

**GARY N. ERVIN, PH.D.**

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**EMPLOYMENT & POSITIONS HELD**

**Professor of Biological Sciences**, August 2011 – present  
 Department of Biological Sciences, Mississippi State University  
**Interim Department Head**, January 2015 – October 2015  
 Department of Biological Sciences, Mississippi State University  
**Graduate Program Coordinator**, August 2008 – 2014  
 Department of Biological Sciences, Mississippi State University  
**Assistant/Associate Professor of Biological Sciences**, August 2001 – August 2011  
 Department of Biological Sciences, Mississippi State University  
**Associate Faculty**, August 2000 – August 2001  
 Northwest Arkansas Community College, Biology  
**Post-doctoral Research Associate, Plant-Insect Interactions**, April 2000 – May 2001  
 Department of Entomology, University of Arkansas

**EDUCATION**

**Doctor of Philosophy**, May 2000  
 Department of Biological Sciences  
 The University of Alabama, Tuscaloosa  
 Area of Study : Aquatic Ecology

**Bachelor of Science**, December 1996  
 The University of Alabama, Tuscaloosa  
 Major: Biological Sciences  
 Honors: *cum laude*

**BOOK AND BOOK CHAPTERS**

**Ervin, G. N.** 2023. *The Biology of Aquatic and Wetland Plants*. Boca Raton: CRC Press.

**Lázaro-Lobo, A., G. N. Ervin**, L. Caño, and F. D. Panetta. 2022. Biological invasion by *Baccharis*. Invited chapter in: G. W. Fernandes, Y. Oki, and M. Barbosa (eds.), *Baccharis: From Evolutionary and Ecological Aspects to Social Uses and Medicinal Applications*. Springer Publishers.

**PEER-REVIEWED PUBLICATIONS**

\* Authors in ***bold italics*** were students under my direction; † = undergraduate students when the research was conducted.

63. Keybondori, S., A. Deljouei, A. Lázaro-Lobo; **G. N. Ervin**, Z. Shakeri, V. Etemad, S. A. Borz, E. Abdi. 2023. Effect of forest roadside on vegetation characteristics in the Hyrcanian temperate forest. *Transportation Research Part D*. <https://doi.org/10.1007/s10342-023-01535-2>
62. **Lázaro-Lobo, A.**, A. Paulson, M. A. Lashley, and **G. N. Ervin**. 2023. Life History Traits of Exotic and Native Species Determine Grassland Management Outcomes Following Prescribed Fire. *Ecological Restoration* 41: 34-43.
61. Schmid, S. A., G. Turnage, and **G. N. Ervin**. 2023. Rare Production of Seeds by Invasive *Alternanthera philoxeroides* (Alligator Weed) in North America Observed in Terrestrial Populations. *Wetlands* 43:12.
60. Turnage, G., **Lázaro-Lobo, A.**, B. Blassingame, O. Robinson, **K. Calhoun**, and **G. N. Ervin**. 2023. American frogbit response to herbicides. *Journal of Aquatic Plant Management* 61:11-14.
59. Zhang, B., L. Zhai, **G. N. Ervin**, and D. R. Coyle. 2023. Effective and timely use of models to inform on-the-ground management of invasive plants. *Biological Invasions*. <https://doi.org/10.1007/s10530-023-03043-1>

## PEER-REVIEWED PUBLICATIONS

58. **Ervin, G. N.** 2022. Eight Billion People on a Wet Rock: Mitigating the threat of eutrophication for sustainable use of water resources. *EBSCO Pathways to Research in Sustainability* SUS066, [s. 1], p. 1–16, 2022. <https://www.pathways2research.com/pts/Eight%20Billion%20People%20on%20a%20Wet%20Rock%3A%20Mitigating%20the%20Threat%20of%20Eutrophication%20for%20the%20Sustainable%20Use%20of%20Water%20Resources>.
57. **Shoemaker, C.M.**, L. E. Wallace, C. P. Brooks, E. W. DiOrio, and **G. N. Ervin.** 2022. Patterns and processes of restored wetland plant assemblages from an agricultural landscape. *Wetlands* 42: 85.
56. **Lázaro-Lobo, A.**, ~20 collaborators, and **G. N. Ervin.** 2021. Phenotypic differentiation among native, expansive, and introduced populations influences invasion success. *Journal of Biogeography* DOI: 10.1111/jbi.14252
55. **Lázaro-Lobo, A.**, C. Ramirez-Reyes, R. D. Lucardi, and **G. N. Ervin.** 2021. Multivariate analysis of invasive plant species distributions in southern US forests. *Landscape Ecology* DOI: 10.1007/s10980-021-01326-3
54. **Lázaro-Lobo, A.** and **G. N. Ervin.** 2021. Wetland invasion: A multi-faceted challenge during a time of rapid global change. *Wetlands* 41:64 (Invited “Mark Brinson Review”).
53. **Lázaro-Lobo, A.**, R. Lucardi, C. Ramirez-Reyes, and **G. N. Ervin.** 2021. Region-wide assessment of fine-scale associations between invasive plants and forest regeneration. *Forest Ecology and Management* 483: 118930.
52. **Lázaro-Lobo, A.** and **G. N. Ervin.** 2021. Native and exotic plant species respond differently to ecosystem characteristics at landscape vs local scales. *Biological Invasions* DOI: 10.1007/s10530-020-02361-y
51. **Lázaro-Lobo, A.**, K. O. Evans, and **G. N. Ervin.** 2020. Evaluating landscape characteristics of predicted hotspots for plant invasions. *Invasive Plant Science and Management* DOI: 10.1017/inp.2020.21
50. **Lázaro-Lobo, A.**, M. Herrera, J. A. Campos, L. Caño, E. Goñi, and **G. N. Ervin.** 2020. Influence of local adaptations, transgenerational effects and changes in offspring's saline environment on *Baccharis halimifolia* L. under different salinity and light levels. *Environmental and Experimental Botany* DOI: 10.1016/j.envexpbot.2020.104134
49. **Lucardi, R. D.**, L. E. Wallace, and **G. N. Ervin.** 2020. Patterns of genetic diversity in the highly invasive species: Cogongrass (*Imperata cylindrica*) expansion in the invaded range of the southern United States (US). *Plants* 9:423.
48. **Shoemaker, C.** and **G. N. Ervin.** 2020. Factors at multiple scales influence recruitment from herbaceous wetland seed banks in the lower Mississippi Alluvial Valley. *Wetlands* DOI: 10.1007/s13157-019-01248-6
47. **Lázaro-Lobo, A.** and **G. N. Ervin.** 2019. A global examination on the differential impacts of roadsides on native vs. exotic and weedy plant species. *Global Ecology & Conservation*, e00555.
46. **Carter, C.**, J. D. Madsen, and **G. N. Ervin.** 2018. Effects of initial propagule size and water depth on *Butomus umbellatus* L. growth and vegetative propagation. *Aquatic Botany* 150: 27-32.
45. Yates, K. L., P. J. Bouchet, ...**G. N. Ervin.**...et al. 2018. Outstanding challenges in the transferability of ecological models. *Trends in Ecology and Evolution* 33: 790-802. (Invited co-author)
44. **Shoemaker, C. M.**, **G. N. Ervin** and **E. L. DiOrio.** 2017. Interplay of water quality and vegetation in restored wetland plant assemblages from an agricultural landscape. *Ecological Engineering* 108: 255-262.
43. Fleming, K. S., R. M. Kaminski, M. L. Schummer, K. D. Nelms, **G. N. Ervin**, and T. E. Tietjen. 2015. Species richness and density of wintering ducks on wetlands reserve program easements in Mississippi. *Wildlife Society Bulletin* 39: 310-318.
42. 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) Walker, a native cactus-boring moth. *Insect Conservation and Diversity*, DOI 10.1111/icad.12115.
41. **Lucardi, R. D.**, L. E. Wallace, and **G. N. Ervin.** 2014. Evaluating hybridization as a potential facilitator of successful Cogongrass (*Imperata cylindrica*) invasion in Florida, USA. *Biological Invasions* 16: 2147-2161.
40. **Lucardi, R. D.**, L. E. Wallace, and **G. N. Ervin.** 2014. Invasion success in cogongrass (*Imperata cylindrica*): a population genetic approach exploring genetic diversity and historical introductions. *Invasive Plant Science and Management* 7: 59-75.

## PEER-REVIEWED PUBLICATIONS

39. Brooks, C. P., B. H. Lambert, K. E. Sauby, **G. N. Ervin**, L. Varone, and G. A. Logarzo. 2014. Larval morphology and host use confirms ecotypic variation in *Cactoblastis cactorum* (Berg). *Biological Invasions* 16: 13-22.
38. Brooks, C. P., **G. N. Ervin**, L. Varone, and G. Logarzo. 2012. Native ecotypic variation and the role of host identity in the spread of an invasive herbivore, *Cactoblastis cactorum* (Berg). *Ecology* 93: 402-410.
37. **Ervin, G. N.** 2012. Indian fig cactus (*Opuntia ficus-indica* (L.) Miller) in the Americas: An uncertain history. *Haseltonia* 17: 70-81.
36. Fleming, K. S., R. M. Kaminski, T. E. Tietjen, M. L. Schummer, **G. N. Ervin**, and K. D. Nelms. 2012. Vegetative forage quality and moist-soil management on Wetlands Reserve Program lands in Mississippi. *Wetlands* 32: 919-929.
35. Neal, D. M., B. S. Baldwin, **G. N. Ervin**, R. L. Jolley, J. N. J. Campbell, M. Cirtain, J. Seymour, and J. W. Neal. 2012. Assessment of seed storage alternatives for rivercane (*Arundinaria gigantea*). *Seed Technology* 34: 119-126.
34. 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: 561-568.
33. **Woodard, A. M.**, T. D. Marsico, and **G. N. Ervin**. 2012. Host plant defense priming in response to a coevolved herbivore combats introduced herbivore attack. *Ecology and Evolution*, online only; DOI: 10.1002/ece3.224
32. **Ervin, G. N.** and **D. C. Holly**. 2011. Examining local transferability of predictive species distribution models for invasive plants: An example with cogongrass (*Imperata cylindrica*). *Invasive Plant Science and Management* 4: 390-401.
31. 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.
30. **Mills, M. C.**, B. S. Baldwin, and **G. N. Ervin**. 2011. Evaluating physiological and growth responses of *Arundinaria* species to inundation. *Castanea* 76: 395-409.
29. **Bried, J. T.** and **G. N. Ervin**. 2010. Randomized intervention analysis for detecting non-random change and management impact: Dragonfly examples. *Ecological Indicators* 11: 535-539.
28. Bryson, C. T., L. J. Krutz, **G. N. Ervin**, K. N. Reddy, and J. D. Byrd, Jr. 2010. Ecotype variability and edaphic characteristics for cogongrass (*Imperata cylindrica*) populations in Mississippi. *Invasive Plant Science and Management* 3: 199-207.
27. **Ervin, G. N.** 2009. Using GAP data in invasive plant ecology and management. *US Geological Survey Gap Analysis Bulletin* 16: 34-41.
26. **Ervin, G. N.** 2009. Distribution, habitat characteristics, and new county-level records of *Baccharis halimifolia* L. on a portion of its present US range boundary. *Southeastern Naturalist* 8: 293-304.
25. **Holly, D. C.**, **G. N. Ervin**, C. R. Jackson, S. V. Diehl, G. T. Kirker. 2009. Effect of an invasive grass on ambient rates of decomposition and microbial community structure: A search for causality. *Biological Invasions* 11: 1855-1868.
24. **Ervin, G. N.** 2008. Applying the state-of-the-art to advance the state of our understanding in integrated hydrophyte ecology. *Verhandlungen Internationale Vereinigung für theoretische und angewandte Limnologie* (Proceedings of the International Society of Theoretical and Applied Limnology) 30: 128-132.
23. **Majure, L.C.** and **G. N. Ervin**. 2008. The *Opuntia* (Cactaceae) of the state of Mississippi, United States. *Haseltonia* 14: 111-126.
22. **Bried, J. T.**, **B. D. Herman**, and **G. N. Ervin**. 2007. Conservation umbrella potential of wetland plants and dragonflies: a quantitative case study using the Umbrella Index. *Journal of Applied Ecology* 44: 833-842.

## PEER-REVIEWED PUBLICATIONS

21. **Bried, J. T.** and **G. N. Ervin.** 2007. Intraspecific models and spatiotemporal context of size–mass relationships in adult dragonflies. *Journal of the North American Benthological Society* 26: 680-692.
20. **Ervin, G. N.** 2007. An experimental study on the facilitative effects of tussock structure among wetland plants. *Wetlands* 27: 620-630.
19. **Holly, D. C.** and **G. N. Ervin.** 2007. Effects of intraspecific seedling density, soil type, and light availability upon growth and biomass allocation in cogongrass, *Imperata cylindrica*. *Weed Technology* 21: 812-819.
18. **Bried, J. T.** and **G. N. Ervin.** 2006. Abundance patterns of dragonflies along a wetland buffer gradient. *Wetlands* 26: 878-883.
17. **Ervin, G. N., B. D. Herman, J. T. Bried,** and **D. C. Holly.** 2006. Evaluating non-native species and wetland indicator status as components of wetlands floristic assessment. *Wetlands* 26: 1114-1129.
16. **Ervin, G. N., L. C. Majure†,** and **J. T. Bried.** 2006. Influence of long-term GTR impoundment on stand structure, species composition, and hydrophytic indicators. *Journal of the Torrey Botanical Society* 113:468-481.
15. **Ervin, G. N., M. Smotherst†, C. Holly, C. Anderson†,** and **J. Linville.** 2006. Relative importance of wetland type vs. anthropogenic activities in determining site invasibility. *Biological Invasions* 8: 1425-1432.
14. **Holly, D. C.** and **G. N. Ervin.** 2006. Characterization and quantitative assessment of rhizome penetration by cogongrass (*Imperata cylindrica* (L.) Beauv.). *Weed Biology and Management* 6: 120-123.
13. **Bried, J. T.,** L. W. Bennett, and **G. N. Ervin.** 2005. Live mass allometric analyses of adult dragonflies collected in east-central Mississippi, USA. *Odonatologica* 34: 111-122.
12. **Bried, J. T.** and **G. N. Ervin.** 2005. Distribution of adult Odonata among localized wetlands in east-central Mississippi. *Southeastern Naturalist* 4: 731-744.
11. **Ervin, G. N.** 2005. Spatio-temporally variable effects of a dominant macrophyte on vascular plant neighbors. *Wetlands* 25: 317-325.
10. Bryant, J. A. and **G. N. Ervin.** 2004. The impact of SWANCC on Federal Clean Water Act jurisdiction. *Real Estate Law Journal* 32: 339-355.
9. **Doant†, A., G. N. Ervin,** and G. W. Felton. 2004. Temporal effects on jasmonate induction of anti-herbivore defense in *Physalis angulata*: seasonal and ontogenetic gradients. *Biochemical Systematics and Ecology* 32:117-126.
8. **Ervin, G. N.** and R. G. Wetzel. 2003. An ecological perspective of allelochemical interference in land-water interface communities. *Plant and Soil* 256: 13-28 (Invited review).
7. Karban, R., J. Maron, G. W. Felton, **G. Ervin,** and H. Eichenseer. 2003. Herbivore damage to sagebrush induces resistance in wild tobacco: evidence for eavesdropping between plants. *Oikos* 100: 325-333.
6. **Ervin, G. N.** and R. G. Wetzel. 2002. Influence of a dominant macrophyte, *Juncus effusus*, on wetland plant species richness, diversity, and community composition. *Oecologia* 130: 626-636.
5. **Ervin, G. N.** and R. G. Wetzel. 2002. Effects of sodium hypochlorite sterilization and dry cold storage on germination of *Juncus effusus* L. *Wetlands* 22: 191-195.
4. Musser, R. O., S. M. Hum-Musser, H. Eichenseer, M. Peiffer, **G. Ervin,** J. B. Murphy, and G. Felton. 2002. Herbivory: Caterpillar saliva beats plant defences. *Nature* 416: 599 – 600.
3. **Ervin, G. N.** and R. G. Wetzel. 2001. Seed fall and field germination of needlerush, *Juncus effusus* L. *Aquatic Botany* 71: 233-237.
2. **Ervin, G. N.** and R. G. Wetzel. 2000. Allelochemical autotoxicity in the emergent wetland macrophyte *Juncus effusus* (Juncaceae). *American Journal of Botany* 87: 853-860.
1. **Ervin†, G. N.** and R. G. Wetzel. 1997. Shoot:root dynamics during growth stages of the rush *Juncus effusus* L. *Aquatic Botany* 59: 63-73.

