

CURRICULUM VITAE

John Andrew Kupfer

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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; Affiliated Researcher: USC Hazards and Vulnerability Research Institute).
- 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.

Professional Memberships:

- American Association of Geographers Southeast Division – American Association of Geographers
- International Association for Landscape Ecology (including North American Chapter)

Honors and Awards:

Teaching:

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

Research / Scholarship:

- 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.

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.

Major Fields:

Landscape ecology, biogeography, riparian systems, forest conservation, disturbance ecology, watershed science, spatial analysis, GIScience, geomorphology.

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*
GEOG510: *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:

- Kupfer, J.A.**, Terando, A.J., Gao, P., Teske, C. and Hiers, J.K. Maintaining static burn criteria alters future opportunities for prescribed fire in a warming climate. In review, *International Journal of Wildland Fire*.
- Chin, E. and **J.A. Kupfer**. Identification of environmental drivers in urban greenway communities. In press, *Urban Forestry & Urban Greening*.
- Chin, E. and **J.A. Kupfer**. 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. Ecological effects 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](https://doi.org/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* 29: 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 A. R. Pipkin. 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.**, 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.
- Kupfer, J.A.** and Farris, C. 2007. Incorporating spatial non-stationarity of regression coefficients into predictive vegetation models. *Landscape Ecology* 22: 837-852.
- 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.
- 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.
- 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.** 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 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.
- 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.
- Kupfer, J.A.** 1996. Patterns and determinants of edge vegetation of a Midwestern forest preserve. *Physical Geography* 17: 62-76.

- 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.** 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:

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:

Southeast Climate Science Center / US Geological Survey. 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.

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.

Valles Caldera Trust. 2002-2004. Inventory and Monitoring at Valles Caldera National Preserve: Forest stand attributes and disturbance history. (**J. Kupfer**). \$38,900.

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:

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. 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:

- 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, University 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.

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.

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

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.

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.

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), University 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.

Conferences: (presenter in bold)

- 2018:** 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.
The evolving nature of riparian landscape ecology. (**J.A. Kupfer**) Annual Meeting of the Association of American Geographers, Chicago.
- 2017:** 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.
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.
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.
- 2016:** A Model for forecasting transportation-related wetland impacts. (**M.E. Hodgson, S.E. Piovani**, H. Xu, J. Kupfer, C. Long and T. Creed. GIForum 2016, Salzburg, Austria.
SECAS vital futures exploration of climate and land use velocity. (**A. Terando**, J. Kupfer, P. Gao). USGS webinar – September 30, 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. Oct. 16-19, 2016. New Orleans, LA.
Tri-variate relationships among vegetation, soil, and topography along the gradient of fluvial biogeomorphic succession. (**D. Kim** and J. Kupfer) Annual Meeting of the AAG, San Francisco, CA.
- 2015:** 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.
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.
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.
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.
- 2014:** Connectivity in aquatic and riparian landscapes: A Southeastern perspective (**J. Kupfer**). Annual Meeting of the Assoc. 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’).
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.
Influences on sedimentation patterns in a southeastern floodplain forest, Congaree National Park, South Carolina. (**C. Kaase** and J. Kupfer). Annual Meeting of the Assoc. of American Geographers, Tampa, FL.

- 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.
- 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.
- 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 the International Association for Landscape Ecology, Austin, TX.
- 2012:** 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.
- 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, Southeast Division of the AAG, Asheville, NC.
- 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, Southeast Division of the AAG, Asheville, NC. (*poster*)
- 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.
- Modeling flood inundation & hydrological connectivity across the Congaree River floodplain, Congaree National Park. (**J.A. Kupfer** and K.M. Meitzen). Annual Meeting, Piedmont-South Atlantic CESU, Charleston, SC.
- 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.
- 2011:** 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.
- 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.
- 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.
- 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.
- 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.
- 2010:** Regionalization of national forest fragmentation patterns using contiguity constrained clustering and partitioning. (**J.A. Kupfer**, D. Guo and P. Gao). Annual Meeting of the Assoc. of American Geographers, Washington, DC.

