

ESA Certified Ecologist

I. Contact**WORK**

Department of Biology
 University of Louisiana
 Lafayette, Louisiana 70504
 ULCEET.com mop@louisiana.edu (337) 482-6277

HOME

300 East Peck Blvd.
 Lafayette, LA 70508
 337-504-3047

II. Education

- Post doc - Florida State Univ. - 1991-93 (with Dan Simberloff)
- Post doc (joint) – N. Arizona Univ./Univ. Colorado – 1988-90 (with Tom Whitham/Jeff Mitton)
- Ph.D. in Zoology, N. Arizona Univ. – 1987 (with Tom Whitham/Peter Price)
- M.S. in Zoology, Florida State Univ. – 1982 (with Dan Simberloff)
- B.S. in Biology, Florida State Univ. – 1977

III. Professional positions

- Director, Center for Ecology and Environmental Technology, 2004-present
- Full Professor, Biology - University of Louisiana, Lafayette, 2004-present
- Program Director - The National Science Foundation, 2000-2001
- Associate Professor, Biology - University of Louisiana, Lafayette, 1998-2004
- Assistant Professor, Biology - University of Louisiana, Lafayette, 1993-1998
- Biologist, Peace Corps - San Salvador, El Salvador, 1977-1979

IV. Awards

- Lafayette Parish Medical Society Endowed Professor of Biology, 2011-2014
- President's Award, Lafayette Natural History Museum, 2004
- The University of Louisiana Distinguished Professor, 2003

V. Research funding (* = Principal Investigator, † = Co-Principal Investigator, #Senior Scientist)

- 2011-2016† Consortium for Training in Environmental Biology (with MD Anderson Cancer Center), NIH, \$189,479, pending
- 2010-2012† Louisiana Native Plant Sustainability (with McNeese University), NRCS, \$39,998
- 2006-2010#- Engaging Middle School Students in Student-Directed Inquiry through Virtual Environments for Learning (Texas A&M), NSF, \$1,685,499
- 2006-2009* Center for Ecology and Environmental Technology, NSF, \$147,665
- 2006-2007* The Impact of Hurricanes on Native Plants, NSF, \$24,840
- 2005-2010† Undergraduate Training in Biology and Mathematics, NSF, \$534,000
- 2001-2005* Ecology of salinity stress in Iris hexagona, NSF, \$308,000
- 1998-1999* International workshop on population and evolutionary biology, NSF, \$25,000
- 1997-1999* Empirical and theoretical studies of host-parasite coevolution, NSF, \$45,000
- 1996-1999* Dynamics of a native iris-herbivore association, NSF, \$185,000
- 1995-1996† Research and Teaching in Environmental Biology, LEQSF, \$40,000
- 1994-1996* Deme formation in a forest insect, LEQSF, \$89,000
- 1994-1995† Research and Teaching in Environmental Biology, LEQSF, \$75,000
- 1991-1993† Tests of the deme formation hypothesis, NSF, \$199,994
- 1985-1987† Mechanisms of host resistance to herbivory, DDIG, NSF, \$9,800

VI. Graduate students

Ph. D.

- Lance Gorham, 1999
- Pete Van Zandt, 2001
- Jack Wang, 2002
- George Wang, 2007
- Sharmila Pathikonda, 2009
- Karen Wiens, 2009
- Greta Goranova, 2010

MS

- Keli Landau, 1997
- Mark Tobler, 2000
- Neoma Geddes, 2003
- Lisa Schile, 2003
- Gayna Meche, 2003
- Chris DeLay, scheduled December 2010

