz, A. N., R. D. Lucardi, and T. D. Marsico.* (Virtual Poster). Teamwork makes the dream work: evaluation of interdisciplinarity between the fields of invasion ecology and biocontrol using scientometrics. 67th Annual Meeting of the Entomological Society of America, St. Louis, Missouri (17-20 November 2019). *Ashley received 1st place in the P-IE Graduate Student Virtual Poster Competition.*
 131. *Soteropoulos, D. and T. Marsico.* (Poster) An exploration of the vascular plants of Pine City Natural Area (Monroe Co., AR) and the Mississippi Alluvial Plain. Botany 2019, Tucson, Arizona (27-31 July 2019)
 130. *Soteropoulos, D., B. Baker, T. Witsell, K. Seale, and T. Marsico.* Building a student and volunteer network for Notes from Nature herbarium transcription success in Arkansas. Botany 2019, Tucson, Arizona (27-31 July 2019)
 129. *Whitehurst, L., C. Cunard, J. Reed, S. Worthy, T. Marsico, R. Lucardi, and K. Burgess.* Evaluating the efficacy of DNA barcoding for the detection of non-native, invasive plant propagules at the Port of Savannah, Georgia. Botany 2019, Tucson, Arizona (27-31 July 2019)
 128. *Marsico, T., C. Cunard, J. Gravesande, S. Hughes, L. Whitehurst, K. Burgess, and R. Lucardi.* Invasive plant propagules are viable upon arrival at ports of entry. Botany 2019, Tucson, Arizona (27-31 July 2019)
 127. *Marsico, T. D.* and K. Neubig. A new natural history collections curriculum in biological sciences education. Society for the Preservation of Natural History Collections, Chicago, Illinois (25-31 May 2019)
 126. *Marsico, T., E. Krimmel, R. Carter, E. Gillespie, P. Lowe, R. McCauley, A. Morris, G. Nelson, M. Smith, and A. Monfils.* Small herbaria significantly contribute unique biogeographic records to county-, locality-, and temporal-level scales. Society for the Preservation of Natural History Collections, Chicago, Illinois (25-31 May 2019)
 125. *Reed, J. N. and T. D. Marsico.* (Poster) Rare and interesting plants recorded in Poinsett County, Arkansas. Society for the Preservation of Natural History Collections, Chicago, Illinois (25-31 May 2019)

124. *Soteropoulos, D. L.*, B. Baker, C. T. Witsell, and **T. D. Marsico**. (Poster) Building a student and volunteer network for Notes from Nature herbarium transcription success in Arkansas. Society for the Preservation of Natural History Collections, Chicago, Illinois (25-31 May 2019)
123. **Marsico, T. D.** and K. Neubig. A new natural history collections curriculum in biological sciences education. 80th Annual Meeting of the Association for Southeastern Biologists, Memphis, Tennessee (3-6 April 2019)
122. **Marsico, T.**, E. Krimmel, R. Carter, E. Gillespie, P. Lowe, R. McCauley, A. Morris, G. Nelson, M. Smith, and A. Monfils. Small herbaria significantly contribute unique biogeographic records to county-, locality-, and temporal-level scales. 80th Annual Meeting of the Association for Southeastern Biologists, Memphis, Tennessee (3-6 April 2019)
121. *Soteropoulos, D. L.* and **T. D. Marsico**. (Poster) A flora of the vascular plants of Pine City Natural Area (Monroe Co., AR): the importance of a flora for conservation priorities. 80th Annual Meeting of the Association for Southeastern Biologists, Memphis, Tennessee (3-6 April 2019)
120. *Reed, J. N.* and **T. D. Marsico**. Diamond in the rough: rare and interesting plants recorded in Poinsett County, Arkansas. 80th Annual Meeting of the Association for Southeastern Biologists, Memphis, Tennessee (3-6 April 2019)
119. *Mech, A.*, D. Herms, K. Thomas, **T. D. Marsico**, and P. Tobin. Using evolutionary history to help identify high-impact, non-native herbivorous specialist insects prior to their arrival. 2018 ESA, ESC and ESBC Joint Annual Meeting, Vancouver, British Columbia, Canada (11-14 November 2018)
118. *Schulz, A.*, A. Mech, C. Allen, M. Ayres, K. J. K. Gandhi, J. Gurevitch, N. Havill, D. Herms, R. Hufbauer, A. M. Liebhold, K. Raffa, M. J. Raupp, K. Thomas, P. Tobin, and **T. D. Marsico**. (Virtual Poster) Do all great minds think alike? An assessment of expert perspective on the impacts of non-native insects in North America. 2018 ESA, ESC and ESBC Joint Annual Meeting, Vancouver, British Columbia, Canada (11-14 November 2018). *Ashley received 2nd place in the P-IE Graduate Student Virtual Poster Competition.*
117. *Soteropoulos, D.*, N. Baggett, J. N. Reed, D. P. DeRouen, and **T. D. Marsico**. Putting Arkansas on the map: Georeferencing Arkansas herbaria. 79th Annual Meeting of the Association of Southeastern Biologists, Myrtle Beach, South Carolina (28-31 March 2018)
116. *DeRouen, D. P.* and **T. D. Marsico**. (Poster) Thinking outside the crops: Mapping vascular plant species richness in the Anthropocene. 79th Annual Meeting of the Association of Southeastern Biologists, Myrtle Beach, South Carolina (28-31 March 2018)
115. *Reed, J. N.* and **T. D. Marsico**. (Poster) Bringing up the bottom: Collection biases may skew plant species richness measurements in Poinsett County, AR. 79th Annual Meeting of the Association of Southeastern Biologists, Myrtle Beach, South Carolina (28-31 March 2018)
114. Schulz, A.N., R. D. Lucardi, and **T. D. Marsico**. (Poster) In pursuit of common ground: Evaluation of cross-disciplinary communication effort between the fields of invasion ecology and biological control. 79th Annual Meeting of the Association of Southeastern Biologists, Myrtle Beach, South Carolina (28-31 March 2018)
113. Bryant, J. and **T. D. Marsico**. (Poster) The hunt for bigleaf. 79th Annual Meeting of the Association of Southeastern Biologists, Myrtle Beach, South Carolina (28-31 March 2018)
112. *Mech, A.*, P. C. Tobin, **T. D. Marsico**, K. A. Thomas, D. A. Herms, C. R. Allen, M. P. Ayres, K. J. K. Gandhi, J. Gurevitch, N. P. Havill, A. Hoover, R. A. Hufbauer, A. M. Liebhold, K. F. Raffa, M. J. Raupp, A.N. Schulz, and D. Uden. Predicting the impact of non-native specialist insects. 29th USDA Interagency Research Forum on Invasive Species, Annapolis, Maryland (9-12 January 2018)
111. *Mech, A. M.*, **T. D. Marsico**, K. A. Thomas, D. A. Herms, and *P. C. Tobin*. Predicting the impact of non-native specialist insects feeding on North American host plants. Ecological Society of America, Portland, Oregon (6-11 August 2017)
110. *Lucardi, R. D.*, A. N. Schulz, and **T. D. Marsico**. Strengthening the ties that bind: An examination of cross-disciplinary communication between the fields of invasion ecology and biocontrol using evaluative bibliometrics. 58th Annual Southern Forest Insect Work Conference (SFIWC), Melbourne, Florida (25-28 July 2017)

