

GRANT L. HARLEY

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PROFESSIONAL PREPARATION

- Ph.D. Geography, The University of Tennessee, May 2012.
Dissertation title: *Tree growth dynamics, fire history, and fire-climate relationships in pine rocklands of the Florida Keys, U.S.A.*
- M.A. Geography, University of South Florida, December 2007.
Thesis title: *A GIS-based inventory of terrestrial caves in west-central Florida: Implications on sensitivity, disturbance, ownership, and management priority.*
- B.A. Geography, University of South Florida, December 2005.

TEACHING AND RESEARCH APPOINTMENTS (FUNDED)

- | | |
|--|---|
| <i>Assistant Professor</i>
2017–present | Department of Geography, University of Idaho |
| <i>Assistant Professor</i>
2012–present | Department of Geography and Geology, University of Southern Mississippi |
| <i>Graduate Assistant</i>
2010–2012 | Department of Geography, University of Tennessee |
| <i>Research Assistant</i>
2011 | “East Tennessee Dendroarchaeology Project,” funded by the Frank H. McClung Museum. |
| <i>NSF GK-12 Fellow</i>
2008–2010 | Department of Geography, University of Tennessee. Funded by the National Science Foundation to improve the teaching of earth science in rural middle schools of East Tennessee. |
| <i>Lab Technician</i>
2007 | Karst Laboratory, University of South Florida.
“An isotopic calibration study of precipitation, cave dripwater, and climate in west-central Florida,” a project funded by the Southwest Florida Water Management District. |
| <i>Graduate Assistant</i>
2006–2007 | Department of Geography, University of South Florida |
| <i>Research Assistant</i>
2006 | “Water supply privatization, vulnerability, and social justice in Belize City, Belize,” a project funded by the Dr. Kiran C. Patel Center for Global Solutions, University of South Florida. |

Research Assistant “Late Holocene environmental reconstruction using cave sediments
2005 from Belize”, funded by the National Speleological Society and
University of South Florida.

PUBLICATIONS (PEER-REVIEWED)

† = undergraduate student co-author; ♣ = graduate student co-author

2017

- [33] **Grant L. Harley**, James King, and Justin T. Maxwell. 2017. Trans-Atlantic connections between African dust flux and tree growth in the Florida Keys, *Earth Interactions* 21(7): 1–22, <https://doi.org/10.1175/EI-D-16-0035.1>
- [32] ♣Trevis J. Matheus, Justin T. Maxwell, and **Grant L. Harley**. 2017. A method for measuring sub-annual ring widths of *Pinus edulis* and subsequent analysis of the climate-growth response of earlywood and latewood, *Tree-Ring Research* 73(2): 91–101.
- [31] R. Stockton Maxwell, **Grant L. Harley**, Justin T. Maxwell, Shelly A. Rayback, Neil Pederson, Ed R. Cook, David J. Barclay, and Wenhong Li. 2017. An interbasin comparison of tree-ring reconstructed streamflow in the eastern United States, *Hydrological Processes* 31(13): 2381–2394, <https://doi.org/10.1002/hyp.11188>
- [30] ♣Clay S. Tucker, Jill C. Trepanier, **Grant L. Harley**, and Kristine L. DeLong. 2017. Coastal pine trees record northern Gulf of Mexico tropical cyclone activity from 1909–2017, In Press, *Journal of Coastal Research*, <https://doi.org/10.2112/JCOASTRES-D-16-00177.1>
- [29] Trevis J. Matheus, Justin T. Maxwell, ♣Joshua S. Oliver, ♣Michael P. Thornton, †Michael Hess, and **Grant L. Harley**. 2017. Defining the pioneer settlement history around the Spring Mill village in southern Indiana using dendroarchaeology, *Dendrochronologia* 43: 12–19.
- [28] Nesibe Köse, Tuncay H. Güner, **Grant L. Harley**, and Joel Guiot. 2017. A broad network of tree-ring chronologies reveals the first spring temperature reconstruction from Turkey, *Climate of the Past* 13:1–15, <https://doi.org/10.5194/cp-13-1-2017>
- [27] **Grant L. Harley**, Justin T. Maxwell, David Holt, and †Christopher Speagle. 2017. Construction history of the Deason House, Jones County, Mississippi, *Dendrochronologia* 43: 50–58.
- [26] **Grant L. Harley**, Justin T. Maxwell, Evan Larson, Henri D. Grissino-Mayer, Joseph Henderson, and Jean Huffman. 2017. Suwannee River flow variability 1550–2005 CE reconstructed from a multispecies tree-ring network. *Journal of Hydrology*, 544, 438–451, doi: <http://dx.doi.org/10.1016/j.jhydrol.2016.11.020>

- [25] Justin T. Maxwell and **Grant L. Harley**. 2017. Increased tree-ring network density reveals more precise estimations of sub-regional hydroclimate variability and climate forcing in the Midwest, U.S.A., *Climate Dynamics* 49(4): 1479–1493, doi 10.1007/s00382-016-3396-9
- [24] Tuncay H. Güner, Nesibe Köse, and **Grant L. Harley**. 2017. A 200-year reconstruction of Kocasu River (Sakarya Basin, Turkey) streamflow derived from tree rings. *International Journal of Biometeorology* 61(3):427–437, doi:10.1007/s00484-016-1223-y