VII. Peer-reviewed articles and book chapters (*corresponding author)

1. Pathikonda S, A Meerow, Z He, S Mopper*. 2010. Salinity tolerance and genetic variability in freshwater and brackish *Iris hexagona* colonies. **American Journal of Botany** 97:1438–1443.
2. Ruan CJ, S Mopper, JA Teixeira da Silva, P Qin, QX Zhang, Y Shan. 2009. Context-dependent style curvature in *Kosteletzkya virginica* (Malvaceae) offers reproductive assurance under unpredictable pollinator environments. **Plant Systematics and Evolution** 277:207-215.
3. Ruan CJ, H Li, S Mopper. 2009. *Kosteletzkya virginica* displays a mixed mating system in response to pollinator environment despite strong inbreeding depression. **Plant Ecology**, 203:183-193.
4. Pathikonda S, AA Ackleh, KH Hasenstein, and S Mopper*. 2009. Invasion, disturbance, and competition: modeling the fate of coastal plant populations. **Conservation Biology** 23:164-173. **Cover Article.**
5. Wang HG and S Mopper*. 2008. Separate and interacting effects of deer florivory and salinity stress on iris herbivores. **Oikos** 117:564-570.
6. Wang Y, Mopper S, Hasenstein KH. 2008. Osmolytes in salinity-stressed *Iris hexagona*. **Acta Physiologiae Plantarum** 30:715-721.
7. Ruan C, L He, S Mopper. 2008. The impact of pollen tube growth on stigma lobe curvature in *Kosteletzkya virginica*: The best of both worlds. **South African Journal of Botany**. 74:65-70.
8. Tobler M., Van Zandt, P., Hasenstein, K., and S. Mopper*. 2006. Growth and reproduction of a clonal plant in response to salinity and florivory. **Wetlands** 26:803-812.
9. Schile, L. and S. Mopper*. 2006. Negative effects of salinity stress on a leafmining insect and its host plant. **Ecological Entomology** 31:1-7.
10. Geddes, N. and S. Mopper*. 2006. Effects of environmental salinity on vertebrate florivory and wetland communities. **Natural Areas Journal** 26:31-37. **Cover Article.**
11. Mopper, S. 2005. Phenology – The role of time in structuring space for herbivorous insect populations. **Annales Zoologici Fennici** 42:327-333.
12. Van Zandt, P., S. Mopper. 2004. The effects of maternal salinity and seed environment on germination and growth in *Iris hexagona*. **Evolutionary Ecology Research** 6:813-832.
13. Mopper, S., Y. Wang, C. Criner, K. Hasenstein. 2004. *Iris hexagona* hormonal response to salinity stress, leafminer herbivory, and phenology. **Ecology** 85:38-47.
14. Van Zandt, P., M. Tobler, E. Mouton, K. Hasenstein, S. Mopper*. 2003. Positive and negative consequences of salinity stress for the growth and reproduction of the clonal plant, *Iris hexagona*. **Journal of Ecology** 91:837-846.
15. Van Zandt, P., V. Townsend Jr., C. Carlton, M. Blackwell, S. Mopper. 2003. *Lobus impressus* (LeConte) (Coleoptera: Erotylidae) fungal associations and presence in the seed capsules of *Iris hexagona*. **The Coleopterists Bulletin** 57:281-288.
16. Van Zandt, P., S. Mopper. 2002. Delayed and carryover effects of salinity on flowering in *Iris hexagona* (Iridaceae). **American Journal of Botany** 89:364-383.

