

CURRICULUM VITAE

John Andrew Kupfer

Department of Geography
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Education:

Degrees:

- 1995. **Ph.D.** (Geography) The University of Iowa, Iowa City, IA. Dissertation: *Effects of Edge Vegetation on Interior Gap Successional Processes* (advisor: George Malanson).
- 1991. **M.A.** (Geography) The University of Iowa, Iowa City, IA. Thesis: *Forest Structure, Composition, and Successional Dynamics in a Riparian Edge* (advisor: George Malanson).
- 1988. **B.A. with highest distinction** (Geography / Biology) Valparaiso University, Valparaiso, IN.

Employment:

- Professor** (2008-present), **Associate Professor** (2005-2008) and **Chair** (2013-2017), Dept. of Geography, Univ. of South Carolina, Columbia, SC. (Senior Associate Faculty: School of Earth, Ocean and the Environment).
- Associate Professor** (2001-2005) and **Assistant Professor** (1999-2001), Dept. of Geography and Regional Development, Univ. of Arizona, Tucson, AZ. (Affiliate Faculty Member: Global Change, Remote Sensing and Spatial Analysis, Arid Lands Resource Sciences, Latin American Studies)
- Adjunct Professor** (1997-2005). Dept. of Biology, University of Memphis, Memphis, TN.
- Assistant Professor** (1994-1999). Dept. of Geography & Planning, Univ. of Memphis, Memphis, TN.
- Instructor and Research Associate** (1993-1994). Dept. of Geography, Univ. of Utah, Salt Lake City, UT.

Major Fields:

Landscape ecology, conservation biogeography, GIScience and spatial analysis, protected lands (especially National Parks), riparian systems, prescribed fire science.

Professional Memberships:

American Association of Geographers
Southeast Division - American Association of Geographers
International Association for Landscape Ecology (including North American Chapter)
Longleaf Alliance
American Association for the Advancement of Science
George Wright Society

Honors and Awards:

Career Achievement:

- 2025. Elected as Fellow, American Association of Geographers.
- 2022. Lifetime Achievement Award. Southeast Division of the Association of American Geographers.

Teaching:

- 2003. University of Arizona Provost's General Education Teaching Award.
- 1998. University of Memphis Alumni Association Distinguished Teaching Award.

Service and Outreach:

- 2014. Office of Governor Steven Beshear, Commissioned as a Kentucky Colonel.
- 2013. University of South Carolina. Ada B. Thomas Outstanding Faculty Advisor Award.
- 1998. University of Memphis, Student Ambassador Board. Faculty Mentor Award.
- 1987. National Park Service, Indiana Dunes National Lakeshore. Certificate of Merit.

Research / Scholarship:

- 2020. Best Undergraduate Poster Award, 2020 SEDAAG Annual Meeting. Improving Conservation Planning for the Congaree Biosphere Reserve. (L. Hutchens and J. Kupfer).
- 2019. Best Paper Award (honorable mention). *Southeastern Geographer*
- 2013. Henry Cowles Award for Excellence in Publication. Biogeography Specialty Group, Association of American Geographers.
- 2011. Research Honors Award. Southeast Division / Association of American Geographers.
- 2007. Henry Cowles Award for Excellence in Publication. Biogeography Specialty Group, Association of American Geographers.
- 2004. Udall Center Fellow. Udall Center for Studies in Public Policy, Tucson, AZ.
- 2004. Summer Research Fellow. Edward J. Meeman Biological Field Station, Millington, TN.
- 1997. University of Memphis, College of Arts and Sciences. Early Career Research Award.
- 1988-1992. University of Iowa Teaching-Research Fellowship.
- 1985. Initiated into Gamma Theta Upsilon (Alpha Xi Chapter), National Geography Honor Society.

Courses Taught:

University of South Carolina:

- ENVR101: *Introduction to the Environment*
- GEOG104: *Introduction to Physical Geography*
- GEOG201: *Landform Geography*
- GEOG348: *Biogeography*
- GEOG370: *America's National Parks*
- GEOG548: *Landscape Ecology*
- GEOG570: *Geography of Public Land and Water Policy*
- GEOG740: *Research Trends in Geography*
- GEOG747/847: *Seminar in Physical Geography (Topics have included: Landscape-level Effects of Hurricane Katrina; Species Distribution Modeling; Principles of Landscape Ecology; Habitat Fragmentation and Land Cover Change; Connectivity in Terrestrial and Aquatic Systems)*

University of Arizona:

ECOL438/538: *Biogeography* (cross-listed as GEOG438/538 and GEOS438/538)
GEOG195: *Topics in Geography and Regional Development*
GEOG303: *Field Methods in Environmental Geography*
GEOG465/565: *Physical Aspects of Arid Lands* (cross-listed as ALRS565)
GEOG523: *Ecological Plant Geography* (cross-listed as RNR523)
GEOG525: *Vegetation and Ecosystem Geography* (cross-listed as RNR525)
GEOG696C: *Seminar in Physical Geography (Topics have included: Landscape Ecology, Forest Fragmentation; Multivariate Analysis in Community and Landscape Ecology)*
NATS101: *Earth and its Environments: Introduction to Physical Geography*

University of Memphis:

GEOG1001: *Introduction to Physical Geography: Weather and Climate*
GEOG1002: *Introduction to Physical Geography: Landforms*
GEOG3221: *Principles of Conservation*
GEOG4/6251: *Environmental Threats to Human Survival*
GEOG4/6241: *Biogeography*
GEOG4/6531: *Field Methods*
GEOG7221: *Graduate Seminar in Conservation*
GEOG7241: *Graduate Seminar in Biogeography*
BIOL7/8250: *Community and Landscape Ecology*

Publications:

Books:

National Academies of Sciences, Engineering, and Medicine, Committee on Long-Term Management of the Spirit Lake/Toutle River System in Southwest Washington (as member of authoring committee). 2018. *A Decision Framework for Managing the Spirit Lake and Toutle River System at Mount St. Helens*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/24874>. 203 pp.

Laboratory Manual:

James, L.A. and Kupfer, J.A. 2018. *Landform Geography Laboratory Exercises*. Dubuque, IA: Kendall-Hunt.

Articles and Chapters: (indicates student author)*

- * Chen, P., Fei, T., **Kupfer, J.A.**, Du, Y, Yi, J., and Li, Y. 2026. Intelligent bear deterrence system based on computer vision: An approach to reducing human-bear conflicts in remote areas of the Tibetan Plateau. *Ursus* 37(e6):1-11
- * Kim, Y., Ellis, J.T. and **Kupfer, J.A.** 2025. Quantifying spatial structures of managed and unmanaged coastal dune systems using grid-based landscape metrics. *Journal of Coastal Conservation* **29**, 57.
- * Hutchens, L., **Kupfer, J.A.**¹, Gao, P., Sanchez, G.M., Meentemeyer, R.K., Terando, A.J., and Hiers, J.K. 2024. Projecting the long-term effects of large-scale human influence on the spatial and functional persistence of extant longleaf pine ecosystems in the Florida Flatwoods Pyrome. *Conservation Science and Practice* 6: e13187. (¹ corresponding author)
- Terando, A.J., Gao, P., **Kupfer, J.A.**, * Young, K.S., and Hiers, J.K. 2024. Using climate-fire analog mapping to inform adaptive management strategies for wildland fire in protected areas of the conterminous US. *Global Environmental Change Advances* 2: 100007.

- Jonko, A., Oliveto, J., Beaty, T., Atchley, A., Battaglia, M.A., Dickinson, M.B., Gallagher, M.R., Gilbert, A., Godwin, D., **Kupfer, J.A.**, Hiers, J.K., Hoffman, C., North, M., Restaino, J., Sieg, C., and Skowronski, N. 2024. How will future climate change impact prescribed fire across the contiguous United States? *npj Climate and Atmospheric Science* 7:96.
- * Lee, K., Son, D., Kim, D., **Kupfer, J.A.**, Kim, D. 2024. Difficulties in studying fluvial biogeomorphological feedback processes. *Journal of the Korean Geomorphological Association* 31: 15-26.
- Lu, J., Huang, X., **Kupfer, J.A.**, Xiao, X., Li, Z., Wei, H., Wang, S., and Zhu, L. 2023. Spatial, temporal, and social dynamics in visitation to U.S. national parks: A big data approach. *Tourism Management Perspectives* 48: 101143.
- * Hutchens, L., **Kupfer, J.A.** and Gao, P. 2023. Spatial patterns of conservation benefits, priorities, and barriers in the Congaree Biosphere Region. *Southeastern Geographer* 63: 98-118.
- Weber, J. and **Kupfer, J.A.** 2023. Guest Editors' Introduction: Protected Areas of the American Southeast. *Southeastern Geographer* 63: 6-14.
- Kupfer, J.A.**, Lackstrom, K., Grego, J.M., Dow, K., Terando, A.J., and Hiers, J.K. 2022. Perspectives on prescribed fire management in longleaf pine ecosystems: Current constraints and future prospects. *Fire Ecology* 18, 27.
- Kupfer, J.A.**, Li, Z., * Ning, H., and Huang, X. 2021. Using mobile device data to track the effects of the COVID-19 pandemic on spatiotemporal patterns of National Park visitation. *Sustainability* 13(16): 9366.
- Gao, P., Terando, A.J., Hiers, J.K., **Kupfer, J.A.** Varner, J.M., Stambaugh, M. and Lei, T. 2021. Projected changes in fire probability for the conterminous United States. *Science of the Total Environment* 789: 147872.
- Kupfer, J.A.**, Terando, A.J., Gao, P., Teske, C. and Hiers, J.K. 2020. Maintaining static burn criteria alters future opportunities for prescribed fire in a warming climate. *International Journal of Wildland Fire* 29: 764–778.
- * Chin, E. and **J.A. Kupfer**. 2020. Identification of environmental drivers in urban greenway communities. *Urban Forestry & Urban Greening* 47: 126549.
- * Chin, E. and **J.A. Kupfer**. 2019. Prevalence of ecological and societal objectives in greenway master plans. *Southeastern Geographer* 59: 153-171.
- Magilligan, F.J., L.A. James, S.A. Lecce, J.T. Dietrich and **J.A. Kupfer**. 2019. Geomorphic responses to extreme rainfall, catastrophic flooding, and dam failures across an urban to rural landscape. *Annals of the American Association of Geographers* 109: 705-729.
- Gao, P. and **J.A. Kupfer**. 2018. Capitalizing on the wealth of spatial information: An improvement of ecoregionalization using spatial clustering. *Applied Geography* 99: 98-108.
- Meitzen, K.M., **J.A. Kupfer** and P. Gao. 2018. Modeling hydrologic connectivity and virtual fish movement across a large Southeastern floodplain, USA. *Aquatic Sciences* 80: 5. <https://doi.org/10.1007/s00027-017-0555-y>
- Kupfer, J.A.** 2017. Environmental impact of Hurricane Katrina. In: *The Mississippi Encyclopedia*. T. Ownby and C.R. Wilson (ed.), Univ. Press of Mississippi, Oxford, MS.
- Kim, D. and **Kupfer, J.A.** 2016. Tri-variate relationships among vegetation, soil, and topography along gradients of fluvial biogeomorphic succession. *PLoS ONE* 11(9): e0163223. doi:10.1371/journal.pone.0163223