- 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.
- 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 Assoc. of American Geographers, Washington, DC.
- 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.
- 2009:** Advances in species distribution modeling: Applications in applied biogeographic research (**J.A. Kupfer**), Annual Meeting, Southeast Division of the AAG, Greensboro, NC.
- 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).
- Hydrogeomorphic controls of early post-logging successional pathways in a southern floodplain forest (**J.A. Kupfer**). Piedmont-South Atlantic Coast CESU Annual Business Meeting, Orange Beach, AL. (invited presentation).
- Local contingencies and hydrogeomorphic responses to channel modifications in West Tennessee floodplain ecosystems (**J.A. Kupfer** and S.B. Franklin), Annual Meeting of the Assoc. of American Geographers, Las Vegas, NV.
- A flexible indicator-based approach to assessing the ecological integrity of South Carolina watersheds. (**P. Gao** and J.A. Kupfer), Annual Meeting of the Assoc. of American Geographers, Las Vegas, NV.
- 2008:** Assessing watershed integrity with a flexible indicator-based approach. (**J.A. Kupfer** and G. Peng). Annual Meeting, Southeast Division of the AAG, Greensboro, NC.
- A flexible indicator-based approach to assessing the ecological integrity of South Carolina watersheds. (**J.A. Kupfer** and G. Peng). South Carolina Water Resources Conference, Charleston, SC. (refereed)
- 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 Assoc. of American Geographers, Boston, MA.
- Climate change and species distribution modeling in the eastern United States. (**S. Dunham** and J.A. Kupfer) Annual Meeting of the Assoc. of American Geographers, Boston, MA.
- 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 Assoc. of American Geographers, Boston, MA.
- Early post-logging succession on the Bates Fork Tract, Congaree National Park. (**J.A. Kupfer**). Congaree National Park Science Symposium, Columbia, SC. (invited speaker)
- 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. (refereed)
- 2007:** Coastal forest vulnerability and responses to hurricane damage: Lessons from Katrina (**J.A. Kupfer**). USGS Northern Gulf of Mexico Land Cover Characterization Workshop, November 14-16th, New Orleans, LA. (invited)

- 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, November 18 – 20.
- 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, November 18 - 20.
- 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 Assoc. of American Geographers, San Francisco, CA.
- Patterns and controls of forest damage following Hurricane Katrina in DeSoto National Forest, Mississippi. (**J.A. Kupfer**). Annual Meeting of the Association of Southeastern Biologists, Columbia, SC. (invited symposium speaker)
- 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. (invited speaker)
- 2006:** 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.
- 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.
- 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 Assoc. of American Geographers, Chicago, IL.
- 2005:** 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.
- 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 Assoc. of American Geographers, Denver, CO.
- 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 Assoc. of American Geographers, Denver, CO.
- Ecological responses to climate change and variability in the Southwest: Issues of temporal and spatial scale (**J. Kupfer**, A. Comrie, M. Crimmins) Climate Variability and Ecosystem Impacts in Southwest Forests and Woodlands Workshop, Sedona, AZ. (invited speaker)
- 2004:** 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.
- 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.
- 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.

- 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.
- 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, AZ.
- Scale, pattern and controls of montane ecotones in Saguaro National Park, Arizona (**J.A. Kupfer** and J.T. Jones). Annual Meeting of the Assoc. of American Geographers, Philadelphia, PA.
- 2003:** Community vegetation pattern analysis in Valles Caldera National Preserve, New Mexico (**J. Balmat** and J.A. Kupfer). Annual Meeting of the Assoc. of American Geographers, New Orleans, LA.
- The interactive effects of fire and invasive species on an Arizona semi-desert grassland (**K. Lombardo** and J.A. Kupfer). Annual Meeting of the Assoc. of American Geographers, New Orleans, LA.
- 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
- 2002:** 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 Assoc. of American Geographers, Los Angeles, CA.
- Predicting montane community distribution using discriminant analysis for southern Arizona. (**J.L. Smith** and J.A. Kupfer). Annual Meeting of the Assoc. of American Geographers, Los Angeles, CA.
- 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 Assoc. of American Geographers, Los Angeles, CA.
- 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.
- 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.
- 2001:** 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.
- 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.
- 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.
- 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.
- 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.
- 2000:** Application of spherical geometry to change vector analysis of Landsat data. (**T.R. Allen** and J.A. Kupfer). Annual Meeting of the Assoc. of American Geographers, Pittsburgh, PA.
- Implementation and evaluation of an ecological land type classification. (**J.A. Kupfer** and S.B. Franklin). Annual Meeting of the Assoc. of American Geographers, Pittsburgh, PA.
- 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.
- 1999:** 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.
- 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.
- 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.
- 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.
- 1998:** The impact of forest ecotones on successional trajectories in Hueston Woods. (**J.A. Kupfer** and J.R. Runkle). Annual Meeting of the Assoc. of American Geographers, Boston, MA.
- 1997:** Structural characteristics and temporal dynamics of Shelby Forest, West Tennessee. (**J.A. Kupfer**). Annual Meeting of the Assoc. of American Geographers, Fort Worth, TX.
- 1996:** Landscape ecological aspects of gap succession in a beech-maple preserve. (**J.A. Kupfer**). Annual Meeting of the Association of American Geographers, Charlotte, NC.
- 1995:** 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.
- 1994:** 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.
- 1993:** 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.
- 1992:** 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
- Beaver, treefall, and cutbank erosion in midwestern rivers. (**D.R. Butler**, G.P. Malanson and J.A. Kupfer). Annual Meeting of the Assoc. of American Geographers, San Diego, CA.
- 1991:** Successional processes in a naturally occurring forest edge. (**J.A. Kupfer**). Annual Meeting of the Association of American Geographers, Toronto, Canada.
- 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