## **RESEARCH FUNDING**

as PI or co-PI (~\$7,963,000 total; ~\$2,141,000 managed directly by me)

Parameterizing next generation ecological models to predict species growth responses in aquatic systems

*US Army Corps of Engineers*

**G. N. Ervin (PI) and Gray Turnage.** \$299,514 (2023-2025)

Creating tools to locate suitable river cane restoration sites: Assessing carbon stocks and sequestration rates of

*Arundinaria gigantea*

*USDA Forest Service, Southern Research Station*

**G. N. Ervin.** \$86,001 (2023-25)

Integrating chemical and biological controls for the aquatic weed *Alternanthera philoxeroides* (alligatorweed)

*Gulf States Marine Fisheries Commission*

**G. N. Ervin (PI) and Gray Turnage.** \$48,537 (2021-2024)

Evaluating vegetation growth model with in-situ experiments

*US Army Corps of Engineers*

**G. N. Ervin (PI) and Gray Turnage.** \$164,912 (2020-2023)

\* with contributions from Andrew Sample (graduate student)

Evaluation of temporal changes in invasive plant abundance and invasion risk in southern forests

*USDA Forest Service, Environmental Monitoring Program*

**G. N. Ervin.** \$34,902 (2019-21)

\* with substantial contributions from Adrián Lazaro-Lobo (graduate student)

Aquatic vegetation management to enhance multiple-user benefits of southeastern wetlands

*US Geological Survey, Water Resources Research Institute*

**G. N. Ervin and L. G. Turnage.** \$65,985 (2018-20)

Influence of wetland plant community types on water quality improvement in natural and restored wetlands of the Mississippi Delta

*US Geological Survey, Water Resources Research Institute*

**G. N. Ervin.** \$44,929 (2015-16)

\* with contributions from Cory Shoemaker & Evelyn DiOrio (graduate students)

Responses of water quality and wetland plant communities to multi-scale watershed attributes in the Mississippi Delta

*US Geological Survey, Water Resources Research Institute*

**G. N. Ervin** and R. Kröger. \$47,668 (2014-15)

\* with substantial contributions from Cory Shoemaker (graduate student)

Research Jumpstart: An experimental microcosm system for advancing understanding of community assembly in natural ecosystems

*MSU College of Arts & Sciences Henry Family Research Fund and the Department of Biological Sciences*

**Ervin, G. N.** \$26,872 (2013-14)

Integrated Assessment of Oil Spill

*Northern Gulf Institute/BP Exploration & Production, Inc. – Gulf of Mexico Research Initiative*

McAnally, W. H., P. J. Fitzpatrick, **G. N. Ervin**, and J. L. Martin. \$553,259 (2010)

Research to Support Integrated Management Systems of Aquatic and Terrestrial Invasive Species and Bioinformatics

*US Geological Survey, National Biological Information Infrastructure*

Madsen, J. D., L. W. Burger, **G. N. Ervin.**, C. Abbott, R. L. Brown, E. Dibble. V. Maddox, P. Amburn.

\$499,000 (2010-2012)

Research to Support Integrated Management Systems of Aquatic and Terrestrial Invasive Species

*US Geological Survey, Biological Resources Discipline*

Madsen, J., D. Shaw, R. Brown, **G. N. Ervin**, V. Maddox, and C. Abbott. \$600,000 (2008-12)

## **RESEARCH FUNDING**

Research to Support Integrated Management Systems of Aquatic and Terrestrial Invasive Species

***US Geological Survey, Biological Resources Discipline***

Madsen, Shaw, Byrd, Brown, Dibble, **G. N. Ervin** and Tietjen. \$785,147 (2007-09)

Linking Cultural, Biological, and Economic Values into Wetland Programs: Mississippi Band of Choctaw Indians' Pearl River Wetland Demonstration Project

***Environmental Protection Agency, Region 4, Wetland Development Programs Grant***

**Ervin, G. N. (PI)**, B. Baldwin, and D. Jones. \$478,000 (2007-2010)

Modeling Spread of Invasive Weedy Species Following Natural Disasters

***US Department of Agriculture, CSREES NRI***

Shaw, D. R., J. Prince, J. Byrd, J. D. Madsen, **G. N. Ervin**, and S. Grado. \$100,300 (2007-09)

Water Quality and Floristic Habitat Assessments in the Coldwater and Sunflower River Basins: Comparing traditional measures of water and habitat quality to Index of Biotic Integrity findings

***US Geological Survey, Water Resources Research Institute***

Tietjen, T. E. and **G. N. Ervin**. \$75,409 (2007-08)

Watershed Modeling Improvements to Enhance Coastal Ecosystems

***NOAA Northern Gulf Institute***

W. H. McAnally et al., **G. N. Ervin** (co-PI). \$642,392 (2007-2009)

Dynamic spatio-temporal modeling of plant invasion

***Mississippi Computational Biology Consortium- NSF EPSCoR.***

**Ervin, G. N. (PI)** and S. F. Oppenheimer. \$35,751 (2007)

Integrating Effects of Land Use Change on Invasive Plant Species Distribution into An Invasive Plant Atlas for the Mid-South

***US Department of Agriculture, CSREES NRI***

Madsen, J.D. and **G. N. Ervin**. \$481,913 (2007-11)

Assessing the effectiveness of streamflow augmentation in the Sunflower River to maintain water quality and wetland integrity

***US Geological Survey, Water Resources Research Institute***

**Ervin, G. N. (PI)** and T. E. Tietjen. \$76,509 (2006-07)

Integrated Management Systems for Invasive Aquatic Plants and Terrestrial Grasses

***US Geological Survey, Biological Resources Discipline***

Madsen, Shaw, Byrd, Brown, Bruce, Dibble, and **G.N. Ervin** (co-PI). \$2,692,819 (2004-08)

Evaluation of Wetland Floristic Quality Indices as indicators of ecological integrity in north Mississippi wetlands

***US Geological Survey, Water Resources Research Institute***

**Ervin, G. N. (PI)**. \$44,706 (2004-05)

Effects of mammalian herbivore exclusion on understory habitat recovery at Strawberry Plains Audubon Center, Holly Springs, MS

***National Audubon Society***

**Ervin, G. N. (PI)** and J. Jones. \$22,555 (2003-06), with an MSU OR GRA Supplement of \$11,500

Functional assessment of moist-soil management impact on wetland impoundments created as part of an agricultural lands reclamation plan

***US Geological Survey, Water Resources Research Institute***

**Ervin, G. N. (PI)** and D. Schmitz. \$59,136 (2002-04)

National Science Foundation Graduate Research Fellowship, \$74,500 (1998-2000)

Society of Wetland Scientists Student Research Grant, \$1,000 (1998)

## MANUSCRIPTS IN PROGRESS

- Ervin G., G. Turnage, and **G. Ervin**. *In preparation*. Mosquitofern Response to Applications of Contact Herbicides. For submission to *Journal of Aquatic Plant Management*.
- Lázaro-Lobo, A.**, G. Turnage, **K. Calhoun**, and **G. N. Ervin**. *In revision*. Effects of select herbicides for management of American lotus, white waterlily, and watershield. Submitted to *Journal of Aquatic Plant Management*.
- Lázaro-Lobo, A., R. Fernandez, A. Alonso, P. Cruces, V. Cruz-Alonso, **G. Ervin**, A. Gallardo, E. Granda, D. Gómez-Gras, H. Marchante, D. Moreno-Fernández, A. Saldaña, J. Silva, P. Castro-Diez. *In revision*. Worldwide comparison of carbon stocks and fluxes between native and non-native forests. For submission to *Biological Reviews*.
- Lázaro-Lobo, A., B. O. Andrade, K. Canavan, **G. N. Ervin**, F. Essl, E. Fernández-Pascual, S. Follak, D. M. Richardson, A. Moles, V. Visser, S. V. Wyse, B. Jiménez-Alfaro. *In preparation*. Monographs on Invasive Plants in Europe N°8: *Cortaderia selloana* (Schult. & Schult. f.) Asch. & Graebn. For submission to *Botany Letters*.
- Schmid, S.**, G. Turnage, and **G. Ervin**. *In review*. Understudied chemical and biological control methods effectively reduce biomass of alligator weed (*Alternanthera philoxeroides*), a widespread aquatic invasive plant. Submitted to *BioControl*.

## PROCEEDINGS, REPORTS, AND OTHER PROFESSIONAL PUBLICATIONS

38. **Ervin, G. N.** 2013. A guide to moist-soil wetland plants of the Mississippi Alluvial Valley (Invited Book Review). *Wetlands* 33: 191-192.
37. Brooks, C. P., **G. N. Ervin**, L. Varone, and G. A. Logarzo. 2012. The South American Cactus Moth. *Bulletin of the Ecological Society of America* 93:61–63. (*photo gallery feature and cover story*)
36. Madsen, J. D., P. Amburn, R. L. Brown, E. D. Dibble, **G. N. Ervin**, D. R. Shaw, C. F. Abbott, G. Baker, K. Bloem, C. P. Brooks, D. Irby, S. Lee, V. L. Maddox, R. Rose, R. Schulz, L. Wallace, L. L. Wasson, M. Welch, R. M. Wersal, D. W. McBride, & N. Madsen. 2011. Research to Support Integrated Management Systems of Aquatic and Terrestrial Invasive Species: Annual Report, 2010. GRI Report #5047. Mississippi State University: Geosystems Research Institute.

### **The following invasive species fact sheets are provided as web content via**

- <https://www.gri.msstate.edu/research/invspec/factsheets.php> [page currently inaccessible]
35. **Ervin, G. N.** and J. D. Madsen. 2010. Giant reed [*Arundo donax* L.]. *Invasive Plant Atlas of the MidSouth Fact Sheet*. Mississippi State University: Geosystems Research Institute.
  34. **Ervin, G. N.**, J. D. Madsen, and R. M. Wersal. 2010. Chinese privet [*Ligustrum sinense* Lour.]. *Invasive Plant Atlas of the MidSouth Fact Sheet*. Mississippi State University: Geosystems Research Institute.
  33. **Ervin, G. N.**, J. D. Madsen, and R. M. Wersal. 2010. Hairy galinsoga [*Galinsoga quadriradiata* Cav.]. *Invasive Plant Atlas of the MidSouth Fact Sheet*. Mississippi State University: Geosystems Research Institute.
  32. **Ervin, G. N.**, J. D. Madsen, and R. M. Wersal. 2010. Japanese honeysuckle [*Lonicera japonica* Thunb.]. *Invasive Plant Atlas of the MidSouth Fact Sheet*. Mississippi State University: Geosystems Research Institute.
  31. **Ervin, G. N.**, J. D. Madsen, and R. M. Wersal. 2010. Japanese privet [*Ligustrum japonicum* Thunb.]. *Invasive Plant Atlas of the MidSouth Fact Sheet*. Mississippi State University: Geosystems Research Institute.
  30. **Ervin, G. N.**, J. D. Madsen, and R. M. Wersal. 2010. Musk thistle [*Carduus nutans* L.]. *Invasive Plant Atlas of the MidSouth Fact Sheet*. Mississippi State University: Geosystems Research Institute.
  29. **Ervin, G. N.**, J. D. Madsen, and R. M. Wersal. 2010. Silktree [*Albizia julibrissin* Durazz.]. *Invasive Plant Atlas of the MidSouth Fact Sheet*. Mississippi State University: Geosystems Research Institute.
  28. **Ervin, G. N.**, J. D. Madsen, and R. M. Wersal. 2010. Tree of heaven [*Ailanthus altissima* (P. Mill.) Swingle]. *Invasive Plant Atlas of the MidSouth Fact Sheet*. Mississippi State University: Geosystems Research Institute.
  27. **Ervin, G. N.**, J. D. Madsen, R. M. Wersal, and T. D. Marsico. 2010. Spiny cocklebur [*Xanthium spinosum* L.]. *Invasive Plant Atlas of the MidSouth Fact Sheet*. Mississippi State University: Geosystems Research Institute.