- * Kaase, C.T. and **Kupfer, J.A.** 2016. Sedimentation patterns across a Coastal Plain floodplain: The importance of hydrogeomorphic influences and cross-floodplain connectivity. *Geomorphology* 269: 43-55.
- * Gao, P., **Kupfer, J.A.**, X. Zhu and D. Guo. 2016. Quantifying animal trajectories using spatial aggregation and sequence analysis – A case study of differentiating trajectories of multiple species. *Geographical Analysis* 48: 275-291.
- * Meitzen, K.M. and **Kupfer, J.A.** 2015. Abandoned meander forest development patterns in a large alluvial southeastern floodplain, South Carolina, USA. *River Systems* 21:141-162.
- * Gao, P. and **Kupfer, J.A.** 2015. Uncovering food web structure using a novel trophic similarity measure. *Ecological Informatics* 30: 110–118.
- Kim, D., Costa, C.S.B., DeWitt, T.J., **Kupfer, J.A.**, McEwan, R.W. and Stallins, J.A. 2015. Beyond bivariate correlations: three-block partial least squares illustrated with vegetation, soil, and topography. *Ecosphere* 6:art135. <http://dx.doi.org/10.1890/ES15-0074.1>.
- Kupfer, J.A.**, * Meitzen, K.M. and * Gao, P. 2015. Flooding and surface connectivity of *Taxodium-Nyssa* stands in a southern floodplain forest ecosystem. *River Research and Applications* 31: 1299–1310.
- * Gao, P., **Kupfer, J.A.**, Guo, D and Lei, T.L. 2013. Identifying functionally-connected habitat compartments with a novel regionalization technique. *Landscape Ecology* 28: 1949-1959.
- Kupfer, J.A.** 2012. Landscape ecology and biogeography: Rethinking landscape metrics in a post-FRAGSTATS landscape. *Progress in Physical Geography* 36: 400-420. (* 2013 Henry Cowles Award for Excellence in Publication. *Biogeography Specialty Group, Association of American Geographers*).
- Kupfer, J.A.**, Gao, P., and Guo, D. 2012. Regionalization of forest pattern metrics for the continental United States using contiguity constrained clustering and partitioning. *Ecological Informatics* 9: 11-18.
- * Vaclavik, T.R., **Kupfer, J.A.** and Meentemeyer, R.K. 2012. Accounting for multi-scale spatial autocorrelation improves performance of invasive species distribution modelling (iSDM). *Journal of Biogeography* 39: 42–55.
- Kupfer J.A.** 2011. Theory in landscape ecology and its relevance to biogeography. In: Millington, A, Blumler, M. and Schickhoff, U. (eds) *Handbook of Biogeography*. London: Sage Press, pp. 57-74.
- Kupfer, J.A.** and Gao, P. 2011. Spatial patterns of ecological integrity in South Carolina watersheds. *Southeastern Geographer* 51: 394-410.
- Hart, J.L. and **Kupfer, J.A.** 2011. Sapling richness and composition in canopy gaps of a southern Appalachian mixed *Quercus* forest. *Journal of the Torrey Botanical Society* 138: 207-219.
- Kupfer, J. A.**, * Meitzen, K.M., and * Pipkin, A.R. 2010. Controls of early post-logging successional pathways in a southern floodplain forest. *Forest Ecology and Management* 259: 1880-1889.
- Kupfer, J.A.** and Franklin, S.B. 2009. Linking spatial pattern and ecological responses in human-modified landscapes: The effects of deforestation and forest fragmentation on biodiversity. *Geography Compass* 3: 1331-1355. doi: 0.1111/j.1749-8198.2009.00245.x

- Franklin, S.B., **Kupfer, J.A.**, Pezeshki, S.R., Gentry, R. and Smith, R.D. 2009. Complex effects of channelization and levee construction on west Tennessee floodplain forest function. *Wetlands* 29: 451-464.
- Franklin, S.B., **Kupfer, J.A.**, Pezeshki, S.R., Gentry, R. and Smith, R.D. 2009. Efficacy of the hydrogeomorphic model: A case study from western Tennessee. *Ecological Indicators* 9: 267-283.
- Kupfer, J.A.**, * Glenn, D. and * Sackett, J. 2008. Patterns and controls of hurricane-caused forest damage: A landscape-scale analysis of treefall direction following Hurricane Katrina. *Professional Geographer* 60: 478-494.
- Kupfer, J.A.**, * Myers, A.T., * McLane, S.E. and * Melton, G. 2008. Factors associated with forest damage in a South Mississippi landscape following Hurricane Katrina. *Ecosystems* 11:45-60.
- Farris, C.A., Margolis, E.Q. and **Kupfer, J.A.** 2008. Spatial characteristics of fire severity in relation to fire growth in a Rocky Mountain subalpine forest. In: *Proceedings of the 2002 Fire Conference: Managing Fire and Fuels in the Remaining Wildlands and Open Spaces of the Southwestern United States*. M. Narog (tech. coord.) Gen. Tech. Rep. PSW-GTR-189, Albany, CA: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture.
- Kupfer, J.A.** and Farris, C. 2007. Incorporating spatial non-stationarity of regression coefficients into predictive vegetation models. *Landscape Ecology* 22: 837-852.
- Kupfer, J.A.**, M.A. Roberts, S. Walker, J.L. Pinckney, J.E. Moore, J.M. Quattro and S.B. Franklin. 2007. Ecological impacts and coastal ecosystem resiliency following Hurricane Katrina. *Southeastern Biology* 54: 407-418.
- Malanson, G.P., Wang, Q. and **Kupfer, J.A.** 2007. Ecological processes and spatial patterns before, during and after simulated deforestation. *Ecological Modelling* 202: 397-409.
- * Huang, C., * Geiger, E. and **Kupfer, J.A.** 2006. Sensitivity of landscape metrics to classification scheme. *International Journal of Remote Sensing* 27: 2927-2948.
- Kupfer, J.A.** 2006. National assessments of forest fragmentation patterns in the U.S. *Global Environmental Change – Human and Policy Dimensions* 16: 73-82.
- Kupfer, J.A.**, Malanson, G.P. and Franklin, S.B. 2006. Not seeing the ocean for the islands: The influence of matrix-based processes on forest fragmentation effects. *Global Ecology and Biogeography* 15: 8-20. (* 2007 Henry Cowles Award for Excellence in Publication. *Biogeography Specialty Group, Association of American Geographers*).
- * Kipfmüller, K.F. and **Kupfer, J.A.** 2005. Complexity of successional pathways in subalpine forests of the Selway-Bitterroot Wilderness Area, USA. *Annals of the Association of American Geographers* 95: 495-510.
- Kupfer, J.A.**, * Balmat, J. and * Smith, J.L. 2005. Shifts in the potential distribution of sky island plant communities in response to climate change. In: *Biodiversity and Management of the Madrean Archipelago II: Connecting Mountain Islands and Desert Seas*. Rocky Mountain Research Station, U.S.D.A. Forest Service, Logan, UT., pp. 485-490.
- Kupfer, J.A.** and Emerson, C.W. 2005. Remote sensing. In: *Encyclopedia of Social Measurement, Vol. 3*. Kempf-Leonard, K. (ed.). Academic Press, San Diego, pp. 377-383.

- Kupfer, J.A.** and *Miller, J.D. 2005. Wildfire effects and post-fire responses of an invasive mesquite population: the interactive importance of grazing and non-native herbaceous species invasion. *Journal of Biogeography* 32: 453-466.
- Kupfer, J.A.**, *Webbeking, A.L., and Franklin, S.B. 2004. The effects of landscape structure on plant regeneration patterns and soil characteristics in shifting cultivation fields near Indian Church, Belize. *Agriculture, Ecosystems and Environment* 103: 509-518.
- Franklin, S.B., **Kupfer, J.A.**, Grubaugh, J.W. and Kennedy, M.L. 2004. A multi-taxa analysis of biotic diversity in Natchez Trace State Forest, western Tennessee. *Environmental Monitoring and Assessment* 93: 31-54.
- Franklin, S.B. and **Kupfer, J.A.** 2004. Forest communities of Natchez Trace State Forest, western Tennessee Coastal Plain. *Castanea* 69: 15-29.
- Kupfer, J.A.** and Malanson, G.P. 2004. The biodiversity crisis. In: *WorldMinds: Geographical Perspectives on 100 Problems*. Warf, B., Hansen, K., and Janelle, D. (eds.). Kluwer Academic Publishers, Dordrecht, pp. 273-277.
- Kupfer, J.A.** and Runkle, J.R. 2003. Edge-mediated effects on stand dynamic processes in forest interiors: a coupled field and simulation approach. *Oikos* 101: 135-146.
- Franklin, S.B., **Kupfer, J.A.**, Pezeshki, R., *Scheff, T., *Hanson R., and Gentry, R. 2001. A comparison of hydrology and vegetation between a channelized stream and a non-channelized stream in Western Tennessee. *Physical Geography* 22:254-274.
- Franklin, S.B., **Kupfer, J.A.**, Pezeshki, S.R., van Gestel, N. and Gentry, R.W. 2001. Channelization effects on floodplain functions in western Tennessee. In: *River Basin Management*. Falconer, R.A. and Blain, W.R. (eds.). WIT Press, Southampton, Boston, pp. 189-201.
- Allen, T.R. and **Kupfer, J.A.** 2001. Spectral response and spatial pattern of Fraser fir mortality and regeneration, Great Smoky Mountains. *Plant Ecology* 156: 59-74.
- Kupfer, J.A.** and Franklin, S.B. 2000. Evaluation of an ecological land type classification, Natchez Trace State Forest, West Tennessee, USA. *Landscape and Urban Planning* 49:179-190.
- *Anderson, S.C., **Kupfer, J.A.**, *Wilson, R.R. and Cooper, R.J. 2000. Estimating crown area removed by selection cutting: A linked regression-GIS approach based on stump diameters. *Forest Ecology and Management* 137: 171-177.
- Allen, T.R. and **Kupfer, J.A.** 2000. Application of spherical statistics to change vector analysis of Landsat data: Southern Appalachian spruce-fir forests. *Remote Sensing of Environment* 74: 481-492.
- Kupfer, J.A.** and Kirsch, S.W. 1998. Heterogeneity of forest characteristics in primary and secondary forest stands on the Third Chickasaw Loess Bluff, Tennessee. *Physical Geography* 19: 35-54.
- Kupfer, J.A.**, Malanson, G.P. and Runkle, J.R. 1997. Factors influencing species composition in canopy gaps: The importance of edge proximity in Hueston Woods, Ohio. *Professional Geographer* 49: 165-178.
- Kupfer, J.A.** and Cairns, D.M. 1996. The suitability of montane ecotones as indicators of global climatic change. *Progress in Physical Geography* 20: 253-272.
- Kupfer, J.A.** and Runkle, J.R. 1996. Early gap successional pathways in a beech-maple forest preserve: patterns and determinants. *Journal of Vegetation Science* 7: 247-256.

- * Coleman, D.S. and **Kupfer, J.A.** 1996. Riparian water quality buffers: estimates of effectiveness and minimum width in an agricultural landscape, western Tennessee. *Southeastern Geographer* 36: 113-127.
- * Coleman, D.S. and **Kupfer, J.A.** 1996. Estimates of effectiveness and minimum width of riparian water quality buffers in an agricultural landscape, western Tennessee. In: *Building the Community Through GIS: Proceedings of a Symposium*. Outlaw, J. and Brunson, R. (eds.). Groundwater Institute, University of Memphis, Memphis, TN., pp. 21-34.
- Kupfer, J.A.** 1996. Patterns and determinants of edge vegetation of a Midwestern forest preserve. *Physical Geography* 17: 62-76.
- Kupfer, J.A.** 1995. Landscape ecology and biogeography. *Progress in Physical Geography* 19:18-34.
- Kupfer, J.A.** and Malanson, G.P. 1993. Observed and modeled directional change in riparian forest composition at a cutbank edge. *Landscape Ecology* 8: 185-199.
- Malanson, G.P. and **Kupfer, J.A.** 1993. Simulated fate of leaf litter and large woody debris at a riparian cutbank. *Canadian Journal of Forest Research* 23: 582-590.
- Kupfer, J.A.** and Malanson, G.P. 1993. Structure and composition of a riparian forest edge. *Physical Geography* 14: 154-170.