17. Gorham, L., S. King, B. Keeland, S. Mopper. 2002. Effects of canopy gaps and flooding on homopterans of a bottomland hardwood forest. **Wetlands** 22:541-549.
18. Wang, Y., S. Mopper, K. Hasenstein. 2001. Effects of salinity on endogenous levels of ABA, IAA, JA, and SA in *Iris hexagona*. **Journal of Chemical Ecology** 27:327-342.
19. Carlton, C., V. Townsend, Jr., P. Van Zandt, S. Mopper. 2000. Description of the larvae of *Loberus impressus* Leconte with notes on its natural history (Languriidae: Xenoscelinae). **Annals of the Entomological Society of America** 93:356-361.
20. Mopper, S., P. Stiling, K. Landau, D. Simberloff, P. Van Zandt. 2000. Spatiotemporal variation in leafminer population structure and adaptation to individual oak trees. **Ecology** 81:1577-1587.
21. Mopper, S., K. Landau, P. Van Zandt. 2000. Adaptive evolution and neutral variation in a wild leafminer metapopulation. Pages 116-138 in Mousseau, T., Sinervo, B., Endler, T., eds., **Adaptive Genetic Variation in the Wild**. Oxford University Press, New York
22. Van Zandt, P., S. Mopper*. 1998. A meta-analysis of adaptive deme formation in phytophagous insect populations. **American Naturalist** 152:597-606.
23. Boecklen, W., S. Mopper. 1998. Local adaptation in specialist herbivores: Theory and evidence. Pages 64-90 in Mopper, S. and S. Strauss, eds., *Genetic Structure and Local Adaptation in Natural Insect Populations: Effects of Ecology, Life History, and Behavior*. Chapman & Hall, New York.
24. Mopper, S. 1998. Local adaptation and stochastic events in an oak leafminer population. Pages 139-155 in Mopper, S. and S. Strauss, eds., *Genetic Structure and Local Adaptation in Natural Insect Populations: Effects of Ecology, Life History, and Behavior*. Chapman & Hall, New York.
25. Cobb, N., S. Mopper, K. Ghering, M. Caouette, K. Christensen, T. Whitham. 1997. Increased moth herbivory associated with environmental stress of pinyon pine at local and regional levels. **Oecologia** 109:389-397.
26. Mopper, S. 1996. Adaptive genetic structure in phytophagous insect populations. **Trends in Ecology and Evolution** 11:235-238.
27. Auerbach, M., E. Connor, S. Mopper. 1995. Major miners and minor miners: population dynamics of latent and eruptive leaf-mining insects. Pages 83-110 in Cappuccino and P. Price, eds., *Novel Approaches to the Population Dynamics of Insect Herbivores*. Academic Press, New York.
28. Mopper, S., M. Beck, D. Simberloff, P. Stiling. 1995. Local adaptation and agents of mortality in a mobile insect. **Evolution** 49:810-815.
29. Mopper, S., D. Simberloff. 1995. Differential herbivory in an oak population: the role of plant phenology and insect performance. **Ecology** 76:1233-1241.
30. Boecklen, W., S. Mopper, P. W. Price. 1994. Sex-biased herbivory in *Salix lasiolepis*: Are there general patterns among herbivores? **Oikos** 71:267-272
31. Craig, T., S. Mopper. 1993. Sex ratio regulation by sawflies. Pages 61-92 in M. R. Wagner and K. F. Raffa, eds., *Sawfly Adaptations to Woody Plants*. Academic Press, NY
32. Mopper, S., T. Whitham. 1992. The plant stress paradox: Effects on pinyon sawfly fecundity and sex ratios. **Ecology** 73:515-525.
33. Mopper, S., J. Maschinski, N. Cobb, T. Whitham. 1991. A new look at habitat structure: consequences of herbivore-modified plant architecture. Pages 260-280 in S. Bell, E. McCoy, and H. Mushinsky, eds., *Habitat Complexity: the Physical Arrangement of Objects in Space*. Chapman & Hall, New York.
34. Mopper, S., J. Mitton, T. Whitham, N. Cobb, K. Christensen. 1991. Genetic differentiation and heterozygosity in pinyon pine associated with herbivory and environmental stress. **Evolution** 45:989-999.
35. Boecklen, W., S. Mopper, P. Price. 1991. Size and shape of micronutrients of arroyo willow (*Salix lasiolepis*) in relation to herbivore attack. **Ecological Research** 6:317-331.
36. Price, P., N. Cobb, T. Craig, G. Fernandes, J. Itami, S. Mopper, and R. Preszler. 1990. Insect herbivore population dynamics on trees and shrubs: new approaches relevant to latent and eruptive species and life table development. Pages 1-38 in E. A. Bernays, ed., *Insect-plant Interactions*, Vol. II. CRC Press, Boca Raton, Florida USA.

37. Boecklen, W., P. Price, S. Mopper. 1990. Sex and drugs and herbivores: sex-biased herbivory in arroyo willow (*Salix lasiolepis*). **Ecology** 71:581-588.
38. Mopper, S., T. Whitham, P. Price. 1990. Plant phenotype and interspecific competition determine sawfly performance and density. **Ecology** 71:2135-2144.
39. Whitham, T., S. Mopper. 1985. Chronic herbivory: impacts on architecture and sex expression of pinyon pine. **Science** 228:1089-1091.
40. Mopper, S., S. Faeth, W. Boecklen, D. Simberloff. 1984. Host specific variation in leaf miner population dynamics: effects on density, natural enemies and behavior of *Stilbosis quadricustatella* (Chambers). **Ecological Entomology** 9:169-177.
41. Faeth, S., S. Mopper, D. Simberloff. 1981. Abundance and diversity of leaf mining insects on three oak species: effects of host plant phenology and nitrogen content of leaves. **Oikos** 32:238-251.

VIII. Edited publications

42. Mopper, S. and A. Agrawal (eds.) 2004. Phytohormonal Ecology. **Ecology** 85:3-77.
43. Mopper, S., S. Strauss (eds.) 1998. Genetic Structure and Local Adaptation in Natural Insect Populations: Effects of Ecology, Life History, and Behavior. Chapman & Hall, New York. 449 pp.

