



SAVANNAH A. COLLINS-KEY

Department of Geography
University of Tennessee, Knoxville
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EDUCATION

Doctor of Philosophy in Geography (expected) **2021**
University of Tennessee Knoxville, TN

- Specializations: Climatology, Hazards, Recent Environmental Change
- Dissertation: *A multifaceted approach to assessing flood risk in the southeastern US*

Master of Science in Geography **2014**
University of Tennessee Knoxville, TN

- Concentration: Dendroclimatology
- Thesis: *Detecting tropical cyclone signals in tree rings of longleaf pine (Pinus palustris Mill.), Valdosta, Georgia, USA*

Bachelor of Science in Geography **2009**
Ohio University Athens, OH

- Emphasis in Meteorology, minor in History

CURRENT POSITIONS

Graduate Teaching Associate, University of Tennessee, Knoxville **2018 – Present**

- ◇ Duties are to construct syllabus and learning objectives; create weekly lectures, in-class activities, quizzes, and exams; teach lectures for a 120+ class; hold office hours; manage Graduate Teaching Assistants and their laboratory/grading duties
- ◇ *Courses taught:*
 - **Geography 131:** Intro to Weather, Climate, & Climate Change
 - **Geography 333:** Climate Change & Human Response

Graduate Teaching Assistant, University of Tennessee, Knoxville **2016 – Present**

- ◇ Duties include laboratory instruction; holding office hours; grading labs and exams; and when needed, giving lectures for professor
- ◇ *Courses assisted:*
 - **Geography 131:** Intro to Weather, Climate, & Climate Change (3 semesters)
 - **Geography 101:** World Geography
 - **Geography 331:** Natural Hazards (3 semesters)
 - **Geography 333:** Climate Change & Human Response
 - **Geography 411:** Introduction to Geographic Information Systems (3 semesters)
 - **Geography 434:** Climatology
 - **Geography 436:** Water Resources
 - **GIS & Remote Sensing Labs** (2 semesters)

PAST POSITIONS

- Post-Master's Research Associate**, Oak Ridge National Laboratory, **2015 – 2017**
Geographic Information Systems & Technology (GIST) Group
- ◇ Researcher on the **Population Density Tables (PDT) project**, focusing on the construction of reports that can illustrate the normal or episodic movement of persons throughout the world. Duties were primarily to collect demographic through sources such as national censuses and demographic health surveys (DHS); organize data by keeping track of most recent census publications
- Adjunct Instructor**, University of Tennessee, Chattanooga **2015 – 2016**
- ◇ Introductory courses with 40–70 students covering physical geography, atmospheric and earth sciences, and climate change. Duties included preparing syllabus and course objectives, creating and grading weekly lectures, homework activities, quizzes, and exams
 - **Geography 1010**: Introduction to Physical Geography (*2 semesters*)
 - **Geography 2060**: Atmosphere, Weather & Climate (*2 semesters*)
- Tutor**, Club Z! In-Home Tutoring **2011 – 2016**
- ◇ Help students after school and on weekends with Mathematics, Science, Social Studies, and English, including writing and reading skills; have worked with students ranging from 4th grade to 11th grade level
- Research Intern**, Oak Ridge National Laboratory, **Summer 2013**
Geographic Information Systems & Technology (GIST) Group
- ◇ 10-week internship assisting with LandScan project by mapping settlements within rural regions; training program models
- Undergraduate Teaching Assistant**, Ohio University **Winter/Spring 2009**
- ◇ Led labs separate from lecture; helped students with assignments; graded/uploaded student work
 - **Geography 201**: Introduction to Weather
 - **Geography 301**: Meteorology
- Weather Anchor**, WOUB, Ohio University **2008 – 2009**
- ◇ Presented before a green screen during each newscast; worked on forecasting skills; explained the weather to southeast Ohio region

FELLOWSHIPS, GRANTS, & AWARDS

- 2019: **Chancellor's Fellowship**, UTK Geography Department, \$3000
 2019: **North American Dendroecological Fieldweek Research Fellowship**, NSF, \$1500
 2018: **Chancellor's Fellowship**, UTK Geography Department, \$3000
 2018: **Outstanding Teaching Assistant Award**, UTK Geography Department
 2018: **Special Award for Extraordinary Service** to UTK Geography Department
 2018: **Stewart K. McCroskey Memorial Grant**, UTK Geography Department, \$500