White Papers, Reports and Book Reviews:

- Kupfer, J.A.** 2017. *Distribution and Status of Champion Trees at Congaree National Park*. Final Report, US Department of the Interior, National Park Service. 141 pp.
- Hodgson, M.E. and **Kupfer, J.A.** 2017. *Geospatial Wetlands Impacts & Mitigation Forecasting Models: A Research Project in Support of Operational Requirements for the South Carolina Department of Transportation*. Final Report, SC DOT. 64 pp.
- Kupfer, J.A.** and Kaase, C.T. 2016. *Magnitude and pattern of floodplain sedimentation in the Bates Fork Tract, Congaree National Park*. Final project report: National Park Service Piedmont-South Atlantic Cooperative Ecosystem Studies Unit (Task Agreement: P11PT50855). 38 pp.
- Kupfer, J.A.**, Meitzen, K., Carbone, G. and Tufford, D. 2016. *Climate Change-Induced Changes in Flow Regime, Floodplain Inundation and Species Habitats at Congaree National Park*. Final project report for the National Park Service, Piedmont-South Atlantic Cooperative Ecosystem Studies Unit (Task Agreement: J5240 10 0011). 168 pp.
- Wilde, S.B., Haynie, R.S., Herrin, J.A., Hook, M.W., **Kupfer, J.A.** and Netherland, M.D. 2013. *Environmental Factors Influencing Blooms of a Neurotoxic Stigonematalan Cyanobacterium Responsible for Avian Vacuolar Myelinopathy*. Technical Report: Environmental Research and Development Center. Aquatic Nuisance Species Research Program. Army COE Technical Report. 13-1. 21 pp.
- Kupfer, J.A.**, Meitzen, K., and Graf, W.L. 2009. *Forest recovery and hydrologic modeling on new park lands*. Final project report: National Park Service Piedmont-South Atlantic Cooperative Ecosystem Studies Unit. 71 pp.
- Cavender-Bares, K., R. O'Malley, N. Christensen, G.T. Bancroft, S.S. Bell, R. Brown, C. Frissell, J. Gross, S. Haines, D. Heagerty, A. Janetos, K.B. Jones, A.J. Jordan, **J.A. Kupfer**, J.A. LaGro, Jr., K. Riitters, G.J. Roloff, E. Thompson, Jr. 2008. *Landscape Pattern Indicators for the Nation*. H. John Heinz III Center for Science, Economics and the Environment, Washington, DC. 108 pp.

- National Commission on Science for Sustainable Forestry (as contributing author). 2007. *Conserving Biodiversity through Sustainable Forestry: A Guide to Applying NCSSF Research*. National Commission on Science for Sustainable Forestry, Washington, DC.
- Balmat, J. and **Kupfer, J.A.** 2004. *Assessment of timber resources and logging history of the Valles Caldera National Preserve*. Final project report: Valles Caldera Trust, Los Alamos, NM. 88 pp.
- Kupfer, J.A.**, Malanson, G.P. and Franklin, S.B. 2004. *Identifying the biodiversity research needs related to forest fragmentation*. National Commission for Science on Sustainable Forestry, Washington, DC. 218 pp.
- Franklin, S.B., **Kupfer, J.A.**, Pezeshki, R., and Gentry, R. 2002. *Forest communities and hydrology of western Tennessee low-gradient riverine wetlands*. Final project report: U.S. Army Corps of Engineers, Waterways Experiment Station. 64 pp.
- Franklin, S.B., **Kupfer, J.A.**, Pezeshki, R., and Gentry, R. 1999. *Forest communities and hydrology of Stokes Creek prior to dechannelization*. Final project report: Tennessee Department of Environment and Conservation. 56 pp.
- Kupfer, J.A.** 1995. Review of *Faith in a Seed* by Henry David Thoreau. *Professional Geographer* 47: 232-234. (Book Review).

Other Publications and Research Products:

- Terando, A.J., Gao, P., **Kupfer, J.A.**, Young, K., and Hiers, J.K., 2025, Climate-fire analog mapping to inform adaptive management strategies for wildland fire in protected areas of the conterminous U.S.: U.S. Geological Survey data release, <https://doi.org/10.5066/P13FFXWV>.
- Kupfer, J.A.** 2023. Data - Prescribed fire in longleaf pine ecosystems: fire managers' perspectives on priorities, constraints, and future prospects [Data set]. Zenodo. <https://doi.org/10.5281/zenodo.10085328>
- Kupfer, J.A.**, Terando, A.J., Gao, P., and Tirpak, B.E. 2021. Historical and future prescribed burn windows for the Southeast United States: U.S. Geological Survey data release, <https://doi.org/10.5066/P95BV7GE>.
- Terando, A.J., **Kupfer, J.A.**, Gao, P., Teske, C., and Hiers, J.K., 2019, Prescribed fire permit records for Georgia and Florida: U.S. Geological Survey data release. <https://doi.org/10.5066/P9YNSQZ2>.
- Carr, E.R., Dinku, T., Giannini, A, **Kupfer, J.** and Mason, S. (contributing authors). 2014. *Assessing Mali's Direction Nationale de la Météorologie Agrometeorological Advisory Program: Preliminary Report on the Climate Science and Farmer Use of Advisories*. Technical report edited by E.R. Carr and prepared for Engility Corp. and U.S. Agency for International Development.
- Kupfer, J.A.** 2006. Effects of Hurricane Katrina on southern Mississippi coastal forests and projected post-hurricane responses: A multi-scale evaluation. In: *Coastal Resiliency Information Systems Initiative for the Southeast (CRISIS): Showcasing University of South Carolina Hurricane Katrina Research Projects*. Univ. of South Carolina, Columbia, SC, pp. 24-25.
- Kupfer, J.A.** 2005. President's Column: Confessions of a Generalist Living in a Specialists' World. *The Biogeographer* (online, *Newsletter of the Biogeography Specialty Group of the Association of American Geographers*)

Kupfer, J.A. 2004. President's Column: The Diversification of U.S. Doctoral Programs in Biogeography. *The Biogeographer* (online, *Newsletter of the Biogeography Specialty Group of the Association of American Geographers*)

Kupfer, J.A. 2003. President's Column: Directions of the BSG and Biogeography in America. *The Biogeographer* (online, *Newsletter of the Biogeography Specialty Group of the Association of American Geographers*).

Grants and Contracts:

External Grants and Funding Received:

Southeastern Crescent Regional Commission. 2026-2028. (J. Fleming et al.). Lanterns in the Wild: An economic development strategy for firefly tourism. \$325,056.

US Department of the Interior, National Climate Adaptation Science Center. 2025-2027. Social-ecological vulnerability in human communities surrounding large protected areas in the Southeast. (**J.A. Kupfer**, P. Armsworth, and R.D. Hardy). \$176,938.

National Science Foundation (Biological Oceanography). 2024-2028 Collaborative research: The benthic microalgal subsidy in estuarine ecosystems. (J. Pinckney, E. Smith, E. Knotts, and **J. Kupfer**). \$1,003,575.

US Geological Survey. 2023-2028. A Proposal to Host the USGS Southeast Climate Adaptation Science Center. (USC Component of Larger Consortium Grant: **J.A. Kupfer**, R.D. Hardy, M. Barra). \$162,899.

US Department of the Interior, Southeast Climate Adaptation Science Center. 2022. Managing fire in longleaf pine ecosystems: Current constraints and longer-term challenges of landscape transformation and anthropogenic climate change. (**J.A. Kupfer**, K. Dow, J.K. Hiers, K. Lackstrom, P. Gao, and A.J. Terando). \$73,346.

US Department of the Interior, Southeast Climate Adaptation Science Center. 2020-2022. Development of an early warning system to identify changing prescribed burn opportunities across Southeast US fire-adapted habitats. (J.A. Collazo, A.J. Terando, J.K. Hiers, **J.A. Kupfer**, B. Reich.). \$199,018.

US Department of the Interior, Southeast Climate Science Center. 2015-2019. Conservation adaptation planning for landscape and climate changes in the Southeast. (N. Peterson, K. Dow, N. Edelson, **J. Kupfer**, K. Lackstrom, B. Stein, A. Terando.) \$1.02 million.

National Science Foundation. 2016-2017. RAPID: Patterns of fluvial sedimentation and geomorphic change following an extreme flood event. (L.A. James, **J. Kupfer**, S. Lecce, and F. Magilligan). \$49,341.

South Carolina Department of Transportation. 2014-2016. A GIS-based mitigation forecasting tool and study on advanced mitigation processes used by DOTs. (M. Hodgson and **J. Kupfer**). \$402,822

US Department of the Interior, National Park Service. 2012-2016. Assessment of the distribution and status of champion trees at Congaree National Park. (**J. Kupfer**, J. Grego and M. Hodgson). \$23,500.

US Department of the Interior, National Park Service. 2012-2014. Magnitude and Pattern of Floodplain Sedimentation in the Bates Fork Tract, Congaree National Park (**J. Kupfer**). \$25,000.

US Department of the Interior, National Park Service. 2010-2015. Climate change-induced changes in flow regime, floodplain inundation and species habitats at Congaree National Park. (**J. Kupfer**, D. Tufford, G. Carbone and K. Meitzen). \$406,000.

- US Department of the Interior, National Park Service. 2008-2010. Fire-environment interactions in Great Basin shrub-steppe communities across an ecotonal gradient in Lava Beds National Monument. (C. Farris and **J. Kupfer**). \$40,000.
- US Department of the Interior, National Park Service. 2006-2007. Forest recovery and hydrologic modeling on new park lands at Congaree National Park. (**J. Kupfer** and W.L. Graf). \$42,280.
- Arizona Technology and Research Initiative Fund. 2004-2005. Patterns of hydrologic connectivity on a desert riparian landscape. (E. Glenn, **J. Kupfer**, D. Meko and K. Morino). \$58,000
- US Department of the Interior, National Park Service. 2004. Vegetation History along the Western Margin of the Sonoran Desert, SE California, U.S. and N. Baja California, Mexico. (J. Betancourt and **J. Kupfer**). \$10,000.
- US Department of the Interior, National Park Service. 2004. Historical Land Use Maps of the Upper Santa Cruz River. (**J. Kupfer**). \$2,400.
- Valles Caldera Trust. 2002-2004. Inventory and Monitoring at Valles Caldera National Preserve: Forest stand attributes and disturbance history. (**J. Kupfer**). \$38,900.
- National Commission on Science for Sustainable Forestry. 2002-2003. Identifying Biodiversity Research Needs Related to Forest Fragmentation (**J. Kupfer**, G. Malanson, and S. Franklin). \$65,000.
- International Arid Lands Consortium. 2001-2003. Restoration of semi-desert grasslands invaded by exotic lovegrasses. (**J. Kupfer**). \$72,160.
- U.S. Army Engineers, Waterways Experiment Station, Environmental Laboratory. 1999-2001. Floodplain dynamics of West Tennessee rivers and streams -- Phase II (S.B. Franklin, **J. Kupfer**, R. Pezeshki, and R. Gentry). \$94,000.
- Tennessee Valley Authority. 1999-2000. Restoration of a Shortleaf Pine forest, Land Between the Lakes, Tennessee (S.B. Franklin and **J. Kupfer**). \$30,000.
- National Science Foundation, Directorate for Social and Behavioral Sciences. 1998-2000. Coupling field, remote sensing and modeling techniques to examine processes at the deciduous-coniferous ecotone in Great Smoky Mountains National Park (**J. Kupfer**, D.M. Cairns and T.R. Allen). \$50,000.
- U.S. Army Engineers, Waterways Experiment Station, Environmental Laboratory. 1998-1999. Floodplain dynamics of West Tennessee rivers and streams -- Phase I (S.B. Franklin, **J. Kupfer**, R. Pezeshki, and J. Smith). \$65,000.
- Tennessee Department of Environment and Conservation, Natural Heritage Division. 1997-1998. An assessment of biotic diversity at Natchez Trace State Forest (S.B. Franklin, **J. Kupfer**, J. Grubaugh, M. Kennedy and D. Fung). \$20,000.
- Tennessee Department of Environment and Conservation. 1997-1998. Forest communities and hydrology of Stokes Creek prior to dechannelization. (S.B. Franklin, **J. Kupfer**, R. Pezeshki, and J.W. Smith). \$10,464.
- Association of American Geographers, Biogeography Specialty Group, Dissertation Enhancement Grant. 1992. Effects of Edge Vegetation on Interior Gap Successional Processes. (**J. Kupfer**) \$500.