2016

- [23] Thomas Patterson, R. Stockton Maxwell, **Grant L. Harley**, ♣Joshua S. Oliver, James Speer, Savannah Collins, Madison Downe, Benjamin Gannon, Lan Ma, Chance Raso, Cody Russell, Aaron Teets. 2016. Climate-signal instability in *Pinus rigida* at the northern range limit, Acadia National Park, Maine. *Northeastern Naturalist*, 23(4):490–500, doi: <http://dx.doi.org/10.1656/045.023.0406>
- [22] ♣Jordan V. Pino, Robert V. Rohli, Kristine L. DeLong, **Grant L. Harley**, and Jill C. Trepanier. 2016. Using proxy records to document Gulf of Mexico tropical cyclones from 1820–1915. *PLoS ONE* 11(11): e0167482. doi:10.1371/journal.pone.0167482
- [21] Justin T. Maxwell, **Grant L. Harley**, and Scott M. Robeson. 2016. On the declining relationship between tree growth and climate in the Midwest United States: The fading drought signal, *Climatic Change* 138(1): 127–142. doi:10.1007/s10584-016-1720-3
- [20] ♣Charles R. White and **Grant L. Harley**. 2016. Historical fire in longleaf pine (*Pinus palustris* Mill.) forests of south Mississippi and its relation to land use and climate, *Ecosphere* 7(11):e01458. 10.1002/ecs2.1458
- [19] Valerie Trouet, **Grant L. Harley**, and Marta Dominguez Delmás. 2016. Shipwreck rates reveal Caribbean tropical cyclone response to past radiative forcing, *Proceedings of the National Academy of Sciences of the United States of America* 113(12): 3169–3174, doi: 10.1073/pnas.1519566113.
- [18] Justin T. Maxwell, Darren L. Ficklin, **Grant L. Harley**, and Gregory V. Jones. 2016. Projecting future winegrape yields using a combination of *Vitis vinifera* L. growth rings and soil moisture simulations, northern California, USA, *Australian Journal of Wine and Grape Research* 22(1): 73–80, doi: 10.1111/ajgw.12158

2015

- [17] **Grant L. Harley**, Justin T. Maxwell, and George T. Raber. 2015. Elevation promotes long-term survival of the foundation species (*Pinus elliottii* var. *densa*) of the endangered pine rockland ecosystem in the Florida Keys, *Endangered Species Research* 29(2): 117–130.

- [16] Justin T. Maxwell, **Grant L. Harley**, and ♣Trevis J. Matheus. 2015. Dendroclimatic reconstructions from multiple co-occurring species: A case study from an old-growth deciduous forest in Indiana, U.S.A., *International Journal of Climatology* 35(6): 860–870, doi: 10.1002/joc.4021.

2014

- [15] Mark D. Spond, Henri D. Grissino-Mayer, and **Grant L. Harley**. 2014. Comparing mixed-conifer woodland dynamics on the Bandera Lava Flow (1948–2010), New Mexico, U.S.A., *The Southwestern Naturalist*, 59(2): 235–243.
- [14] **Grant L. Harley**, H. D. Grissino-Mayer, Sally P. Horn, and Chris Bergh. 2014. Fire synchrony and the influence of Pacific climate variability on wildfires in the Florida Keys, U.S.A., *Annals of the Association of American Geographers* 104(1):1–19, doi: 10.1080/00045608.2013.843432.
- [13] †Christopher A. Petruccelli, John B. Sakulich, **Grant L. Harley**, and Henri D. Grissino-Mayer. 2014. Structure and dynamics of an old-growth pine-oak community of the Southern Appalachians, Georgia, U.S.A., *Southeastern Geographer* 54(2):161–182.
- [12] ♣Mark Van Aken, **Grant L. Harley**, ♣James F. Dickens, Jason S. Polk, and Leslie North. 2014. A GIS-based modeling approach to predicting cave disturbance in karst landscapes: A case study from west-central Florida, *Physical Geography* 35(2): 123–133.

2013

- [11] **Grant L. Harley**. 2013. Tropical Tree Rings and Environmental Change. *Southeastern Geographer* 53(1):1–3.
- [10] **Grant L. Harley**, Henri D. Grissino-Mayer, and Sally P. Horn. 2013. Fire history and forest structure of endangered pine rockland communities in the Florida Keys, *International Journal of Wildland Fire* 22(3):394–404.
- [9] Henri D. Grissino-Mayer, Justin T. Maxwell, **Grant L. Harley**, Niki A. Garland, David H. Holt, Carl Aspher, B. Jacob Beale, Mathew S. Boehm, Kristen A. de Graauw, Anna-Maria Rautio, and Alex W. Dye. 2013. Dendrochronology reveals the construction history of an early 19th century farm settlement, southwestern Virginia, USA. *Journal of Archaeological Science* 40(1):481–489.

2012

- [8] **Grant L. Harley** and Henri D. Grissino-Mayer. 2012. Tree Rings as Environmental Indicators. Pages 359–361 in Daniel Fogel, Sarah Fredericks, Lisa Harrington, and Ian Spellerberg, eds., *The Encyclopedia of Sustainability: Vol. 6. Measurements, Indicators, and Research Methods for Sustainability*. Berkshire Publishing: Great Barrington, Massachusetts.

- [7] **Grant L. Harley**, Henri D. Grissino-Mayer, Jennifer A. Franklin, Chad Anderson, and Nesibe Köse. 2012. Cambial activity of *Pinus elliottii* var. *densa* reveals influence of solar radiation on seasonal growth dynamics in the Florida Keys. *Trees—Structure and Function* 26(5):1449–1459.
- [6] Niki A. Garland, H. D. Grissino-Mayer, Kathleen Deagan, **Grant L. Harley**, and Gifford Waters. 2012. Dendrochronological Dating of Wood from the Fountain of Youth Park Archaeological Site (8SJ31), St. Augustine, Florida, U.S.A. *Tree-Ring Research* 68(1):69–78.

