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EDUCATION

M.S., Geography, University of Georgia, 2003.
B.S., Geography, University of Georgia, 2000.

CERTIFICATIONS

2018: GISP Certification, GIS Certification Institute (License no. 160524).

PROFESSIONAL EXPERIENCE

Research Professional III, Warnell School of Forestry and Natural Resources, University of Georgia, Athens, GA. 2019 - present.

- Coordinated the research effort for multiple spatial analysis and geographic information system projects including forest fragmentation visualization, land cover change modeling, hurricane risk assessments, and potential urban carbon and bioenergy estimations.
- Used satellite imagery and aerial photographs to assess land cover and land cover change in multiple U.S. cities including processing satellite imagery for classification.
- Conducted extensive literature reviews. Wrote peer-reviewed manuscripts and project reports.
- Completed multiple cartographic projects for atlases, reports, textbooks, research project objectives, and online projects.
- Developed online education courses and assisted with instructor-led courses.
- Developed, manipulated, managed, and analyzed GIS databases, including LiDAR.
- Developed tool extensions for ArcGIS (10.x) with Python scripts and ModelBuilder.
- Coordinated and advised the research of several graduate and undergraduate students.

Research Professional II, Warnell School of Forestry and Natural Resources, University of Georgia, Athens, GA. 2013 - 2019.

Research Professional I, Warnell School of Forestry and Natural Resources, University of Georgia, Athens, GA. 2005 - 2013.

Project Coordinator, Department of Environmental Health Science, University of Georgia, Athens, GA. 2003 - 2005.

TEACHING EXPERIENCE (UNIVERSITY OF GEORGIA)

Instructor, Senior Project in Forestry and Natural Resources Management (FANR 4500), Spring 2019.

FIELDS OF SPECIALIZATION

Geography and geographic information systems (GIS) with a focus on cartography, remote sensing, land use / land cover change, and modeling.

MEMBERSHIP IN PROFESSIONAL SOCIETIES

Association of American Geographers, URISA.

HONORS AND RECOGNITION

- 2013 Alumni Staff Award, Warnell School of Forestry and Natural Resources.
 2009 GIS and Spatial Analysis Merit Award, Warnell School of Forestry and Natural Resources.

OTHER PROFESSIONAL ACTIVITIES

Service to Conference Planning Teams

- 2019 Proceedings Chair. 12th Southern Forestry and Natural Resource Management GIS Conference.
 Planning Committee Member. 12th Southern Forestry and Natural Resource Management GIS Conference.
 2017 Proceedings Chair. 11th Southern Forestry and Natural Resource Management GIS Conference.
 Planning Committee Member. 11th Southern Forestry and Natural Resource Management GIS Conference.
 2015 Proceedings Chair. 10th Southern Forestry and Natural Resource Management GIS Conference.
 Planning Committee Member. 10th Southern Forestry and Natural Resource Management GIS Conference.
 2013 Proceedings Chair. 9th Southern Forestry and Natural Resource Management GIS Conference.
 Planning Committee Member. 9th Southern Forestry and Natural Resource Management GIS Conference.
 2011 Proceedings Chair. 8th Southern Forestry and Natural Resource Management GIS Conference.
 Planning Committee Member. 8th Southern Forestry and Natural Resource Management GIS Conference.
 2009 Proceedings Editor. 7th Southern Forestry and Natural Resource Management GIS Conference.
 Planning Committee Member. 7th Southern Forestry and Natural Resource Management GIS Conference.
 2008 Proceedings Editor. 6th Southern Forest Economics Workers Annual Meeting

Service to Journal Review Processes

AIMS Environmental Science, Applied Energy, Cities and the Environment, Forestry, International Journal of Remote Sensing, Mathematical and Computational Forestry & Natural-Resource Sciences, Remote Sensing, Urban Forestry and Urban Greening. Member of Reviewer Board, Remote Sensing.

Other Service

Southern Region Extension Foresters Office: Content editing, application testing.
Wood Energy Community of Practice (eXtension): Content management, online map development.
Plantation Management Research Cooperative: Geospatial data quality control, map production.
TimberMart-South: Content editing, GIS database development, map production.
Center for Forest Business (University of Georgia): Timberland investment conference outreach, e-mail newsletters and announcements; GIS consulting for the *Wood Demand Report*.