Internal Grants and Funding Received:

- ASPIRE: Advanced Support for Innovative Research Excellence, Office of the Vice President for Research, Univ. of South Carolina. 2020-2022. Rapid estimation of visitation activities in U.S. National Parks by mining Big Social Media Data (Z. Li and **J.A. Kupfer**). \$14,846.
- Research Engagement Collaborative, Office of the Provost, Univ. of South Carolina. 2015. Coastal Health, Sustainability, and Adaptation (K. Dow et al.). \$23,417.
- Social Sciences Grant Program, Office of the Provost, Univ. of South Carolina. 2010-2011. Connecting livelihoods to the biophysical impacts of forest incursion. (E.R. Carr and **J.A. Kupfer**). \$19,962.
- Research Assistantships Program. USC Graduate School. 2008-2009. Patterns of ecological integrity in Southeastern riparian systems. (**J.A. Kupfer**). \$6,000.
- Research and Productive Scholarship Program, Office of Research, Univ. of South Carolina. 2006-2007. Forest regeneration patterns following logging of bottomland hardwood forests in Congaree National Park. (**J.A. Kupfer** and J. Grego) \$18,000.
- Coastal Resiliency Information Systems Initiative for the Southeast (CRISIS): Rapid Response Research on Social and Environmental Dimensions of Hurricane Katrina, Office of Research, Univ. of South Carolina. 2005-2006. Effects of Hurricane Katrina on southern Mississippi coastal forests and projected post-hurricane responses: A multi-scale evaluation. (**J.A. Kupfer**) \$25,000.
- Univ. of Arizona, Social and Behavioral Sciences Research Institute, GIS Assistance Grant. 2004. Perceptual boundaries between human and wildlife spaces and their changes due to drought, Tucson, AZ. (**J.A. Kupfer** and S.L. Simpson) \$2500.
- Univ. of Arizona, Social and Behavioral Sciences Research Institute, Faculty Summer Research Grant Development Award. 2000. \$4000.
- Univ. of Arizona, Social and Behavioral Sciences Research Institute, Mini-Grant Program. 1999. Insect-induced changes in spruce-fir ecosystem patterns at Great Smoky Mountains National Park: An Application of Spherical Statistics to Change Vector Analysis. \$750.
- Univ. of Memphis, Faculty Research Grant. 1999. Spatio-temporal dynamics of *milpa* recovery near the Lamanai Archeological Reserve, Belize (S.B. Franklin and **J. Kupfer**). \$4,000.
- Univ. of Memphis, Graduate College and College of Arts Sciences. 1999. Spatio-temporal dynamics of *milpa* recovery near the Lamanai Archeological Reserve, Belize (S.B. Franklin and **J. Kupfer**). \$1,500.
- Univ. of Memphis, Vice-President for Research. 1998. Funding for co-sponsorship of symposium, *Ecology and Management of Bottomland Hardwood Ecosystems: The state of our understanding*. (**J. Kupfer**, K. Maier, J. Grubaugh, and S. Franklin). \$500.
- Univ. of Memphis, Faculty Research Grant. 1995. Modeling the response of a mid-South forest community to projected global warming (**J. Kupfer** and S.W. Kirsch). \$4,000.

Undergraduate Research Grants:

- Magellan Scholars Program, Office of Undergraduate Research, Univ. of South Carolina. 2020-2021. Improving conservation planning for the Congaree Biosphere Reserve. (**J.A. Kupfer**, L. Hutchens, and P. Gao). \$2750.

Magellan Scholars Program, Office of Undergraduate Research, Univ. of South Carolina. 2016-2017. Biogeographic Analysis of Fish Communities in Congaree National Park Using a Remotely Operated Vehicle. (**J.A. Kupfer**, W.J. Jones and J. Fleming). \$3000.

Magellan Scholars Program, Office of Undergraduate Research, Univ. of South Carolina. 2011-2012. Detecting Floodplain Microtopography and Sediment Flux Using Terrestrial Laser Scanning. (**J.A. Kupfer** and S. Bryant). \$3000.

Magellan Scholars Program, Office of Undergraduate Research, Univ. of South Carolina. 2009. Environmental controls of steppe-forest transitions in Lava Beds National Monument. (**J.A. Kupfer** and I. Johnson). \$3,000.

Magellan Voyagers Program, Office of Undergraduate Research, Univ. of South Carolina. 2007. The role of soils in shaping the course of secondary succession on logged areas at Congaree National Park. (**J.A. Kupfer** and A. Pipkin). \$500.

Magellan Scholars Program, Office of Undergraduate Research, Univ. of South Carolina. 2007-2008. The role of soils in shaping the course of secondary succession on logged areas at Congaree National Park. (**J.A. Kupfer** and A. Pipkin). \$3,000.

Presentations:

Invited Colloquia and Presentations:

The future of prescribed burning in the Southeast: Adapting to constraints imposed by climate and landscape change. Hazards and Vulnerability Resilience Institute, University of South Carolina. October 2025.

Changing climates, changing fires: How climate change could affect prescribed fire management in southeastern forests. (J.A. Kupfer) Clemson Univ., Dept. of Forestry and Environmental Conservation Colloquium, February 2024.

Spatial patterns of conservation benefits, priorities, and barriers in the Congaree Biosphere Region. (J.A. Kupfer) 2024 Congaree National Park Research Symposium, February 2024.

Changing climates, changing fires: How climate change could affect prescribed fire management in southern forests. (J.A. Kupfer) Southeastern Association of Fish and Wildlife Agencies Wildlife Diversity Committee, August 2023.

Managing fire in changing Southeastern landscapes (J. Kupfer). Texas A&M Univ., Dept. of Geography Colloquium, October 2022.

Projecting potential fire regimes under climate change in the Southeast. (J.K. Hiers, J.A. Kupfer, and A.J. Terando; presented by J.K. Hiers) Southeast Climate Adaptation Science Symposium. September 2022.

Prescribed fire in longleaf pine ecosystems: Fire managers' perspectives on priorities, constraints, and future prospects. (K. Lackstrom, J.A. Kupfer, J.M. Grego, K. Dow, A.J. Terando, and J.K. Hiers; presented by K. Lackstrom). Southeast Climate Adaptation Science Symposium. September 2022.

Implications of 21st century climate change for prescribed burning in the Southeast. Georgia Prescribed Fire Council Meeting. Sep. 30, 2021.

Implications of 21st century climate change for prescribed burning in the Southeast. Univ. of South Carolina, Dept. of Geography Colloquium, Sep. 17, 2021.

Perspectives on prescribed fire management in longleaf pine ecosystems. Third Thursday Web Forum: South Atlantic Landscape Conservation Cooperative / Southeast Climate Adaptation Science Center (SE CASC). July 16, 2020.

Recent progress on the Southeast Conservation Adaptation Strategy (SECAS):
 Implications of future climate change for managing fire in the Southeast.
 Southeastern Association of Wildlife and Fisheries Managers. Oct. 27, 2020.

Managing fire in longleaf pine ecosystems in the context of anthropogenic climate
 change and landscape transformation. Southeast Climate Adaptation Science Center
 Regional Science Symposium. New Orleans, LA. Nov. 14, 2019.

Climate change projected to reduce prescribed burning opportunities in the southeastern
 US (J.K. Hiers, J.A. Kupfer, A.J. Terando, P. Gao, C. Teske) Southeast Climate
 Adaptation Science Center Regional Science Symposium. New Orleans, LA. Nov.
 14, 2019.

Long-term Management of the Spirit Lake / Toutle River System. U.S. Naval Academy
 Alumni Association of the Midlands. 2018.

The potential of National Parks in promoting geographic literacy. Geofest 52. Univ. of
 South Carolina (invited keynote speaker). 2016.

Understanding patterns of lateral hydrological connectivity in southern floodplain
 ecosystems. Dept. of Geography, Univ. of Alabama. 2014.

Climate, hydrology and flood inundation patterns at Congaree National Park. National
 Park Service Climate Smart Parks Workshop, Congaree National Park. 2014.

There are no 1's or 0's in "Landscape": Conceptualizing and quantifying landscape mosaics
 for biodiversity conservation. Ellen Churchill Semple Lecture, Univ. of Kentucky. 2014.

Climate-change induced variations in flow regime, floodplain inundation and species
 habitats at Congaree National Park. Congaree National Park. 2013.

Advancing riverscape ecology: Connectivity, crevasses and creek chubs. Dept. of
 Geography, Virginia Tech, Blacksburg, VA. 2012.

Modeling flood inundation & hydrological connectivity across the Congaree River
 floodplain, Congaree National Park. Piedmont-South Atlantic Coast CESU Annual
 Meeting, Charleston, SC. 2012. (with K.M. Meitzen).

The role of fire-environment interactions in controlling shrub-steppe vegetation patterns
 in Lava Beds National Monument. Lava Beds National Monument. 2011.

Linking floodplain inundation modeling to ecosystem patterns and processes in southern
 floodplain forests. Dept of Geography, East Carolina University. 2010.

Hydrogeomorphic controls of early post-logging successional pathways in a southern
 floodplain forest. Piedmont-South Atlantic Coast CESU Annual Meeting, Orange
 Beach, AL. 2009.

Putting the 'spatial' into spatial distribution modeling: Advances and applications in
 predictive species models. Center for Applied GIS, UNC-Charlotte. 2008.

Early post-logging succession on the Bates Fork Tract, Congaree National Park.
 Congaree National Park Science Symposium, Columbia, SC. 2008.

Coastal forest vulnerability and responses to hurricane damage: Lessons from Katrina.
 USGS Northern Gulf of Mexico Land Cover Characterization Workshop, November
 14-16th, New Orleans, LA. 2007.

Putting the 'spatial' into spatial distribution modeling: Incorporating spatial non-
 stationarity into predictive vegetation models. Plant Biology Seminar, Dept. of
 Biology, Univ. of South Carolina. 2007.

Patterns and controls of forest damage following Hurricane Katrina in DeSoto National Forest, Mississippi. Invited Symposium Speaker: Annual Meeting of the Association of Southeastern Biologists, Columbia, SC. 2007.

Trees, models and a bald guy: Predicting spatial patterns of ecological phenomena over heterogeneous landscapes. Environmental Brownbag Series, Dept. of Geography, Univ. of South Carolina. 2006.

Ecological responses to climate change and variability in the Southwest: Issues of temporal and spatial scale. Invited Symposium Speaker: Climate Variability and Ecosystem Impacts in Southwest Forests and Woodlands Workshop, Sedona, AZ. 2005.

National assessments of forest fragmentation. Dept. of Political Science and Geography, Old Dominion University. 2005.

Effects of Hurricane Katrina on southern Mississippi coastal forests and projected post-hurricane responses: A multi-scale evaluation. Dept. of Geography, Univ. of South Carolina. 2005.

Not seeing the ocean for the islands: Spatial heterogeneity and forest fragmentation effects. Institute for the Study of Planet Earth and Udall Center for Studies in Public Policy (co-sponsored), Univ. of Arizona. 2005.

Invasive Grass Species in Southern Arizona Rangelands: Ecosystem Effects, Spatial Constraints and Management Implications. Dept. of Geography, Univ. of South Carolina. 2004.

Johannes Warming, Henry Gleason and Mr. Spock: Lessons for understanding the effects of landscape structure on plant regeneration patterns and soil characteristics near Indian Church, Belize. Dept. of Biology, Carleton University. 2002.

Ecosystem effects and management of desert grasslands invaded by African lovegrasses. Arid Lands Resource Sciences, Univ. of Arizona. 2001.

Johannes Warming, Henry Gleason and Mr. Spock: Lessons for understanding the effects of landscape structure on plant regeneration patterns and soil characteristics near Indian Church, Belize. School of Renewable Natural Resources, Univ. of Arizona. 2001.

Spatial aspects of mortality and regeneration in southern Appalachian Fraser fir ecosystems following an exotic insect outbreak. Laboratory of Tree Ring Research, Univ. of Arizona. 2000.

Vegetation dynamics and (not so) shifting cultivation near Lamanai Archeological Reserve, Indian Church, Belize. Dept. of Geography and Regional Development, Univ. of Arizona. 2000.

Environmental and spatial aspects of forest dynamics in an Ohio nature preserve. John Treacy Memorial Lecture, Dept. of Geography, University of Wisconsin-Madison. 2000.

Threats to high elevation spruce-fir forests in Great Smoky Mountains National Park. Brown bag discussion series. Dept. of Geography, University of Wisconsin-Madison. 2000.

Spatial aspects of forest succession in a beech-maple forest reserve. Dept. of Geography, Arizona State University. 1999.

Landscape ecological aspects of gap succession in an Ohio beech-maple preserve. Dept. of Geography, Texas A&M University. 1997.

(De)Channelization effects in West Tennessee. Geography Awareness Week Series, Dept. of Geography, University of Memphis. 1997.

Modeling the effects of global climate change on forest communities in West Tennessee. Department of Geography and Planning, University of Memphis. 1996.

Early gap successional pathways in Hueston Woods: The effects of environment and spatial relations. Department of Biology, University of Memphis. 1995.