2011

- [5] **Grant L. Harley**, Jason S. Polk, Leslie A. North, and Philip Reeder. 2011. Application of a cave inventory system to stimulate development of management strategies: The case of west-central Florida, USA. *Journal of Environmental Management* 92(10):2547–2557.
- [4] **Grant L. Harley**, Lisa B. LaForest, and Henri D. Grissino-Mayer. 2011. Dendrochronological Dating of the Lund-Spathelf House, Ann Arbor, Michigan, U.S.A. *Tree-Ring Research* 67(2):117–121.
- [3] **Grant L. Harley**, Henri D. Grissino-Mayer, and Sally P. Horn. 2011. The Dendrochronology of *Pinus elliottii* in the Lower Florida Keys: Chronology Development and Climate Response. *Tree-Ring Research* 67(1):39–50.

2010

- [2] Henri D. Grissino-Mayer, Leda N. Kobziar, **Grant L. Harley**, Kevin P. Russell, and Lisa B. LaForest. 2010. The Historical Dendroarchaeology of the Ximenez-Fatio House, St. Augustine, Florida, U.S.A. *Tree-Ring Research* 66(1):61–73.
- [1] **Grant L. Harley**, Philip Reeder, Jason S. Polk, and Philip E. van Beynen. 2010. Developing a GIS-Based Inventory for the Implementation of Cave Management Protocols in Withlacoochee State Forest, Florida. *Journal of Cave and Karst Studies* 72(1):35–42.

IN REVIEW [REVISE & RESUBMIT]

Grant L. Harley and Justin T. Maxwell. Current declines of Pecos River streamflow in a 700-year context, *revise and resubmit*, *Holocene*.

IN REVIEW

Grant L. Harley, Kristine DeLong, Samuel J. Bentley Sr., Kehui Xu, Carl Andy Reese, Jeffrey B. Obelcz, and Suyapa Gonzalez. Discovery of a Pleistocene forest in the Gulf of Mexico, *in review*.

Trevis J. Matheus, Justin T. Maxwell, **Grant L. Harley**, and Brandon M. Strange. Environmental growth response of high-elevation *Picea engelmannii* at the southern range margin, New Mexico, USA, *in review*.

John B. Sakulich, **Grant L. Harley**, Jim H. Buck, and Henri D. Grissino-Mayer. Using dendrochronology to estimate the date of establishment of the southernmost outlier population of emerald ash borer (*Argrilus planipennis*, Coleoptera: Buprestidae), *in review*.

RESEARCH SUPPORT

PI *Principal investigator*

RESEARCH SUPPORT: ONGOING

Investigation of an Ancient Bald Cypress Forest in the Northern Gulf of Mexico, U.S.A., Bureau of Ocean Energy Management, Role: Co-PI, Duration: 2016–2019, **\$261,000**.

RESEARCH SUPPORT: UNDER REVIEW

Training Dendrochronologists: A Workshop Approach to Analyses of Multiple Disturbances in the Greater Yellowstone Ecosystem. Role: Co-PI, Duration: 2018–2021, National Science Foundation—Geography and Spatial Sciences, **\$17,927**.

Examining the Causes and Spatial Variability of the Fading Signal between Tree-Rings and Soil Moisture from Multiple Species Across the Midwestern US. Role: Co-PI, Duration: 2018–2021, National Science Foundation—Geography and Spatial Sciences, **\$57,927**.

RESEARCH SUPPORT: COMPLETED

Collaborative Forest Landscape Restoration Plan, USDA Forest Service, Role: Co-PI, Duration: 2014–2017, **\$32,000**.

Paleoenvironmental investigations of an ancient bald cypress forest uncovered recently in the northern Gulf of Mexico, Wallace Research Foundation, Role: PI, Duration: 2013–2017, **\$21,982**.

Paleo-perspectives of wildfire and vegetation assemblage derived from bog sediments in DeSoto Ranger District, Mississippi, USDA Forest Service, Role: PI, Duration: 2013–2017, **\$39,600**.

Human and climate affects on fire in the Gallinas Mountains, New Mexico, U.S.A., Arthell Kelley Research Initiative, Role: co-PI (graduate student PI), Duration: 2016–2017, **\$2,550**.

A multi-millennial drought reconstruction from Rocky Mountain juniper, west-central New Mexico, U.S.A., Arthell Kelley Research Initiative, Role: co-PI (graduate student PI), Duration: 2015–2017, **\$4,850**.

Historical water availability in the Pecos River basin, New Mexico: Implications on climate drivers and cultural practices, Arthell Kelley Research Initiative, Role: co-PI (graduate student PI), Duration: 2015–2017, **\$4,307**.

Yates Dissertation Fellowship, University of Tennessee Graduate School, Role: PI, Duration: 2011–2012, **\$15,000**.

Doctoral Dissertation Research: Vegetation dynamics of endangered pine rockland communities in the lower Florida Keys, National Science Foundation Doctoral Dissertation Research Improvement Grant, Role: Co-PI (PI Henri Grissino-Mayer), Duration: 6/1/10–5/31/12, **\$12,000**.

A multi-proxy reconstruction of North Atlantic Ocean Basin tropical cyclones for the Gulf Coast Region, Proposal Development Grant, Office of Vice Provost for Research, University of Southern Mississippi, Role: PI, Duration: 2012–2014, **\$2,000**.

RESEARCH SUPPORT: SUBMITTED, NOT FUNDED

Hydromatic: An open-source web application tool for improved water planning in the United States, Role: PI, Google.

Project EastNet: estimating past streamflow and modeling future flow variability across the Eastern United States, Role: PI, National Science Foundation—Paleoperspectives on Climate Change (P2C2).

Assessing the Resiliency of Maritime Pine Savannas to Multiple Disturbance Regimes in a Changing Climate, Role: Co-PI, Joint Fire Science Program.

Influence of African Dust on the endangered pine rockland ecosystem, Florida Keys, U.S.A., National Science Foundation [Geography and Spatial Sciences], Role: PI.

A high-resolution reconstruction of Sierra Nevada paleo-hydrology with implications for ecology and water supply, National Science Foundation [Dual: Geography and Spatial Sciences, Hydrology], Role: Co-PI.