2018: **Photography/Map Competition**, AAG Landscape Specialty Group, \$250
 2017: **Chancellor's Fellowship**, UTK Geography Department, \$3000
 2016: **Chancellor's Fellowship**, UTK Geography Department, \$5000
 2016: **Special Award for Extraordinary Service** to UTK Geography Department
 2015: **Student Publication Award**, UTK Geography Department
 2014: **Special Award for Extraordinary Service** to UTK Geography Department
 2014: **Student Publication Award**, UTK Geography Department

PEER-REVIEWED PUBLICATIONS

Thomas W. Patterson, R. Stockton Maxwell, Grant L. Harley, Joshua S. Oliver, James H. Speer, **Savannah A. Collins**, Madison Downe, Benjamin Gannon, Lan Ma, Chance Raso, Cody Russell, & Aaron Teets, 2016. Climate-growth relationships of *Pinus rigida* (Mill.) at the species' northern range limit, Acadia National Park, Maine. *Northeastern Naturalist* 23 (4): 490–500.

Lauren A. Stachowiak, Elizabeth A. Schneider, Maegen L. Rochner, **Savannah A. Collins**, & Henri D. Grissino-Mayer, 2016. Dendrochronological dating of two historic log cabins on the Belle Meade Plantation, Davidson County, Tennessee, USA. *Vegetation History and Archaeobotany* 25 (2): 105–115.

Lauren A. Stachowiak, Elizabeth A. Schneider, Maegen L. Rochner, **Savannah A. Collins**, Chaney P. Swiney, Henri D. Grissino-Mayer, & Thomas G. McKenzie, 2014. Dendrochronological dating of the historic McKenzie Home, Meigs County, Tennessee, USA. *Tree-Ring Research* 70 (1): 31–39.

MANUSCRIPTS IN PREPARATION

Savannah A. Collins-Key. Detecting tropical cyclone signals in annual growth of longleaf pine (*Pinus palustris* Mill.) from Lake Louise, Georgia, USA. Preparing for submission to *Dendrochronologia*.

Savannah A. Collins-Key. On the Political Feasibility of Enacting Reform in the U.S. Animal Agricultural Industry. Preparing for submission to *Journal of Science Policy and Governance*.

PRESENTATIONS & PANEL DISCUSSIONS

*Indicates presenter of paper/poster

Savannah A. Collins-Key* 2020. The Perception of Flash Flood Risk among Emergency Managers in the NWS-MRX County Warning Area. *Annual Meeting of the American Meteorological Society (AMS)*, 12–16 January 2020, Boston, MA. Paper presentation.

Savannah A. Collins-Key* 2019. Evaluating evidence of past flood events in tree-ring features of riparian oak, Pearl River Wildlife Management Area, Louisiana. *Annual Meeting of the Southeastern Division of the Association of American Geographers (SEDAAG)*, 24–25 November 2019, Wilmington, NC. Paper presentation.