109. **Marsico, T. D.**, J. N. Reed, C. Cunard, L. Whitehurst, K. S. Burgess, and R. D. Lucardi. International shipping ports as zones of inquiry for the release and maintenance of exotic plant species. BOTANY 2017, Fort Worth, Texas (24 June-28 June 2017)
108. **Marsico, T. D.**, Hazel K. Berríos Álvarez, and Indiana Coronado. Plant species richness and community composition along an elevation gradient on an isolated cloud forest volcano. BOTANY 2017, Fort Worth, Texas (24 June-28 June 2017)
107. **Reed, J. N.** and **T. D. Marsico**. (Poster) Don't doubt the Delta: Collection biases may skew plant species richness measurements in Poinsett County, AR. BOTANY 2017, Fort Worth, Texas (24 June-28 June 2017)
106. **Schulz, A. N.**, R. D. Lucardi, and **T. D. Marsico**. The forgotten fourth trophic level: Natural enemies influence the success or failure of non-native invaders and biological control agents. BOTANY 2017, Fort Worth, Texas (24 June-28 June 2017)
105. **Schulz, A. N.**, R. D. Lucardi, and **T. D. Marsico**. (Poster) The quest for common ground: An evaluation of communication effort between the fields of invasion ecology and biocontrol using bibliometric analysis. BOTANY 2017, Fort Worth, Texas (24 June-28 June 2017)
104. **Harris, K. M.**, J. L. Czerwonky, and **T. D. Marsico**. Strategies to engage high school students in natural history collections. SPNHC 2017, Denver Colorado (17 June-24 June 2017)
103. **Thigpen, C.**, **K. Jones**, K. M. Harris, **H. Canada**, and **T. D. Marsico**. (Poster) Preserving natural history collections through student involvement and public interest. SPNHC 2017, Denver Colorado (17 June-24 June 2017)
102. **Schulz, A. N.** and **T. D. Marsico**. (Poster) Finding common ground: A bibliometric analysis and review to assess communication effort between the fields of invasion ecology and biocontrol. 7th Annual Create@State Symposium of Research, Scholarship, and Creativity, Arkansas State University, Jonesboro, Arkansas (21 April 2017)
101. **Schulz, A. N.**, R. D. Lucardi, and **T. D. Marsico**. Who cites whom? Communication insights from a bibliometric analysis of invasion and biological control literature. 101st Annual Arkansas Academy of Science Meeting. University of Central Arkansas, Conway, Arkansas (7-8 April 2017)
100. **Mech, A. M.**, P. T. Tobin, **T. D. Marsico**, K. A. Thomas, D. A. Herms, C. R. Allen, M. P. Ayres, K. J. K. Gandhi, J. Gurevitch, N. Havill, R. Hufbauer, A. Liebhold, K. Raffa, M. Raupp, and A. Schulz. Looking for black and white in the grey: Variation in invasion success and management challenges in a global community. Proceedings of the 25th International Congress of Entomology, Orlando, Florida (25-30 September 2016)
99. Krimmel, E. R., D. L. Linton, **T. D. Marsico**, A. K. Monfils, A. B. Morris, and **B. R. Ruhfel**. CollectionsEducation.org: Connecting Students to Citizen Science and Curated Collections. BOTANY 2016, Savannah, Georgia (30 July-3 August 2016)
98. **Harris, K. M.** and **T. D. Marsico**. Involving undergraduates in the digital community: Leveraging collections preservation, research, and outreach through a network of natural history collections clubs. BOTANY 2016, Savannah, Georgia (30 July-3 August 2016)
97. **Schulz, A. N.** and **T. D. Marsico**. A quest to promote greater synergy between invasion ecology and biological control. International Union of Forest Research Organizations (IUFRO) Biological Invasions in Forests Workshop, Shepherdstown, West Virginia (18-21 July 2016)
96. **Marsico, T. D.**, J. N. Reed, C. Cunard, S. Worthy, L. Whitehurst, K. S. Burgess, and R. D. Lucardi. Small herbaria as repositories for invasive species and federal noxious weed vouchers in collaborative research. 31st Annual Meeting of the Society for the Preservation of Natural History Collections, Berlin, Germany (20-25 June 2016)
95. **Harris, K. M.** and **T. D. Marsico**. Involving undergraduates in the digital community: Leveraging collections preservation, research, and outreach through a network of natural history collections clubs. 31st Annual Meeting of the Society for the Preservation of Natural History Collections, Berlin, Germany (20-25 June 2016)
94. **Marsico, T. D.** and K. M. Harris. Frank discussion of small herbarium digitization options for the lost, confused, weary, under-budgeted, and over-stimulated. 31st Annual Meeting of the Society for the Preservation of Natural History Collections, Berlin, Germany (20-25 June 2016)