PUBLICATIONS

Books

- Bettinger, P., K. Merry, and K. Boston. 2020. *Mapping human and natural systems*. Academic Press, New York. 350 p.
 Siry, J., P. Bettinger, K. Merry, D.L. Grebner, K. Boston, and C. Cieszewski. 2015. *Forest plans of North America*. Academic Press, New York. 482 p.
 Bettinger, P. and K. Merry. 2011. *Global navigation satellite system research in forest management*. LAP Lambert Academic Publishing. Saarbrücken, Germany. 64 p.

Book Chapters

- Bettinger, P., K. Merry, and K. Boston. 2012. Comparison of landscape planning models. In Sustainable built environment (UNESCO-EOLSS Joint Committee, eds.), located in the *Encyclopedia of Life Support Systems (EOLSS)*. UNESCO, Eolss Publishers, Oxford, UK.
 Bettinger, P. and K. Merry. 2012. Management of forests in hurricane-prone regions of the southern United States: Basic considerations. In Daniels, J.A. (ed.), *Advances in Environmental Research*. Volume 17. Nova Science Publishers, Inc., Hauppauge, NY.
 Bettinger, P. and K. Merry. 2011. Knowledge gained and gaps suggested from recent forestry-related GPS research. In Boehm, D.A. (ed.), *Forestry: Research, Practices and Policies*. Nova Science Publishers, Inc., Hauppauge, NY.

Peer-Reviewed Journal Articles

- Stober, J., K. Merry, and P. Bettinger. 2020. Analysis of fire frequency on the Talladega National Forest, USA, 1998-2018. *International Journal of Wildland Fire*. 29: 919-925.
- Merry, K., P. Bettinger, J. Siry, and J.M. Bowker. 2020. Preferences of motorcyclists to views of managed, rural southern United States landscapes. *Journal of Outdoor Recreation and Tourism*. 29: 100259.
- Merry, K., and P. Bettinger. 2019. Smartphone GPS accuracy study in an urban environment. *PLoS ONE*. 14(7): e0219890.
- Zhang, S., P. Bettinger, C. Cieszewski, S. Merkle, K. Merry, S. Obata, X. He, and H. Zhang. 2019. Evaluation of sites for the reestablishment of the American chestnut (*Castanea dentate*) in northeast Georgia, USA. *Landscape Ecology*. 34: 943-960.
- Bettinger, P., and K. Merry. 2019. Land cover transitions in the United States South: 2007-2013. *Applied Geography*. 105: 102-110.
- Bettinger, P., K. Merry, M. Bayat, and J. Tomašík. 2019. GNSS use in forestry – a multi-national survey from Iran, Slovakia, and southern USA. *Computers and Electronics in Agriculture*. 158: 369-383.
- Merry, K., P. Bettinger, J. Siry, J.M. Bowker, S. Weaver, and Z. Ucar. 2018. Mapping potential motorized sightseeing recreation supply across broad privately-owned landscapes of the southern United States. *Landscape Research*. 43(5): 721-734.
- Bettinger, P., and K. Merry. 2018. Follow-up study of the importance of mapping technology knowledge and skills for entry-level forestry job postings, as deduced from recent job advertisements. *Mathematical and Computational Forestry & Natural-Resource Sciences*. 10(1): 15-23.
- Ucar, Z., P. Bettinger, K. Merry, R. Akbulut, and J. Siry. 2018. Estimation of urban vegetation cover using multispectral imagery and LiDAR. *Urban Forestry and Urban Greening*. 29: 248-260.
- Merry, K., P. Bettinger, D. Grebner, J. Siry, C. Cieszewski, S. Weaver, and Z. Ucar. 2017. Assessment of potential agricultural and short-rotation forest bioenergy crop establishment sites in Jackson County, Florida, USA. *Biomass and Bioenergy*. 105: 453-463.
- Akbulut, R., Z. Ucar, P. Bettinger, K. Merry, and S. Obata. 2017. Effects of forest thinning on static horizontal position accuracy collected with a mapping-grade receiver. *Mathematical and Computational Forestry & Natural-Resource Sciences*. 9(1): 14-21.
- Merry, K., P. Bettinger, D.L. Grebner, K. Boston, and J. Siry. 2016. Assessment of geographic information system (GIS) skills employed by graduates from three forestry programs in the United States. *Forests*. 7(12): article 304.
- Bettinger, P., K. Merry, and C.J. Cieszewski. 2016. The importance of mapping technology knowledge and skills for students seeking entry-level forestry positions: Evidence from job advertisements. *Mathematical and Computational Forestry & Natural-Resource Sciences*. 8(1): 14-24.
- Kaya, A., P. Bettinger, K. Boston, R. Akbulut, Z. Ucar, J. Siry, K. Merry, and C. Cieszewski. 2016. Optimisation in forest management. *Current Forestry Reports*. 2: 1-17.
- Ucar, Z., P. Bettinger, K. Merry, J. Siry, J.M. Bowker, and R. Akbulut. 2016. A comparison of two sampling approaches for assessing the urban forest canopy cover from aerial photography. *Urban Forestry & Urban Greening*. 16: 221-230.
- Merry, K., P. Bettinger, J. Siry, and J.M. Bowker. 2015. Estimating urban forest carbon sequestration potential in the southern United States using current remote sensing imagery sources. *Geographia Technica*. 10(2): 78-89.