Grape yields in a changing climate: Reconstructing past and projecting future California grape product yields, National Science Foundation [Geography and Spatial Sciences], Role: Co-PI

Understanding the relationships between climate and grape product yields in California and the perceptions of climate variability among vineyard operators. U.S. Department of Agriculture, Role: Co-PI.

A high-resolution multi-proxy network for the Gulf of Mexico and Florida, National Science Foundation, Role: Co-PI.

Reconstructing past and projecting future California grape product yields, American Viticultural Foundation, Role: Co-PI.

Recovering a buried climate treasure: Ancient cypress forest uncovered in the Gulf of Mexico offers a rare paleoenvironmental record during the last glacial cycle 50 ka BP, National Geographic Society, Role: PI.

TEACHING EXPERIENCE

GEOG100—Introduction to Physical Geography, Department of Geography, University of Idaho, 2017–present

GHY424/524—Quaternary Environments, Department of Geography and Geology, University of Southern Mississippi, 2015–present

GHY423/523—Tree Rings and Environmental Change (Dendrochronology), Department of Geography and Geology, University of Southern Mississippi, 2014–present

GHY425/525—Climatology, Department of Geography and Geology, University of Southern Mississippi, 2013–present

GHY422/522—Biogeography, Department of Geography and Geology, University of Southern Mississippi, 2013–present

- GHY104—Introduction to Physical Geography: Weather and Climate**, Department of Geography and Geology, University of Southern Mississippi, 2012–present
- GHY327—Earth Surface Processes & Environments (Geomorphology)**, Department of Geography and Geology, University of Southern Mississippi, 2013–present
- GHY131—Geography of the Natural Environment (I): Weather, Climate, and Biomes**, Department of Geography, University of Tennessee, 2010–2011.
- GHY132—Geography of the Natural Environment (II): Geomorphology and Soils**, Department of Geography, University of Tennessee, 2011–2012.
- National Science Foundation GK-12 Fellow**, Department of Geography, University of Tennessee, 2008–2010.
- Introduction to Physical Geography Laboratory**, Department of Geography, University of South Florida, 2006–2007.
- Computer Cartography (Teaching Assistant)**, Department of Geography, University of South Florida, 2006.
- Geographic Information Systems (Teaching Assistant)**, Department of Geography, University of South Florida, 2006.
- Advanced Geographic Information Systems (Teaching Assistant)**, University of South Florida, 2006.
- Group Leader/Facilitator**, 21st Annual North American Dendroecological Fieldweek, 1–9 August 2011, Mountain Lake Biological Station, Pembroke, Virginia.
- Instructor, Geographic Awareness Week**, Tennessee Geographic Alliance, University of Tennessee. 2009 & 2010.
- Instructor**, Cartography Workshop for Middle and High School Students and Teachers, Earth Science Fair sponsored by the Department of Earth and Planetary Sciences, University of Tennessee. 2008.

GRADUATE STUDENTS

- James McGee (current)—research topic: Human-climate controls on fire in the Gallinas Mountains, New Mexico, USA
- Joshua Oliver (graduated May 2017)—research topic: A multi-millennial precipitation reconstruction for northwest New Mexico derived from Rocky Mountain juniper (*Juniperus scopulorum* Sarg.)
- Michael Thornton (graduated May 2017)—research topic: hydrology, dendroclimatology
- Kayla Pendergrass (graduated May 2015)—“*Application of a new tree-ring based drought reconstruction method at multiple forest sites across Indiana, USA*”
- Raymond White (graduated May 2015)—“*Human impacts on fire in De Soto National Forest, Mississippi, USA*”

AWARDS

- National Science Foundation GK-12 Fellowship**, Division of Graduate Education, National Science Foundation, Duration: 8/1/08–5/31/10.
- Outstanding Teaching Associate Award**, Department of Geography, University of Tennessee.
- Student Publication Award**, Department of Geography, University of Tennessee.
- Competitive Travel Award**, to present at the 2011 Association of American Geographers meeting, Seattle, Washington, Graduate Student Senate and Department of Geography, University of Tennessee, total **\$850**.

Student Publication Award, Department of Geography, University of Tennessee.

Competitive Travel Award, to present at the 2010 Association of American Geographers meeting, Washington, D.C., Graduate Student Senate and Department of Geography, University of Tennessee, total **\$750**.

Professional Development Award, Department of Geography, University of Tennessee.

Competitive Travel Award, Department of Geography, University of South Florida, to present at the 2007 National Speleological Society Convention, Marengo, Indiana, **\$400**.

Competitive Travel Award, to present at the 2007 Association of American Geographers meeting, San Francisco, California, Department of Geography and Graduate and Professional Student Council, University of South Florida, total **\$800**.

OTHER RELEVANT PROFESSIONAL EXPERIENCE

<i>Co-Director</i> 2008–present	The Karst Conservancy, a non-profit, national-level land trust dedicated to protecting karst landscapes from human impacts. http://www.karstconservancy.org/
<i>GIS Technician</i> 2006–2008	Florida Center for Community Design and Research, Tampa, Florida.

OTHER PUBLICATIONS (UNREFEREED) AND REPORTS

Grant L. Harley. Tree growth dynamics, fire history, and fire-climate relationships in pine rocklands of the Florida Keys, U.S.A., Ph.D. Dissertation, University of Tennessee. 246 pp.
Jason S. Polk, **Grant L. Harley**, Robert Brooks, Lance Elder, and Thomas Turner. 2011. The Karst Conservancy's Efforts Toward Cave and Karst Protection and Education in the United States. *NSS News* 69(4): 7.