93. *Krimmel, E. R.*, D. L. Linton, **T. D. Marsico**, A. K. Monfils, A. B. Morris, and B. R. Ruhfel. (Poster) Connecting students to citizen science and curated collections. 31st Annual Meeting of the Society for the Preservation of Natural History Collections, Berlin, Germany (20-25 June 2016)
92. *Harlin, M.*, J. Kilmer, **T. D. Marsico**, and G. Phillips. (Poster) Chemical profiles of *Opuntia humifusa* defense and response to methyl jasmonate. Create@ASTATE, Jonesboro, Arkansas (6-7 April 2016)
91. **Marsico, T. D.** A tribute to Dr. George Pryor Johnson, summarizing his contributions to Arkansas botany and my life. 100th Annual meeting of the Arkansas Academy of Science, Fayetteville, Arkansas (1-2 April 2016)
90. *Reed, J. N.* and **T. D. Marsico**. Understanding vascular plant diversity in an agriculture-dominated county in northeastern Arkansas. 100th Annual meeting of the Arkansas Academy of Science, Fayetteville, Arkansas (1-2 April 2016)
89. *Bouldin, J. L.*, B. Justus, D. R. L. Burge, J. Cobb, and **T. D. Marsico**. (Poster) Indicating water-quality conditions in connected depressions using macroinvertebrate and diatom assemblages in the Mississippi Alluvial Plain. SETAC North America 36th Annual Meeting, Salt Lake City, Utah (1-5 November 2015)
88. *Lucardi, R. D.*, K. S. Burgess, and **T. D. Marsico**. (Poster) Technology development to increase the efficacy of invasive propagule interceptions in the face of increasing trade volume. 13th International Conference, Ecology and Management of Alien Plant Invasions (EMAPI), Hawai'i Island, Hawai'i (20-24 September 2015)
87. Krimmel, E. R., D. L. Linton, **T. D. Marsico**, A. K. Monfils, A. B. Morris, and B. R. Ruhfel. Connecting students to citizen science and curated collections. BOTANY 2015, Edmonton, Alberta, Canada (26-30 July 2015)
86. **Marsico, T. D.**, J. J. Caron, R. Carter, E. Gillespie, E. Krimmel, P. D. Lowe, R. McCauley, A. B. Morris, G. Nelson, M. Smith, and A. K. Monfils. The role of small herbaria in contributing to the understanding of biodiversity patterns. BOTANY 2015, Edmonton, Alberta, Canada (26-30 July 2015)
85. *Krimmel, E. R.*, A. B. Morris, **T. D. Marsico**, A. K. Monfils, B. R. Ruhfel, and D. L. Linton. Small collections working together: CollectionsEducation.org. 30th Annual meeting of the Society for the Preservation of Natural History Collections, Gainesville, Florida (18-22 May 2015)
84. *Thigpen, C. S.*, *M. M. Rath*, *A. T. Hook*, K. M. Harris, and **T. D. Marsico**. (Poster) NHC3: A novel approach to encourage student participation in natural history collections. 30th Annual meeting of the Society for the Preservation of Natural History Collections, Gainesville, Florida (18-22 May 2015)
83. **Marsico, T. D.**, J. J. Caron, R. Carter, E. Gillespie, E. Krimmel, R. McCauley, A. B. Morris, G. Nelson, and A. K. Monfils. The role of small natural history collections in contributing to understanding species' distributions. 30th Annual meeting of the Society for the Preservation of Natural History Collections, Gainesville, Florida (18-22 May 2015)
82. Bouldin, J. L., *B. Justus*, D. R. L. Burge, J. Cobb, and **T. D. Marsico**. (Poster) Macroinvertebrate and diatom assemblages as indicators of water-quality conditions in connected wetland depressions within the Mississippi Alluvial Plain. Society for Freshwater Science Annual Meeting, Milwaukee, Wisconsin (17-21 May 2015)
81. *Thigpen, C. S.*, S. E. Trauth, and **T. D. Marsico** (Poster) A case of frugivory in a green treefrog (*Hyla cinerea*) from northeastern Arkansas. 99th Annual Meeting of the Arkansas Academy of Science, Henderson State University, Arkadelphia, Arkansas (10-11 April 2015)
80. *Davis, C.*, J. Kilmer, and **T. D. Marsico** (Poster) Genetic requirements for hairy root cultures in *Opuntia humifusa* (Cactaceae). Create at ASTATE, Jonesboro, Arkansas (7 April 2015)
79. Phelps, G., S. I. Aboobucker, J. P. Yactayo-Chang, F. Rivas, T. D. Marsico, and A. Lorence. DNA barcoding to identify Arkansas native plants with potential anti-leukemia activity. Create at ASTATE, Jonesboro, Arkansas (7 April 2015)
78. **Marsico, T. D.**, J. J. Caron, and A. K. Monfils. The role of small natural history collections in contributing to understanding species' distributions: case studies from Arkansas and Michigan

- herbaria. Association of Southeastern Biologists 2015 Annual Meeting, Chattanooga, Tennessee (1-3 April 2015)
77. Krimmel, E. R., D. L. Linton, **T. D. Marsico**, A. K. Monfils, A. B. Morris, and *B. R. Ruhfel*. Connecting students to citizen science and curated collections. Association of Southeastern Biologists 2015 Annual Meeting, Chattanooga, Tennessee (1-3 April 2015)
 76. *Kilmer, J.* and **T. D. Marsico** (Poster) Chemical defenses of *Opuntia humifusa* in response to *Cactoblastis cactorum* herbivory. Association of Southeastern Biologists 2015 Annual Meeting, Chattanooga, Tennessee (1-3 April 2015)
 75. *Nelson, K.*, J. Kilmer, and **T. D. Marsico** (Poster) Methyl jasmonate applied to host plants reduces invasive herbivore growth. Association of Southeastern Biologists 2015 Annual Meeting, Chattanooga, Tennessee (1-3 April 2015)
 74. *Phelps, G.*, S. I. Aboobucker, J. P. Yactayo-Chang, F. Rivas, **T. D. Marsico**, and A. Lorence (Poster) Use of DNA barcodes to identify Arkansas native plants, potential sources of leads against drug-resistant leukemia cells. Fall 2014 INBRE Research Conference, Fayetteville, Arkansas (7-8 November 2014) (Honorable Mention in Biological Sciences)
 73. *Sauby, K. E.*, J. Kilmer, R. D. Holt, and **T. D. Marsico**. Native and invasive insect herbivory and precipitation patterns explain variation in vital rates of a threatened plant, *Opuntia stricta*. Graduate Student Research Day, University of Florida, Gainesville, Florida (28 October 2014)
 72. *Kilmer, J.* and **T. D. Marsico** (Poster) Characterizing chemical profiles produced by *Opuntia humifusa* in response to herbivory and methyl jasmonate in comparison to root organ cultures. Arkansas Biosciences Institute, annual meeting, Jonesboro, Arkansas (7 October 2014)
 71. *Stanley, J. W.*, K. Harris, and **T. D. Marsico**. Natural History Collections Curation Club (NHC3): Its creation and activities at Arkansas State University and expansion to other universities. Tennessee Herpetology Conference, Belmont University, Nashville, Tennessee (25-27 September 2014)
 70. *Phelps, G.*, *J. Freeman*, F. Rivas, **T. D. Marsico**, and A. Lorence (Poster) Silica gel allows tissue preservation under field conditions and leads to acceptable DNA yields for plant DNA barcoding. Bridging the Divide Symposium, Arkansas State University, Jonesboro, Arkansas (7 August 2014)
 69. **Marsico, T. D.** (Invited) Documenting the importance of small collections. Small Herbarium Digitization Workshop, Botany 2014, Boise, Idaho (31 July 2014)
 68. *Phelps, G.*, *J. Freeman*, J. Yactayo-Chang, S. Aboobucker, F. Rivas, **T. Marsico**, and A. Lorence. (Poster) Arkansas native plants as a source of leads for the treatment of high-risk pediatric hematological cancers. P3 Annual Symposium, Winthrop Rockefeller Institute, Morrilton, Arkansas (28-30 July 2014)
 67. *Harris, K. M.* and **T. D. Marsico**. Digitizing specimens in the STAR Herbarium: A viable workflow for collections working with limited resources. Botany 2014, Boise, Idaho (26-30 July 2014)
 66. *Cheriyath, V.*, **T. Marsico**, *A. Azghani*, and *M. Danley*. Disseminating scientific teaching methods. Gulf Coast Summer Institute for Scientific Teaching, Louisiana State University, Baton Rouge, Louisiana (24-25 July 2014)
 65. *Danley, M.*, *C. Osovitz*, *C. Landry*, **T. Marsico**, *X. Gonzales*, *V. Cheriyath*, and *A. Azghani*. Implementing scientific teaching in 2013-2014. Gulf Coast Summer Institute for Scientific Teaching, Louisiana State University, Baton Rouge, Louisiana (24-25 July 2014)
 64. *Lucardi, R. D.*, Y. Zhang, and **T. D. Marsico**. (Invited Plenary) Interdisciplinary approaches to detecting and predicting potential forest pest insects. 56th Annual Southern Forest Insect Work Conference, Charleston, South Carolina (22-25 July 2014)
 63. *Harris, K. M.* and **T. D. Marsico**. Digitizing specimens in the STAR Herbarium: A viable workflow for collections working with limited resources. Society for the Preservation of Natural History Collections 29th Annual Meeting, Cardiff, Wales, UK (22-27 June 2014)
 62. *Phelps, G.*, S. Aboobucker, F. Rivas, **T. D. Marsico**, and A. Lorence. (Poster) Arkansas native plants as a source of leads for the treatment of high risk pediatric hematological cancers. Create at ASTATE, Jonesboro, Arkansas (10 April 2014)
 61. *Thomas, K.*, J. Crawford, **T. D. Marsico**, M. Hiza Redsteer, and L. Smith. (Poster) U.S. Geological Survey science meets buggy issues in the Southwest: A call for collaborations. 98th Annual