26. Madsen, J. D., **G. N. Ervin**, R. M. Wersal, and T. D. Marsico. 2010. Nepalese browntop [*Microstegium vimineum* (Trin.) A. Camus]. *Invasive Plant Atlas of the MidSouth Fact Sheet*. Mississippi State University: Geosystems Research Institute.
25. Alarcon, V. J., W. McAnally, **G. N. Ervin** and C. P. Brooks. 2010. Using MODIS Land-Use/Land-Cover Data and Hydrological Modeling for Estimating Nutrient Concentrations. *In: Computational Science and Its Applications - ICCSA 2010* (Taniar, D.; Gervasi, O.; Murgante, B.; Pardede, E.; Apduhan, B.O., eds.), Lecture Notes in Computer Science 6016. Springer-Verlag, Berlin, pp. 501-514.
24. **Ervin, G. N.**, C. P. Brooks, and V. Alarcon. 2010. Exploring biologically relevant buffer zones for aquatic and wetland ecosystems in northern Mississippi. *Proceedings of the Mississippi Water Resources Conference, August 5-7, 2009*, K. Brasher, ed., Mississippi State University, pp. 84-94.
23. Jolley, R. L., D. M. Neal, B. S. Baldwin, and **G. N. Ervin**. 2010. Restoring canebrakes to enhance water quality along the upper Pearl River. *Proceedings of the Mississippi Water Resources Conference, August 5-7, 2009*, K. Brasher, ed., Mississippi State University, pp. 5-12.
22. Madsen, J.D., R. Brown, **G. Ervin**, D. Shaw, C. Abbott, V. Maddox, R. Wersal, D. McBride, and N. Madsen. 2010. Research to Support Integrated Management Systems of Aquatic and Terrestrial Invasive Species. Geosystems Research Institute GRI#5039, Mississippi State University, Mississippi State, MS.
21. **Ervin, G. N.** 2009. Relationship of wetlands vegetation and land cover as an indicator of ecologically appropriate wetland buffer zones. Northern Gulf Institute Report, Mississippi State University.
20. **Ervin, G. N.** and J. D. Madsen. 2009. Roundleaf toothcup [*Rotala rotundifolia* (Roxb.) Koehne]. *Invasive Plant Atlas of the MidSouth Fact Sheet*. Mississippi State University: Geosystems Research Institute.
19. Madsen, J. D., V. L. Maddox, **G. N. Ervin**, J. D. Byrd, D. W. McBride, N. Madsen, and B. Stroud. 2009. *Invasive Species Field Identification Guide*. Mississippi State University: Geosystems Research Institute.
18. Madsen, J. D., R. Brown, **G. N. Ervin**, D. R. Shaw, C. F. Abbott, V. L. Maddox, R. M. Wersal, D. W. McBride, and N. Madsen. 2009. Research to Support Integrated Management Systems of Aquatic and Terrestrial Invasive Species: Annual Report 2008. GRI Report #5030. Mississippi State University: Geosystems Research Institute.
17. McAnally, W. H., V. J. Alarcon, P. Amburn, J. A. Baca, J. A. Ballweber, J. H. Cartwright, **G. N. Ervin**, R. E. Jackson, J. Martin, S. L. Ortega-Achury, J. J. Ramirez-Avila, and G. W. Wilkerson. 2009. White Paper: Holistic Water Resources Management, A Professional Education Plan. Mississippi State University: Northern Gulf Institute.
16. **Ervin, G. N.** and J. C. Jones. 2007. Effects of mammalian herbivory on understory habitat at Strawberry Plains Audubon Center. Technical completion report to the National Audubon Society for grant project 2121144, 11 pp.
15. **Ervin, G. N. and R. A. White†**. 2007. Assessing vegetative growth potential of exotic *Rotala rotundifolia* (Roxb.) Koehne (roundleaf toothcup), in comparison with *Alternanthera philoxeroides* (Mart.) Griseb. (alligatorweed), a known successful invader. GeoResources Institute Report Number 5015, Mississippi State University, MS. June 2007. 6pp.
14. Madsen, J. D., C. Abbott, R. Brown, L. Bruce, J. Byrd, E. Dibble, **G. N. Ervin**, V. Maddox, D. Shaw. 2007. Research to Support Integrated Management Systems of Aquatic and Terrestrial Invasive Species. Mississippi State University. GeoResources Institute Report #5014, 78pp.
13. **Ervin, G. N.** 2006. Managing invasive species in the face of natural disaster: Obstacles and opportunities. *Wildland Weeds* 10: 9-10.
12. **Ervin, G. N.** 2006. Human-caused disturbance and plant invasion in Mississippi wetlands. *Proceedings of the Mississippi Delta Water Resources Review Meeting, Stoneville, March 2006*.
11. **Ervin, G. N.** and **M. J. Linville**. 2006. The landscape context of plant invasions in Mississippi wetlands. *Proceedings of the 36<sup>th</sup> Mississippi Water Resources Conference, April, 2006*, K. Brasher, ed. Mississippi State University.
10. **Ervin, G. N.** and J. D. Madsen. 2006. Predictive Habitat Modeling in Support of Integrated Invasive Species Management in the Mid-South. *In: Frondorf, A., ed. Proceedings of the 1st All-USGS Modeling Conference, November 14–17, 2005*: U.S. Geological Survey Scientific Investigations Report #2006–5308, 32 p.

## PROCEEDINGS, REPORTS, AND OTHER PROFESSIONAL PUBLICATIONS

9. **Herman, B. D.**, J. D. Madsen, and **G. N. Ervin**. 2006. Development of coefficients of conservatism for wetland vascular flora of north and central Mississippi. GeoResources Institute Report Number 4001, Mississippi State University, MS. March 2006. 15pp.
8. Madsen, J.D., C. Abbott, R. Brown, L. Bruce, J. Byrd, E. Dibble, **G. Ervin**, J. Fowler, V. Maddox, D. McBride, D. Shaw, R. Westbrooks. 2006. Research to Support Integrated Management Systems of Aquatic and Terrestrial Invasive Species. GeoResources Institute Report Number 5004, Mississippi State University, MS. April, 2006. 141 pp.
7. Burnell K.D., Byrd, Jr. J.D., **Ervin G.N.** Lang D.J. Peyton B.S and Bryson C.T. 2005. Cogongrass [*Imperata cylindrica* (L.) Beauv.] control using mechanical and cultural management. Proceedings of the Weed Science Society of America 45:366
6. **Ervin, G. N.** and **B. D. Herman**. 2005. An Approach to Incorporate Invasive Species and Wetland indicator Status into Wetland Floristic Quality Evaluation. Proceedings of the 35<sup>th</sup> Mississippi Water Resources Conference, April, 2005, D. McBride, ed. Mississippi State University.
5. **Ervin, G. N.**, **B. D. Herman**, and **J. T. Bried**. 2005. Evaluation of Wetland Floristic Quality Indices as indicators of ecological integrity in north Mississippi wetlands. Technical completion report to the USGS Water Resources Research Institute for grant project 01HQGR0088.
4. Burnell K.D., Byrd, Jr. J.D., **Ervin G.N.** Bryson C.T., Mask D.B. and Barnett J.W. 2004. Evaluation of non-chemical tactics for cogongrass [*Imperata cylindrica* (L.) Beauv.] control. Proceedings of the Weed Science Society of America 44:124.
3. **Ervin, G. N.** and D. W. Schmitz. 2004. Functional assessment of moist-soil management impact on wetland impoundments created as part of an agricultural lands reclamation plan. Technical completion report to the USGS Water Resources Research Institute for grant project 01HQGR0088.
2. **Ervin, G. N.**, **J. T. Bried**, **B. D. Herman**, and D. W. Schmitz. 2003. Assessing functional integrity of moist-soil managed wetlands by comparison with nearby non-managed systems. Proceedings of the 33<sup>rd</sup> Mississippi Water Resources Conference, April, 2003, D. McBride, ed. Mississippi State University.
1. **Ervin, G. N.** 2002. Responses of individual wetland plant species to shading by the dominant, early-successional rush, *Juncus effusus* L. Proc. of the 32<sup>nd</sup> Mississippi Water Resources Conference, April, 2002, B. Jean Daniel, ed. Mississippi State University.

## TEACHING EXPERIENCE – CURRENT COURSES

Department of Biological Sciences, Mississippi State University

### **Aquatic Botany, split-level undergraduate/graduate**

Growth forms, habitat, and adaptations of vegetation to aquatic environments; interactions of plants with one another and their surroundings; and function of plants in wetlands and aquatic systems.

### **Living with Global Change, undergraduate**

Examination of the interrelationship between human activities and ecological systems, with an emphasis on the concept of “sustainable” management of food, fiber, pests, and rare species.

### **Key Concepts in Plant Ecology, graduate-level only**

Lecture/Seminar examining foundational topics in plant ecology, with an emphasis on important concepts, along with approaches to develop and test related hypotheses.

## TEACHING EXPERIENCE – PREVIOUS COURSES TAUGHT

Department of Biological Sciences, Mississippi State University

### **Invasion Ecology, graduate-level only**

Seminar course examining invasion at the levels of species, communities, and ecosystems, including management implications of invasion and invasive species.

### **Ecology and the Environment** (Distance Master of Science in General Biology Program)

Investigation of biodiversity, ecological hierarchies, and interactions between biota and the environment. Includes an introduction to contemporary environmental science issues.

### **Comprehensive Study of Plants** (Distance Master of Science in General Biology Program)

Study of plants from bryophytes to angiosperms, including growth, photosynthesis, respiration, nutrition, reproduction, ecology, and evolution.

### **Plant Ecology**

General ecology of plants, including environmental influence of plant structure & performance, interactions with other biota and ecosystem-level function and importance of plants

### **Plants & Humans**

Non-majors introductory Botany course emphasizing general biology of plants and the importance of plants as food, medicines, and potential toxins to humans.

### **Plant Physiology**

General plant physiology, including lectures on physiological basis for plant-environment interactions; laboratory investigations of macro-scale plant physiological processes.

### **Introduction to Environmental Sciences**

Discussion and debate on multiple perspectives of environmental issues, with accompanying guest lectures by practicing environmental scientists.

Northwest Arkansas Community College

### **Principles of Biology I**

Lectured on general biological chemistry, cell biology, genetics, evolution, and ecology, and instructed laboratory activities in general biological chemistry, genetics, and ecology.

### **General Biology II**

Survey of major plant and animal organ systems; laboratory studies of classification of organisms, examination of representative taxa, and a comparative survey of major plant and animal organ systems.

## INVITED PRESENTATIONS

*Ervin, G. N.*, G. Turnage, and A. Sample. 2023. A model system to investigate plant communities in southeastern US floodplain wetlands. US Army Corps of Engineers Next Generation Modeling Workshop, Vicksburg, MS, August 01-02, 2023.

*Ervin, G. N.* 2023. ¿La competencia afecta la fitorremediación de nutrientes en los humedales? Society of Wetland Scientists International Chapter meeting for the Latin American Region, Medellín, Colombia, November 7-8, 2023.

*Ervin, G. N.* 2023. Panel expertos: Proceso editorial con publicaciones de libros sobre humedales. Society of Wetland Scientists International Chapter meeting for the Latin American Region, Medellín, Colombia, November 7-8, 2023.

*Ervin, G. N.* 2022. What chapter membership has meant to me. Society of Wetland Scientists International Chapter meeting for the Latin American Region (virtual), February 2022.

*Ervin, G. N.* 2019. Wetland plants and ecosystem services – Too much of a good thing? Department of Wildlife, Fisheries, & Aquaculture, Mississippi State University, October 2019.

*Ervin, G. N.* 2019. Managing Aquatic & Wetland Plants for Ecosystem Services. US Army Corps of Engineers, Engineering Research & Development Center, Vicksburg, MS, June 2019.

## INVITED LECTURES

- Ervin, G. N.** and C. M. Shoemaker. 2018. Examining interactions among vegetation and water quality in conservation wetlands of the Mississippi Alluvial Valley. Society of Wetland Scientists webinar series, August 16, 2018.
- Ervin, G. N.** and C. M. Shoemaker. 2017. Humedales para la conservación de la calidad y cantidad de agua en paisajes agrícolas. Second University Congress of Agro-Food Sciences, Universidad Nacional Autónoma de México, Mexico City, April 6, 2017.
- Shoemaker, C. M.* and **G. N. Ervin.** 2017. Assessment of Restored Wetland Plant Assemblages in Mississippi. Workshop on Standard Monitoring Protocols for Herbaceous Vegetation. Engineer Research and Development Center (ERDC), Environmental Laboratory, Vicksburg, MS, April 4, 2017.
- Ervin, G. N.** and J. D. Madsen. 2012. IPAMS research data: Investigating responses of invasive plants to landscape features in the Mid-South. USGS Invasive Species Interest Group teleconference, October 25, 2012.
- Ervin, G. N.** 2011. Combining biological databases and predictive modeling in conservation planning. Department of Biological Sciences, Arkansas State University, Jonesboro, AR, February 16, 2011.
- Lucardi, R.* and **G. N. Ervin.** 2011. Multi-scale ecological understanding of cogongrass: Landscape genetics and habitat modeling. Natural Areas conference workshop: Biology and control of cogongrass (*Imperata cylindrica*), Tallahassee, FL, November 1-4, 2011. (*Invited* presentation given by Lucardi)
- Russell, D. P., D. M. Neal, J. Wright, R. L. Jolley, B. S. Baldwin, G. N. Ervin, N. A. Reichert.* 2011. Riparian stabilization with *Arundinaria gigantea* in Choctaw land, Mississippi. Joint meeting of the International and American Bamboo Society. Lafayette, LA. October 13-16, 2011. (*Invited* presentation given by Russell)
- Brooks, C. P. and **G. N. Ervin.** 2010. Genetic diversity of *Cactoblastis cactorum* in the moth's native range and implications for future spread. Entomological Society of America annual conference, San Diego, CA, December 12-15, 2010.
- Ervin, G. N.** 2010. Patronos en la diversidad de especies exóticas y aplicaciones para programas de monitoreo. 31st Congress of the Mexican Weed Science Association, Cancún, México, November 10, 2010.
- Ervin, G. N.** 2010. North meets south meets north again: A global series of species introductions. Department of Biological Sciences, University of Alabama, September 16, 2010.
- Ervin, G. N.** 2010. Ecological genetics of the cactus moth *Cactoblastis cactorum* at home and abroad. USGS NBII Invasive Species Working Group teleconference, July 29, 2010.
- Ervin, G. N.** 2010. Invasive species research at Mississippi State University. Soil and Water Conservation Society, MSU Chapter, Mississippi State University, March 24, 2010.
- Ervin, G. N.** 2008. Modeling spread of an invasive plant species – An effort at collaboration between Math and Biology. Mathematical Applications in Ecology and Evolution Workshop, Center for Computational Sciences, Mississippi State University, August 4-6, 2008.
- Ervin, G. N.** 2008. Applied landscape ecology within an integrated weed management framework. Department of Plant and Soil Sciences, Mississippi State University, September 22, 2008.
- Ervin, G. N.** and C. P. Brooks. 2008. Studying the invasive cactus moth, *Cactoblastis cactorum* (Berg), in its native range. Lepidopterists' Society 59th Annual Meeting, Mississippi State University, MS, 24-27 June, 2008.
- Ervin, G. N., D. C. Holly, D. R. Shaw, J. M. Prince, J. D. Byrd, S. C. Grado, M. K. Measells, J. D. Madsen.** 2008. Effects of patch-scale human disturbance on invasive species spread override hurricane-mediated landscape change. 93<sup>rd</sup> Meeting of the Ecological Society of America, Milwaukee, WI, August 3-8, 2008.