Grant L. Harley, John Peterson, Peter Brown, Nathan Beane, Jim Buck, Alex Collins, Steven Hughes, Sam Jackson, Rebecca Kidd, Derek Luchik, Christy Rollinson, Alexander Stewart, Jane Wolken. The truth is in the wood: Building a chronology from the Ellet Valley Nature Trail using techniques of dendrochronology. Final Report, 21st Annual North American Dendroecological Fieldweek, Mountain Lake Biological Research Station, Blacksburg, Virginia, 10 pp. http://dendrolab.indstate.edu/nadef/2011/2011_Intro_Paper_Final_2.pdf

Henri D. Grissino-Mayer, H.D., Leda N. Kobziar, **Grant L. Harley**, Kevin P. Russell, and Lisa B. LaForest. 2009. The historical dendroarchaeology of the Ximenez-Fatio House, St. Augustine, Florida, U.S.A. Final Report, National Society of The Colonial Dames of America in the State of Florida. 44 pp.

Saskia van de Gevel, Christopher Gentry, **Grant L. Harley**, Stacy Birch, Stella Cousins, Jeff Dech, Christopher Guiterman, Benjamin Hook, Eli Martinson, Rob Morrissey, Mike Reinikainen, Soung-Ryoul Ryu, April Sahara, and John Waldron. 2009. Forest stand dynamics and disturbance history in a mixed hardwood forest, Simes Tract, Harvard Forest, Massachusetts. Final Report, 19th Annual North American Dendroecological Fieldweek, Hampshire College, Massachusetts. 30 pp.

http://dendrolab.indstate.edu/nadef/2009/Papers/Stand_Dynamics_Paper_FINAL_NADEF_2009.pdf

Grant L. Harley. 2007. A GIS-based inventory of terrestrial caves in west-central Florida: Implications on sensitivity, disturbance, ownership, and management priority, M.A. thesis, University of South Florida. 321 pp.

INVITED PRESENTATIONS

- How cattle, fire, logging, and climate shaped the Mississippi Piney Woods since ca. 1750 CE.* Missouri Western State University, 4 November 2015
- The red [maple] menace: insights into the future structure and composition of forests in the eastern United States.* Berry College, 27 January 2015
- Disturbance history of the Marshall Forest Preserve—an old-growth pine-oak community in the Southern Appalachians.* Shorter University, 26 January 2015
- Tree-growth dynamics, fire history, and fire-climate relationships in an endangered subtropical ecosystem of the Florida Keys, USA.* Gulf Coast Research Laboratory, 6 December 2012.
- Historical wildfires and their importance in sustaining a globally-endangered subtropical ecosystem in Florida.* Department of Geography, University of West Florida, 25 September 2012.
- Vegetation dynamics in globally-endangered pine rocklands of the Florida Keys.* Department of Geography and Anthropology, Louisiana State University, 14 September 2012.
- The use of dendrochronology to determine construction dates for the Murphy Springs Plantation, Knoxville, Tennessee.* Knox Heritage Preservation Network, Knoxville, Tennessee, 7 May 2010.
- Cave sensitivity and disturbance in Belleview, Marion County, Florida.* Marion County Board of County Commissioners, Ocala, Florida, 11 October 2007.
- An overview of karst research at USF: Advances in Florida climate research and cave management.* Department of Geography, University of South Florida, 28 September 2007.

PROFESSIONAL PRESENTATIONS

† = student co-author

- Jeffrey B. Obelcz, Kehui Xu, Suyapa Gonzalez, Samuel J. Bentley Sr, Alicia Caporaso, Kristine L. DeLong, **Grant L. Harley**, Carl Andy Reese, Jonathan T. Truong, David Dodd, and William M. Graham. Samuel J. Bentley Sr. Placing a Late Pleistocene Drowned Forest within the Geological Context of the Northern Gulf of Mexico via Seafloor and Shallow Subsurface Mapping. (E21E-08). American Geophysical Union, December 12–16, 2016.
- Suyapa Gonzalez, Samuel J. Bentley, Kristine L. DeLong, Kehui Xu, Alicia Caporaso, Jeffrey B. Obelcz, **Grant L. Harley**, Carl Andy Reese, Jonathan T. Truong. Preliminary Facies Reconstruction of a Late Pleistocene Cypress Forest Discovered on the Northern Gulf of Mexico Continental Shelf. (E21E-07). American Geophysical Union, December 12–16, 2016.
- Thomas Patterson, R. Stockton Maxwell, **Grant L. Harley**, †Joshua S. Oliver, James Speer, Savannah Collins, Madison Downe, Benjamin Gannon, Lan Ma, Chance Raso, Cody Russell, Aaron Teets. Climate-signal instability in *Pinus rigida* at the northern range limit, Acadia National Park, Maine. Association of American Geographers Annual Meeting, March 29–April 2, 2016, San Francisco, California.
- R. Stockton Maxwell, **Grant L. Harley**, Justin T. Maxwell, Shelly A. Rayback, Neil Pederson, Edward R. Cook, David J. Barclay, Wenhong Li, and John Rayburn. Tree-ring reconstructions of streamflow in the Eastern U.S. Southeastern Division of the Association of American Geographers, November 20–21, 2016, Columbia, South Carolina.
- †Joshua S. Oliver and **Grant L. Harley**. A multi-millennial perspective of drought variability for the American Southwest using Rocky Mountain juniper (*Juniperus scopulorum* Sarg.).