IX. Popular or non-refereed publications

44. Gorham, L., B. Keeland, S. Mopper, S. King, D. Johnson. 1996. Effects of canopy gap dynamics on arthropod abundance in a bottomland forest in northeast Arkansas. Pp 165-169 in K. M. Flynn, ed. Proc. Southern Forested Wetlands Ecology and Management Conference.
45. Mopper, S. 1996. Temporal variability and local adaptation: a reply to Y Michalakis. **Trends in Ecology and Evolution** 11 (10): 431-432.
46. Mopper, S., T. G. Whitham. 1986. Natural Bonsai of Sunset Crater. **Natural History** 95:42-47.

X. Courses taught

Undergraduate

- BIOL 428 – Experimental design
- BIOL 307 – Field Techniques
- BIOL 321 - Entomology
- BIOL 101 - Introductory Biology for majors
- BIOL 121 - Introductory Biology for non-majors

Graduate

- BIOL 575 - Statistical Ecology
- BIOL 508 – Community Ecology
- BIOL 558 - Arthropod Evolution
- BIOL 605 - Special Topics in Environmental Biology: Coevolution; Local Adaptation in Heterogeneous Environments; Chemical Mediators of Ecological Interactions

XI. Chaired events

- Coastal Restoration and Enhancement through Science and Technology Annual Meeting, Lafayette, LA, 2005
- Environmental Research Consortium of Louisiana Annual Meeting, Lafayette, LA, 2002
- Evolutionary Biology of Parasite-Host Interactions Symposium and Contributed Paper Session - Society for the Study of Evolution, Madison, WI – 1999
- Ecology Workshop - Local Adaptation and Spatial Heterogeneity in Parasite-Host Interactions, Centre National de la Recherche Scientifique, Paris, France - 1998
- Insect Population Dynamics and Life History Contributed Paper Session - Ecological Society of America, Snowbird, UT - 1995
- Host-Plant Variation and Genetic Diversity of Natural Insect Populations Symposium - Ecological Society of America, Knoxville, Tennessee - 1994

XII. Invited symposia and lectures (since 2000)

- Loyola University, Department of Biology, 2010
- Mathematical Biology Institute, Ohio State University, 2007
- University of Vermont, Department of Biology, 2007
- New Mexico State University Department of Biology, 2007
- Shanghai Forestry Institute, Shanghai, China, 2006
- Dalian National University, Dalian, China, 2006
- Beijing Normal University, Beijing, China, 2006
- University of Illinois, Champagne-Urbana, IL, 2005
- University of Helsinki - Tvärminne, Finland, 2004
- University of Kentucky – Lexington, KY - 2003 (Keynote Speaker)
- Louisiana State University - Baton Rouge, LA - 2003
- Smithsonian Environmental Research Center - Edgewater, MD - 2001
- University of Mali - Mali, Africa – 2001

XIII. Presentations at professional meetings (since 2000)

- American Society for Gravitational and Space Biology (talk), Angers, FR, 2008
- Ecological Society of America (two talks), Milwaukee, WI, 2008
- Ecological Society of America (three talks), San Jose, CA, 2007
- Ecological Society of America (three talks, one poster), Memphis, TN, 2006
- American Society of Plant Biology (poster) - Honolulu, HI - 2003
- Estuarine Research Federation (poster) - Seattle, WA, - 2003
- Society for Wetland Scientists (talk, poster) - New Orleans, LA - 2003
- Ecological Society of America (three talks) - Savannah, GA - 2003
- American Society of Plant Biology (two posters) - Denver, CO - 2002
- Environmental State of the State Conference (three posters) - Lafayette, LA - 2002
- Gordon Research Conference (poster) - Ventura, CA - 2001
- American Society of Plant Physiologists (poster) - San Diego, CA - 2000
- Society for Integrative and Comparative Biology (poster) - Atlanta, GA - 2000
- Ecological Society of America (two talks, one poster) - Snowbird, UT – 2000

XIV. Professional societies (current memberships)

- Botanical Society of America
- Ecological Society of America
- Sigma Xi
- Society for the Study of Evolution