## INVITED LECTURES

- Ervin, G. N.** 2007. Prickly Pear Cactus Modelling Efforts. Interagency Cactus Moth Detection and Monitoring Network Meeting, Mississippi State University, 04 December 2007.
- Ervin, G. N.** 2007. Habitat models as tools for invasive plant monitoring and management. Department of Biological Sciences, University of Southern Mississippi, 12 October 2007.
- Ervin, G. N.** 2007. Using GAP data to guide integrated management of invasive species. US Geological Survey National Gap Analysis Program Conference, Asheville, NC, 10-13 September 2007.
- Ervin, G. N.** 2007. A multi-scale examination of the state of our understanding in hydrophyte ecology. 30<sup>th</sup> Congress of the International Association of Theoretical and Applied Limnology, Montreal, Canada, 12-18 August 2007.
- Ervin, G. N.** 2007. Integrating research and undergraduate teaching (in wetland ecology). Society of Wetland Scientists International Meeting, Sacramento, CA, 10-15 June, 2007.
- Ervin, G. N.** 2007. Modeling invasive species distribution and spread. Digital Biology Learning Community, Mississippi State University, April 2007.
- Ervin, G. N.** and C. P. Brooks. 2007. Ecosystem Response Models. Mobile Bay Collaboration Network Workshop, Dauphin Island Sea Lab, Alabama, 06 November 2007.
- Ervin, G. N.** 2006. Habitat modeling for invasive species in Mississippi and the Mid-South. MS Exotic Pest Plant Council, November 2006.
- Ervin, G. N.** 2006. Managing invasive species in the face of natural disaster: Obstacles and opportunities. MS Exotic Pest Plant Council, June 2006.
- Ervin, G. N.** 2006. Using Invasive Plants as Ecological Indicators in Freshwater Wetlands. Interdisciplinary Working Group on Water Resources, Univ. of MS, April 2006.
- Ervin, G. N.** 2006. Human-caused disturbance and plant invasion in Mississippi wetlands. Mississippi Delta Water Resources Review Meeting, Stoneville, March 2006.
- Ervin, G. N.** 2005. Basic and applied ecology of invasive plants in Mississippi wetlands. Dept. of Sciences and Mathematics, MS University for Women, Columbus, Nov. 2005.
- Ervin, G. N.** 2005. Deer Herbivory and Invasive Plants in the Forest Understory at Strawberry Plains. 6<sup>th</sup> Annual Hummingbird Migration Celebration, Holly Springs, MS September 2005.
- Ervin, G. N.** 2005. Invasive plants in freshwater wetlands: Ecology and Assessment. Department of Biology and Tri-Beta, University of North Alabama, Florence, Oct. 2005.
- Ervin, G. N.** 2005. Positive interactions involving tussock-forming plants in freshwater wetlands. Dauphin Island Sea Lab, Dauphin Island, AL, July 2005.
- Ervin, G. N.** 2005. Does 'tussock' equal 'phalanx defense' by herbaceous plants? Department of Biology, Southeastern Louisiana University, Hammond, LA, Feb. 2005.
- Ervin, G. N.** 2004. Deer herbivory and songbird habitat at Strawberry Plains Audubon Center. 5th Annual Hummingbird Migration Celebration, Holly Springs, MS September 2004.
- Ervin, G. N.** 2004. Interactions among interactions in freshwater wetlands. Depts. of Plant Biology and Fisheries & Wildlife, Michigan State Univ., February 2004.
- Ervin, G. N.** 2003. There's more than one way to facilitate an ecological engineer. Department of Biology, University of Mississippi, October 2003.
- Ervin, G. N.** 2003. Inducible anti-herbivore defenses in plants. Department of Biology, University of Memphis, April 2003.
- Ervin, G. N.** 2003. Wetlands research at the Strawberry Plains Audubon Center: Monitoring ecosystem integrity of managed areas. Oktibbeha County Audubon Society, March 2003.
- Ervin, G. N.** 2001. Effects of shading by *Juncus effusus* on wetland plant species richness, diversity, and community composition. Department of Biology, University of Memphis, March 2002.
- Ervin, G. N.** 2001. Biological and ecological function of wetlands as freshwater purification systems. Oktibbeha County Audubon Society, Nov 2001.
- Ervin, G. N.** 2001. Systemin-independent anti-herbivore defense in tomato, *Lycopersicon esculentum*. Department of Biochemistry & Mol Biol, Mississippi State University, Oct 2001.

## INVITED LECTURES

- Ervin, G. N.** 2001. Biological interactions: Unexpected effects of hostile neighbors on plant growth. Biology Department, College of Wooster, Mar 2001.
- Ervin, G. N.** 2001. Ecological complexity in plant community development. Department of Biological Sciences, Mississippi State University, Feb 2001.
- Ervin, G. N.** 2001. Potential physical and chemical determinants of plant community structure. Department of Biological Sciences, University of Arkansas, January 2001.
- Ervin, G. N.** 2000. Mechanisms of competitive dominance: Interference, reproduction, or pre-emptive exploitation? Department of Entomology, University of Arkansas, Apr 2000.
- Ervin, G. N.** 2000. Factors influencing the competitive abilities of the freshwater macrophyte, *Juncus effusus*. School of Biology, Georgia Institute of Technology, Feb 2000.

## CONTRIBUTED PRESENTATIONS

- Ervin, G. N.,** G. Turnage, J. Hockensmith, and A. Sample. 2023. Working with undergraduates to explore interactions between two common emergent wetland plant species. Society of Wetland Scientists' Annual Meeting (International), Spokane, Washington, June 27-30, 2023.
- Ervin, G. N.,** G. Turnage, J. Hockensmith, and A. Sample. 2023. Working with undergraduates to explore interactions between two common emergent wetland plant species. Society of Wetland Scientists' South Central Chapter Meeting, Cave City, Kentucky, October 12-13, 2023.
- Ervin, G. N.** and C. Shoemaker. 2022. Sediment and nutrient inputs interact to reduce floristic quality of wetlands in agricultural landscapes. Particles in the Americas Conference (virtual), June 13-17, 2022.
- Ervin, G. N.,** G. Turnage, and A. Lázaro-Lobo. 2022. Aquatic vegetation management to enhance multiple-user benefits of southeastern wetlands. Mississippi Water Resources Conference, Starkville, MS, April 12-14, 2022.
- Middleton, B. and **G. N. Ervin.** 2021. Advice for first-generation college students. Society of Wetland Scientists annual conference (virtual), June 2021.
- Ervin, G. N.** and C. Shoemaker. 2019. Wetland vegetation for water quality improvement: Is the simplest advice still the best? Society of Wetland Scientists annual conference, Baltimore, MD, June 2019.
- Ervin, G. N.,** G. Turnage, and K. Calhoun. 2019. Experimental evaluation of herbicides for chemical management of nuisance native aquatic plants. Mississippi Water Resources Conference, Jackson, MS, 03 April, 2019.
- Ervin, G. N.,** C. Carter, J. D. Madsen, and G. Turnage. 2015. Assessing vegetative propagation as it impacts potential spread in flowering rush (*Butomus umbellatus*). Society of Wetland Scientists annual conference, Providence, RI, 04 June 2015.
- Ervin, G. N.** and C. M. Shoemaker. 2015. Water quality-land use interactions in restored wetlands of the Mississippi Delta. Mississippi Water Resources Conference, Jackson, MS, 08 April 2015.
- Ervin, G. N.** and S. Hughes. 2012. Plant species distribution modeling in the Blackland Prairie region of Mississippi. Southeastern Prairie Symposium, Mississippi State University, MS, May 14-17, 2012.
- Ervin, G. N.** 2010. Getting the jump on invasives: Considerations during habitat management and restoration. SE-EEPC/SERI Joint Conference in Chattanooga, TN, May 11-12, 2010.
- Ervin, G. N.** 2010. Mississippi's noteworthy exotic plant species: Final draft list for comment. SE-EEPC/SERI Joint Conference in Chattanooga, TN, May 11-12, 2010.
- Ervin, G. N.** and D. C. Holly. 2010. Anthropogenic dispersal corridors override large-scale natural disturbance in determining distribution of a widespread invasive grass (*Imperata cylindrica*). Weeds Across Borders, National conservation Training Center, Shepherdstown, WV, June 01-04, 2010.
- Ervin, G. N.** 2009. Human Dimensions of International Collaboration: Cactus con pollo?! 2009 Arts & Sciences Research Showcase, Mississippi State University, October 21-22, 2009.

## **CONTRIBUTED PRESENTATIONS**

- Ervin, G. N.**, B. Baldwin, D. Neal, and R. Jolley. 2009. Application of habitat modeling approaches for identifying potential rivercane restoration sites. Rivercane Restoration: Linking Cultural, Biological and Economic Values, Mississippi Band of Choctaw Indians at Philadelphia, MS, October 26-27, 2009.
- Ervin, G. N.**, C. P. Brooks, and V. Alarcon. 2009. Exploring biologically relevant buffer zones for aquatic and wetland ecosystems in northern Mississippi. Mississippi Water Resources Conference, Tunica, MS, August 5-7, 2009.
- Ervin, G. N.**, T. D. Marsico, and C. P. Brooks. 2009. Reassessing expectations for *Cactoblastis cactorum* (Berg) spread in North America. Research Collaboration Workshop at the USDA ARS Crop Protection and Management Research Laboratory, Tifton, GA, August 13, 2009.
- Ervin, G. N.** 2008. Draft exotic plant list for Mississippi and request for input. Southeast Exotic Pest Plant Council 10th Annual Symposium, Biloxi, MS, May 20-21, 2008.
- Ervin, G. N.** 2008. Developing an exotic plant list for Mississippi. Southeast Exotic Pest Plant Council 10<sup>th</sup> Annual Symposium, Biloxi, MS, May 20-21, 2008.
- Ervin, G. N.** and J. D. Madsen. 2008. Developing an invasive plant atlas for the Mid-South. 93<sup>rd</sup> Meeting of the Ecological Society of America, Milwaukee, WI, August 3-8, 2008.
- Ervin, G. N.** 2007. Developing an invasive plant list for Mississippi – MS Exotic Pest Plant Council, May 2007.
- Ervin, G. N.** and J. D. Madsen. 2007. Developing an invasive plant atlas for the Mid-South. Society of Wetland Scientists International Meeting, Sacramento, CA, June 10-15, 2007.
- Ervin, G. N.** and Majure, L. C. 2007. Habitat modeling for *Opuntia* species in the southeastern United States. USDA, Animal and Plant Health Inspection Service, International *Cactoblastis cactorum* Conference, Phoenix, AZ, May 7-10, 2007.
- Ervin, G.N.** and S.F. Oppenheimer. 2007. Setting the stage for mathematical modeling of plant invasion across space and time. Mississippi Computational Biology Consortium Research Workshop, Mississippi e-Center, Jackson State University, November 15, 2007.
- Ervin, G. N.** 2006. Invasion risk of *Rotala rotundifolia* (roundleaf toothcup) in southeastern US wetlands – Mid South Aquatic Plant Management Society, October 2006.
- Ervin, G. N.** 2006. Temporal shifts in the relative importance of microhabitat factors influencing invasion success – Ecological Society of America 91<sup>st</sup> Annual Conference, August 2006.
- Ervin, G. N.** and M. J. Linville. 2006. The landscape context of plant invasions in Mississippi wetlands. Mississippi Water Resources Conference, April 2006.
- Ervin, G. N.** 2006. Temporal scaling of the native-exotic species relationship mediated by microhabitat features and heterogeneity – Association of Southeastern Biologists, Gatlinburg, TN, March 2006.
- Ervin, G. N.** 2005. Temporal shifts in the relative importance of abiotic vs. biotic factors influencing invasion success – Society of Wetland Scientists/Gulf Estuarine Research Society, Pensacola Beach, FL, March 2005.
- Ervin, G. N.**, B. D. Herman, J. T. Bried, D. C. Holly. 2005. Incorporation of exotic species and wetland affinity into assessment of wetlands floristic quality – Society of Wetland Scientists International Meeting, Charleston, SC, June 2005.
- Ervin, G. N.**, J. D. Madsen, L. C. Majure. 2005. Predictive Habitat Modeling in Support of Integrated Invasive Species Management in the Mid-South – First All-USGS Modelling Conference, Olympic Park Institute, WA, November 2005.
- Ervin, G. N.**, M. Smothers, C. Anderson. 2005. Relative importance of wetland type vs. local land use/cover in determining susceptibility to invasive plants – Association of Southeastern Biologists, Florence, AL, April 2005.
- Ervin, G. N.** 2004. Pattern and process during succession of a former beaver pond – Association of Southeastern Biologists, Memphis, TN, April 2004.
- Ervin, G. N.** 2003. Determining the mechanistic role of disturbance in community invasibility: Interactions with microsite variability – Invasive Plants in Natural and Managed Systems, Ft. Lauderdale, FL, November 2003.

## **CONTRIBUTED PRESENTATIONS**

- Ervin, G. N.** 2003. Assessing functional integrity of moist-soil managed wetlands by comparison with nearby non-managed systems – Mississippi Water Resources Conference, April 2003.
- Ervin, G. N.** 2002. Responses of individual wetland plant species to shading by the dominant, early-successional rush, *Juncus effusus* L. – Mississippi Water Resources Conference, April 2002.
- Ervin, G. N.** 2001. Acquired environmental acclimation induced by *Helicoverpa zea* herbivory and salivary glucose oxidase – Gordon Research Conference on Plant-Herbivore Interactions, Ventura, CA, Mar 2001.
- Ervin, G. N.** 2000. Effects of shading by *Juncus effusus* on wetland plant community composition – Ecological Soc of Am and British Ecol Society, joint meeting, Orlando, FL, April 2000.
- Ervin, G. N.** 1999. Effects of stratification and sterilization on germination of seeds from the freshwater rush *Juncus effusus* – Society of Wetland Scientists, South Central Chapter, Lafayette, LA, November 1999.
- Ervin, G. N.** 1999. Allelochemical effects of *Juncus effusus* across plant growth stages – Society of Wetland Scientists, Norfolk, VA, June 1999.
- Ervin, G. N.** 1998. Allelochemical autotoxicity in the freshwater rush *Juncus effusus* L. – Society of Wetland Scientists, South Central Chapter, Memphis, TN, October 1998.
- Ervin, G. N.** 1998. Shoot:root dynamics of the rush *Juncus effusus* L. – Am. Society of Limnol. and Oceanogr. & Ecol. Society of Am., St. Louis, MO, June 1998.

## **CO-AUTHORED CONTRIBUTED PRESENTATIONS**

*italics = presenter*

- Esser, E., P.M. Severns, G. Ervin, R. D. Lucardi, D. Oakley, V. Fitzgerald, A. Schulz.* 2023. Triploids, Tetraploids, and Hexaploids, Oh My! Cogongrass Ploidy Distribution Throughout the Invaded Range. Botanical Society of America Conference, Boise, Idaho, July 2023.
- Esser, E., P.M. Severns, G. Ervin, R. D. Lucardi, D. Oakley, V. Fitzgerald, A. Schulz.* 2023. Triploids, Tetraploids, and Hexaploids, Oh My! Cogongrass Ploidy Distribution Throughout the Invaded Range. Mississippi State Graduate Student Research Symposium, Starkville, Mississippi, October 2023.
- Hockensmith, J.A., L.G. Turnage, G. N. Ervin.* 2023 Survival and Efficacy of *Juncus effusus* in Phytoremediation of Nitrogen and Copper. Society of Wetland Scientists' Annual Meeting (International), Spokane, Washington, June 27-30, 2023.
- Hockensmith, J.A., L.G. Turnage, G. N. Ervin.* 2023 Survival and Efficacy of *Juncus effusus* in Phytoremediation of Nitrogen and Copper. Society of Wetland Scientists' South Central Chapter Meeting, Cave City, Kentucky, October 12-13, 2023.
- Schmid, S. A., G. Turnage, and G. N. Ervin.* 2023. Chemical and biological control of alligator weed (*Alternanthera philoxeroides*): An invasive aquatic plant in Mississippi. Mississippi Water Resources Conference. Starkville, Mississippi, March 28-30, 2023.
- Schmid, S. A., G. Turnage, and G. N. Ervin.* 2023. Integrating chemical and biological control for management of alligator weed (*Alternanthera philoxeroides*; Amaranthaceae). XVI International Symposium on Biological Control of Weeds. Puerto Iguazú, Misiones, Argentina, May 7-12, 2023.
- Schmid, S. A., G. Turnage, and G. N. Ervin.* 2023. Testing new chemical control methods on invasive alligator weed in the Southeast. Aquatic Plant Management Society Joint Annual Conference. Indianapolis, Indiana, July 24-27, 2023.
- Schmid, S. A., G. Turnage, and G. N. Ervin.* 2023. Alligator weed produces seeds in North America: Implications for invasive alligator weed reproduction. Aquatic Plant Management Society Joint Annual Conference. Indianapolis, Indiana, July 24-27, 2023.
- Schmid, S. A., G. Turnage, and G. N. Ervin.* 2023. Testing new chemical control methods on invasive alligator weed in the Southeast. South Carolina Aquatic Plant Management Society Annual Conference. Myrtle Beach, South Carolina, October 9–11, 2023.