Panels and Workshop Participation:

- USC Center for Teaching Excellence - Virtual Environments Bootcamp. Univ. of South Carolina, June 25-29, 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. Hopkins, SC. (invited participant).
- Conducting interdisciplinary research in biogeography: Practicalities and pitfalls. Annual Meeting of the Assoc. 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 Assoc. 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 Assoc. 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:

Completed Graduate Advisees: (with thesis title):

Doctoral:

- Peng Gao. PhD. 2013. *Uncovering the structures in ecological networks: Multiple techniques for multiple purposes.*
- Kimberly Meitzen. PhD. 2011. *Flood processes, forest dynamics, and disturbance in the Congaree River floodplain, South Carolina.*

Masters:

- Kim Noonan. MEERM. 2017. *Edisto River Recreation Management Plan.*
- Maka Bitsadze. MEERM. 2013. *Identifying values and benefits of Congaree National Park.*
- Joshua Leisen. M.S. 2012. *Relative roles of environmental conditions and riverscape connectivity on fish metacommunity structure.*
- Walter Meitzen. MEERM. 2012. *Propagation of Vallisneria americana (Michx.): Vegetation management in South Carolina Piedmont reservoirs.*
- Michael Hook. MEERM. 2010. *Environmental determinants of Stigonematales in a southeastern reservoir.*
- Justin Roberson. M.A. 2008. *Bird species prediction modeling: a comparison of multiple modeling techniques at Francis Marion National Forest in South Carolina.*
- Sarah McLane. M.A. 2007. *An integrative approach to modeling invasive species as a part of a watershed management partnership in the Kohala Mountains, Hawaii.*
- Susan Simpson. M.A. 2005. *Perceptual boundaries between human and wildlife spaces and their changes due to drought, Tucson, AZ.*

- Jeff Balmat. M.A. 2004. *Assessment of timber resources and logging history of the Valles Caldera National Preserve.*
- Candice Koski. M.A. 2004. *Forest community structure and composition in the Valles Caldera National Preserve, NM.*
- Keith Lombardo. M.A. 2004. *Interactive effects of wildfire and non-native species on biodiversity and ecosystem functioning in a semi-desert grassland.*
- Christine Hansell. M.A. 2003. Non-thesis.
- Tyler Jones. M.A. 2003. *Predictive modeling of montane ecotone locations in an Arizona sky island ecosystem.*
- Jacqueline Smith. M.A. 2002. *Analysis and predictive modeling of vegetation patterns in Saguaro National Park East, Arizona.*
- Stacy Anderson. M.S., 2000. *The effects of silvicultural treatments on forest interior bird populations.*
- Tony Coryell. M.S., 1997. *Effects of regulated discharge below the Douglas Dam on potential reintroduction of the muskellunge to the French Broad River, Tennessee.*
- Joy Fritschle Mason. M.S., 1997. *A structural and compositional comparison of alluvial and nonalluvial redwood forest stands, Jedediah Smith Redwoods State Park, CA.*
- David Coleman. M.S., 1996. *An analysis of riparian water quality buffers in an agricultural landscape of Western Tennessee.*
- Keith Bell (co-chair with Dr. C.V. Dixon). M.A., 1995. *The Columbia Mule Day: A reason for celebration.*

Completed Undergraduate Honors Theses Supervised: (with thesis title):

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

Current Graduate Advisees:

Chris Kaase (Ph.D.; Geography); Christy Cole (MEERM, School of Earth, Ocean and the Environment)

Current Graduate Committees (other than as Chair):

Taylor Freeman (MEERM, School of Earth, Ocean and the Environment); Herrick Brown (Ph.D. – Biology); Haiqinq Xu (Ph.D. – School of Earth, Ocean and the Environment).