- Savannah A. Collins-Key*** 2019. Detecting flood signatures in the tree-ring record: Expanding dendrohydrological techniques and integrating paleofloods into flood risk assessments. *Annual Meeting of the American Association of Geographers (AAG)*, 3–7 April 2019, Washington, DC. Paper presentation.
- Savannah A. Collins-Key*** 2019. Examining Intensity Trends of Tropical Cyclones Impacting the Louisiana Deltaic Region: An Extreme Value Analysis Approach. *Southeast Severe Storms Symposium XVII (SESVR)*, 22–24 March 2019, Starkville, MS. Poster presentation.
- Savannah A. Collins-Key*** 2018. Examining Intensity Trends of Tropical Cyclones Impacting the Louisiana Deltaic Region Using Extreme Value Theory. *Annual Meeting of the Southeastern Division of the Association of American Geographers (SEDAAG)*, 18–20 November 2018, Johnson City, TN. Paper presentation.
- Savannah A. Collins-Key*** & Henri D. Grissino-Mayer, 2018. Policy Alternatives and Community Preparedness for Wildfire Management in the Southeastern US. *Annual Meeting of the American Association of Geographers (AAG)*, 10–14 April 2018, New Orleans, LA. Paper presentation.
- Henri D. Grissino-Mayer & **Savannah A. Collins-Key*** 2018. Communicating Wildfire Science to an Often-Misinformed Public: Completing the Knowledge Transfer Circle. *Annual Meeting of the American Association of Geographers (AAG)*, 10–14 April 2018, New Orleans, LA. Paper presentation.
- Savannah A. Collins-Key*** & Henri D. Grissino-Mayer, 2018. Dendrochronological analysis of abrupt and inexplicable mortality in urban hackberry (*Celtis occidentalis* L.), Augusta, Georgia, USA. *UTK Geography Research Symposium (GeoSym)*, 15–16 February 2018, Knoxville, TN. Lightning talk.
- Savannah A. Collins-Key*** 2017. Industrialized Animal Agriculture: Communicating the Harms of High Meat Consumption & the Modern Agricultural System on Public Health, Food Security, and the Environment. *Annual Meeting of the Southeastern Division of the Association of American Geographers (SEDAAG)*, 19–21 November 2017, Starkville, MS. Poster presentation.
- Panelist**, 2017. “Graduate Student Health and Wellbeing: A Frank Discussion, Session III.” Panel series organized by Matthew T. Kerr, *Annual Meeting of the American Association of Geographers (AAG)*, 5–9 April 2017, Boston, MA. Panel session.
- Savannah A. Collins-Key*** 2017. The Impact of Normalcy Bias on Public Response to Hazard Threats. *Annual Meeting of the American Association of Geographers (AAG)*, 5–9 April 2017, Boston, MA. Poster presentation.
- Savannah A. Collins-Key*** 2017. A Feminist Epistemological Approach to Climate Change Research. *UTK Pipeline Women in STEM Research Symposium*, 21 March 2017, Knoxville, TN. Paper presentation.
- Savannah A. Collins*** Marie L. Urban, Amy N. Rose & David E. Axley, 2016. Systematizing Demographics to Enhance the Accuracy of Population Density. *Annual Meeting of the*

American Association of Geographers (AAG), 29 March–2 April 2016, San Francisco, CA. Paper presentation.

Lauren A. Stachowiak, Elizabeth A. Schneider, Maegen L. Rochner, **Savannah A. Collins*** & Henri D. Grissino-Mayer, 2015. Dendrochronological Dating of Two Historic Log Cabins on the Belle Meade Plantation, Davidson County, Tennessee, USA. *Annual Meeting of the Southeastern Division of the Association of American Geographers (SEDAAG)*, 22–24 November 2015, Pensacola, FL. Paper presentation.

Savannah A. Collins* & Henri D. Grissino-Mayer, 2014. Detecting Hurricane Signals in the Tree-Ring Growth Responses of the Longleaf Pine in Valdosta, Georgia, USA. *Annual Meeting of the Southeastern Division of the Association of American Geographers (SEDAAG)*, 23–25 November 2014, Athens, GA. Paper presentation.

Savannah A. Collins* & Henri D. Grissino-Mayer, 2014. Detecting Hurricane Signals in the Tree-Ring Growth Responses of the Longleaf Pine in Valdosta, Georgia, USA: Preliminary results. *Annual Meeting of the American Association of Geographers (AAG)*, 8–12 April 2014, Tampa, FL. Paper presentation.

Savannah A. Collins* Henri D. Grissino-Mayer, Maegen L. Rochner, Elizabeth A. Schneider, Lauren A. Stachowiak, & Chaney P. Swiney, 2013. Restoration Ecology and Tree-Ring Dating at Cumberland Homesteads Tower in Crossville, Tennessee. *Annual Meeting of the Southeastern Division of the Association of American Geographers (SEDAAG)*, 24–26 November 2013, Roanoke, VA. Poster presentation.