- Meeting of the Pacific Branch of the Entomological Society of America, Tucson, Arizona (6-9 April 2014)
60. *Foard, M. B.* and **T. D. Marsico**. (Poster) Hydrology plays a major role in the invasion success of Chinese privet (*Ligustrum sinense* Lour.) in a riparian zone along a channelized river. Arkansas Soil and Water Education Conference, Jonesboro, Arkansas (31 January 2014); 2nd place award in Master's level poster competition
 59. *Poe, N.*, M. K. Kilmer, *R. Word-Burkman*, *M. Bell*, J. L. Bouldin, and **T. Marsico**. (Poster) Comparing water quality in channelized and natural streams: An Experiential Learning Fellowship (ELF) project. Arkansas Soil and Water Education Conference, Jonesboro, Arkansas (31 January 2014); 1st place award in Master's level poster competition
 58. *Kilmer, J.*, A. M. W. Cooper, G. Phillips, F. Medina-Bolivar, and **T. D. Marsico**. (Poster) Alternatives to pesticide use: The biosynthesis of signaling compounds to activate endogenous plant defenses. Arkansas Soil and Water Education Conference, Jonesboro, Arkansas (31 January 2014); 3rd place award in Master's level poster competition
 57. Cooper, A. M. W. and **T. D. Marsico**. (Poster) The game of telephone: Testing for a cascade of defense transfer from one induced plant to the next. Gordon Research Conference: Plant Volatiles, Ventura, California (26-31 January 2014)
 56. Cooper, A. M. W., C. De Moraes, M. Mescher, and **T. D. Marsico**. (Poster) A pricklypear's cry decoded: Characterization of plant volatiles released by *Opuntia humifusa* (Cactaceae) in response to native and newly-associated cactus-boring moth herbivory (Lepidoptera: Pyralidae). Gordon Research Conference: Plant Volatiles, Ventura, California (26-31 January 2014)
 55. *Poe, N.*, M. K. Kilmer, *R. Word-Burkman*, *M. Bell*, J. L. Bouldin, and **T. Marsico**. (Poster) Comparing water quality in channelized and natural streams: An Experiential Learning Fellowship (ELF) project. SETAC North America 34th Annual Meeting, Nashville, Tennessee (17-21 November 2013)
 54. Cooper, A. M. W., C. De Moraes, M. Mescher, and **T. D. Marsico**. (Poster) A pricklypear's cry decoded: Characterization of plant volatiles released by *Opuntia humifusa* (Cactaceae) in response to native and newly-associated cactus-boring moth herbivory (Lepidoptera: Pyralidae). Arkansas Biosciences Institute Fall Research Symposium, Little Rock, Arkansas (15 October 2013)
 53. *Foard, M.* and **T. D. Marsico**. Altered hydrology assists the invasion of Chinese privet (*Ligustrum sinense* Lour.) in a natural area of Southwest Tennessee. 2013 Natural Areas Conference, Chicago, Illinois (1-4 October 2013)
 52. *Banks, J.*, *J. Brown*, *C. Gordon*, *C. Gregg*, **T. Marsico**, *C. Osovitz*, and R. Symula. The problem of scale in evolution, a teachable unit. Gulf Coast Summer Institute for Scientific Teaching, Louisiana State University, Baton Rouge, Louisiana (22-26 July 2013)
 51. *Harris, K. M.*, *C. R. Burkhardt*, *R. D. Kennedy*, *S. M. Loerch*, *A. J. Worm*, **T. D. Marsico**. (Invited Presentation) A viable digitization workflow for small collections utilizing student enthusiasm and involvement. Society for the Preservation of Natural History Collections Meeting, Rapid City, South Dakota (17-22 June 2013)
 50. *Harris, K. M.*, *C. R. Burkhardt*, *R. D. Kennedy*, *S. M. Loerch*, *A. J. Worm*, **T. D. Marsico**. (Invited Presentation) Digitization Efforts in the STAR Herbarium. Delta Symposium, Arkansas State University, Jonesboro, Arkansas (18 April 2013)
 49. *Burge, D. R. L.*, **T. D. Marsico**, J. Cobb, and J. L. Bouldin. Land-use practices in relation to wetland water quality of the Cache River, AR, USA. Association of Southeastern Biologists 2013 Annual Meeting, Charleston, West Virginia (10-13 April 2013)
 48. *Burkhardt, C. R.*, K. M. Harris, and **T. D. Marsico**. (Poster) Improvement of digital herbarium specimens through image stitching. Association of Southeastern Biologists 2013 Annual Meeting, Charleston, West Virginia (10-13 April 2013)
 47. *Foard, M.* and **T. D. Marsico**. Understanding the role of hydrology in the invasion of Chinese privet (*Ligustrum sinense* Lour.). Association of Southeastern Biologists 2013 Annual Meeting, Charleston, West Virginia (10-13 April 2013)
 46. *Harris, K. M.*, *C. R. Burkhardt*, *R. D. Kennedy*, *S. M. Loerch*, *A. J. Worm*, and **T. D. Marsico**. Digitizing specimens in a small herbarium: A template for other collections working with limited