Committee Member - Completed Ph.D.:

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 (external reviewer), 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 (external reviewer), 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 Kipfmuller, 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 (external examiner).

Committee Member - Completed M.A., M.S., MEERM, M.A.T.:

Alex Butler, USC Geography, 2018; Tyler Dearman, USC Geography, 2018; Victoria Schwartz, USC MEERM, 2018; Logan Ress, USC MEERM, 2018; Wade Biltoft, USC MEERM, 2018; Parker Leslie, USC Geography, 2016; Bill Soohoo, USC Geography, 2016;

Rebecca Givens, USC MEERM, 2015; Caitlin Strachan, USC Geography, 2014; Shadow Gullede, USC MEERM, 2014; Rebecca Cain, USC MEERM, 2014; Tanner Arrington, USC Geography, 2013; Andy Maceyka, USC Geography, 2010; Ian Millar, USC Geography, 2009; Chris Van Dyke, USC Geography, 2009; Mary Thompson, USC Geography, 2008; Jovian Sackett, USC, Geography, 2007; Gregory Sprouse, USC, Geography, 2007; Kimberly Meitzen, USC, Geography, 2006; Miguel Villareal, UA, Geography, 2004; Tamara Wilson, UA, Geography, 2002; Erick Sanchez, UA, Geography, 2002; Joe Abraham, UA, Geography, 2001; David Brown, UA, Geography, 2001; Ann-Maree White, UA, Geography, 2001; Michelle Wagner, UA, MAT, 2001; J. Todd Graves, UM, Geography, 2001; Peter Johnson, UA, Geography 2001; Kevin Claridge, UM, Biology, 2000; Amy Webbeking, UM, Biology, 2000; Barbara Ball, UA, Geography, 2000; Jennifer Smith, UM, Geography, 1998; Susan Hutson, UM, Geography, 1997; Pete Anderson, UM, Biology, 1997; Suzanne Struve, UM, Geography, 1996; Herbert Cochrane, UM, Geography, 1996; Edward Esslinger, UM, Geography, 1995; Russ McKee, UM, Geography, 1995; Glenn Gallien, UM, Geography, 1994

Departmental Service:

Univ. of South Carolina – Department of Geography

Department Chair. 2013-2017.

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

Curriculum Committee. 2018-present.

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

Undergraduate Advisor. 2005-2013; 2018-current.

Chair's Advisory Committee. 2009-2010.

Julian Minghi Distinguished Lectureship Selection Committee. 2007-2010.

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.

Colloquium Coordinator. 2005-2006.

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

Undergraduate Internship Coordinator. 2010-2013.

Graduate Admissions Committee. 2007-2010 (Chair: 2009-2010).

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

Director of Undergraduate Studies. 2003-2004.

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, Oceans and the Environment: Tenure and Promotion Guideline Taskforce.
 2014-2015.
 Dept. of Earth and Ocean Sciences: Internal 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, McGinnies 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.

Professional Organizations:

American Association of Geographers:
 AAG Council. 2017-present.
 Search Committee: Executive Director of the AAG. 2018-present.
 Ad hoc Committee for the *Professional Geographer*. 2018-present.
 Honors Committee. 2012-2014.
 Publications Committee. 2007-2010.

Biogeography Specialty Group, American Association of Geographers:
 President. 2003-2005.
 Executive Board. 1998-2000.
 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.

Southeast Division, American Association of Geographers (SED/AAG):
 SED/AAG Executive Committee. 2017-present
 SED/AAG Steering Committee. 1998-1999; 2017-present.
 Meeting Organizer and Local Arrangements Chair. Annual SED/AAG Meeting. 2016.
 Program Committee, Annual SED/AAG Meeting. 2007, 2009-2010.

Session organizer and / or 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.

International Association of Landscape Ecology, U.S. Regional Division (US-IALE):

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.

Editorial Service:

Co-Editor. *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.

Membership on Advisory Committees

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.

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.

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* (invited reviewer). 2015

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

Tenure and Promotion Reviewer:

I have served as an external reviewer on 25 tenure and promotion cases at a range of institutions.

I have also performed one Continuing Scientist Professional Evaluation for the USDA Forest Service.

Academic Program Review

University of Alabama, Dept. of Geography. Academic Program Review Team (Program Review Team Chair).

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.