- Weaver, S.A., Z. Ucar, P. Bettinger, and K. Merry. 2015. How a GNSS receiver is held may affect static horizontal position accuracy. *PLOS One*. 10: e0124696.
- Weaver, S., Z. Ucar, K. Faw, P. Bettinger, K. Merry, and C.J. Cieszewski. 2015. Assessing the accuracy of tree diameter measurements collected at a distance. *Croatian Journal of Forest Engineering*. 36(1): 73-83.
- Bettinger, P., K. Merry, and Z. Ucar. 2014. Assessment of global land cover classification allocated across the landscape of Georgia (USA). *Journal of Scientific Research and Reports*. 3(3): 457-478.
- Merry, K., J. Siry, P. Bettinger, and J.M. Bowker. 2014. Urban tree cover change in Detroit and Atlanta, USA, 1951-2010. *Cities*. 40(Part A): 123-131.
- Ucar, Z., P. Bettinger, S. Weaver, K.L. Merry, and K. Faw. 2014. Dynamic accuracy of recreation-grade GPS receivers in oak-hickory forests. *Forestry*. 87(4): 504-511.
- Merry, K., P. Bettinger, J. Siry, and J.M. Bowker. 2013. Efficient assessments of urban tree planting potential within or near the southern Piedmont region of the United States. *Computers, Environments, and Urban Systems*. 39: 39-47.
- Bettinger, P., K. Merry, and J. Siry. 2013. Forest management planning technology issues posed by climate change. *Forest Science and Technology*. 9(1): 9-19.
- Merry, K., J. Siry, P. Bettinger, and J.M. Bowker. 2013. Assessing potential urban tree planting sites in the Piedmont of the United States: a comparison of methods. *Southeastern Geographer*. 53(1): 79-101.
- Bettinger, P., J. Siry, C. Cieszewski, K.L. Merry, J. Zengin, and A. Yesil. 2013. Forest management issues of the southern United States and comparisons with Turkey. *Turkish Journal of Agriculture and Forestry*. 37(1): 83-96.
- Bettinger, P., and K.L. Merry. 2012. Influence of the juxtaposition of trees on consumer-grade GPS position quality. *Mathematical and Computational Forestry & Natural-Resource Sciences*. 4(2): 81-91.
- Bettinger, P., and K.L. Merry. 2012. Relative vulnerability of the forests along southeastern African coasts to cyclones. *Singapore Journal of Tropical Ecology*. 33(3): 320-334.
- Bettinger, P., and K. Merry. 2012. Static horizontal positions determined with a consumer-grade GNSS receiver: One assessment of the number of fixes necessary. *Croatian Journal of Forest Engineering*. 33(1): 149-157.
- Merry, K., P. Bettinger, and J. Hepinstall-Cymerman. 2011. A prototype model for estimating the location of forest damage from tropical cyclones. *Geographia Technica*. 6(2): 65-80.
- Bettinger, P., K.L. Merry, D.L. Grebner. 2010. Two views of the impact of strong wind events on forests of the southern United States. *Southeastern Geographer*. 50(3): 291-304.
- Merry, K., P. Bettinger, D.L. Grebner, and J. Hepinstall-Cymerman. 2010. Perceptions of foresters of wind damage in Mississippi forests. *Southern Journal of Applied Forestry*. 34(3): 124-130.
- Bettinger, P., T. Lowe, J. Siry, K.L. Merry, and N. Nibbelink. 2010. Analytical decision-making considerations for upgrading or changing GIS software. *Journal of Forestry*. 108(5): 238-244.
- Bettinger, P., K.L. Merry, and J. Hepinstall. 2009. Post-hurricane forest management responses in the southern United States. *Journal of Emergency Management*. 7(6): 35-50.
- Bettinger, P., K.L. Merry, and J. Hepinstall. 2009. Average tropical cyclone intensity along the Georgia, Alabama, Mississippi, and north Florida coasts. *Southeastern Geographer*. 49(1): 49-66.
- Merry, K., P. Bettinger, and J. Hepinstall. 2009. Physical and biological responses of forests to tropical cyclones affecting the United States Atlantic Ocean and Gulf of Mexico coasts. *American Journal of Environmental Sciences*. 5(1): 16-32.
- Merry, K.L., P. Bettinger, and W.G. Hubbard. 2008. Back to the future part 1: Surveying