- Southeastern Division of the Association of American Geographers, November 20–21, 2016, Columbia, South Carolina.
- †Michael P. Thornton and **Grant L. Harley**. A multi-centennial perspective of snowpack variability for the Sangre de Cristo Mountains, New Mexico. Southeastern Division of the Association of American Geographers, November 20–21, 2016, Columbia, South Carolina.
- Matthew Therrell, Matthew Meko, Margaret Bialecki, and **Grant L. Harley**. Tree ring anatomical variability as an indicator for large-magnitude spring flooding in the Lower Mississippi Basin. (PP51A-2262). American Geophysical Union, December 14–18, 2015.
- R. Stockton Maxwell, **Grant L. Harley**, Justin T. Maxwell, Shelly A. Rayback, Neil Pederson, Ed R. Cook, David J. Barclay, Wenhong Li, and John Rayburn. Reconstructed streamflow in the eastern United States: validity, drivers, and challenges. (PP51A-2241). American Geophysical Union, December 14–18, 2015.
- Grant L. Harley**, James S. King, and Justin T. Maxwell. Trans-Atlantic connections between African dust flux and tree growth in the Florida Keys, U.S.A. Association of American Geographers Annual Meeting, April 21–25, 2015, Chicago, Illinois.
- Grant L. Harley**, Valerie Trouet, and Marta Dominguez-Delmas. Shipwreck rates and tree rings suggest reduced North Atlantic tropical cyclone activity during the Maunder Minimum. (PP33a-1205). American Geophysical Union, December 15–19, 2014.
- Justin Maxwell, **Grant L. Harley**, Kayla Pendergrass, and Trevis J. Matheus. Dendroclimatic reconstructions from multiple co-occurring species from old-growth deciduous forests in Indiana, USA. (PP33A-1193). American Geophysical Union, December 15–19, 2014.
- Grant L. Harley**, Stockton Maxwell, Neil Pederson, Justin Maxwell, and Shelly Rayback. Flint River streamflow since 947 AD reconstructed from tree rings. Annual Meeting of the Southeastern Division of the Association of American Geographers, November 23–25, 2014, Athens, Georgia.
- †Kayla Pendergrass, **Grant L. Harley**, and Justin Maxwell. Climate reconstructions from multiple co-occurring tree species: a case study from an old-growth deciduous forest in Indiana, U.S.A. Annual Meeting of the Southeastern Division of the Association of American Geographers, November 23–25, 2014, Athens, Georgia.
- Grant L. Harley**. Forest structure of sub-tropical pine rocklands in relation to micro-site elevation on islands in the Florida Keys. Association of American Geographers Annual Meeting, April 8–12, 2014, Tampa, Florida.
- Lauren A. Stachowiak, Henri D. Grissino-Mayer, Nicholas N. Nagle, and **Grant L. Harley**. Applied GIS and fire behavior in a pine rocklands ecosystem, Big Pine Key, Florida, U.S.A. Association of American Geographers Annual Meeting, April 8–12, 2014, Tampa, Florida.
- Jason S. Polk, Leslie North, Jonathan Oglesby, Bernie Strencky, Gilman Ouellette, Kegan McClanahan, Ben Miller, Taylor Huthison, Lowell Neeper, Aaron Holland, and **Grant L. Harley**. Climate change and water resources in the Southeastern USA and Caribbean: A geographical approach to problem solving. Association of American Geographers Annual Meeting, April 8–12, 2014, Tampa, Florida.
- Justin Maxwell, **Grant L. Harley**, and Trevis J. Matheus. Dendroclimatic reconstructions from multiple co-occurring species: a case study from an old-growth deciduous forest in Indiana, U.S.A. Association of American Geographers Annual Meeting, April 8–12, 2014, Tampa, Florida.

- Bandana Kar and **Grant L. Harley**. Suitability of remote sensing data for African dust mapping in the Florida Keys, U.S.A. American Society for Photogrammetry and Remote Sensing (ASPRS) Annual Conference, March 23–28, 2014, Louisville, Kentucky.
- Valerie Trouet, Marta-Dominguez-Delmas, Henry Diaz, David Frank, and **Grant L. Harley**. Climate dynamics and European history. 9th International Conference on Dendrochronology, January 13–17, 2014, Melbourne, Australia.
- Grant L. Harley** and Justin L. Hart. On the use of tree growth anomalies to detect North Atlantic tropical cyclone activity 1707–2010, Florida Keys, U.S.A. (PP11A-1802). American Geophysical Union, December 7–13, 2013.
- †William Funderburk, Gregory A. Carter and **Grant L. Harley**. Mapping the distribution of sand live oak (*Quercus geminata*) and determining growth responses to Hurricane Katrina (2005) on Cat Island, Mississippi (B13I-0634). American Geophysical Union, December 7–13, 2013.
- †Kayla Pendergrass, **Grant L. Harley**, and Nicholas P. Herrmann. Using techniques of dendrochronology to reveal burial dates for unmarked graves of the former Mississippi Insane Asylum, Jackson, Mississippi, U.S.A. Annual Meeting of the Southeastern Division of the Association of American Geographers, November 24–26, 2013, Roanoke, Virginia.
- †William Funderburk, Gregory A. Carter, and **Grant L. Harley**. Forest stand and geomorphic relationships on siliciclastic barrier islands: Determining growth responses of *Pinus elliottii* to Hurricanes Camille (1969) and Katrina (2005) on Cat Island, Mississippi. Annual Meeting of the Southeastern Division of the Association of American Geographers, November 24–26, 2013, Roanoke, Virginia.
- †Luke A. Wylie and **Grant L. Harley**. Disturbance history of the Mississippi Piney Woods: Implications on the ecological effects of widespread 20th century logging. Annual Meeting of the Southeastern Division of the Association of American Geographers, November 24–26, 2013, Roanoke, Virginia.
- Grant L. Harley**, Henri D. Grissino-Mayer, Sally P. Horn, and Chris Bergh. Pacific climate forcing of historical wildfire in an endangered subtropical ecosystem of the Florida Keys, U.S.A. Second American Dendrochronology Conference, May 13–17, 2013.
- Grant L. Harley**, Henri D. Grissino-Mayer, and Sally P. Horn. Fire history and forest structure of an endangered subtropical ecosystem in the Florida Keys, U.S.A. Annual Meeting of the Southeastern Division of the Association of American Geographers, November 18–20, 2012, Asheville, North Carolina.
- Grant L. Harley**, Henri D. Grissino-Mayer, Jennifer A. Franklin, Chad Anderson, and Nesibe Kose. Cambial activity of *Pinus elliottii* var. *densa* reveals influence of solar radiation on seasonal growth dynamics in the Florida Keys. Association of American Geographers Annual Meeting, February 24–28, 2012, New York, New York.
- Sally P. Horn, Henri D. Grissino-Mayer, Joshua W. Albritton, Jeff Malik, Christopher A. Underwood, Nathan Sharp, Marshal Massey, Desiree Kocis, Mathew Boehm, **Grant L. Harley**, and Kenneth H. Orvis. Charcoal records of long-term fire history in the National Key Deer Refuge, Florida Keys, U.S.A. Association of American Geographers Annual Meeting, February 24–28, 2012, New York, New York.
- Grant L. Harley**, John B. Sakulich, Jim H. Buck, and Henri D. Grissino-Mayer. Dendrochronological analysis of the southernmost outlier population of the Emerald Ash