- resources. Association of Southeastern Biologists 2013 Annual Meeting, Charleston, West Virginia (10-13 April 2013)
45. **Marsico, T. D.**, M. P. Hardin, A. M. Woodard, and X. Huang. Comparison of gene expression profiles between a native cactus borer (*Melitara prodenialis*) and an invasive cactus borer (*Cactoblastis cactorum*) to assess unique responses to food source. Association of Southeastern Biologists 2013 Annual Meeting, Charleston, West Virginia (10-13 April 2013)
 44. Riley, K., A. M. Woodard, and **T. D. Marsico**. (Poster) Can they finish together? Development of a standard operating procedure for synchronization of a laboratory colony with two species of cactus-feeding moths (Lepidoptera: Pyralidae). Association of Southeastern Biologists 2013 Annual Meeting, Charleston, West Virginia (10-13 April 2013)
 43. Woodard, A. M., C. De Moraes, M. Mescher, and **T. D. Marsico**. A pricklypear's cry decoded: Characterization of plant volatiles released by *Opuntia humifusa* (Cactaceae) in response to native and newly-associated cactus-boring moth herbivory (Lepidoptera: Pyralidae). Association of Southeastern Biologists 2013 Annual Meeting, Charleston, West Virginia (10-13 April 2013); Winner of the Botanical Society of America Southeastern Section Student Poster Award
 42. **Marsico, T. D.**, M. P. Hardin, A. M. Woodard, and X. Huang. (Poster) Aligning two pyralid moth transcriptomes to the annotated silkworm genome. NSF Bioinformatics Workshop to Foster Collaborative Research, Little Rock, Arkansas (3-5 March 2013); 3rd Place Poster Award for Faculty/Staff in the Biological Division
 41. **Marsico, T. D.** and A. M. Woodard. Do recent invasion frameworks downplay the community context of species invasions? A case study using an invasive phytophagous insect. 97th Annual Meeting of the Ecological Society of America, Portland, Oregon (5-10 August 2012)
 40. **Marsico, T.**, B. Bennett, M. Huss, and F. Medina-Bolivar. (Poster) Recent advances in formal botanical education at Arkansas State University: an eye to the future. 3rd Annual Meeting of the American Council for Medicinally Active Plants, Jonesboro, Arkansas (22-25 May 2012)
 39. Harris, K. M., M. B. Foard, and **T. D. Marsico**. Understanding floristic diversity through a database of Greene County specimens. 96th Annual Arkansas Academy of Science Meeting, Southern Arkansas University, Magnolia, Arkansas (13-14 April 2012)
 38. Woodard, A. M., R. A. F. Warby, B. Rougeau, and **T. D. Marsico**. Identification of cactus-derived volatile organic compounds induced by cactus boring moth herbivory using SPME sampling and GC/IT-MS analysis. Joint Southeastern/Southwestern Branch Meeting, Entomological Society of America, Little Rock, Arkansas (4-7 March 2012)
 37. **Marsico, T. D.**, A. M. Woodard, and G. N. Ervin. (Poster) Host plant defense signaling in response to a coevolved herbivore combats introduced herbivore attack. Gordon Research Conference: Plant Volatiles, Ventura, California (29 January-3 February 2012)
 36. Woodard, A., J. Hubstenberger, F. Medina-Bolivar, G. Phillips, and **T. D. Marsico**. (Poster) Biosynthesis of defense-priming volatiles from *Opuntia* associated with cactus boring moth (Lepidoptera: Pyralidae) herbivory. Gordon Research Conference: Plant Volatiles, Ventura, California (29 January-3 February 2012)
 35. **Marsico, T. D.** (Invited symposium speaker) Consequences of direct defenses induced by cactus-derived VOCs for the invasive cactus borer, *Cactoblastis cactorum* (Lepidoptera: Pyralidae). Entomology 2011, Reno, Nevada (13-16 November 2011)
 34. Woodard, A., J. Hubstenberger, F. Medina-Bolivar, G. Phillips, and **T. D. Marsico**. (Poster) Biosynthesis of defense-priming volatiles from *Opuntia* associated with cactus boring moth (Lepidoptera: Pyralidae) herbivory. Entomology 2011, Reno, Nevada (13-16 November 2011)
 33. Burge, D., **T. D. Marsico**, and B. Justus. (Poster) Arkansas wetland flora structure 2011. Natural Areas Conference, Tallahassee, Florida (1-4 November 2011)
 32. **Marsico, T. D.** Plant recognition and defense against coevolved insect herbivores: insights from a pricklypear/cactus borer study system. Arkansas P3 Center Symposium, Heber Springs, Arkansas (26-28 July 2011)
 31. Woodard, A. M., G. N. Ervin, and **T. D. Marsico**. (Poster) Defense priming as a mechanism to combat newly-associated insect herbivores. Arkansas P3 Center Symposium, Heber Springs, Arkansas (26-28 July 2011); 3rd place award