Savannah A. Collins* & Henri D. Grissino-Mayer, 2013. The Influence of Climate Anomalies on the Development, Sequence and Outcome of Hurricane Sandy. *Annual Meeting of the American Association of Geographers (AAG)*, 7–11 April 2013, Los Angeles, CA. Poster presentation.

PROFESSIONAL MEMBERSHIPS

American Association for the Advancement of Science (**AAAS**), 2017 – Present

American Association for University Women (**AAUW**), 2019 – Present

American Geophysical Union (**AGU**), 2017 – Present

American Meteorological Society (**AMS**), 2007 – 2010, 2017 – Present

Association of American Geographers (**AAG**), 2012 – Present

Association of Fire Ecology (**AFE**), 2017–Present

Association of Southeastern Biologists (**ASB**), 2018 – Present

Association for Tree-Ring Research (**ATR**), 2018 – Present

Association for Women Geoscientists (**AWG**), 2019 – Present

Association for Women in Science (**AWIS**), 2019 – Present

Gamma Theta Upsilon Geographical Honor Society (**GTU**), 2019 – Present

Society of American Foresters (**SAF**), 2019 – Present

Southeastern Division of Association of American Geographers (**SEDAAG**), 2013 – Present

Tree-Ring Society (**TRS**), 2017 – Present

LABORATORY & FIELD EXPERIENCE

Climate Lab

University of Tennessee

- ◇ *Tornado Safety Project*, September 2018

2018 – Present

Knoxville, TN

Environmental Change Laboratory (formerly the Laboratory of Tree-Ring Science) **2013 – Present**

University of Tennessee

Knoxville, TN

- ◇ Assist with lab projects; travel with lab to research sites; process samples; present projects at conferences; write/edit lab reports for publication
 - *Cumberland Homesteads*, Crossville, Tennessee, February 2013
 - *Wynnewood State Historic Site*, Gallatin, Tennessee, March 2013
 - *Historic McKenzie Home*, Meigs County, Tennessee, April 2013
 - *Belle Meade Plantation*, Belle Meade, Tennessee, May 2013
 - *Rembrandt Painting*, June 2013
 - *Shipwreck in Acadia National Park*, Winter Harbor, Maine, June 2015
 - *Hackberry Mortality at Augusta National Golf Club*, June 2017
 - *Dating of Senn Violin*, May 2018
 - *Past Wildfire in the Turks and Caicos Islands*, Ongoing

Scalia Laboratory, Senior Weather Forecaster

Ohio University

2007 – 2009

Athens, OH

SERVICE TO UNIVERSITY & COMMUNITY

Geography Graduate Student Association, UTK

- ◇ Vice President, 2019 – Present
- ◇ Graduate Representative to the Faculty, 2018

Graduate Student Senate, UTK

- ◇ Co-chair, Equity & Diversity Committee, 2018 – Present
- ◇ Teaching & Learning Committee, 2018

Steering Committee for Biennial UTK Geography Research Symposium

- ◇ Former chair (*advising capacity*), 2018 – Present
- ◇ Chair, 2016 – 2018
- ◇ Co-chair, 2014 – 2016
- ◇ Physical geography chair, 2012 – 2014

Guest Lecturer for Geography 345: People & Environment, UTK, 2017 – Present

- ◇ **Presentation:** *What's Wrong with the Red Meat Industry? Communicating the Harms of High Meat Consumption and the Modern Agricultural System*

Undergraduate Research & Creative Achievement Exhibition (**EURēCA**) **Judge**, UTK, 2019

Heritage Middle School **Science Fair Judge**, Maryville, TN, 2013

RESEARCH AND TECHNICAL SKILLS

ArcGIS/ArcMap
 R & R Studio
 Adobe Illustrator, Photoshop, InDesign
 SPSS
 Mendeley
 Microsoft Word, Excel, PowerPoint
 Keynote & Infographics Lab
 PuTTY

Dendrochronology software
 ◇ COFECHA, WinDendro/WinCell,
 ARSTAN, Velmex/MeasureJ2X
 ENVI
 ImageJ & ROXAS

REFERENCES

Kelsey N. Ellis, Ph.D. | Assistant Professor of Geography

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