- Borer (Coleoptera: Buprestidae). Annual Meeting of the Southeastern Division of the Association of American Geographers, November 20–22, 2011, Savannah, Georgia.
- Grant L. Harley** and Henri D. Grissino-Mayer. Seasonal wood formation of slash pines (*Pinus elliottii* var. *densa*) in the Lower Florida Keys, U.S.A. Association of American Geographers Annual Meeting, April 12–16, 2011, Seattle, Washington.
- April Sahara, **Grant L. Harley**, Saskia van de Gevel, Christopher Gentry, Stacy Birch, Stella Cousins, Jeff Dech, Christopher Guiterman, Benjamin Hook, Eli Martinson, Rob Morrissey, Mike Reinikainen, Soung-Ryoul Ryu, and John Waldron. Forest stand dynamics and disturbance history in a mixed hardwood forest, Simes Tract, Harvard Forest, Massachusetts. Association of American Geographers Annual Meeting, April 12–16, 2011, Seattle, Washington.
- Grant L. Harley**, Henri D. Grissino-Mayer, Lisa B. LaForest, and Patrick McCauley, 2010. Dendrochronological dating of the Lund-Spathelf House, Ann Arbor, Michigan. Southeastern Divisional of the Association of American Geographers Annual Meeting, November 21–23, 2010, Birmingham, Alabama.
- Niki A. Garland, Henri D. Grissino-Mayer, **Grant L. Harley**, Kathleen Deagan, and Gifford Waters, 2010. Dendrochronological dating of wood from the Fountain of Youth Park Site (8SJ31), St. Augustine, Florida. Southeastern Divisional of the Association of American Geographers Annual Meeting, November 21–23, 2010, Birmingham, Alabama.
- Jason S. Polk, **Grant L. Harley**, Sean Vanderhoff, Benjamin Miller, and Philip Reeder, 2010. Using a karst atlas approach to address the complexities of karst resource management in west-central, FL, USA. Kentucky Academy of Science 96th Annual Meeting, Bowling Green, KY, November 2010.
- Grant L. Harley**, Henri D. Grissino-Mayer, and Sally P. Horn. Slash pine (*Pinus elliottii* var. *densa*) in the lower Florida Keys: Climate response and fire history reconstructions. Association of American Geographers Annual Meeting, April 14–18, 2010, Washington, D.C.
- Alice Schoen, **Grant L. Harley**, and Sally P. Horn. Teaching mountain building and tectonics with reusable modeling compound. Association of American Geographers Annual Meeting, April 14–18, 2010, Washington, D.C.
- Sally P. Horn, Henri D. Grissino-Mayer, Kenneth H. Orvis, Ian A. Slayton, **Grant L. Harley**, Joshua W. Albritton, Jeff Malik, and Christopher A. Underwood. Environmental history from pond sediments and tree rings in pine rocklands of the Florida Keys and Bahamas. Pine Rockland Conference 2010: Consequences of Fragmentation, February 11, 2010, Miami, Florida.
- Grant L. Harley**, Henri D. Grissino-Mayer, and Sally P. Horn. Vegetation dynamics of endangered pine rockland communities in the lower Florida Keys. Southeastern Divisional of the Association of American Geographers Annual Meeting, November 22–24, 2009, Knoxville, Tennessee.
- Grant L. Harley**, Jolene L. Hamilton, John B. Sakulich, Matthew J. Valente, and Sally P. Horn. The GK-12 Earth Project at the University of Tennessee: Integrating fellows' research into middle school classrooms. National Science Foundation GK-12 Annual Meeting, March 27–29, 2009, Washington, D.C.
- Grant L. Harley**, Kevin P. Russell, Henri D. Grissino-Mayer, Lisa B. LaForest, and Leda N. Kobziar. The historical dendroarchaeology of the Ximenez-Fatio House, St. Augustine,