- geospatial technology needs of Georgia land use planners. *Journal of Extension*. 46: 3RIB6.
- Merry, K.L., P. Bettinger, and W.G. Hubbard. 2008. Back to the future part 2: Surveying geospatial technology needs of Georgia agriculture and natural resources Extension professionals. *Journal of Extension*. 46: 4RIB1.
- Merry, K.L., P. Bettinger, M. Clutter, J. Hepinstall, and N.P. Nibbelink. 2007. An assessment of Geographic Information System (GIS) skills employed by field-level natural resource managers. *Journal of Forestry*. 105(7): 364-370.

Non-Peer Reviewed Publications

- Bettinger, P., K. Merry, S. McNulty, J. Siry, and M. Gavazzi. 2020. Variations in results of three biologically focused search engines: A case study using North American tree species. *Bulletin of the Ecological Society of America*. Available at: <https://esajournals.onlinelibrary.wiley.com/doi/full/10.1002/bes2.1808>.
- Bettinger, P. and K. Merry. 2016. An overview of the 10th Southern Forestry and Natural Resource Management GIS Conference. *Mathematical and Computational Forestry & Natural-Resource Sciences*. 8(1): 1-3.
- Merry, K. 2011. Timberland Maps. In T. Harris, S. Baldwin, and J. Siry, *United States Timber Markets: Transactions, Values, and Market Research*. Timber Mart-South. Athens, GA. USA. pp. 328-343.
- Merry, K., P. Bettinger, and J. Hepinstall-Cymerman. 2010 Modeling forest damage from hurricanes. In Merry, K., P. Bettinger, J. Fan, J. Kushla, T. Litts, J. Siry, J. Hepinstall-Cymerman, and B. Song (eds.), *Proceedings of the 7th Southern Forestry and Natural Resources GIS Conference*. Warnell School of Forestry and Natural Resources, University of Georgia, Athens, GA. 141 p.
- Bettinger, P., K.L. Merry, and J. Hepinstall-Cymerman. 2010. Potential storm surges of concern to Fort Stewart and Hunter Army Airfield. Warnell School of Forestry and Natural Resources, University of Georgia, Athens, GA. 260 p.
- Merry, K.L., P. Bettinger, and J. Hepinstall. 2009. Annotated bibliography of publications on hurricane activity and hurricane impacts of interest to land managers of forests of the southern and eastern United States. Warnell School of Forestry and Natural Resources, University of Georgia, Athens, GA. 72 p.
- Bettinger, P., J. Hepinstall-Cymerman, and K. Merry. 2009. Hurricane damage to forests at Fort Stewart, Georgia, Final Report. Warnell School of Forestry and Natural Resources, University of Georgia, Athens, GA. 126 p.
- Merry, K.L., and P. Bettinger. 2008. Surveys of GIS usage and needs among natural resource managers, Extension agents, and land use planners. In Bettinger, P., K.L. Merry, S. Fei, J. Drake, N. Nibbelink, and J. Hepinstall (eds.), *Proceedings of the 6th Southern Forestry and Natural Resources GIS Conference*. Warnell School of Forestry and Natural Resources, University of Georgia, Athens, GA. pp. 15-21.
- Merry, K.L., P. Bettinger, and W.G. Hubbard. 2008. Visualizing future landscapes: Options for natural resource managers and land use planners. Center for Forest Business, University of Georgia, Athens, GA. Research Note No. 28. 141 p.