The effects of edge vegetation on interior gap successional processes Department of Geography, University of Utah. 1994.

Contributed Presentations at Conferences: (presenter in bold)

Long-term, large-scale human influences on the spatial and functional persistence of a threatened pine savanna ecosystem (**J. Kupfer**, L. Hutchens, G. Sanchez). IALE-North America Annual Meeting, Athens, GA, April 2026.

A Tribute to the life and legacy of Dr. George P. Malanson. (**J. Kupfer**). Annual Meeting of the American Association of Geographers, Honolulu, HI, April 2024.

Quantification of dune vegetation and wrack patterns using grid-based landscape metrics analysis in coastal South Carolina. (**Y. Kim**, J.T., Ellis and J. Kupfer). Annual Meeting of the American Geophysical Union, Washington, DC, December 2024.

Mapping the distribution of *Phragmites australis* on the Santee Coastal Reserve using high-resolution aerial imagery (**C. Lewis**, T. Arrington, D. Porter, J. Kupfer). Annual Meeting of the Southeastern Division of the Association of American Geographers, Nov. 2024.

Using climate-fire analog mapping to inform adaptive management strategies for wildland fire in protected areas of the conterminous US (**J.A. Kupfer**, A.J. Terando, P. Gao, K. Young, and J.K. Hiers. Annual Meeting of the Southeastern Division of the Association of American Geographers, Nov. 2024.

Long-term, large-scale human influences on the spatial and functional persistence of a threatened pine savanna ecosystem (**J. Kupfer**, L. Hutchens, P. Gao, G. Sanchez). Annual Meeting of the American Association of Geographers, Honolulu, HI, April 2024.

Application of grid-based landscape metrics approach for coastal dune vegetation and wrack pattern analysis (**Y. Kim**, J.T., Ellis and J. Kupfer). Annual Meeting of the American Association of Geographers, Honolulu, HI, April 2024.

Long-term, large-scale human influences on the spatial and functional persistence of a threatened pine savanna ecosystem (**J. Kupfer**, L. Hutchens, P. Gao, G. Sanchez). Annual Meeting of the Southeastern Division of the Association of American Geographers, Nov. 2023.

Using mobile device data to track the effects of the COVID-19 pandemic on spatiotemporal patterns of National Park Visitation (**J. Kupfer**, Z. Li, H. Ning and X. Huang. Annual Meeting of the Southeastern Division of the Association of American Geographers, Nov. 2022.

Spatiotemporal changes in visitation to U.S. national parks and associated social inequity: A big data approach. (**J. Lu**, X. Huang, J.A. Kupfer, X. Xiao, Z. Li, H. Wei, S. Wang and L. Zhu.). Annual Meeting of the American Association of Geographers, March 2022.

Predicting migratory phenologies: The power of time-stepped species distribution models. (**M.C. Handmaker**, L. Puleo, J.A. Linscott, J.A. Kupfer, F.J. Sanders, J.G. Navedo, J. Ruiz, B.M. Ballard, M.D. Weegman, and N.R. Senner). On the Wings of Recovery: Annual Meeting of the American Ornithological Society. June/July 2022.

Case studies of advancing application of new science to address changing prescribed fire management opportunities: The role of partnerships and boundary organizations in the Southeast. (**J. Kupfer**) 9th International Fire Ecology and Management Congress, Dec. 3, 2021.

Improving Conservation Planning for the Congaree Biosphere Reserve. (**L. Hutchens** and J. Kupfer). Discover UofSC, April 23, 2021.

The Impact of COVID-19 on U.S. National Park Visitation. (**Z. Ashroff**, M. Teumer, and J.A. Kupfer). Discover UofSC, April 23, 2021.

Managing prescribed fires in longleaf pine ecosystems: Current constraints and future prospects. (**J. Kupfer**). 13th Biennial Longleaf Pine Conference - Longleaf: The Resilient Landscape. Oct. 21, 2020.

Improving Conservation Planning for the Congaree Biosphere Reserve. (**L. Hutchens** and J. Kupfer). SEDAAAG, Annual Meeting. Nov. 7, 2020.

Managing fire in longleaf pine ecosystems in the context of anthropogenic climate change and landscape transformation (**J. Kupfer**, J.K. Hiers, K. Dow, A. Terando, K. Lackstrom). Annual Meeting, Southeastern Division of the American Association of Geographers, Wilmington, NC. 2019.

Impacts of Projected Landscape Transformation on Conservation Corridors in the Southeastern U.S. (**P. Gao**, J. Kupfer, D. Van Berkel and A. Terando.) Annual Symposium of the U.S. Regional Association of the International Association for Landscape Ecology, Chicago, IL. 2018.

The evolving nature of riparian landscape ecology. (**J.A. Kupfer**) Annual Meeting of the American Association of Geographers, Chicago, IL. 2018.

Projecting future climate change and landscape transformation in the Southeast in support of long range conservation planning. (**A. Terando**, J. Kupfer, P. Gao, D. Van Berkel, N. Tarr and J. Costanza). Annual Meeting of the Southeastern Association of Fish and Wildlife Agencies. Louisville, KY. 2017.

The evolving nature of riparian landscape ecology. (**J.A. Kupfer**) Annual Symposium of the U.S. Regional Association of the International Association for Landscape Ecology, Baltimore, MD. 2017.

Ecological functions of urban multiple-use greenways in Raleigh, NC. (**E. Chin** and J. Kupfer). Annual Meeting of the U.S. Regional Association of the International Association for Landscape Ecology. Baltimore, MD. 2017.

A Model for forecasting transportation-related wetland impacts. (**M.E. Hodgson**, **S.E. Piovan**, H. Xu, J. Kupfer, C. Long and T. Creed. GIForum 2016, Salzburg, Austria. 2016.

The velocity of regional global change: Are climate resilient landscapes also resilient to land use change? (**A. Terando**, **A.**, J. Kupfer, P. Gao and B. Stein). 70th Annual Conference of the Southeastern Association of Fish & Wildlife Agencies. New Orleans, LA. 2016.

SECAS vital futures exploration of climate and land use velocity. (**A. Terando**, J. Kupfer, P. Gao). USGS webinar – September 30, 2016.

Tri-variate relationships among vegetation, soil, and topography along the gradient of fluvial biogeomorphic succession. (**D. Kim** and J. Kupfer). Annual Meeting of the Association of American Geographers, San Francisco, CA. 2016.

Assessing the effects of climate variability on lateral hydrological connectivity of *Taxodium-Nyssa* ecosystems. (**J. Kupfer**, K.M. Meitzen and P. Gao). Quadrennial World Congress of the International Association for Landscape Ecology, Portland, OR. 2015.

Patterns of sediment accumulation and characteristics across a Coastal Plain floodplain: the importance of hydrogeomorphic influences and cross-floodplain connectivity. (**C. Kaase** and J. Kupfer). Quadrennial World Congress of the International Association for Landscape Ecology, Portland, OR. 2015.

- Patterns of sediment accumulation and characteristics across a Coastal Plain floodplain: the importance of hydrogeomorphic influences and cross-floodplain connectivity. (**C. Kaase** and J. Kupfer). Society of Wetland Scientists, Providence, RI. 2015.
- Patterns of sediment accumulation and characteristics across a Coastal Plain floodplain: the importance of hydrogeomorphic influences and cross-floodplain connectivity. (**C. Kaase** and J. Kupfer). Annual Meeting of the Association of American Geographers, Chicago, IL. 2015.
- Impacts of clear-cut logging on floodplain sediment characteristics in a southeastern Coastal Plain bottomland hardwood forest. (**C. Kaase** and J. Kupfer). Annual Meeting of the Ecological Society of America, Sacramento, CA. 2014
- Connectivity in aquatic and riparian landscapes: A Southeastern perspective (**J. Kupfer**). Annual Meeting of the Association of American Geographers, Tampa, FL. (invited participant as part of 'The Natural and Human Structuring of Rivers and other Geomorphic Systems IV: A Special Session in Honor of Will Graf'). 2014
- Influences on sedimentation patterns in a southeastern floodplain forest, Congaree National Park, South Carolina. (**C. Kaase** and J. Kupfer). Annual Meeting of the Association of American Geographers, Tampa, FL. 2014
- Regionalization of white-tailed deer movement patterns using high resolution telemetry data. (**P. Gao**, J.A. Kupfer, S.K. Hasapes, Z. Xi and D. Guo). Annual Symposium of the U.S. Regional Association of the International Association for Landscape Ecology, Austin, TX. 2013.
- Assessing and visualizing floodplain connectivity through the use of network and circuit theory. (**J.A. Kupfer**, K.M. Meitzen, and P. Gao) Annual Symposium of the U.S. Regional Association of International Association for Landscape Ecology, Austin, TX. 2013.
- Hydrogeomorphic influences on sedimentation patterns in a Southeastern floodplain forest . (**C. Kaase** and J. Kupfer). Annual Meeting of the Southeastern Division of the Association of American Geographers, Roanoke, VA. 2013.
- Sensitivity of floodplain connectivity to variations in stream flow at Congaree National Park. (**J.A. Kupfer** and K.M. Meitzen). Riparian Ecosystems: Advancing Science, Economics and Policy. American Water Resources Association. Denver, CO. 2012.
- Effects of forest type and management history on downed woody material and leaf litter in a managed southeastern pine and hardwood forest. (**C. Strachan**, C. Kaase and J.A. Kupfer). Annual Meeting, Southeastern Division of the Association of American Geographers, Asheville, NC. (*poster*) 2012.
- Flooding and surface connectivity of abandoned channel waterbodies in a southern floodplain forest system. (**J.A. Kupfer**, K.M. Meitzen, and P. Gao) Annual Meeting, Southeastern Division of the Association of American Geographers, Asheville, NC. 2012.
- Modeling flood inundation & hydrological connectivity across the Congaree River floodplain, Congaree National Park. (**J.A. Kupfer** and K.M. Meitzen). South Carolina Water Resources Conference. Columbia, SC. 2012.
- Identifying functionally-connected habitat compartments with a novel regionalization technique (**P. Gao**, J.A. Kupfer and D. Guo). Annual Symposium of the U.S. Regional Association of the International Association for Landscape Ecology, Newport, RI. 2012.
- Effects of environmental conditions on fish community structure. (**J. Leisen** and J. Kupfer). Annual Meeting, Southeastern Division of the Association of American Geographers, Savannah, GA. 2011.

- Modeling vegetation cover to predict greater sage-grouse nesting habitat in Lava Beds National Monument. (**W. Stangler** and J. Kupfer). Annual Symposium of the U.S. Regional Association of the International Association for Landscape Ecology, Portland. 2011.
- Accounting for multi-scale spatial autocorrelation improves performance of invasive species distribution modeling (iSDM). (**T. Vaclavik**, J. Kupfer, and R. Meentemeyer). Annual Symposium of the U.S. Regional Association of the International Association for Landscape Ecology, Portland, OR. 2011.
- Post-fire successional patterns and dynamics across the grassland-woodland ecotone in a Great Basin shrub-steppe landscape mosaic. (**J. Roberson**, J. Kupfer and C. Farris). Annual Symposium of the U.S. Regional Association of the International Association for Landscape Ecology, Portland, OR. 2011.
- Accounting for multi-scale spatial autocorrelation improves performance of invasive species distribution modeling (iSDM). (**T. Vaclavik**, J. Kupfer, and R. Meentemeyer). Annual Symposium of the U.S. Regional Association of the International Association for Landscape Ecology, Portland, OR. 2011.
- Regionalization of national forest fragmentation patterns using contiguity constrained clustering and partitioning. (**J.A. Kupfer**, D. Guo and P. Gao). Annual Meeting of the Association of American Geographers, Washington, DC. 2010.
- Investigations of the seasonality of avian vacuolar myelinopathy on J. Strom Thurmond Lake, a Monomictic Reservoir. (**J.A. Herrin**, M.W. Hook, J.A. Kupfer, S.B. Wilde, R.S. Haynie and S.M. Robertson). Annual Meeting of the Aquatic Plant Management Society, Bonita Springs, FL. 2010.
- The role of fire-environment interactions in controlling vegetation patterns in a Great Basin shrub-steppe ecosystem. (**J.L. Roberson**, J.A. Kupfer and C.A. Farris). Annual Meeting of the Association of American Geographers, Washington, DC. 2010.
- Regionalization of national forest fragmentation patterns using contiguity constrained clustering and partitioning. (**J.A. Kupfer**, D. Guo and P. Gao). Annual Symposium of the U.S. Regional Association of the International Association for Landscape Ecology, Athens, GA. 2010.
- Advances in species distribution modeling: Applications in applied biogeographic research (**J.A. Kupfer**), Annual Meeting, Southeastern Division of the Association of American Geographers, Greensboro, NC. 2009.
- Hydrogeomorphic controls of early post-logging successional pathways in a southern floodplain forest (**J.A. Kupfer**, K. Meitzen, and A.R. Pipkin). Binghamton Geomorphology Symposium, Blacksburg, VA. (refereed poster). 2009.
- Local contingencies and hydrogeomorphic responses to channel modifications in West Tennessee floodplain ecosystems (**J.A. Kupfer** and S.B. Franklin), Annual Meeting of the Association of American Geographers, Las Vegas, NV. 2009.
- A flexible indicator-based approach to assessing the ecological integrity of South Carolina watersheds. (**P. Gao** and J.A. Kupfer), Annual Meeting of the Association of American Geographers, Las Vegas, NV. 2009.
- Assessing watershed integrity with a flexible indicator-based approach. (**J.A. Kupfer** and P. Gao). Annual Meeting, Southeastern Division of the Association of American Geographers, Greensboro, NC. 2008.