- St. Johns County, Florida, U.S.A. National Science Foundation GK-12 Annual Meeting, March 27–29, 2009, Washington, D.C.
- Kevin P. Russell, Henri D. Grissino-Mayer, **Grant L. Harley**, Lisa B. LaForest, and Leda N. Kobziar. Dendroarchaeological investigations of the Ximenez-Fatio House, St. Augustine, Florida. Exhibition of Undergraduate Research and Creative Achievement, April 1–2, 2009, The University of Tennessee, Knoxville, Tennessee.
- Grant L. Harley**, Philip Reeder, and Jason S. Polk. A GIS-based inventory of terrestrial caves in west-central Florida: Implications of sensitivity, disturbance, ownership and management priority. Association of American Geographers Annual Meeting, April 15–19, 2008, Boston, Massachusetts.
- Grant L. Harley**, and Philip Reeder. A GIS-based inventory of terrestrial caves in west-central Florida. National Speleological Society Convention Meeting, August 11–15, 2008, Lake City, Florida.
- Grant L. Harley**, and Philip Reeder. Determining the sensitivity and disturbance of terrestrial caves in west-central Florida: An inventory of public and private cave systems. National Speleological Society Convention Meeting, July 23–27, 2007, Marengo, Indiana.
- Jason S. Polk, Philip E. van Beynen, and **Grant L. Harley**. Late Holocene paleoenvironmental changes: Evidence from cave sediments in Florida. National Speleological Society Convention Meeting, July 23–27, 2007, Marengo, Indiana.
- Grant L. Harley**, and Philip Reeder. An analysis of cave sediments from Jennings Cave, Marion County, Florida: Geomorphic implications. Association of American Geographers Annual Meeting, April 17–21, 2007, San Francisco, California.
- Jason S. Polk, Philip E. van Beynen, and **Grant L. Harley**. Environmental reconstruction during the Late Holocene from cave sediments in Jennings Cave, Marion County, Florida. Florida Society of Geographers 44th Annual Meeting, 2007, Jacksonville, Florida.
- Jason S. Polk, Philip E. van Beynen, and **Grant L. Harley**. Environmental reconstruction during the Late Holocene from cave sediments in Jennings Cave, Marion County, Florida. Geological Society of America Abstracts with Programs, 2006, Vol. 38, No. 7, p. 379.
- Grant L. Harley**, and Jason S. Polk. An analysis of cave sediments from Jennings Cave, Marion County, Florida: Geomorphic implications. Geological Society of America Abstracts with Programs, 2006, Vol. 38, No. 7, p. 62.
- Grant L. Harley**, and Philip Reeder. The association between surface soils and cave sediments in Marion County, Florida. Florida Society of Geographers 43rd Annual Meeting, 2006, St. Petersburg, Florida.
- Grant L. Harley**, and Philip Reeder. A comparative study of cave sediments on the Vaca Plateau Belize: Geomorphic implications. University of South Florida 5th Annual Graduate Student Research Symposium, 2006.

PROFESSIONAL SERVICE AND TRAINING

- 2016 Chair, Honors Committee.** Southeastern Division of the AAG (SEDAAG)
Group Leader/Facilitator, Dendrohydrology Group, 26th Annual North American Dendroecological Fieldweek, Pack Forest/Mount Rainier National Park, Washington.
- 2015 Group Leader/Facilitator,** Dendroclimatology Group, 25th Annual North American Dendroecological Fieldweek, 1–10 June 2015, Acadia National Park, Maine

- Co-organizer/Chair**, oral session at Association of American Geographers annual meeting. *Dendrochronological Applications II*
- Recruitment Coordinator**, Department of Geography and Geology, University of Southern Mississippi
- Reviewer and Judge**, Student Research Grant Competition, Biogeography Specialty Group, AAG Annual Meeting (Tampa, FL)
- 2014 Recruitment Coordinator**, Department of Geography and Geology, University of Southern Mississippi
- Faculty Affiliate**, Center for Undergraduate Research, University of Southern Mississippi
- Reviewer and Judge**, Student Research Grant Competition, Biogeography Specialty Group, AAG Annual Meeting (Tampa, FL)
- 2013 Honors Committee**, Southeastern Division of the AAG (SEDAAG)
- Convener**, with Kristine DeLong and Jason Polk, oral and poster sessions at American Geophysical Union annual meeting. *Climate Variability from Multiple Reconstructions I (PP23D), II (PP24A), and III (PP31A)*.
- 2012 Co-organizer/Chair**, oral session at Association of American Geographers annual meeting. *Dendrochronological Applications*.
- 2011 Group Leader/Facilitator**, Introductory to Dendrochronology Group, 21st Annual North American Dendroecological Fieldweek, 1–9 August 2011, Mountain Lake Biological Station, Pembroke, Virginia
- Graduate Student Representative to the Faculty**, Department of Geography, University of Tennessee.
- Panelist**, Teaching Tree-Rings: Ideas for K-12 Outreach and Undergraduate Education. Association of American Geographers Annual Meeting, April 12–16, Seattle, Washington.
- 2010 President**, Graduate Association of Researchers in Geography (GARG), University of Tennessee
- Panelist**, A Survival Kit for TA's: How to be in a Class by Yourself. Southeastern Divisional of the Association of American Geographers Annual Meeting, November 21–23, Birmingham, Alabama.
- 2009 President**, Graduate Association of Researchers in Geography (GARG), University of Tennessee.
- Participant**, Stand Dynamics Group, 19th Annual North American Dendroecological Fieldweek, June 4–June 12, Harvard Forest, Massachusetts.
- 2008 Field Assistant**, for “A multidisciplinary approach to understanding the historic landscape at the Tipton-Haynes State Historic Site, Johnson City, Tennessee, U.S.A.,” a project funded by the Tennessee Historical Commission. October.
- 2007 Field Assistant**, for “An isotopic calibration study of precipitation, cave dripwater, and climate in west-central Florida.” Summer and Fall.
- 2006 Field Assistant**, for “Paleoenvironmental evidence for collapse of the Maya civilization on the Vaca Plateau, Belize.” Maya Mountains, Belize. March.

PROFESSIONAL ASSOCIATIONS

American Geophysical Union
 American Association of Geographers

Biogeography Specialty Group
National Speleological Society

REVIEWER FOR

Journals

Chemical Geology

Biological Reviews

Forests

Trees—Structure and Function

Tree Physiology

Climate Dynamics

Climate Research

Journal of Biogeography

PALEO3

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Dendrochronologia

Forest Ecology and Management

Earth Interactions

Canadian Journal of Forest Resources

Journal of Cave and Karst Studies

Physical Geography

Funding Agency

National Science Foundation

National Geographic Society

Association of American Geographers: Biogeography Specialty Group