30. Woodard, A., G. Ervin, and **T. Marsico**. Defense priming as a mechanism to combat newly-associated insect herbivores. Botany 2011, Healing the Planet, St. Louis, Missouri (9-13 July 2011)
29. *Foard, M.* and **T. Marsico**. (Poster) Chinese privet invasion decreases botanical species richness in a riparian forest. Botany 2011, Healing the Planet, St. Louis, Missouri (9-13 July 2011)
28. *Harris, K. M.*, M. B. Foard, and **T. D. Marsico**. The Greene County Vascular Flora Project. Create @ ASTATE, Arkansas State University, Jonesboro, Arkansas (12 April 2011)
27. **Marsico, T. D.**, G. N. Ervin, and C. P. Brooks. (Poster) Putting hypothesized native-range phylogeographic patterns of *Cactoblastis cactorum* to the test using genetic and climatic data. International Biogeography Society 5th International Conference, Heraklio, Crete, Greece (7-11 January 2011)
26. **Marsico, T. D.**, A. M. Woodard, and G. N. Ervin. (Poster) Potential eavesdropping may cue inducible defenses against an invasive herbivore. Entomological Society of America Annual Conference, San Diego, California (12-15 December 2010)
25. *Harris, K. M.*, M. B. Foard, and **T. D. Marsico**. The Greene County Vascular Flora Project. Fall McNair Research Symposium, Arkansas State University, Jonesboro, Arkansas (6 December 2010)
24. *Harris, K. M.*, M. B. Foard, and **T. D. Marsico**. (Poster) The Greene County vascular flora project. 2010 McNair Research Conference, University of Arkansas, Fayetteville, Arkansas (4-5 November 2010)
23. **Marsico, T. D.** (Invited faculty presentation) Plant-plant signaling may cue inducible defenses against an invasive herbivore. Arkansas INBRE Research Conference, Fayetteville, Arkansas (15-16 October 2010)
22. **Marsico, T. D.**, A. M. Woodard, and G. N. Ervin. (Poster) Novel defenses in invasion resistance: potential eavesdropping may cue inducible defenses against an invasive herbivore. Arkansas P3 Center Symposium, Winthrop Rockefeller Institute, Petit Jean, Arkansas (15-17 August 2010)
21. *Perez, L.* and **T. D. Marsico**. (Poster) Testing multiple mitochondrial and nuclear genes for utility in *Cactoblastis cactorum* phylogeographic research. Research Internships in Science of the Environment (RISE) Student Symposium, Arkansas State University, Jonesboro, Arkansas (5 August 2010)
20. *Stephens, F.*, A. Woodard, and **T. D. Marsico**. (Poster) Analysis for a field key for identification of cactophagous moth eggsticks. Research Internships in Science of the Environment (RISE) Student Symposium, Arkansas State University, Jonesboro, Arkansas (5 August 2010)
19. **Marsico, T. D.**, A. M. Woodard, and G. N. Ervin. Novel defenses in invasion resistance: potential eavesdropping may cue inducible defenses against an invasive herbivore. 95th Ecological Society of America Annual Meeting, Pittsburgh, Pennsylvania (1-6 August 2010)
18. *Harris, K. M.*, M. B. Foard, and **T. D. Marsico**. The Greene County Vascular Flora Project. Summer McNair Research Symposium, Arkansas State University, Jonesboro, Arkansas (30 July 2010)
17. *Woodard, A. M.*, **T. D. Marsico**, and G. N. Ervin. (Poster) Evaluating differential defense response in two native cactus species. Biological Undergraduate Research Program Symposium, Mississippi State University, Starkville, Mississippi (16 April 2010)
16. **Marsico, T. D.**, G. N. Ervin, C. P. Brooks, B. A. Counterman, L. E. Wallace, and M. E. Welch. (Poster) Using next-generation sequencing approaches to investigate reciprocal recognition and response in plant-herbivore interactions. 7th Annual MidSouth Computational Biology and Bioinformatics Society (MCBIOS) Conference, Arkansas State University, Jonesboro, Arkansas (19-20 February 2010)
15. *Sauby, K. E.*, **T. D. Marsico**, G. N. Ervin, and C. P. Brooks. Host community composition as a driver of the invasion of the exotic cactus moth, *Cactoblastis cactorum*. 94th Ecological Society of America Annual Meeting, Albuquerque, New Mexico (2-7 August 2009)
14. *Sauby, K. E.*, **T. D. Marsico**, G. N. Ervin, and C. P. Brooks. Host community composition as a driver of the invasion of an exotic herbivore. 6th Annual Southeastern Ecology and Evolution Conference, University of Florida, Gainesville, Florida (27-29 March 2009)
13. **Marsico, T. D.**, C. P. Brooks, L. E. Wallace, M. E. Welch, and G. N. Ervin. (Poster) Genetic diversity within the native ranges of two cactophagous pyralid moths. Synthesizing Ecology and

- Evolution for the Study of Invasive Species, a workshop, Granlibakken Conference Center, Lake Tahoe, California (19-22 March 2009)
12. **Marsico, T. D.** Different patterns of seed dispersal are related to abundance in co-occurring *Lomatium* species. Southeastern Population Ecology and Evolutionary Genetics (SEPEEG), University of Georgia, Rock Eagle 4-H Center, Georgia (24-26 October 2008)
 11. *Welch, M. E.*, C. Brooks, R. Brown, G. Ervin, J. McClure, **T. D. Marsico**, and L. Wallace. The phylogeography of the invasive cactus moth *Cactoblastis cactorum* in its native range. SEPEEG, University of Georgia, Rock Eagle 4-H Center, Georgia (24-26 October 2008)
 10. **Marsico, T. D.** and J. J. Hellmann. Dispersal limitation at poleward range boundaries. 93rd Ecological Society of America Annual Meeting, Milwaukee, Wisconsin (3-8 August 2008)
 9. **Marsico, T. D.** Constraints on geographic range shifts under climate change. NDEER 2007: Energy and the Environment, University of Notre Dame, Notre Dame, Indiana (10 October 2007)
 8. **Marsico, T. D.** and J. J. Hellmann. (Poster) Dispersal limitation to climate-driven poleward range shifts: evidence from a *Lomatium* germination experiment. Challenges of Climate Change in the Great Lakes Region, University of Michigan Biological Station, Pellston, Michigan (26-27 July 2007)
 7. **Marsico, T. D.** and J. J. Hellmann. Understanding factors limiting species' ranges to predict range shifts under climate change. Botany and Plant Biology Joint Congress, Chicago, Illinois (7-11 July 2007)
 6. Giordano, J., **T. D. Marsico**, and J. J. Hellmann. (Poster) Growth comparison of three *Lomatium* species under increased temperature and CO₂. Botany and Plant Biology Joint Congress, Chicago, Illinois (7-11 July 2007)
 5. **Marsico, T. D.**, J. J. Hellmann, and J. Romero-Severson. When the range periphery is an island: Understanding population structure in the core and periphery of the *Quercus garryana* species range. Midwest Ecology and Evolution Conference (MEEC), Kent State University, Kent, Ohio (9-11 March 2007)
 4. *Gonzales, E.* and **T. D. Marsico**. The poop on endozoochory in Garry oak ecosystems. Garry Oak Research Colloquium 2007, Victoria, British Columbia, Canada (20 February 2007)
 3. **Marsico, T. D.** (Poster) Are you primed? Using microsatellite markers to understand oak dispersal in a modified world. Plant Conservation in an Era of Global Climate Change, School of the Chicago Botanic Garden, Chicago, Illinois (21 October 2005)
 2. **Marsico, T. D.** Vascular plant inventory of Richardson Bottoms Wildlife Viewing Area. 88th Annual Meeting of the Arkansas Academy of Science, Arkansas State University, Jonesboro, Arkansas (2-3 April 2004)
 1. **Marsico, T. D.** On the rare endemic *Hydrophyllum brownei* Kral & Bates (Browne's Waterleaf): New population information and a recommendation for change in status. 87th Annual Meeting of the Arkansas Academy of Science, University of Arkansas, Fayetteville, Arkansas (4-5 April 2003)

Attended

12. 2022 Annual NSF S-STEM Symposium, Washington, D.C. (29 September - 1 October 2022)
11. 2019 Annual NSF S-STEM Symposium with reverse site visit for Track 3 PIs, Washington, D.C. (11-14 September 2019)
10. Workflows for Herbarium Digitization Workshop, Valdosta State University, Valdosta, Georgia (26-30 January 2015)
9. 2012 NSF S-STEM Projects Meeting, Arlington, Virginia (14-16 October 2012)
8. 51st Annual Systematics Symposium, Latin American Biogeography, Missouri Botanical Garden, St. Louis, Missouri (8-10 October 2004)
7. Inaugural meeting of the Ancient Cross Timbers Consortium, Gilcrease Museum, Tulsa, Oklahoma (30 April 2004)
6. Midwest Ecology and Evolution Conference (MEEC), University of Notre Dame, South Bend, Indiana (5-7 March 2004)
5. Rare and Invasive Plants of Arkansas Conference, University of Arkansas Center for Continuing Education, Fayetteville, Arkansas (23-24 October 2003)