- A flexible indicator-based approach to assessing the ecological integrity of South Carolina watersheds. (**J.A. Kupfer** and P. Gao). South Carolina Water Resources Conference, Charleston, SC. 2008
- Post-disturbance regeneration in southeastern floodplain forests: Implications of environmental variability on successional pathways. (**J.A. Kupfer**, K. Meitzen, A. Pipkin). Annual Meeting of the Association of American Geographers, Boston, MA. 2008.
- Climate change and species distribution modeling in the eastern United States. (**S. Dunham** and J.A. Kupfer) Annual Meeting of the Association of American Geographers, Boston, MA. 2008.
- Bird species prediction modeling: A comparison of multiple modeling techniques at Francis Marion National Forest in South Carolina. (**J. Roberson** and J.A. Kupfer). Annual Meeting of the Association of American Geographers, Boston, MA. 2008.
- Complex effects of channelization and leveeing on Western Tennessee floodplain forest structure, composition and function. (**Franklin, S.B.**, Kupfer, J.A., Pezeshki, S.R., Gentry, R. and Smith, R.D. Floodplain Ecosystem Symposium: The Restoration and Management of Floodplain Ecosystems of the Southeast. Little Rock, AR. 2008. (refereed)
- Patterns and controls of forest damage caused by Hurricane Katrina in a Southern Mississippi landscape. (**J.A. Kupfer**). Annual Meeting, Southeastern Division of the Association of American Geographers, Charleston, SC. 2007.
- The roles of elevation, soils and microtopography in shaping the course of secondary succession on logged areas acquired by Congaree National Park (**A.L. Pipkin** and J.A. Kupfer). Annual Meeting, Southeastern Division of the Association of American Geographers, Charleston, SC. 2007.
- Early successional patterns on recently logged areas at Congaree National Park. (**J. Roberson**, J.A. Kupfer, A.L. Pipkin and K. Meitzen). Annual Meeting of the Association of American Geographers, San Francisco, CA. 2007.
- Effects of Hurricane Katrina on Southern Mississippi Coastal Forest soil and water chemistry. (**J.E. Moore**, J.A. Kupfer, S. Pierce and S.B. Franklin). Annual Meeting of the Association of Southeastern Biologists, Columbia, SC. 2007.
- Analysis of blowdown directionality from Hurricane Katrina across Southeastern Mississippi. (**D.A. Glenn**, J.P. Sackett and J.A. Kupfer). Annual Meeting, Southeastern Division of the Association of American Geographers. Morgantown, WV. 2006.
- Implementation of regional and national landscape pattern and fragmentation indicators in the U.S. (**J.A. Kupfer**). Patterns and Processes in Forest Landscapes: Consequences of Human Management, International Union of Forest Research Organizations, Locorotondo, Italy. 2006.
- Incorporating spatial non-stationarity into predictive vegetation modeling: The use of geographically-weighted regression to model montane Ponderosa pine abundance (**J.A. Kupfer** and C. Farris). Annual Meeting of the Association of American Geographers, Chicago, IL. 2006.
- The *State of the Nation's Ecosystems*: The indicator landscape (**K. Cavender-Bares**, R. O'Malley, N. Christensen, G.T. Bancroft, S.S. Bell, R. Brown, C. Frissell, J. Gross, S. Haines, D. Heagerty, A. Janetos, K.B. Jones, A.J. Jordan, J. Kupfer, J.A. LaGro, Jr., K. Riitters, G.J. Roloff, E. Thompson, Jr.). Annual Symposium of the U.S. Regional Association of the International Association for Landscape Ecology, Syracuse, NY. 2005.

- Forest fragmentation and landscape representation: The influence of matrix-based processes on forest fragmentation effects (**J.A. Kupfer**, G.P. Malanson, S.B. Franklin) Annual Meeting of the Association of American Geographers, Denver, CO. 2005.
- Composition change and recovery on native and non-native grasslands following the 2002 Ryan Fire (**K.J. Lombardo**, J.A. Kupfer) Annual Meeting of the Association of American Geographers, Denver, CO. 2005.
- Sensitivity of landscape metrics to number of land cover classes (**C. Huang**, E. Geiger, J. Kupfer). Annual Symposium of the U.S. Regional Association of the International Association for Landscape Ecology, Las Vegas, NV. 2004.
- Landscape transformations: Changes in biodiversity and ecosystem functioning following the Ryan Fire of 2002 (**K.J. Lombardo** and J.A. Kupfer). Annual Symposium of the U.S. Chapter of the International Association for Landscape Ecology, Las Vegas, NV. 2004.
- Scale, pattern and controls of montane ecotones (**J.A. Kupfer** and J.T. Jones). Annual Symposium of the U.S. Regional Association of the International Association for Landscape Ecology, Las Vegas, NV. 2004.
- Landscape transformations: Changes in biodiversity and ecosystem functioning following the Ryan Fire of 2002 (**K.J. Lombardo** and J.A. Kupfer). Biodiversity and Management of the Madrean Archipelago II: Connecting Mountain Islands and Desert Seas, Tucson, AZ. 2004.
- Projected responses of vegetation pattern and ecotone location to climatic change in an Arizona sky island ecosystem (**J.A. Kupfer**). Biodiversity and Management of the Madrean Archipelago II: Connecting Mountain Islands and Desert Seas, Tucson. 2004.
- Scale, pattern and controls of montane ecotones in Saguaro National Park, Arizona (**J.A. Kupfer** and J.T. Jones). Annual Meeting of the Association of American Geographers, Philadelphia, PA. 2004.
- Community vegetation pattern analysis in Valles Caldera National Preserve, New Mexico (**J. Balmat** and J.A. Kupfer). Annual Meeting of the Association of American Geographers, New Orleans, LA. 2003.
- The interactive effects of fire and invasive species on an Arizona semi-desert grassland (**K. Lombardo** and J.A. Kupfer). Annual Meeting of the Association of American Geographers, New Orleans, LA. 2003.
- Not seeing the ocean for the islands: The need for new concepts and approaches to the study of forest fragmentation (**J.A. Kupfer**). Annual Symposium of the U.S. Regional Association of the International Association for Landscape Ecology, Banff, AB. 2003.
- Landscape structure effects on vegetation recovery and soil characteristics in shifting cultivation fields (J.A. Kupfer, S.B. Franklin and A.L. Webbeking). Annual Meeting of the Association of American Geographers, Los Angeles, CA. 2002.
- Predicting montane community distribution using discriminant analysis for southern Arizona. (**J.L. Smith** and J.A. Kupfer). Annual Meeting of the Association of American Geographers, Los Angeles, CA. 2002.
- Influence of topography and fire disturbance on vegetation patterns and ecotone position in the Rincon Mountains, Arizona. (**J.T. Jones** and J.A. Kupfer). Annual Meeting of the Association of American Geographers, Los Angeles, CA. 2002.
- Montane ecotone hierarchies in Arizona sky islands. (**J.A. Kupfer**, J.T. Jones and J.L. Smith). Annual Meeting of the Ecological Society of America, Tucson, AZ. 2002.

- Landscape structure effects on nutrient pools of recovering milpas in Belize, C.A. (**S.B. Franklin** and J.A. Kupfer). Annual Meeting of the Ecological Society of America, Tucson, AZ. 2002.
- Evaluation of an ecological land type classification system, Natchez Trace State Forest, Western Tennessee, USA. (**J.A. Kupfer** and S.B. Franklin). Annual Symposium of the U.S. Regional Association of the International Association for Landscape Ecology, Tempe, AZ. 2001.
- The effects of landscape structure on plant regeneration patterns in shifting cultivation fields near Indian Church, Belize. (**S.B. Franklin**, A.L. Webbeking and J.A. Kupfer). Annual Symposium of the U.S. Regional Association of the International Association for Landscape Ecology, Tempe, AZ. 2001.
- Scales of pattern and process in Fraser fir forest disturbance and regeneration, Great Smoky Mountains, USA. (**T.R. Allen** and J.A. Kupfer). Annual Symposium of the U.S. Regional Association of the International Association for Landscape Ecology, Tempe, AZ. 2001.
- Channelization effects on floodplain nutrient pools in western Tennessee. (**S.B. Franklin**, J.A. Kupfer, S.R. Pezeshki, and N. van Gestel). Annual Meeting of the Association of Southeastern Biologists, New Orleans, LA. 2001.
- Landform-vegetation interactions in the mortality and regeneration of Fraser fir forests, Great Smoky Mountains National Park. (**T.R. Allen** and J.A. Kupfer). 2001 Binghamton International Geomorphology Symposium: Mountain Geomorphology – Integrating Earth Systems. Chapel Hill, NC. 2001.
- Application of spherical geometry to change vector analysis of Landsat data. (**T.R. Allen** and J.A. Kupfer). Annual Meeting of the Association of American Geographers, Pittsburgh, PA. 2000.
- Implementation and evaluation of an ecological land type classification. (**J.A. Kupfer** and S.B. Franklin). Annual Meeting of the Association of American Geographers, Pittsburgh, PA. 2000.
- Regeneration of slash-and-burn agricultural fields in relation to landscape structure in the Orange Walk District, Belize. (**A.L. Webbeking**, J.A. Kupfer and S.B. Franklin). Annual Meeting of the Ecological Society of America, Snowbird, UT. 2000.
- The impact of forest ecotones on successional trajectories in Hueston Woods. (**J.A. Kupfer**). Quadrennial World Congress of the International Association for Landscape Ecology, Snowmass Village, CO. 1999.
- A comparison of plant communities along channelized and non-channelized streams in West Tennessee. (**R. Hansen**, S.B. Franklin and J.A. Kupfer) Tennessee Academy of Sciences West Tennessee Scholastic Meeting, Memphis, TN. 1999.
- Stream restoration demonstration project of Stokes Creek, Crockett County, Tennessee. (**L. Turrini-Smith**, **E.M. Williams**, S.B. Franklin, J.A. Kupfer and others). Ecology and Management of Bottomland Hardwood Ecosystems: The state of our understanding. Memphis, TN. 1999.
- Groundwater response to flooding of Stokes Creek prior to dechannelization. (**T.L. Scheff**, J.A. Kupfer and Franklin, S.B.) Tennessee Academy of Sciences West Tennessee Scholastic Meeting, Memphis, TN. 1999.
- The impact of forest ecotones on successional trajectories in Hueston Woods. (**J.A. Kupfer** and J.R. Runkle). Annual Meeting of the Association of American Geographers, Boston, MA. 1998.

Structural characteristics and temporal dynamics of Shelby Forest, West Tennessee. (**J.A. Kupfer**). Annual Meeting of the Association of American Geographers, Fort Worth. 1997.

Landscape ecological aspects of gap succession in a beech-maple preserve. (**J.A. Kupfer**). Annual Meeting of the Association of American Geographers, Charlotte, NC. 1996.