XV. ServiceNational and International

- Member, Committee of Visitors, NSF - Subcommittee of the Advisory Committee for the Directorate for Biological Sciences to assess the scientific portfolio and review process of NSF Directorates - 2009
- Panelist, NSF, Center for Integrative Mathematics and Biological Sciences – 2008
- Panelist, NSF, Field Stations and Marine Laboratories - 2007
- Panelist, NSF, Evolutionary and Population Ecology - 2006
- Panelist, NSF, Frontiers of Integrative Biological Research - 2005
- Panelist, NSF, Integrative Research in Environmental Biology - 2002
- Panelist, Integrated Research Challenges in Environmental Biology, NSF-DEB - 2002
- Site Reviewer, Long Term Ecological Research, NSF-DEB, Luquillo, PR - 1997, 2003
- Liaison, University of Mali – NSF - United Nations Development Program, Mali, Africa – 2001
- Mercer Award Committee, Ecological Society of America - 2001-2003
- Panelist, NSF, Ecology Program - 1995-2000
- Judge, Buell and Braun Awards, Ecological Society of America - 1995-2000
- External/ ad hoc reviewer - Academic Press, American Journal of Botany, American Midland Naturalist, American Naturalist, Ann. Rev. Entomology, Biotropica, Chapman & Hall, Ecological Applications, Ecological Entomology, Ecology, Entomologia Experimentalis et Applicata, Environmental Entomology, Evolution, International J. Plant Science, J. Biogeography, J. Entomological Science, , Molecular Ecology, Nature, Oecologia, Oikos, Science National Science Foundation, National Sciences and Engineering Research Council of Canada, United States Department of Agriculture

Departmental

- Chair, Initiatives Committee, 2009- present
- Chair, Tenure and Promotion Review Committee, 2009 - present
- Member, Executive Committee, 2009-present
- Judge of oral presentations and posters - Dept. of Biology Graduate Student Symposium - 2009
- Chair, Search Committee, Ecologist – 2005
- Graduate Studies Committee – 2003-2007
- Graduate Student Advisory Committees
- Equipment Committee - 1998, 2000, 2002
- Biology Department Seminar Series Coordinator- 1994-2000
- Search Committee, Plant Ecologist – 1995

University

- Member, Research and Economic Development Task Force, 2009 – present
- Member, Subcommittee for Center Development, 2009 - present
- Member, Ad Hoc Hearing Committee, 2008
- Graduate Appeals Committee – 2003 - 2008
- Search Committee, Vice President for Research and Graduate Studies – 2004-2005
- Space Use Committee, Center for Ecology and Environmental Technology - 1998-2004, Chair 2002-2004
- Search Committee, Dean of Science - 2002
- Facilities Committee, Center for Ecology and Environmental Technology – 2000-2002
- Search Committee, Vice President of Research and Graduate Studies - 2000
- Advisory Board, Center for Ecology and Environmental Technology – 1998-2004
- Cognitive Specializations Art Selection Committee - 1998-1999
- Summer Research Fellowship Selection Committee - 1998

State and Local**Educational sponsorships and activities:**

- Judge, student posters, Environmental State of the State Conference, Lafayette, LA - 2002
- Board of Regents Speaking of Science Lecture Program - 1996-2003
- State Science Olympiad Entomology Competition - since 1996
- 4H Club, Myrtle Elementary, Westminster Academy, Prairie Elementary, Cathedral Carmel, St. Thomas Moore, Lafayette High, UL Summer Enrich. - since 1995
- Young Scholars Program, Florida Department of Education, Tallahassee, FL - 1992

Board service

- Coastal Restoration & Enhancement through Science & Technology, Technical Board – 2004-2007
- Treasurer, Lafayette Natural History Museum & Planetarium Assoc - 2003-2004
- Executive Board, Lafayette Natural History Museum & Planetarium Assoc - 2001-2004
- Acadiana Education Endowment Grants, Grant Selection Committee - 2003
- Johnston Science Foundation Environmental Science, Advisory Board - 2002, 2004
- Environmental Research Consortium of Louisiana, Executive Board -1996-2002
- Nature Conservancy Cypress Island Wildlife Refuge, Advisory Board - 1995-2000

Entomology exhibits and donations:

- Science Olympiad - 2006
- The Nature Station - 2003
- Lafayette Natural History Museum & Planetarium - 1998

Other professional service:

- Forensic Entomologist, UL Lafayette Student Health Services - since 2005
- Forensic Entomologist, Lafayette Parish Coroner's Office - since 2001
- Forensic Entomologist, Acadiana Medical Laboratory and Crime Unit - since 1996