4. 50th Annual Systematics Symposium, Species Reconsidered, Missouri Botanical Garden, St. Louis, Missouri (10-11 October 2003)
3. Upland Oak Ecology Symposium: History, Current Conditions, and Sustainability, Radisson Hotel, Fayetteville, Arkansas (7-10 October 2002)
2. 48th Annual Systematics Symposium, Biological Invasions, Missouri Botanical Garden, St. Louis, Missouri (12-13 October 2001)
1. 85th Annual Meeting of the Arkansas Academy of Science, University of Central Arkansas, Conway, Arkansas (April 2001)

Invited Seminars

20. The Important Role of Herbaria in Recent Discoveries of Invasive Species Risk from Hitchhiking Propagules at International Seaports, Arkansas Native Plant Society Webinar (6 October 2021)
19. Recent Discoveries and a Way Forward to Assess Invasive Species Risk from Hitchhiking Propagules at International Seaports, California Botanic Garden (webinar; 18 February 2021)
18. Making the Most of the Legacy, Arkansas Native Plant Society Fall 2016 meeting, Mena, Arkansas (24 September 2016)
17. Education and Outreach Webinar Series: Connecting Students to Citizen Science and Curated Collections, iDigBio 5th seminar in the series, presenters: Erica Krimmel and Travis Marsico (18 May 2016)
16. A First Glimpse of Plant Species Diversity along an Elevation Gradient on a Tropical Volcano, Arkansas State University, Jonesboro, Arkansas (April 2016)
15. Herbarium Collections in Action: Using Specimens in Research and Teaching, Christian Brothers University, Memphis, Tennessee (April 2015)
14. Defense-Free-Space Invaders, University of Mississippi (October 2014)
13. 2-day workshop to teach undergraduate students DNA Barcoding for Plant Species Identification, University of Puerto Rico, Mayagüez (May 2014)
12. Defense-Free-Space Invaders, Louisiana State University (May 2014)
11. Activities at the Arkansas State University Herbarium (STAR)—Part II, Craighead County Master Gardeners monthly meeting, (April 2014)
10. Stop and Smell the Roses: They Are Trying to Tell You Something! Arkansas Native Plant Society Spring Meeting (May 2012)
9. Activities at the Arkansas State University Herbarium (STAR), Craighead County Master Gardeners monthly meeting, (March 2012)
8. Sending the Alarm: Evidence for Defense Priming Against Insect Herbivores by Eavesdropping Plants, University of Arkansas (September 2010)
7. Insect Invasions and the Role of Host Plant Defenses, University of Central Arkansas (April 2010)
6. Next-Generation Sequencing Platforms: The Similarities, Differences, and Applications of High-Throughput Technologies, Arkansas State University (February 2010)
5. The Genetics of Colonizing Species, Arkansas State University (April 2009)
4. Past and Present Geographic Range Shifts: A Conservation Perspective, Mississippi State University (May 2008)
3. Predicting Plant Responses to Climate Change: Evidence from the Past, Present, and Future, Hampden-Sydney College (February 2008) and University of Findlay (February 2008)
2. Unlocking the Mysteries of Long-Distance Dispersal, Wittenberg University (November 2007)
1. Factors Limiting Species' Ranges and the Importance of Abundance, University of Tennessee (February 2007)

Seminar Speakers Hosted at Arkansas State University

15. Dr. Suneeti Jog, Murray State University, Murray, Kentucky. Towards rapid assessment of wetland biological condition using indicator species (17 April 2019)
14. Dr. Dwayne Estes, Southeastern Grasslands Initiative, Austin Peay State University, Clarksville, Tennessee. Southeastern Grasslands Initiative (10 October 2018)

13. Bill Holimon, Department of Arkansas Heritage, Arkansas Natural Heritage Commission, Little Rock, Arkansas. Ecology of the red-cockaded woodpecker (*Picoides borealis*) and recovery efforts of this endangered species in Arkansas (3 October 2018)
12. Renee Molina, Maderas Rainforest Conservancy, Miami, Florida. Family sustainable farming and the birth of Maderas Rainforest Conservancy (29 August 2018)
11. Dr. Adam Siepielski, Department of Biological Sciences, University of Arkansas, Fayetteville, Arkansas. The major features of natural selection in the wild (18 April 2018)
10. Dr. Chelsea Cunard, Department of Biological Sciences, Arkansas State University, Jonesboro, Arkansas. The journey of invasive plants: examining prevention and long-term dynamics (30 November 2016)
9. Dr. Kamal Gandhi, Daniel B. Warnell School of Forestry and Natural Resources, University of Georgia, Athens, Georgia. Unraveling of forest processes due to invasion by the exotic emerald ash borer (2 September 2015)
8. Dr. Shannon Pelini, Department of Biological Sciences, Bowling Green State University, Bowling Green, Ohio. Insect experiments reveal idiosyncratic warming responses across latitude and ecological hierarchy (12 March 2014)
7. Dr. Daniel Herms, Chair, Department of Entomology, The Ohio State University, Ohio. The emerald ash borer invasion of North America: ecological impacts and the quest for resistance (11 December 2013)
6. Dr. Jessica Hellmann, Department of Biological Sciences, University of Notre Dame, South Bend, Indiana. Constraints on species' range change under climate change: studies in genomic biology and ways that humans might help (24 April 2013)
5. Dr. Esra Ozdenerol, Department of Earth Sciences, University of Memphis, Memphis, Tennessee. The accuracy of detection of Chinese privet in Shelby Farms Park using the Woldview-2 Imagery (15 February 2012)
4. Dr. Jessica Gurevitch, Chair, Department of Ecology and Evolution, Stony Brook University, Stony Brook, New York. Biological invasions: a conceptual framework and systematic review (9 March 2011)
3. Dr. Gary Ervin, Department of Biological Sciences, Mississippi State University, Starkville, Mississippi. Combining biological datasets and predictive modeling in conservation planning (16 February 2011)
2. Dr. Erin Espeland, USDA ARS NPARL, Sydney, Montana. Transgenerational plasticity as a force to enhance or constrain local adaptation in invasive species (20 October 2010)
1. Dr. Sally Entekin, Department of Biological Sciences, University of Central Arkansas, Conway, Arkansas. Anthropogenic alterations change aquatic food web structure of headwater streams (17 March 2010)