Early gap successional pathways in Hueston Woods Nature Preserve, Ohio: Patterns and determinants. (**J.A. Kupfer**, J.R. Runkle and G.P. Malanson). Annual Meeting of the Association of American Geographers, Chicago, IL. 1995.

The effect of edge vegetation on interior gap-successional processes. (**J.A. Kupfer**, J.R. Runkle and G.P. Malanson). Annual Meeting of the Association of American Geographers, San Francisco, CA. 1994.

Forest-stream ecotones: Structure, composition, and carbon dynamics along midwestern cutbank edges. (**J.A. Kupfer** and G.P. Malanson). Annual Meeting of the Association of American Geographers, Atlanta, GA. 1993.

The effect of edge vegetation on interior gap-successional processes. (**J.A. Kupfer**). Annual Meeting of the Association of American Geographers, Great Plains/Rocky Mountains Division, Manhattan, KS. 1992

Beaver, treefall, and cutbank erosion in midwestern rivers. (**D.R. Butler**, G.P. Malanson and J.A. Kupfer). Annual Meeting of the Association of American Geographers, San Diego, CA. 1992.

Successional processes in a naturally occurring forest edge. (**J.A. Kupfer**). Annual Meeting of the Association of American Geographers, Toronto, Canada. 1991.

Vegetational structure, composition, and successional dynamics of a riparian forest edge. (**J.A. Kupfer** and G.P. Malanson). Quadrennial World Congress of the International Association for Landscape Ecology, Ottawa, Canada. 1991.

Panels and Workshop Participation:

Eastern Fire Network Workshop. Tallahassee, FL. June 8-10, 2026. (invited)

Panel on Fire Outreach and Education. 13th Biennial Longleaf Pine Conference - Longleaf: The Resilient Landscape. October 22, 2020.

The Evolving Nature of Wildland Fire: Can We Adapt to New Risks Posed by a Changing Climate and Landscape? Southeast Climate Adaptation Science Center Regional Science Symposium. New Orleans, LA. 2019. (invited)

Involving Undergraduates in Geoscience Research. Annual Meeting, Southeastern Division of the American Association of Geographers, Wilmington, NC. 2019. (invited)

USC Center for Teaching Excellence - Virtual Environments Bootcamp. Univ. of South Carolina. 2018. (selected participant)

Critical Physical Geography Workshop. Chicago, IL. 2015. (invited participant).

Conservation Blueprint 2.0 Review Workshop (with South Atlantic Landscape Conservation Cooperative). North Charleston, SC.

Climate-Friendly Parks workshop. Congaree National Park. 2014. (invited participant).

Conducting interdisciplinary research in biogeography: Practicalities and pitfalls. Annual Meeting of the Association of American Geographers, Tampa, FL. 2014. (invited panelist).

In-stream flow management in the South Atlantic region. Southeast Aquatic Resource Partnership (SARP). Savannah, GA. 2012.

Sustainability Partnering Workshop. South Carolina National Guard / USC Environment and Sustainability Program. Columbia, SC. 2012.

Networking and Professionalization Opportunities for Early Career Biogeographers.
Annual Meeting of the Association of American Geographers, Boston, MA. 2012.
(invited panelist).

UNEP GEO 5, North American Regional Consultation. Washington, DC, 2010. (invited participant)

Visualizing Environmental Science. John Wiley & Sons and National Geographic Society, Washington, DC, 2007. (invited participant)

Unifying themes and issues in AAG biogeography. Annual Meeting of the Association of American Geographers, Denver, CO. (invited panelist)

Identifying Biodiversity Research Needs Related to Forest Fragmentation. National Commission on Science for Sustainable Forestry User's Meeting. Washington, D.C. 2003.

Identifying Biodiversity Research Needs Related to Forest Fragmentation. National Commission on Science for Sustainable Forestry, Annual Meeting, Portland, OR. 2002.

Service

Student Committees:

Graduate Advising:

Doctoral:

Jory Fleming. PhD, Geography. Current (2026-present).

Peng Gao. PhD, Geography. 2013. *Uncovering the structures in ecological networks: Multiple techniques for multiple purposes.*

Kimberly Meitzen. PhD, Geography. 2011. *Flood processes, forest dynamics, and disturbance in the Congaree River floodplain, South Carolina.* (co-advisor w/ W. Graf)

Masters:

Tanner Furness. MEERM, School of the Earth, Ocean and Environment. Current (2026-present).

Acadia Lewis. M.S., Geography. Current (2025-present).

Reagan Martin. M.S., Geography. Current (2025-present).

Karen Hardison. M.S., Geography. Current (2025-present).

Jocelyn Falkenstine. M.S., Geography. 2025. *Evaluating wetland accretion and carbon accounting models: A comparative analysis and recommendations for effective use in blue carbon projects.*

Courtney Lewis. MEERM, School of the Earth, Ocean and Environment. 2024. *Mapping the distribution of Phragmites australis on the Santee Coastal Reserve using high-resolution aerial imagery.*

Lilian Hutchens. M.S., Geography. 2023. *Projecting the effects of climate change and urbanization on longleaf pine stands in the Florida flatwoods.*

Hannah Fox. MEERM, School of the Earth, Ocean and Environment. 2023. *Identification of suitable lands for conservation easements in the Edisto River Basin.*

Derek Matchette. 2022. M.S., Geography. *Urban forest dynamics: Untangling ecosystem patterns at Harbison State Forest.*

Christina Cole. 2021. MEERM, School of the Earth, Ocean and Environment. *Transportation at the C & O Canal – An Educational Story Map and Instructor's Guide*

Kim Noonan. 2017. MEERM, School of the Earth, Ocean and Environment. *Edisto River Recreation Management Plan.*

Maka Bitsadze. 2013. MEERM, School of the Environment. *Identifying values and benefits of Congaree National Park.*

- Joshua Leisen. 2012. M.S., Geography. *Relative roles of environmental conditions and riverscape connectivity on fish metacommunity structure.*
- Walter Meitzen. 2012. MEERM, School of the Environment. *Propagation of Vallisneria americana (Michx.): Vegetation management in South Carolina Piedmont reservoirs.*
- Michael Hook. 2010. MEERM, School of the Environment. *Environmental determinants of Stigonematales in a southeastern reservoir.*
- Justin Roberson. 2008. M.S., Geography. *Bird species prediction modeling: a comparison of multiple modeling techniques at Francis Marion National Forest in South Carolina.*
- Sarah McLane. 2007. M.S., Geography. *An integrative approach to modeling invasive species as a part of a watershed management partnership in the Kohala Mountains, Hawaii.*
- Susan Simpson. 2005. M.A., Geography. *Perceptual boundaries between human and wildlife spaces and their changes due to drought, Tucson, AZ.*
- Jeff Balmat. 2004. M.A., Geography. *Assessment of timber resources and logging history of the Valles Caldera National Preserve.*
- Candice Koski. 2004. M.A., Geography. *Forest community structure and composition in the Valles Caldera National Preserve, NM.*
- Keith Lombardo. 2004. M.A., Geography. *Interactive effects of wildfire and non-native species on biodiversity and ecosystem functioning in a semi-desert grassland.*
- Christine Hansell. 2003. M.A., Geography. (Non-thesis).
- Tyler Jones. 2003. M.A., Geography. *Predictive modeling of montane ecotone locations in an Arizona sky island ecosystem.*
- Jacqueline Smith. 2002. M.A., Geography. *Analysis and predictive modeling of vegetation patterns in Saguaro National Park East, Arizona.*
- Stacy Anderson. 2000. M.S., Geography. *The effects of silvicultural treatments on forest interior bird populations.*
- Tony Coryell. 1997. M.A., Geography. *Effects of regulated discharge below the Douglas Dam on potential reintroduction of the muskellunge to the French Broad River, Tennessee.*
- Joy Fritschle Mason. 1997. M.S., Geography. *A structural and compositional comparison of alluvial and nonalluvial redwood forest stands, Jedediah Smith Redwoods State Park, CA.*
- David Coleman. 1996. M.S., Geography. *An analysis of riparian water quality buffers in an agricultural landscape of Western Tennessee.*
- Keith Bell (co-chair with Dr. C.V. Dixon). 1995. M.A., Geography. *The Columbia Mule Day: A reason for celebration.*

Completed Graduate Degrees – Ph.D. Committee Member:

Youngjae Kim, Univ. of South Carolina, Geography, 2026; Cleber Ten Caten, Univ. of South Carolina, Biology, 2025; Haiqing Xu, Univ. of South Carolina, Geology, 2020; Herrick Brown, Univ. of South Carolina, Biology, 2019; Manali Baruah, Univ. of South Carolina, Geography, 2017; Chris Gillam, Univ. of South Carolina, Geography, 2016; Chase Nelson, Univ. of South Carolina, Biology, 2016; Bob Greeley, Univ. of South Carolina, Geography, 2016; Amy Davis, Univ. of North Carolina-Charlotte, Geography, 2014; Benjamin Haywood, Univ. of South Carolina, Geography, 2014; Mary Thompson, Univ. of South Carolina, Geography, 2013; Tomas Vaclavik, Univ. of North Carolina-Charlotte, Geography, 2011; Tara Plewa, Univ. of South Carolina, Geography, 2009; Calvin Farris, Univ. of Arizona, Geography, 2008; Erika Geiger, Univ. of Arizona,

Natural Resources, 2006; Jose Iniguez, Univ. of Arizona, Natural Resources. 2006; Kathryn Mauz, Univ. of Arizona, Arid Lands Resource Science, 2006; Theresa Mau-Crimmins, Univ. of Arizona, Natural Resources, 2005; Korine Kolivras, Univ. of Arizona, Geography, 2004; Kurt Kipfmuehler, Univ. of Arizona, Geography, 2003; Hardson Kwandayi, Univ. of Arizona, Education, 2003; John All, Univ. of Arizona, Geography, 2002; Tom Contreras, Carleton Univ., Biology, 2002.

Completed Graduate Degrees – M.A., M.S., MEERM, M.A.T. Committee Member:

Pengyu Chen, Univ. of South Carolina, Geography, 2026; Ian O’Shea, Univ. of South Carolina, Geography, 2024; Breonna Roden, Univ. of South Carolina, Geography, 2024; Taylor Freeman, Univ. of South Carolina, MEERM, 2020; Alex Butler, Univ. of South Carolina, Geography, 2018; Tyler Dearman, Univ. of South Carolina, Geography, 2018; Victoria Schwartz, Univ. of South Carolina, MEERM, 2018; Logan Ress, Univ. of South Carolina, MEERM, 2018; Wade Biltoft, Univ. of South Carolina, MEERM, 2018; Parker Leslie, Univ. of South Carolina, Geography, 2016; Bill Soohoo, Univ. of South Carolina, Geography, 2016; Rebecca Givens, Univ. of South Carolina, MEERM, 2015; Caitlin Strachan, Univ. of South Carolina, Geography, 2014; Shadow Gullledge, Univ. of South Carolina, MEERM, 2014; Rebecca Cain, Univ. of South Carolina, MEERM, 2014; Tanner Arrington, Univ. of South Carolina, Geography, 2013; Andy Maceyka, Univ. of South Carolina, Geography, 2010; Ian Millar, Univ. of South Carolina, Geography, 2009; Chris Van Dyke, Univ. of South Carolina, Geography, 2009; Mary Thompson, Univ. of South Carolina, Geography, 2008; Jovian Sackett, Univ. of South Carolina, Geography, 2007; Gregory Sprouse, Univ. of South Carolina, Geography, 2007; Kimberly Meitzen, Univ. of South Carolina, Geography, 2006; Miguel Villareal, University of Arizona, Geography, 2004; Tamara Wilson, University of Arizona, Geography, 2002; Erick Sanchez, University of Arizona, Geography, 2002; Joe Abraham, University of Arizona, Geography, 2001; David Brown, University of Arizona, Geography, 2001; Ann-Maree White, University of Arizona, Geography, 2001; Michelle Wagner, University of Arizona, MAT, 2001; J. Todd Graves, University of Memphis, Geography, 2001; Peter Johnson, University of Memphis, Geography, 2001; Kevin Claridge, University of Memphis, Biology, 2000; Amy Webbeking, University of Memphis, Biology, 2000; Barbara Ball, University of Arizona, Geography, 2000; Jennifer Smith, University of Memphis, Geography, 1998; Joshua Lontz, University of Memphis, Geography, 1997; Susan Hutson, University of Memphis, Geography, 1997; Pete Anderson, University of Memphis, Biology, 1997; Suzanne Struve, University of Memphis, Geography, 1996; Herbert Cochrane, University of Memphis, Geography, 1996; Edward Esslinger, University of Memphis, Geography, 1995; Russ McKee, University of Memphis, Geography, 1995; Glenn Gallien, University of Memphis, Geography, 1994.