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- Schmid, S. A., G. Turnage, and **G. N. Ervin\***. 2023. Alligator weed produces seeds in North America: Implications for invasive alligator weed reproduction. Society of Wetland Sciences South Central Chapter meeting. Cave City, Kentucky, October 12-13, 2023.
- Schmid, S. A.*, G. Turnage, and **G. N. Ervin**. 2023. Testing new chemical control methods on invasive alligator weed in the Southeast. MidSouth Aquatic Plant Management Society Annual Conference. LaGrange, Georgia, October 24 – 26, 2023.
- Aponte Amaya, F. M.*, S. Casco, A. C. Santos Rocha, T. Lobato de Magalhães, and **G. N. Ervin**. 2022. Hydrosedimentological pulse in South America large river wetlands. Joint Aquatic Sciences Meeting, Grand Rapids, Michigan, May 14-20, 2022.
- Barker, D.*, G. N. Ervin, A. Sample, and G. Turnage. 2022. Effects of density and species interactions on *Juncus effusus* and *Schoenoplectus tabernaemontani* growth and biomass production. MSU Undergraduate Research Symposium, August 02, 2022.
- Sample, A.R.*, **G. N. Ervin**, and G. Turnage. *Emergent macrophyte invasion effects on nutrient sequestration in a simulated floodplain wetland scenario*. Society of Wetland Scientists South Central Chapter Annual Meeting, Searcy, AR, October 7, 2022.
- Sample, A.R.*, **G. N. Ervin**, and G. Turnage. 2022. Establishing a system to examine eutrophication and invasion effects on wetland nutrient mitigation. Joint Aquatic Sciences Meeting, Grand Rapids, Michigan, May 14-20, 2022.
- Sample, A., G. Turnage, and **G. N. Ervin**. 2022. Establishing a model system to investigate eutrophication and invasion of southeastern US floodplain wetlands. Mississippi Water Resources Conference, Starkville, MS, April 12-14, 2022.
- Sample, A.R.*, **G. N. Ervin**, and G. Turnage. 2022. Establishing a model system to investigate eutrophication and invasion of southeastern US floodplain wetlands. Society of Wetland Scientists South Central Chapter Annual Meeting, Virtual, February 17, 2022.
- Sample, A.R.*, **G. N. Ervin**, and G. Turnage. 2022. Establishing a model system to examine eutrophication and invasion effects on wetland nutrient mitigation. Western Aquatic Plant Management Society Annual Conference, Tucson, AZ, March 10, 2022.
- Schmid, S.*, **G. N. Ervin**, and G. Turnage. 2022. Invasive alligator weed (*Alternanthera philoxeroides*) in the southeastern United States: a future research plan. Mississippi Water Resources Conference, Starkville, MS, April 12-14, 2022.
- Schmid, S. A.*, **G. N. Ervin**, and G. Turnage. 2022. New research questions on invasive alligator weed (*Alternanthera philoxeroides*) and an understudied biocontrol agent. Oral Presentation. MidSouth Aquatic Plant Management Society Annual Conference. Mobile, AL.
- Schmid, S. A.*, **G. N. Ervin**, and G. Turnage. 2022. Invasive alligator weed (*Alternanthera philoxeroides*) in the southeastern United States: a future research plan. Oral Presentation. Aquatic Plant Management Society Joint Annual Conference. Greenville, SC.
- Turnage, G.*, A. Lázaro-Lobo, B. Blassingame, O. Robinson, K. Calhoun, and **G. N. Ervin**. 2022. Effects of select herbicides for management of American frogbit grown in mesocosms. Mississippi Water Resources Conference, Starkville, MS, April 12-14, 2022.
- Ervin, G. L.*, A. M. Sibley, G. Turnage, **G. N. Ervin**. 2021. Mosquitofern Response to Foliar Applications of Contact Herbicides. Aquatic Plant Management Society annual national conference, New Orleans, LA, July 12-14, 2021.
- Lázaro-Lobo, A.*, G. Turnage, **G. N. Ervin**. 2021. Native Aquatic Vegetation Management to Enhance Multiple-user Benefits of Southeastern Wetlands. Aquatic Plant Management Society annual national conference, New Orleans, LA, July 12-14, 2021.

## **CO-AUTHORED CONTRIBUTED PRESENTATIONS**

*italics = presenter*

- Robinson, O. L., *G. Turnage*, A. Lázaro-Lobo, **G. N. Ervin**. 2021. Effects of Select Herbicides for Management of American Frogbit Grown in Mesocosms. Aquatic Plant Management Society annual national conference, New Orleans, LA, July 12-14, 2021.
- Sample, A.R.*, **G. N. Ervin**, and G. Turnage. 2021. Do Species Invasion and Eutrophication Impact the Efficacy of Water Quality Improvement by Native Wetland Plants. South Carolina Aquatic Plant Management Society Annual Meeting, North Myrtle Beach, SC, October 7, 2021.
- Sample, A. R.*, G. Turnage, **G. N. Ervin**. 2021. Do Species Invasion and Eutrophication Impact the Efficacy of Water Quality Improvement by Native Non-Weedy Wetland Plants? Aquatic Plant Management Society annual national conference, New Orleans, LA, July 12-14, 2021.
- Lucardi, R.L. and **G.N. Ervin**. 2021. Impacts of cogongrass on private and public land: Prevention and control strategies. National Invasive Species Week US Forest Service SCIENCEx webinar, February 26, 2021.
- Lázaro-Lobo, A.*, R. L. Lucardi, and **G.N. Ervin**. 2021. Assessing spread and impact of invasive plants across forests at a regional scale. US Forest Service Forest Health Monitoring Workshop, online, February 23-24, 2021.
- Lucardi, R.L., **G.N. Ervin**, and *A. Lázaro-Lobo*. 2020. Human-made dispersal corridors indirectly impact forest regeneration by facilitating invasive plants. US Forest Service Southern Research Station Science in Practice webinar, August 7, 2020.
- Lázaro-Lobo, A., **G.N. Ervin**, and R. L. Lucardi. 2020. Using FIA data to assess impacts of invasive plants on regeneration of southeastern forests. US Forest Service Forest Health Monitoring Workshop, Raleigh, NC, February 25-27, 2020.
- Calhoun, K.*, **G.N. Ervin**, and G. Turnage. 2019. Management of problematic native aquatic vegetation to enhance multi-user benefits in southeastern waterbodies. Presented at the Weed Science Society of America annual conference, New Orleans, LA, February 11-14, 2019.
- Lázaro-Lobo, A.* and **G.N. Ervin**. 2019. Transportation systems have compounding effects on exotic plant species distribution. Presented at the Ecological Society of America conference, Louisville, KY, August 11-16, 2019.
- Lázaro-Lobo, A.*, G. Turnage, L. Sanders, A. Ratliff, and **G. Ervin**. 2019. Response of water quality metrics to foliar herbicide applications and subsequent plant breakdown of American frogbit. Presented at the Midsouth Aquatic Plant Management Society annual conference, Baton Rouge, LA, November 4-6, 2019.
- Ratliff, A.*, G. Turnage, L. Sanders, A. Lázaro-Lobo, and **G. Ervin**. 2019. Short and long-term response of fragrant water lily to foliar herbicide applications. Presented at the Midsouth Aquatic Plant Management Society annual conference, Baton Rouge, LA, November 4-6, 2019.
- Sanders, L.*, G. Turnage, A. Ratliff, A. Lázaro-Lobo, and **G. Ervin**. 2019. Response of water quality metrics to foliar herbicide applications and subsequent plant breakdown of three rooted aquatic plant species. Presented at the Midsouth Aquatic Plant Management Society annual conference, Baton Rouge, LA, November 4-6, 2019.
- Calhoun, K.*, G. Turnage, and **G.N. Ervin**. 2018. Management of problematic native aquatic vegetation to enhance multi-user benefits in southeastern waterbodies. Presented at the Texas Aquatic Plant Management Society annual conference, San Antonio, TX, November 26-27, 2018.
- Calhoun, K.*, G. Turnage, and **G.N. Ervin**. 2018. Management of problematic native aquatic vegetation to enhance multi-user benefits in southeastern waterbodies. Presented at the Mid-South Aquatic Plant Management Society annual conference, Chattanooga, TN, November 5-7, 2018.
- Calhoun, K.*, **G.N. Ervin**, and G. Turnage. 2018. Management of problematic native aquatic vegetation to enhance multi-user benefits in southeastern waterbodies. Presented at the Aquatic Plant Management Society annual conference, Buffalo, NY, July 15-18, 2018.

## **CO-AUTHORED CONTRIBUTED PRESENTATIONS**

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- Shoemaker, C. M.* and **G.N. Ervin**. Interplay of wetland plant assemblages and water quality dynamics in restored wetlands. Society of Wetland Scientists Annual Meeting, San Juan, Puerto Rico, June 2017.
- Shoemaker, C.M.*, E.L. Windham, and **G.N. Ervin**. Effects of land use on wetland plant diversity in Mississippi. Mississippi Water Resources Conference, Jackson, MS, 06 April 2016.
- Windham, E.L.*, Shoemaker, C.M., **G.N. Ervin**. Functions of wetland plant assemblages in water quality improvement. Mississippi Water Resources Conference, Jackson, MS, 06 April 2016.
- Shoemaker, C.M.*, **G.N. Ervin**. Drivers of wetland plant assemblages in restored and naturally occurring wetlands in Mississippi. MidSouth Aquatic Plant Management Society Conference, Mobile, AL, September 16, 2015.
- Windham, E.L.*, Shoemaker, C.M., **G.N. Ervin**. Functions of wetland plant assemblages in water quality improvement in natural wetlands. MidSouth Aquatic Plant Management Society Conference, Mobile, AL, September 16, 2015.
- Shoemaker, C. M.* and **G. N. Ervin**. Drivers of plant community composition in restored wetlands. Society of Wetland Scientists annual conference, Providence, RI, 03 June 2015.
- Shoemaker, C. M.* and **G. N. Ervin**. Drivers of plant community composition in Delta wetlands. Mississippi Water Resources Conference, Jackson, MS, 08 April 2015.
- Lucardi, R. D.* and **G. N. Ervin**. 2014. Introduction history & hybridization modulate propagule pressure in a successful exotic grass invasion: cogongrass (*Imperata cylindrica*) in the southeast. Association of Southeastern Biologists, Spartanburg, SC, April 2-5, 2014.
- Lucardi, R. D.* and **G. N. Ervin**. 2014. Invasion, part two: Patterns of genetic diversity following expansion in the novel range. Invasion Genetics: The Baker and Stebbins Legacy Symposium, Asilomar, CA, August 13-15, 2014. (Invited presentation)
- Shoemaker, C. M.*, R. Kröger, and **G. N. Ervin**. 2014. Assessing the relative importance of environmental factors at multiple scales on wetland structure and function in the Mississippi Delta. Southeastern Natural Resources Graduate Student Symposium, Mississippi State, MS, March 5-7, 2014.
- Carter, C.*, J. D. Madsen, G. Turnage, and **G. N. Ervin**. 2013. Experimental assessment of *Butomus umbellatus* growth along a depth gradient. South Central Chapter of the Society of Wetland Scientists, Mississippi State University, October 17-19, 2013.
- Lucardi, R. D.* and **G. N. Ervin**. 2013. Cogongrass invasion in Florida: What does genetic data reveal about population variation and hybridization? Joint Conference of the Southeastern and Florida Exotic Pest Plant Councils, Panama City Beach, FL, May 21-23, 2013.
- Brooks, C. P.* and **G. N. Ervin**. 2012. Defining ecotypic variation in the invasive moth, *Cactoblastis cactorum* (Berg), and its implication for spread in North America. 60<sup>th</sup> Meeting of the Entomological Society of America, Knoxville, TN, November 11-14, 2012.
- Madsen, J. D.*, Maddox, V. L., **Ervin, G. N.**, & Wersal, R. M. 2012. EDRR and the Invasive Plant Atlas of the MidSouth Project. Society of Range Management Annual Meeting. Spokane, WA.
- Garcia, C. I.*, *T. P. Fera*, A. McDonald, K. Summy, and **G. N. Ervin**. 2011. Potential distributional effects on the invasive grass, *Panicum maximum*, due to climate change. 96<sup>th</sup> Meeting of the Ecological Society of America, Austin, TX, August 8-12, 2011.
- Garcia, B. M.*, *S. A. del Alto*, T. P. Fera, A. Felicisimo, J. Goulovob, **G. N. Ervin**, and C. P. Brooks. 2011. Potential distribution of the Prickly-pear moth *Cactoblastis cactorum* in south Texas and north Mexico. 96<sup>th</sup> Meeting of the Ecological Society of America, Austin, TX, August 8-12, 2011.
- Lambert, B.*, **G. N. Ervin**, and C. P. Brooks. 2011. Comparing morphological variation to genetic variation in an invasive herbivore, *Cactoblastis cactorum* (Berg). Southeastern Ecology and Evolution Conference, Auburn University, Auburn, AL, March 25-27, 2011.
- Lambert, B.*, **G. N. Ervin**, and C. P. Brooks. 2011. Comparing morphological variation to genetic variation in an invasive herbivore, *Cactoblastis cactorum* (Berg). Biology Undergraduate Research Program, Mississippi State University Department of Biological Sciences, April 8, 2011.