Public Service and Outreach

- The Link Theatre Board Member (October 2020-present)
- WeDigBio Transcription Blitz (virtual), provided a seminar titled, "A botanist's meandering hike down memory lane: A flora in the Ouachitas, a Ouachita endemic plant, and the changing nature of herbarium data management" (October 2021)
- WeDigBio Transcription Blitz (virtual), provided a seminar titled, "Plant Species Discoveries on Isla de Ometepe, Nicaragua, WeDigBio Virtual Transcription Blitz (April 2021), Hazel K. Berríos, co-author
- WeDigBio Transcription Blitz (virtual), provided a seminar titled, "The Important Role of Herbaria in Recent Discoveries of Invasive Species Risk from Hitchhiking Propagules at International Seaports, (April 2021)
- WeDigBio Transcription Blitz (virtual), provided a seminar on the importance of volunteers to the research enterprise (October 2020)
- WeDigBio Lite Transcription Blitz, provided a discussion session on the virtual forum to talk with transcription volunteers (April 2020)
- Plant Mounting Workshop, Valley View STEM Day at A-State, 5th graders from Valley View School (Jonesboro) learned to mount museum-quality plant specimens (December 2019)

- Plant Mounting Workshop, STEM Fest at A-State, middle school student groups learned to mount museum-quality plant specimens (October 2019)
- WeDigBio Transcription Blitz, A-State student event with 52 participants and over 1000 transcriptions in a single day (October 2019)
- Bearitage Field Station Bioblitz, Plant Identifications and leading a student group on Bottomland Hardwoods Hike (October 2019)
- Plant Mounting Workshop, Led a specimen mounting workshop for 84 Valley View School 5th graders (November 2018)
- WeDigBio Transcription Blitz, A-State student event with over 50 participants and 1460 transcriptions in a single day (October 2018)
- WeDigBio Transcription Blitz, A-State student event with 75 participants and over 2500 transcriptions in a single day (October 2017)
- Bearitage Field Station Bioblitz, Plant Identifications and leading student group (October 2017)
- Invited Lecture, Marsico Family Sabbatical on Isla de Ometepe, Nicaragua, Twin Lakes Baptist Church, Mountain Home, Arkansas (October 2017)
- WeDigBio Transcription Blitz, A-State student event with over 50 participants and 1300 transcriptions in a single day (October 2016)
- Bearitage Field Station Bioblitz, Plant Identifications and leading student group (October 2016)
- FaceTime Question and Answer, Garlic Growing Experiment, Mrs. Stanton's 6th grade classes, Euper Lane Elementary School, Fort Smith, Arkansas (March 2016)
- Volunteer Outreach Participant, Plant-Pollinator Adaptation, DNA Day and Spring Spectacular, for mid-level students from area schools, Arkansas State University, Jonesboro, Arkansas (March 2016)
- Volunteer Lecture, Nicaragua Biodiversity, Mrs. Sutterfield's 2nd grade class, Fox Meadow Elementary, Jonesboro, Arkansas (February 2016)
- Volunteer Lecture, Earth's Rotation and Revolution and their Impact on Weather, Climate, and Monarch Butterfly Migration, Mrs. Sutterfield's 2nd grade class, Fox Meadow Elementary, Jonesboro, Arkansas (December 2015)
- Invited Speaker, Another Form of Plant Imaging: Utilizing Herbarium Collections in Citizen Science and Big Data Initiatives, Plant Imaging Consortium (PIC) Teacher Workshop, Arkansas State University, Jonesboro, Arkansas (July 2015)
- Volunteer Lecture, Landscaping with Native Plants, Twin Lakes Baptist Church, Mountain Home, Arkansas (March 2015)
- Volunteer Lecture, Landscaping with Native Plants, Craighead County Master Gardeners monthly meeting, Jonesboro, Arkansas (January 2015)
- Volunteer Lecture, Landscaping with Native Plants, Arkansas State University Museum Garden Club, Jonesboro, Arkansas (November 2014)
- Volunteer Lecture, Landscaping with Native Plants, Twin Lakes Baptist Church, Mountain Home, Arkansas (October 2014)
- Volunteer Educator, Craighead County Master Gardeners Course; Botany lesson (January 2014)
- Volunteer Lecture, Landscaping with Native Plants, Twin Lakes Baptist Church, Mountain Home, Arkansas (October 2013)
- Volunteer Herbaceous Plant Hike Leader, Arkansas Master Naturalist program, Bioblitz 2013; Village Creek State Park (20 April 2013)
- Volunteer Lecture, Hughes Town and Country Garden Club; Plant nomenclature and using dichotomous keys (19 April 2013)
- Volunteer Tutor, Country Garden Apartments; tutor low-income, minority, elementary school students in science, math, and literacy each week (September 2012 – December 2012)
- On-site Organizer, Arkansas Native Plant Society Meeting held in Jonesboro (May 2012)
- Volunteer Educator, Northeast Arkansas Master Naturalists course; Botany lesson (March 2012)
- Volunteer Educator, St. Francis, Cross, Woodruff, and Crittenden Counties Master Gardeners Course; Botany lesson (February 2012)
- Volunteer Educator, Craighead County Master Gardeners Course; Botany lesson (January 2012)

- Volunteer Lecture, Educational outreach to 3rd graders at Fox Meadow Intermediate Center, Carnivorous plants (October 2011)
- Volunteer Lecture, Outreach to the Greene County Master Gardeners' Association through a discussion of Japanese garden project (February 2011)
- Lead Volunteer, Chef David's Kidz Wishgrant Foundation, Leader of team to implement a Japanese garden for a child who underwent a heart transplant, Kennett, Missouri (Summer and Fall 2010)
- Tour Guide, Lyle Entomology Quarantine Insect Rearing Facility, Mississippi State University, for Annual Insect Camp (June 2009)
- Speaker, South Bend Elkhart Audubon Society monthly meeting (January 2008)
- Invited speaker, Grand Buddy program global change forum, Stanley Clark School, South Bend, Indiana (November 2006)
- Invited participant, BioBlitz 2006, St. Patrick's County Park, St. Joseph County, Indiana (September 2006)
- Science Fair Judging:
 - Northern Indiana Regional Science and Engineering Fair, University of Notre Dame, Indiana (March 2006 & March 2007)
 - Intel International Science and Engineering Fair (ISEF), Indianapolis, Indiana (June 2006)
 - Kennedy Elementary School Science Fair, South Bend, Indiana (February 2005)
 - Northwest Arkansas Regional Science and Engineering Fair, University of Arkansas, Fayetteville (March 2004)
- Speaker, Native Trees, Shrubs, & Vines Identification Workshop, University of Arkansas, Fayetteville (May 2003)
- Herbarium Tour Guide, University of Arkansas Museum's Open House, Fayetteville (October 2002)
- Speaker, A Native Plant Identification Workshop for Beginners, University of Arkansas, Fayetteville (September 2001)