Undergraduate Honors Theses: (with thesis title):

Lilian Hutchens. 2021. *Improving Conservation Planning for the Congaree Biosphere Reserve*. (advisor)
 Ella Concannon. 2021. *Tradeoff between loving the great outdoors and loving the great outdoors to death*. (reader)
 Emily Wood and Lindsay Harden. 2020. *A Tale of Two Hikers: Walking Through Nature, Society, and History*. Univ. of South Carolina. (reader)

Laura Woodlee. 2016. *Use of prescribed fire is heating up: Educating about controlled burning programs in the state parks of upstate South Carolina*. Univ. of South Carolina. (advisor)

Caitlin Strachan. 2012. *Effects of forest type and management history on downed woody material and leaf litter in a managed southeastern pine and hardwood forest*. Univ. of South Carolina. (advisor)

Departmental Service:

University of South Carolina – Department of Geography

Department Chair. 2013-2017.

Colloquium Coordinator. 2005-2006, 2023-present.

Departmental by-laws. 2021.

Director of Undergraduate Studies. 2006-2007, 2009-2013.

Graduate Admissions Committee. 2007-2010, 2020-present (Chair: 2009-2010, 2021-2025).

Peer Teaching Review Committee. 2019-2022.

Curriculum Committee. 2018-2020.

Promotion and Tenure Committee. 2008-2013, 2017-present.

Undergraduate Advisor. 2005-2013; 2018-2021.

Chair's Advisory Committee. 2009-2010.

Search Committees:

Undergraduate Coordinator. 2016. (Chair)

Business Manager. 2015. (Chair)

Applications Analyst. 2015. (Chair)

GIS Manager. 2014. (Chair)

Assistant Professor, Water Resources. 2012-2013. (Chair)

Professor, Remote Sensing. 2011-2012.

Assistant Professor, Conservation Biology (Biology Dept.), 2011-2012.

Assistant Professor, Ecological Forecasting (Biology Dept.). 2009-2010.

Assistant Professor, Environmental Microbiology (Biology Dept.). 2008-2009.

Assistant Professor, Ecological Mapping. 2008-2009. (Chair)

Assistant Professor, GeoVisualization. 2006-2007.

Awards Committee. 2010-2013 (chair: 2010-2013)

Undergraduate Internship Coordinator. 2010-2013.

University of Arizona – Dept. of Geography & Regional Development:

Director of Undergraduate Studies. 2003-2005.

Annual Performance Review Committee. 2001-2004. (Chair. 2002-2003).

Promotion and Tenure Committee. 2001-2003.

Undergraduate Advisor. 2000-2005.

Undergraduate Committee. 2000-2001, 2003-2004. (Chair: 2003-2004)

Colloquium. 1999-2003. (Coordinator: 2000-2003).

Physical Geography Committee. 1999-2005.

Graduate Committee. 1999-2000.

Search Committees:

Associate Professor, Water Resources Management. 2005.

Visiting Assistant Professor, Climate and Health. 2001.

University of Memphis – Department of Geography and Planning Committees:

- Undergraduate and graduate mentoring. 1994-1999.
- Undergraduate and graduate curriculum. 1994-1999.
- Environmental/earth science concentration. 1994-1999.
- Department of Geography Colloquium Series. 1994-1996, 1998.
- Search Committee Member, Physical Geographer. 1999.

College and University Service:

University of South Carolina:

- Piedmont-South Atlantic Cooperative Ecosystems Study Unit Liaison. 2011-present.
- Carolina Core Oral Communication Subcommittee. 2011-2016.
- New Faculty Academy, Center for Teaching Excellence. Guest speaker. 2015.
- School of Earth, Ocean and Environment: Tenure and Promotion Guideline Taskforce. 2014-2015.
- Dept. of Earth and Ocean Sciences: Department Chair Search (Chair). 2014.
- University Courses and Curriculum Committee. 2009-2012.
- Office of the Vice President for Research: Promising Investigators Research Awards. Review Panel. 2009-2011 (Committee Chair: 2011).
- College of Arts and Science Advising Assessment Taskforce. 2007-2008.
- Faculty Senate. 2006-2009.

University of Arizona:

- College of Social & Behavioral Sciences Research Institute. Advisory Board 2003-2005.
- College of Social & Behavioral Sciences. Academic Advisor Search Committees (4). 2003.
- Arid Lands Resource Sciences, McGinniss Award Selection Committee. 2002-2004.
- NASA Space Grant Internship Mentor. 2002.
- College of Social & Behavioral Sciences. Outstanding Senior Award Committee. 2000-2001.
- College of Social & Behavioral Sciences. Student Grade Appeals, Dept. Representative Committee. 2000-2001, 2003-2004.

University of Memphis:

- Distinguished Teaching Award Selection Committee. 1998-1999.
- General Education Committee. 1998-1999.

Advisory Committees

UNESCO Man and the Biosphere Program

- Congaree Biosphere Reserve Advisory Council. 2019-present.
- US Biosphere Reserve Network: National Working Group. 2020-2023.

Southeast Climate Adaptation Science Center.

- University Consortium PI. 2018-present.
- Global Change Fellows, Selection Committee. 2024.

National Academy of Sciences, Engineering, and Medicine (Board on Environmental Change and Society, Water Science and Technology Board, and Board on Earth Sciences & Resources). Committee on Long-term Management of the Spirit Lake/Toutle River System in Southwest Washington. Member. 2016-2018.

The H. John Heinz III Center for Science, Economics and the Environment:

- Landscape pattern workgroup for *State of the Nation's Ecosystems*. 2003-2008.

Professional Organizations:

American Association of Geographers:

AAG Presidential Taskforce on the State of AAG Regions. 2019-2020.
AAG Covid-19 Rapid Response Initiative. Regional Subcommittee (Chair). 2020.
AAG Council. 2017-2020.
Search Committee: Executive Director of the AAG. 2018-2019.
Ad hoc Committee for the *Professional Geographer*. 2018-2019.
Honors Committee. 2012-2014.
Publications Committee. 2007-2010.

Southeast Division, American Association of Geographers (SED/AAG):

Endowment Committee. 2019-present. (Chair: 2019-2025)
Undergraduate Poster Competition, Annual Meeting. Judge. 2021
SED/AAG Executive Committee. 2017-2020.
SED/AAG Steering Committee. 1998-1999; 2017-2020.
Meeting Organizer and Local Arrangements Chair. Annual SED/AAG Meeting. 2016.
Program Committee, Annual SED/AAG Meeting. 2007, 2009-2010.
Session organizer / Paper Discussant. Annual SED/AAG Meeting. 1994-1996, 2007-2009.
State Representative, Tennessee. 1998-1999.
Local Arrangements Committee, Annual SED/AAG Meeting. 1998.
Field Trip Leader, Annual SED/AAG Meeting. 1998.

Biogeography Specialty Group, American Association of Geographers:

President. 2003-2005.
Executive Board. 1998-2000, 2003-2005.
Webmaster. 2005-2017.
Judge, Student Grants Competition. 1998-2000, 2008.
Coordinator, Henry Cowles Award for Excellence in Publication. 1998-2000.
Coordinator, James J. Parsons Distinguished Career Award. 1998-2000.
Chair for BSG-sponsored sessions, Annual Meeting of the AAG. 2000-present.

Parks and Protected Areas Specialty Group, American Association of Geographers:

Vice-Chair. 2026-present.

International Association of Landscape Ecology, North American Division (IALE-NA):

Student / Faculty Mentor Lunch participant. IALE World Congress. 2015.
Symposium organizer and chair, Annual US-IALE Meeting. 2003.
Student paper competition judge, Annual US-IALE Meeting. 2001, 2003.

Arizona Climate Change-Vegetation Response Workgroup.

Member. 2003-2005.
Conference Co-organizer, "Climate Change & Ecosystem Impacts in Southwest Forests and Woodlands", Sedona, AZ (Feb. 7-9, 2005)
Workgroup leader, Spatial and temporal scales of vegetation responses. "Climate Change & Ecosystem Impacts in Southwest Forests and Woodlands", Sedona, AZ (Feb. 7-9, 2005)

Gamma Theta Upsilon, National Geography Honor Society:

Alpha Xi Chapter, Executive Board. 1987-1988.

Academic Program Reviews:

University of Maryland – Baltimore County, Department of Geography and Environmental Systems. 2025.

University of North Carolina, Greensboro, Department of Geography, Environment, and Sustainability. 2024

University of South Florida, School of Geosciences. 2022.

Brigham Young University, Department of Geography. 2020.

Virginia Tech, Department of Geography. 2020.

East Carolina University, Department of Geography, Planning, & Environment. 2019.

University of Alabama, Department of Geography. 2018.

Tenure and Promotion Reviewer:

I have served as an external reviewer on 41 tenure and promotion cases and performed one Continuing Scientist Professional Evaluation for the USDA Forest Service.

Review panels:

National Science Foundation, Graduate Research Fellowship Program Advisory Panel (Geography and Sociology). 2013-2014.

National Science Foundation, Senior Advisory Panel, Geography and Spatial Sciences program. 2007-2009. (*four review panels total*)

Environmental Protection Agency / U.S. Department of Agriculture (EPA Star Program). “Ecological Impacts from the Interactions of Climate Change, Land Use Change and Invasive Species”. 2007.

Report Reviewer:

National Academy of Sciences / National Research Council. *Fostering Transformative Research in the Geographical Sciences*. 2015.

National Park Service, Inventory and Monitoring Division. *A Guide to Interpreting NPScape Data and Analyses*. (Invited technical reviewer). 2011.

Editorial Service:

Editorial Board. *Journal of Ecology and Environment*. 2022-present.

Editorial Board. *Southeastern Geographer*. 2019-present.

Special Issue Co-editor: Protected Lands in the Southeast, *Southeastern Geographer*. 2023.

Editor for Physical Geography. *Geography Compass*. 2011-2016.

Coordinating Editor, *Landscape Ecology*. 2011-2014.

Associate Editor, *Plant Ecology*. 2010-2014.

Section Co-Editor (Atmosphere and Biosphere), *Geography Compass*. 2010-2015.

Journal manuscript reviewer:

Ambio; American Midlands Naturalist; Annals of the American Association of Geographers; Agriculture, Ecosystems and Environment; Applied Vegetation Science; Biological Conservation; Catena; Climate Research; Diversity and Distributions; Earth Surface Processes and Landforms; Ecological Applications; Ecological Modelling; Environmental Management; Forest Science; GeoCarto; Geographical Analysis; Geomorphology; GIScience and Remote Sensing; Journal of Arid Environments; Journal of Biogeography; Journal of the American Water Resources Association; Journal of the Torrey Botanical Society; Journal of Vegetation Science; Landscape and Urban Planning; Landscape Ecology; Ohio Journal of Science; Oikos; Physical Geography; Plant Ecology; PLoS One; Professional Geographer; Progress in Physical Geography; River Research and Applications; Southeastern Geographer; Southwestern Naturalist; Trends in Ecology and Evolution; Western North America Naturalist; Wetlands.

Additional Community Service and Outreach:

Episcopal Church, Diocese of Upper South Carolina: Committee on Environmental Stewardship and Justice. 2022-present

Congaree National Park:

Friends of Congaree Swamp. Board of Directors. 2025-present.

2026 Congaree Research Symposium. Organizing Committee and Session Chair. 2025-2026.

Uniquely Close: Biodiversity at Congaree and Diversity in Columbia. Community forum at the Nickelodeon Theater sponsored by Columbia's 2024 ONE BOOK Project (Invited panelist). 2024.

2024 Congaree Research Symposium. Organizing Committee and Session Chair. 2023-2024.

2022 Congaree Research Symposium. Organizing Committee and Session Chair. 2021-2022.

Smithsonian Water/Ways Virtual Community Symposium. Organizing Committee and Session Leader. 2020-2021.

Regular media appearances (print and TV), as well as contributing to two National Park Service videos.