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- Lambert, B., **G. N. Ervin**, and C. P. Brooks. 2011. Comparing morphological variation to genetic variation in an invasive herbivore, *Cactoblastis cactorum* (Berg). MSU Undergraduate Research Program, Mississippi State University, April 21, 2011.
- Lucardi, R., **G. N. Ervin**, L. Wallace, and C. Bryson. 2011. Population genetic analysis of cogongrass (*Imperata cylindrica*) in Mississippi and Alabama. Southeast Exotic Pest Plant Council conference, Lexington, KY, May 3-5, 2011.
- Lucardi, R., **G. N. Ervin**, L. Wallace, and C. Bryson. 2011. Population genetic analysis of an invasive species: Cogongrass (*Imperata cylindrica* (L.) P. Beauv.) in Mississippi and Alabama. 96<sup>th</sup> Meeting of the Ecological Society of America, Austin, TX, August 8-12, 2011.
- Madsen, J. D., **G. N. Ervin**, R. M. Wersal, & P. Fuller. 2011. Two web-based databases for invasive aquatic plant locations and information. Southern Weed Science Society 64<sup>th</sup> Annual Meeting. San Juan, Puerto Rico, January 24-26, 2011.
- Marsico, T. D., **G. N. Ervin**, and C. P. Brooks. 2011. Putting hypothesized native-range phylogeographic patterns of *Cactoblastis cactorum* to the test using genetic and climatic data. Fifth International Biogeography Society meeting, Heraklion, Crete, Greece, January 08, 2011.
- Neal, D. M., B. S. Baldwin and **G. N. Ervin**. 2011. Growth responses and biomass allocation of rivercane (*Arundinaria gigantea*) across a gradient of light conditions. Association of Southeastern Biologists Conference in Asheville, NC, April 13-16, 2011.
- Brooks, C. P. and **G. N. Ervin**. 2010. The global invasion of *Cactoblastis cactorum* (Berg). Ecological Society of America annual conference, Pittsburg, PA, August 01-06, 2010.
- Hughes, S. and **G. Ervin**. 2010. Construction of a GIS predictor for locating new sites for prairie conservation efforts in the Blackland Prairie region of Mississippi. SE-EEPC/SERI Joint Conference in Chattanooga, TN, May 11-12, 2010.
- Jolley, R., D. Neal, B. Baldwin, and **G. Ervin**. 2010. Optimizing rhizomal propagation of rivercane (*Arundinaria gigantea*). SE-EEPC/SERI Joint Conference in Chattanooga, TN, May 11-12, 2010.
- Lucardi, R. L., C. T. Bryson, L. Wallace, and **G. N. Ervin**. Assessing genetic diversity in a model invasive species: cogongrass (*Imperata cylindrica*) in the southeastern U.S. SE-EEPC/SERI Joint Conference in Chattanooga, TN, May 11-12, 2010.
- Madsen, J. D. and **G. N. Ervin**. 2010. An Update on the Invasive Plant Atlas of the MidSouth. Weeds Across Borders, National conservation Training Center, Shepherdstown, WV, June 01-04, 2010.
- Marsico, T. D., A. M. Woodard, and **G. N. Ervin**. 2010. Novel defenses in invasion resistance: Potential eavesdropping may cue inducible defenses against an invasive herbivore. Ecological Society of America annual conference, Pittsburg, PA, August 01-06, 2010.
- Marsico, T. D., A. M. Woodard, and **G. N. Ervin**. 2010. Potential eavesdropping may cue inducible defenses against an invasive herbivore. Entomological Society of America annual conference, San Diego, CA, December 12-15, 2010.
- Marsico, T. D., **G. N. Ervin**, C. P. Brooks, B. A. Counterman, L. E. Wallace, M. E. Welch. 2010. Using next-generation sequencing approaches to investigate reciprocal recognition and response in plant-herbivore interactions. MidSouth Computational Biology and Bioinformatics Society, 7<sup>th</sup> annual conference, Arkansas State University, Jonesboro, AR, February 19-20, 2010.
- Mills, M.C., B. Baldwin, and **G. Ervin**. 2010. Evaluating physiological and growth responses of *Arundinaria gigantea* to inundation. SE-EEPC/SERI Joint Conference in Chattanooga, TN, May 11-12, 2010.
- Mills, M.C., B. Baldwin, R. Jolley, D.M. Neal and **G.N. Ervin**. 2010. Response of rivercane (*Arundinaria gigantea*) to native and exotic grass competition and site preparation techniques for canebrake restoration. Association of Southeastern Biologists Conference in Asheville, NC, April 7-10, 2010.

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- Mills, M. C., B. Baldwin, and **G. N. Ervin**. 2010. Response of rivercane (*Arundinaria gigantea*) to native and exotic grass competition and site preparation techniques for canebrake restoration. 7<sup>th</sup> Annual Eastern Native Grass Symposium. Knoxville, TN. October 5-8.
- Mills, M. C., B. Baldwin, and **G. N. Ervin**. 2010. Evaluating physiological and growth responses of *Arundinaria gigantea* to inundation. Mississippi Water Resources Conference. Bay St. Louis, MS. November 3-5.
- Neal, D. M., R. Jolley, B. Baldwin, **G. Ervin**, M. Cirtain, J. Seymour, and J. Campbell. 2010. Maximizing seed germination methods to enhance Rivercane [*Arundinaria gigantea* L. (Walter) Muhl] seedling production for habitat restoration programs. Association of Southeastern Biologists Conference in Asheville, NC, April 7-10, 2010.
- Woodard, A. M., T. D. Marsico, and **G. N. Ervin**. 2010. Evaluating Differential Defense Response In Two Native Cactus Species. Mississippi State University Biology Undergraduate Research Symposium, Mississippi State, MS, April 16, 2010.
- Cannon, J. B. and **G. N. Ervin**. 2009. Soil texture effects on *Opuntia pusilla* morphology. Mississippi State University Biology Undergraduate Research Symposium, Mississippi State, MS, April 21, 2009.
- Fleming, K. S., R. M. Kaminski, T. E. Tietjen, **G. N. Ervin**, K. D. Nelms, and M. L. Schummer. September 2009. Plant and avian community responses to management and hydrology on wetland reserve program lands in Mississippi. The 16th Wildlife Society Annual Conference, Monterey, California.
- Fleming, K. S., R. M. Kaminski, T. E. Tietjen, **G. N. Ervin**, K. D. Nelms, and M. L. Schummer. August 2009. Evaluation of wetland size and vegetative quality on waterfowl use in Wetlands Reserve Program wetlands in Mississippi. The 5th North American Duck Symposium, Toronto, Ontario, Canada.
- Fleming, K. S., R. M. Kaminski, T. E. Tietjen, **G. N. Ervin**, K. D. Nelms, and M. L. Schummer. August 2009. Plant and duck community responses to management and hydrology on Wetlands Reserve Program lands in Mississippi. Presented at the 5th North American Duck Symposium, Toronto, Ontario, Canada.
- Fleming, K. S., R. M. Kaminski, T. E. Tietjen, **G. N. Ervin**, and K. D. Nelms. 2009. Plant and Avian Community Responses to Management and Hydrology on Wetland Reserve Program Lands in Mississippi. Southern Hardwood Forest Research Group Meeting, Stoneville, Mississippi.
- Jolley, R. L., D. M. Neal, B. S. Baldwin, and **G. N. Ervin**. 2009. Restoring canebrakes to enhance water quality along the upper Pearl River. Mississippi Water Resources Conference, Tunica, MS, August 5-7, 2009.
- Jolley, R. L., **G. N. Ervin**, B. Baldwin, and D. Neal. 2009. Optimizing rhizomal propagation of rivercane (*Arundinaria gigantea* (Walter) Muhl.). Rivercane Restoration: Linking Cultural, Biological and Economic Values, Mississippi Band of Choctaw Indians at Philadelphia, MS, October 26-27, 2009.
- Lucardi, R. D., L. E. Wallace, and **G. N. Ervin**. 2009. Genetic diversity of cogongrass (*Imperata cylindrica*) populations and the genus *Imperata* in the Southern United States: Impacts on invasion dynamics and evolutionary potential. Southeastern Ecology and Evolution Conference, Gainesville, FL, March 27-29, 2009.
- Madsen, J. D. and **G. N. Ervin**. 2009. The Invasive Plant Atlas of the Mid-South. Weed Science Society of America Annual Meeting, Orlando, FL, February 9-13, 2009.
- Marsico, T. D., C. P. Brooks, L. E. Wallace, M. E. Welch, and G. N. Ervin. 2009. Genetic Diversity within the Native Ranges of Two Cactophagous Pyralid Moths. Synthesizing Ecology and Evolution for the Study of *Marsico, T. D.* and **G. N. Ervin**. 2009. Chew 'em up and spit 'em out: Prickly pear defenses elicited from native but not invasive moths. Research Collaboration Workshop at the USDA ARS Crop Protection and Management Research Laboratory, Tifton, GA, August 13, 2009.
- Mills, M. C., R. L. Jolley, D. M. Neal, B. S. Baldwin, and **G. N. Ervin**. 2009. Response of giant cane (*Arundinaria gigantea*) to native and exotic grass competition and site preparation techniques for canebrake restoration. Southeastern Ecology and Evolution Conference, Gainesville, FL, March 27-29, 2009.

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- Mills, M. C., R. L. Jolley, D. M. Neal, B. S. Baldwin, and **G. N. Ervin**. 2009. Response of giant cane, (*Arundinaria gigantea*), to native and exotic grass competition and site preparation techniques for canebrake restoration. Association of Southeastern Biologists conference in Birmingham, AL, April 1-4, 2009.
- Mills, M. C., B. Baldwin, R. Jolley, D. M. Neal and **G. N. Ervin**. 2009. Response of rivercane (*Arundinaria gigantea*) to native and exotic grass competition and site preparation techniques for canebrake restoration. Mississippi State University Graduate Symposium. Starkville, MS. April 2009.
- Mills, M. C., **G. N. Ervin**, B. Baldwin, D. Neal, and R. Jolley. 2009. Response of rivercane (*Arundinaria gigantea*) to native and exotic grass competition and site preparation techniques for canebrake restoration. Rivercane Restoration: Linking Cultural, Biological and Economic Values, Mississippi Band of Choctaw Indians at Philadelphia, MS, October 26-27, 2009.
- Mills, M. C., B. Baldwin, R. Jolley, D. M. Neal and **G. N. Ervin**. 2009. Evaluating physiological and growth responses of *Arundinaria gigantea* to inundation. Rivercane Restoration Symposium: Linking Cultural, Biological and Economic Values. Mississippi Band of Choctaw Indians at Philadelphia, MS. October 26-27.
- Neal, D. M., R. L. Jolley, B. Baldwin, and **G. N. Ervin**. 2009. Rivercane habitat restoration for wildlife enhancement: Pearl River and Conahatta projects. Producer Advisory Council Meeting, North Mississippi Research and Extension Center, Mississippi State University Extension Service, Verona, MS, February 19th, 2009.
- Prince, J. M., J. D. Madsen, D. R. Shaw, J. L. Harvill, **G. N. Ervin**, J. L. Martin, and S. A. Samson. Modeling Eurasian Watermilfoil (*Myriophyllum spicatum*) with Geographic Information Systems. Midsouth Aquatic Plant Management Society Conference. Sep. 15-17, 2009, Lake Guntersville State Park, AL.
- Prince, J. M., D. R. Shaw, J. D. Madsen, J. L. Harvill, **G. N. Ervin**, S. A. Samson, and J. L. Martin. 2009. Local-scale GIS Modeling of Eurasian Watermilfoil. Weed Science Society of America Annual Meeting, Orlando, FL, Feb. 9-13, 2009.
- Turnage, G., M. Roberts, **G. N. Ervin**, R. Altig, C. Brooks, W. H. McAnally, & J. Diaz-Ramirez. 2009. Estimating mussel reproduction using historical fish collections in the upper Mobile Basin watershed. *NGI Conference*. Mobile, AL, May 19-21, 2009.
- Abbott, C., V. Maddox, **G. N. Ervin**, and J. Madsen. 2008. The Invasive Plant Atlas of the Mid-South (IPAMS). Southeast Exotic Pest Plant Council 10th Annual Symposium, Biloxi, MS, May 20-21, 2008.
- Bried, J. T. and **G. N. Ervin**. 2008. Making invasiveness count in floristic quality assessments. Society of Wetland Scientists, Washington, DC, May 26-30, 2008.
- Brooks, C. P. and **G. N. Ervin**. 2008. Mechanisms controlling the spread of *Cactoblastis cactorum* (Berg). Lepidopterists' Society 59th Annual Meeting, Mississippi State University, MS, 24-27 June, 2008.
- Fleming, K. S., R. M. Kaminski, T. E. Tietjen, **G. N. Ervin**, and K. D. Nelms. 2008. Plant and Avian Community Responses to Management and Hydrology on Wetland Reserve Program Lands in Mississippi. The Wildlife Society Annual Meeting. Jackson, Mississippi.
- Fleming, K. S., R. M. Kaminski, T. E. Tietjen, **G. N. Ervin**, K. D. Nelms and M. L. Schummer. 2008. Plant and Avian Community Responses to Management and Hydrology on Wetland Reserve Program Lands in Mississippi. The Water Resource Conference, Little Rock, AR.
- Fleming, K. S., R. M. Kaminski, T. E. Tietjen, **G. N. Ervin**, K. D. Nelms and M. L. Schummer. 2008. Assessing the benefits of moist-soil management on WRP Wetlands in Mississippi. Southeastern Natural Resource Graduate Student Symposium, Starkville, Mississippi.
- Holly, D. C. and **G. N. Ervin**. 2008. Relative important and propagule pressure, light availability, and nutrient concentration upon the establishment and physiology of a model invasive species, *Imperata cylindrica*. Southeast Exotic Pest Plant Council 10th Annual Symposium, Biloxi, MS, May 20-21, 2008.
- Holly, D. C. and **G. N. Ervin**. 2008. Characterization and quantitative assessment of a potential rhizome-mediated root disturbance mechanism in cogongrass. Southeast Exotic Pest Plant Council 10th Annual Symposium, Biloxi, MS, May 20-21, 2008.

## **CO-AUTHORED CONTRIBUTED PRESENTATIONS**

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- Holly, D. C., **G. N. Ervin**, C. R. Jackson, S. V. Diehl, G. T. Kirker. 2008. Accelerated decomposition rates by *Imperata cylindrica* in southern Mississippi are correlated with microbial community structure and function. Southeast Exotic Pest Plant Council 10th Annual Symposium, Biloxi, MS, May 20-21, 2008.
- Madsen, J. D., R. L. Brown, **G. N. Ervin**, V. L. Maddox, and C. F. Abbott. 2008. Cactus moth detection network. Southeast Exotic Pest Plant Council 10th Annual Symposium, Biloxi, MS, May 20-21, 2008.
- Tietjen, T.E. and **G. Ervin**. 2008. Comparing Index of Biotic Integrity Scores to Traditional Measures of Water Quality: Exploring the Causes of Impairment in Streams of the Mississippi Delta. Mississippi Water Resources Conference. Jackson, MS, April 15-16, 2008.
- Tietjen, T.E. and **G. Ervin**. 2008. Big Sunflower River Water Quality and Floristic Quality Assessments following Streamflow Augmentation. Mississippi Water Resources Conference. Jackson, MS, April 15-16, 2008.
- Welch, M.E., C. Brooks, R. Brown, **G. Ervin**, J. McClure, T. Marsico, and L. Wallace. 2008. The phylogeography of the invasive cactus moth *Cactoblastis cactorum* in its native range. Southeastern Population Ecology and Evolutionary Genetics Conference. Oct. 24-26, Eatonton, GA
- Bryson, C. T., J.D. Byrd, **G.N. Ervin** and K.N. Reddy. 2007. Is diverse morphology of cogongrass in Mississippi related to edaphic characteristics or biotypic variation? – Southern Weed Science Society, 60th Meeting, Nashville, TN, January 22-24, 2007.
- Ervin, G. N.**, B. D. Herman, J. T. Bried, D. C. Holly. 2007. Floristic Assessment Quotients for Wetlands – New England Association of Environmental Biologists, 31st Annual Conference, Grand Summit Hotel and Conference Center, West Dover, Vermont. March 14-16, 2007.
- Fleming, K. S., R. M. Kaminski, T. E. Tietjen, **G. N. Ervin**, and K. D. Nelms. 2007. Assessing the benefits of moist-soil management on WRP Wetlands in Mississippi. Natural Resource Conservation Service Annual meeting, Greenwood, Mississippi. Fleming, K. S., R. M. Kaminski, T. E. Tietjen, **G. N. Ervin**, K. D. Nelms. 2007. Assessing the benefits of moist-soil management on WRP Wetlands in Mississippi. Delta Wings Hunting Club, Oxberry, Mississippi.
- Holly, D. C. and **G. N. Ervin**. 2007. Invasive species and their impacts upon decomposition dynamics: Insights from *Imperata cylindrica* – Graduate Student Research Symposium, Mississippi State University, Starkville MS, March 30, 2007.
- Holly, D. C. and **G. N. Ervin**. 2007. Relative importance of propagule pressure, light availability, and nutrient concentration upon the establishment and physiology of a model invasive species, *Imperata cylindrica*. Graduate Student Research Symposium, Mississippi State University, Starkville MS, March 30, 2007.
- Madsen, J. D. **G. N. Ervin**. 2007. Integrating effects of land use change on invasive plant species distribution into an Invasive Plant Atlas for the Mid-South (IPAMS) – Southern Weed Science Society Annual Meeting, Nashville, TN, 22-24 January 2007.
- Madsen, J. D. **G. N. Ervin**. 2007. Integrating effects of land use change on invasive plant species distribution into an Invasive Plant Atlas for the Mid-South (IPAMS) – Weed Science Society of America 47<sup>th</sup> Annual Meeting, San Antonio, TX, 5-8 February 2007.
- Madsen, J. D., **G. N. Ervin**, V. Maddox, J. D. Byrd, Jr., R. G. Westbrooks, L. J. Mehrhoff. 2007. Integrating effects of land use change on invasive plant species distribution into an invasive plant atlas for the Mid South (IPAMS). 9th Annual Southeast Exotic Pest Plant Council Symposium, March 20-22 2007, Athens, GA.
- Madsen, J. D., **G. N. Ervin**, V. Maddox, J. D. Byrd, Jr., R. G. Westbrooks, and L. J. Mehrhoff. 2007. Integrating effects of land use change on invasive plant species distribution into an Invasive Plant Atlas for the Mid South (IPAMS). MS Exotic Pest Plant Council, May 2007.
- Majure, L. C. and **G. N. Ervin**. 2007. Microstructural morphology of *Opuntia* species (Cactaceae) based on scanning electron microscopy. USDA, Animal and Plant Health Inspection Service, International *Cactoblastis cactorum* Conference, Phoenix, AZ, May 7-10, 2007.

## CO-AUTHORED CONTRIBUTED PRESENTATIONS

*italics = presenter*

- Majure, L. C. and **G. N. Ervin**. 2007. Microstructural morphology of *Opuntia* species (Cactaceae) based on scanning electron microscopy. Southeastern Microscopy Society, Decatur, GA, April 11-13, 2007.
- Majure, L. C., **G. N. Ervin** and P. Fitzpatrick. 2007. Storm-driven maritime dispersal of prickly pear cacti (*Opuntia* species). USDA, Animal and Plant Health Inspection Service, International *Cactoblastis cactorum* Conference, Phoenix, AZ, May 7-10, 2007.
- McAnally, W., J. Diaz, V. Alarcon, L. Wasson, B. Johnson, **G. N. Ervin**, and C. P. Brooks. 2007. Watershed Modeling Improvements to Enhance Coastal Ecosystems. Mobile Bay Collaboration Network Workshop, Dauphin Island Sea Lab, Alabama, 06 November 2007.
- Oppenheimer, S. and **G. N. Ervin**. 2007. A model for the spread of an invasive plant species. 27th Southeastern Atlantic Regional Conference on Differential Equations, Murray State University, Murray, KY, October 19-20, 2007.
- Tietjen, T. E. and **G. N. Ervin**. 2007. Stream restoration in the Mississippi Alluvial Valley: Streamflow augmentation to improve water quality in the Sunflower River, Mississippi, USA – Ecological Society of America/Society for Ecological Restoration International Conference, San Jose, CA, August 5-10, 2007.
- Tietjen, T. E. and **G. N. Ervin**. 2007. Water quality and floristic quality assessments of the Big Sunflower River following streamflow augmentation using groundwater – 37<sup>th</sup> Annual Mississippi Water Resources Conference, Jackson, MS, April 24-25, 2007.
- Holly, D. C. and **G. N. Ervin**. 2006. Relative importance of propagule pressure, light availability, and nutrient concentration upon the establishment and physiology of a model invasive species, *Imperata cylindrica*. Ecological Society of America 91<sup>st</sup> Annual Conference, Memphis, TN, August 2006.
- Holly, D. C. and **G. N. Ervin**. 2006. Characterization and quantitative assessment of a potential rhizome-mediated root disturbance mechanism in cogongrass (*Imperata cylindrica* (L.) Beauv.). Southeastern Ecology and Evolution Conference, University of Alabama, Tuscaloosa AL, March 3-5, 2006.
- Holly, D. C. and **G. N. Ervin**. 2006. Characterization and quantitative assessment of a potential rhizome-mediated root disturbance mechanism in cogongrass (*Imperata cylindrica* (L.) Beauv.). Graduate Student Research Symposium, Mississippi State University, Starkville MS, March 31, 2006.
- Madsen, J. D., **Gary N. Ervin**, Randy Westbrook, Joel P. Floyd, Annie Simpson, and Elizabeth Sellers. 2006. The National Cactus Moth Detection Network and Database. Ecological Society of America International Meeting, Merida, Mexico, January 2006.
- Majure, L. C. and **G. N. Ervin**. 2006. The morphological plasticity of *Opuntia pusilla* (Haw.) Nutt. induced by differentiations in environmental variables. Ecological Society of America 91<sup>st</sup> Annual Conference, Memphis, TN, August 2006.
- Majure, L. C., **Gary N. Ervin**, John D. Madsen, Randy Westbrook, Annie Simpson, and Elizabeth Sellers. 2006. Assessing habitat requirements for host plants (*Opuntia* spp.) of *Cactoblastis cactorum* Berg. in the Southeastern United States. Southeastern Ecology and Evolution Conference, University of Alabama, Tuscaloosa, March 2006.
- Majure, L. C., **Gary N. Ervin**, John D. Madsen, Randy Westbrook, Annie Simpson, and Elizabeth Sellers. 2006. Assessing habitat requirements for host plants (*Opuntia* spp.) of *Cactoblastis cactorum* Berg. in the Southeastern United States. Graduate Student Research Symposium, MSU, March 2006.
- Majure, L. C., **Gary N. Ervin**, John D. Madsen, Randy Westbrook, Annie Simpson, and Elizabeth Sellers. 2006. Assessing habitat requirements for host plants (*Opuntia* spp.) of *Cactoblastis cactorum* in the Southeastern United States. Graduate Student Research Symposium, MSU, March 2006.
- Herman, B. D. and **Gary N. Ervin**. 2005. Testing the Floristic Quality Assessment Index in natural and created wetlands in Mississippi. Mississippi Water Resources Conference, Raymond, MS, April 2005.
- Herman, B. D. and **Gary N. Ervin**. 2005. Testing the Floristic Quality Assessment Index in natural and created wetlands in Mississippi. Soc of Wetl Sci/Gulf Estuarine Res Soc Joint Meeting, Pensacola Beach, FL, March 2005.

## **CO-AUTHORED CONTRIBUTED PRESENTATIONS**

*italics = presenter*

- Bried, J. T. and **Gary Ervin**. 2004. Diversity and fidelity of adult Odonata among localized wetlands. Southeastern Ecology and Evolution Conference, Georgia Technological University, Atlanta, March 5-7, 2004.
- Bried, J. T. and **G. N. Ervin**. 2004. Dragons and Damsels: Mass comparisons, prediction, and practical applications using adult Odonata. 2004 Graduate Student Symposium, Gulf Coast Research Laboratory, Ocean Springs, MS, January 30-31, 2004.
- Burnell, K. D., J. D. Byrd, Jr., **G. N. Ervin**, C. T. Bryson, D. B. Mask, and J. W. Barnett. 2004. Evaluation of non-chemical management techniques for cogongrass control [*Imperata cylindrica* (L.) Beauv.]. Weed Science Society of America meeting, February 2004, Kansas City, MO.
- Bryant, J. A. and **Gary N. Ervin**. 2003. The impact of SWANCC on Federal Clean Water jurisdiction. Academy of Legal Studies in Business, Annual Conference, Nashville, TN, August 2003.
- Musser, R. O., C. Doan, **G. N. Ervin**, and T. Morelock. 2001. Biochemical mechanisms of green peach aphid resistance in selected spinach cultivars. National Spinach Conference, Fayetteville, AR, Nov 2001.

## **RESEARCH EXPERIENCES FOR UNDERGRADUATES (REU) STUDENT PROJECTS**

- Effects of density and species interactions on *Juncus effusus* and *Schoenoplectus tabernaemontani* growth and biomass production – Dallis Barker (Tougaloo College) – Summer 2022.
- The relative importance of air to water flow disruption by emergent vegetation in reducing dissolved oxygen in littoral systems – John Gordon (University of Delaware) – Summer 2006
- Quantifying the potential allelopathic effects of cogongrass on mycorrhizal associations – Kristen Ostermann (MS State University) – Summer 2006
- Factors affecting pteridophyte distribution at spring sites in the Tombigbee National Forest – Devin Yeatman (Pennsylvania State University) – Summer 2006
- Effects of existing vegetation and soil from three geographical areas of Mississippi on cogongrass (*Imperata cylindrica*) rhizome leaf growth – Brittany Garvin (University of South Carolina, Upstate) – Summer 2005
- Alternanthera philoxeroides* affects dissolved oxygen similarly to native littoral wetland vegetation – Erica Althans-Schmidt (Western Washington University) – Summer 2005
- Comparison of Invasion in Wetland Communities – Cori Anderson (Birmingham Southern College, Alabama) and Melissa Smothers (Humboldt State University, Arcata, CA) – Summer 2004

## **POSTDOCTORAL SCIENTISTS MENTORED**

- Dr. Travis Marsico, 2008-2009, Ph.D. from Notre Dame University
- Ecological Genetics postdoc on *Opuntia-Cactoblastis* research (USGS)
  - Currently an Assistant Professor at Arkansas State University, Department of Biological Sciences
- Dr. Rachel Jolley, 2008-2010, Ph.D. from Auburn University
- Plant Ecology postdoc on *Arundinaria* research (EPA)

## **GRADUATE STUDENT COMMITTEES**

(year graduated in parentheses)

### **Current Students – Committee Chair & Major Professor**

Jacob Hockensmith, M.S. student  
Sam Schmid, Ph.D. student

## **GRADUATE STUDENT COMMITTEES**

(year graduated in parentheses)

### **Graduated Students – Committee Chair & Major Professor**

Jason T. Bried, M.S. (2005)  
Lucas Majure, M.S. (2007)  
Steven Hughes, M.S. (2011)  
Christian Carter, M.S. (2014)  
David Mason, M.S. (2018)

Brook D. Herman, M.S. (2005)  
Michael Calloway, M.S. (2010)\*  
Mary Catherine Mills, M.S. (2011)  
Evelyn Windham DiOrio, M.S. (2016)  
Andrew Sample, M.S. (2023)

D. Christopher Holly, Ph.D. (2008)  
Rima Lucardi, Ph.D. (2012)  
Mahbi Hosseinalizadehnozarinezhad, Ph.D. (2020)\*  
Adrián Lázaro-Lobo, Ph.D. (2021)

Matthew Roberts, Ph.D. (2008)\*  
Cory Shoemaker, Ph.D. (2018)  
Eranga Wettewa, Ph.D. (2020)\*

*\* thesis or dissertation directed by another faculty member who relocated prior to student's graduation*

### **Committee Member**

*MSU Biological Sciences, current*: Sushil Dahal, Ph.D.; Dexcem Pantinople, Ph.D.; Jimmy Wehsener, M.S.

*MSU Biological Sciences, graduated*: Phillip Bucolo, M.S. (2006); Giuliano Colosimo, Ph.D. (2016); Hannah Dorman, M.S. (2015); Sarah Gibbs, M.S. (2007); Michael S. Husak, Ph.D. (2007); Jessica Martin, M.S. (2015); Prachi Matsye, Ph.D. (2013); Mallory McKinney, M.S. (2020); Troy Mutchler, Ph.D. (2004); Arned Raspberry, M.S. (2015); Andrew Sanderson, M.S. (2006); Kristen Sauby, M.S. (2009); Tyler Schartel, Ph.D. (2016); Sarah Shields-Menard, Ph.D. (2016); Cori Speights, Ph.D. (2020); Weston Thompson, M.S. (2020); Gray Turnage, M.S. (2013); Greg Wheeler, M.S. (2013)

*Other MSU, current*: Kayla Broster, MSU PSS, Ph.D.; Elizabeth Esser, MSU Forestry, M.S.; Tanaya Johnson, MSU Sustainable Bioproducts, Ph.D.

*Other MSU, graduated*: Charlotte Buehler, MSU GeoSci, M.S. (2010); Keith D. Burnell, MSU P&SS, Minor Professor, Ph.D. (2005); Joshua Cheshier, MSU P&SS, M.S. (2010); Daniel Dembkowski, MSU WF&A, M.S. (2011); Keri K. Denley, MSU P&SS, Ph.D. (2004); Ryan Edwards, MSU P&SS, Ph.D.; Jonathan Fleming, MSU WF&A, Ph.D. (2012); Sarah Fleming, MSU W&F, M.S. (2010); Laura Hobbs, MSU Forestry, M.S. (2011); Ekaterina Kovalenko, MSU W&F, Ph.D. (2009); Edda Martinez-Calez, MSU Ento, Ph.D. (2010); Anberitha Matthews, MSU Poultry Sci, M.S. (2010); Jennifer Parsons, MSU A&DS, Ph.D. (2013); Joby Prince, MSU P&SS, Ph.D. (2011); Hayden Quick, M.S., MSU P&SS (2021); Wilfredo Robles, MSU P&SS, Ph.D. (2009); David Russell, MSU P&SS, Ph.D. (2017); Daniel Sullivan, MSU W&F, M.S. (2015); Gray Turnage, Ph.D., MSU P&SS (2021); Jason Weirich, MSU P&SS, Ph.D. (2010); Maria Leticia Moraes Zaccaro, MSU P&SS, M.S. (2016).

*External*: Efrain Nobrega, M.S., Instituto de Ecologia, (A.C), Veracruz, Mexico

## **PROFESSIONAL AFFILIATIONS AND SERVICE**

### MSU Department of Biological Sciences

- Zernickow Research Fellowship Committee, 2012-present
- Graduate Committee, 2016-present
- Undergraduate Curriculum Committee, 2003-2004, 2017-present
- Department Head Search Committee, 2015-2016
- Promotion & Tenure Committee, Chair, 2011-2014, 2017-2019
- Graduate Coordinator, 2008 – 2014
- Peer Teaching Evaluation Committee, 2012-2014
- Biological Sciences Faculty Fund student award application reviewer, 2012-13
- Department Head's Executive Committee, 2010
- Web page renovation committee, Chair, 2009
- Renovation Planning Review Committee, 2006-07
- Webmaster, 2004-2007
- Undergraduate Curriculum Revision Freshman Biology Sub-committee, 2006
- Department Head Advisory Committee, 2006
- Faculty Search Committees, 2003-04, 2005-06, 2007, 2009, 2013
- Space Committee, 2004-2006

### MSU College of Arts & Sciences

- A&S Dean Search Committee, 2016-17
- Reviewer for Henry Family Research Fund grant proposals, 2014
- Faculty Awards Review Committee, 2008
- Faculty Senate Representative, 2004-2007
- General Liberal Arts degree, advisory committee member, 2002-2007

### Mississippi State University

- Graduate Coordinator Advisory Council, 2010-2014
- Faculty Research Advisory Committee, 2008-2014
- Institutional Effectiveness Evaluation Committee, 2008-2014
- College of Veterinary Medicine Graduate Program Self-Study Internal Review Committee Chair, 2014
- Day One Leadership Program Mentor, 2012
- MSU Office of Research and Economic Development, ad hoc Intellectual Property Advisory Committee, 2012
- Research Strategic Planning and Evaluation: Strategic Investment Subcommittee, 2010
- Research Initiation Grants Review Panel, 2008
- Robert Holland Faculty Senate Representative, 2007 – 2010
- Robert Holland Faculty Senate Ancillary Affairs Committee, 2007 – 2010; Co-Chair, 2009 – 2010
- John K. Bettersworth Leadership Lectures Speaker, 2004 – 2008
- Environmental Sciences Program, Advisory Committee Member, 2004 – 2014
- Day One Leadership Program Ambassador, 2007 – 2008
- Delegate to the Universities Council on Water Resources, 2005 – 2008
- Hazardous Waste Management Committee, 2003 – 2005
- Environmental Sciences Program Coordinator, 2002 – 2004

## PROFESSIONAL AFFILIATIONS AND SERVICE

### External

- Member: Society of Wetland Scientists
  - Society of Wetland Scientists South-Central Chapter Executive Board Member, 2004-06; 2021-25
  - Society of Wetland Scientists, HumMentor mentoring program for Latin America and the Caribbean, 2021-present
  - Society of Wetland Scientists, 2021 Annual International Conference (virtual) session organizer  
Session: SWS Career Narratives: Navigating a wetland scientist career: Lessons for the next generation
  - Southeastern Exotic Pest Plant Council (SE-EPPC) Graduate Student Scholarship Committee, 2010
  - SE-EPPC, Plant Listing Committee, 2009-2014
  - Mississippi Exotic Pest Plant Council, State Plant List Coordinator, 2007-2014
  - Society of Wetland Scientists 2008 International Conference, Oral Session Organizer and Moderator, May 2008, Washington, DC
  - Fifth World Congress on Allelopathy, Oral Session Organizer, September 2008, Saratoga Springs, NY
  - Ecological Society of America 91<sup>st</sup> Annual Meeting, Contributed Oral Session Moderator, August 2006
  - Ecological Society of America 91<sup>st</sup> Annual Meeting, Buell-Braun Student Awards Judge, August 2006
  - Society of Wetland Scientists Annual International Conference Promotions Committee, 2003
  - Associate Editor: *Wetlands*, Journal of the Society of Wetland Scientists, 2006-2008
  - Board of Editors: *Southeastern Naturalist*, 2005-2008
  - Guest Editor: *Northeastern Naturalist*, 2011
  - Manuscript Reviews (42 journals total):  
*Allelopathy Journal, American Journal of Botany, American Midland Naturalist, Animal Conservation, Aquatic Biology, Aquatic Botany, Aquatic Ecology, Aquatic Microbial Ecology, Basic & Applied Ecology, Biological Conservation, Biological Invasions, Ecological Engineering, Ecological Informatics, Ecology, Ecology & Evolution, Ecology Letters, Environmental & Experimental Botany, Environmental Monitoring & Assessment, Environmental Pollution, Environmental Protection Agency (internal review), Environmental Reviews, Forest Ecology & Management, Fresenius Environmental Bulletin, Hydrobiologia, Invasive Plant Science & Management, Journal of Applied Ecology, Journal of Chemical Ecology, Journal of Aquatic Plant Management, Journal of Coastal Research, Journal of Ecology, Journal of Experimental Marine Biology & Ecology, Journal of Plant Growth Regulation, Journal of Plant Research, Journal of the Botanical Research Institute of Texas (BRIT), Journal of the Torrey Botanical Society, Natural Resource Modeling, Plant & Soil, Plant Ecology, Rangeland Ecology, Restoration Ecology, Soil Science Society of America Journal, Southeastern Naturalist, Weed Technology, Wetlands*
- Reviewed a proposal for Kaplan & Specht's *Principles of Plant Morphology* (Taylor & Francis/CRC Press).  
Townsend et al., *Essentials of Ecology*, 4<sup>th</sup> ed. (Wiley publishing)  
Gurevitch et al., *Ecology of Plants*, 2<sup>nd</sup> ed., adopter review prior to initiation of 3<sup>rd</sup> edition development  
Gurevitch et al., *Ecology of Plants*, 2<sup>nd</sup> ed., section on allelopathy  
Brooker et al., *Biology* Chapter 30, "The Diversity of Modern Gymnosperms and Angiosperms"  
Nabors' *Introductory Botany* Chapter 24, "Ecology and the Biosphere"  
Raven's *Biology*, 9<sup>th</sup> edition Chapter 575, "Interspecific Interactions and the Ecology of Communities"  
*Teaching Issues and Experiments in Ecology* web module reviewer  
Reviewed a proposal for a revision to M. G. Barbour et al., *Terrestrial Plant Ecology* (Roberts & Co.)

## **PROFESSIONAL AFFILIATIONS AND SERVICE**

### External

- Grant Proposal Reviews:  
Department of Defense, Strategic Environmental Research and Development Program, 2022  
RESTORE Council project review, 2020  
Louisiana Board of Regents – Biological Sciences II Review *Panel Chair*, 2011, 2012  
Louisiana Board of Regents – Biological Sciences II Review *Panelist*, 2009, 2010  
EPA – Aquatic Systems Ecology Review *Panelist*, 2006  
NSF – Doctoral Dissertation Improvement Grants Review *Panelist*, 2004, 2005  
Ad-hoc reviewer for: Ecology Program; Science and Technology Centers Program;  
International Research Fellows Program  
USGS – National Institutes of Water Resources
- Other:  
Led programmatic review of Arkansas State University Environmental Sciences graduate program, 2020

### Community Service

- Member, Exec. Board of Dir., Excel, Okolona, MS (community service organization), 2017-present
- Instructor in Friends of Noxubee NWR Youth Day Camp, Starkville, MS, 07 & 09 June 2011
- Assistant Den Leader, Cub Scout Den 5 Pack 27, Starkville, MS, 2007 – 2008
- Reading tutor, Sudduth Elementary School, Starkville, MS, 2006 – 2007

## **PROFESSIONAL DEVELOPMENT & SPECIALIZED TRAINING**

- MSU Office of Research and Economic Development, William Hall Smith Faculty Leadership Program, 2010-11
- MSU Office of Research and Economic Development, Responsible Conduct of Research Training Publication Practices, 24 February 2010
- MSU Center for Teaching & Learning Faculty Learning Community Teach Students How to Learn, Spring semester 2016
- MSU Center for Teaching & Learning workshops  
Active Participation Strategies, 28 September 2016  
Blackboard Day at MSU, 07 September 2016  
Give Me My A!, 09 November 2011  
Faculty-led Study Abroad, 22 September 2011  
Effective Teaching Portfolios for Tenure and Awards, 25 February 2010
- ESRI-certified GIS training courses:  
Introduction to ArcView GIS, Introduction to ArcGIS II, Learning ArcGIS 9

## **HONORS, AWARDS, AND NOMINATIONS**

- MSU Alumni Association Outstanding Graduate Student Mentor Award Recipient, 2013
- Conference of Southern Graduate Schools Outstanding Mentor Award, *nominee*, 2013
- MSU Faculty Achievement Award *nominee*, 2012
- MSU Oldham Outstanding Faculty Mentor Award Recipient, 2011
- MSU Irvin Atly Jefcoat Faculty Advising Award *nominee*, 2009
- Society of Wetland Scientists, Doug Wilcox Award for Outstanding Associate Editor for the journal *Wetlands*, 2009
- MSU College of Arts & Sciences Faculty Research Award, Spring 2009

## **HONORS, AWARDS, AND NOMINATIONS**

- MSU College of Arts & Sciences Beverly B. and Gordon W. Gulmon Dean's Eminent Scholar Awarded October 2007
- MSU GeoResources Institute Academic Professor of the Year, 2007
- Excellence in Research by a Doctoral Student Award, University of Alabama, 1999-2000
- National Science Foundation Graduate Research Fellowship, 1998-2000
- Graduate Council Fellowship, The University of Alabama, 1997-1998
- Honorable Discharge, 1996, United States Marine Corps (USMC) Reserve
- Selected Marine Corps Reserve Medal, 1993, USMC Reserve
- National Defense Service Medal, 1991, USMC
- Meritorious Unit Commendation, 1991, USMC
- Honor Graduate, Aircraft Firefighting/Crash Rescue School, 1990, USMC
- Meritorious Promotion (PFC), MCRD Parris Island, 1989, United States Marine Corps

## **STUDENT HONORS AND AWARDS**

*2023*

- Jacob Hockensmith (M.S. Student) – South Carolina Aquatic Plant Management Society Phillip M Fields Scholarship, 2023
- Sam Schmid, Ph.D. Student. Third Place Student Presentation Award. National Aquatic Plant Management Society Annual Meeting, Indianapolis, Indiana, July 24-27, 2023.

*2022*

- Jacob Hockensmith (M.S. student) – Master's degree Teaching Assistant of the Year 2022, MSU Department of Biological Sciences
- Jacob Hockensmith (M.S. student) – 1<sup>st</sup> place student presentation, 2022 MSU Graduate Student Research Symposium, MSU
- Andy Sample (M.S. student) – Master's degree Student Researcher of the Year 2022, MSU Department of Biological Sciences
- Andy Sample (M.S. student) – 1<sup>st</sup> place student presentation, 2022 Society of Wetland Scientists, South Central Chapter meeting, Searcy, AR
- Andy Sample (M.S. student) – 3<sup>rd</sup> place student presentation, 2022 Society of Wetland Scientists, South Central Chapter virtual meeting
- Sam Schmid (Ph.D. student) – Mid-South Aquatic Plant Management Society Scholarship, 2022
- Sam Schmid (Ph.D. student) – South Carolina Aquatic Plant Management Society Phillip M. Fields Scholarship, 2022

*2021*

- Jacob Hockensmith (M.S. student) – Best student presentation, 2021 South Carolina Aquatic Plant Management Society
- Adrian Lazaro-Lobo (Ph.D. student) – Doctoral degree Student Researcher of the Year 2021, MSU Department of Biological Sciences
- Andy Sample (M.S. student) – 2<sup>nd</sup> place student presentation, 2021 South Carolina Aquatic Plant Management Society
- Andy Sample (M.S. student) – Student research grants, SWS and SWS-South Central Chapter, 2021
- Andy Sample (M.S. student) – Mid-South Aquatic Plant Management Society Scholarship, 2021

## **STUDENT HONORS AND AWARDS**

### *2020 and earlier*

- Adrian Lazaro-Lobo (Ph.D. student) – “Outstanding Paper in Invasive Plant Science and Management Award” from the Weed Science Society of America, 2020
- Cory Shoemaker (Ph.D. student) – Doctoral degree Student Researcher of the Year 2019, MSU Department of Biological Sciences
- David Mason (M.S. student) – Grand Champion Runner-Up, Mississippi State University 3-Minute Thesis competition, “Introduced Species and Plant Communities: A Dance or a Duel?” Spring 2017.
- Cory Shoemaker (Ph.D. student) – Best Student Oral Presentation Award, Mississippi Water Resources Conference, Jackson, MS, April 2016
- Evelyn Windham (M.S. 2016) – Master’s degree Teaching Assistant of the Year 2016, MSU Department of Biological Sciences
- Brice Lambert (B.S. student) – 3<sup>rd</sup> Place Student Presentation, 2011 Biology Undergraduate Research Program Symposium, MSU
- Brice Lambert (B.S. student) – 1<sup>st</sup> Place in Life Sciences Division in the MSU Honors College Research Symposium
- Mary Catherine Mills (M.S. 2011) – Master’s degree Research Assistant of the Year 2011, MSU Graduate Student Association
- Mary Catherine Mills (M.S. 2011) – Research Assistant of the Year 2011, MSU Department of Biological Sciences
- Mary Catherine Mills (M.S. 2011) – 3<sup>rd</sup> Place Student Presentation, Mississippi Water Resources Conference, Bay St. Louis, MS, Nov 02-04, 2010.
- Mary Catherine Mills (M.S. 2011) – Best Student Presentation, Southeastern Exotic Pest Plant Council/ Southeast branch of Society for Ecological Restoration joint conference, Chattanooga, TN, May 11-12, 2010.
- Jeffery Cannon (B.S. 2009) – Inducted into MSU Society of Scholars, 2008
- Jeffery Cannon (B.S. 2009) – Don Downer Award for Student Presentation, 2<sup>nd</sup> Annual Biology Undergraduate Research Program Symposium, MSU
- Chris Holly (Ph.D. 2008) – Doctoral degree Research Assistant of the Year 2008, MSU Graduate Student Association
- Lucas Majure (M.S. 2007) – Master’s degree Research Assistant of the Year 2007, MSU Graduate Student Association
- Jason Bried (M.S. 2005) – Best Student Presentation, SWS South-Central Chapter, Society of Wetland Scientists/Gulf Estuarine Research Society Joint Meeting, Pensacola Beach, FL, March 2005.
- Jason Bried (M.S. 2005) – Student Research Grant, Society of Wetland Scientists