

Savannah A. Collins-Key

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EDUCATION

Bachelor of Science, Ohio University, Geography, emphasis in Meteorology and minor in History, 2007–2009

Master of Science, The University of Tennessee, Knoxville, Geography, 2012–2014

Thesis Title: Detecting Tropical Cyclone Signals in Tree Rings of Longleaf Pine (Pinus palustris Mill.), Valdosta, Georgia, USA

Doctor of Philosophy, The University of Tennessee, Knoxville, Geography, 2016–Present

Dissertation Title: Facilitating Standards for Resilience & Communicating Environmental Change through Quantitative Models, Community Outreach Programs, & Policy Reform Initiatives.

CURRENT POSITIONS

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

- ◇ *Geography 333: Climate Change*
 - Grading assignments, media journals and quizzes; engaging students about paleoclimates, anthropogenic climate change, policy & skepticism.
- ◇ *Geography 331: Natural Hazards*
 - Aid professor with grading of projects, assignments, and exams; engage students on topic of hazards, their causes, and their potential risks.
- ◇ *Geography 131: Physical Geography*
 - Laboratory instructor for two weekly lab sessions; lead lab discussions; aid students with lab work; attend weekly meetings; office hours.

Chair, Steering Committee, 2018 UTK Geography Research Symposium, 2016–Present

- ◇ Organize and micromanage the duties/tasks of committee members; hold committee meetings; host visiting professors; produce grant packages for funding; organize undergraduate competitions/activities; oversee of advertising and marketing of event.

PAST POSITIONS

Post-Master's Research Associate, Oak Ridge National Laboratory, Geographic Information Systems & Technology Group, Feb 2015–Sept 2017

- ◇ 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; primarily collect demographic through sources such

as national censuses and demographic health surveys (DHS); organize data by keeping track of most recent census publications and future efforts

Adjunct Instructor, Univ. of Tennessee, Chattanooga, January 2015–May 2016

◇ *Geography 1010: Physical Geography*

- Introductory course on physical climate and earth sciences; prepare syllabus and learning objectives, create weekly lectures, homework activities, quizzes and exams; teach lectures twice per week for a 70-person class, grade assignments, quizzes, and exams.

◇ *Geography 2060: Atmosphere, Weather & Climate*

- In-depth course on weather and climate processes; prepare syllabus and learning objectives, create weekly lectures, homework activities, quizzes and exams; teach lectures twice per week for a 35-person class, grade assignments, quizzes, and exams.

Co-Chair, Steering Committee of the 2016 University of Tennessee Department of Geography Research Symposium, Fall 2014–Spring 2016

- ◇ Visit businesses to gain sponsorship funding, write grant packages for funding, create programs, transport visiting professors, gather abstracts for paper and poster presentations, organize undergraduate poster competition, management of advertisements and marketing.

Tutor, Club Z! In-Home Tutoring in Mathematics, Science, and English, Jan 2011–Jan 2016

- ◇ Help students after school and on weekends with Mathematics, Science, Social Studies, and English, including writing and reading skills; have worked with students as young as 4th grade and as old as 11th grade.

Graduate Teaching Assistant, University of Tennessee, Fall 2014

◇ *Geography 131: Physical Geography*

- Laboratory instructor for two 2-hour physical geography lab sessions that gather weekly. Duties include leading lab discussions, aiding students with completion of assigned labs, and grading students' labs, quizzes, and exams. Also attend weekly GTA lab meetings and hold weekly office hours.

Graduate Teaching Assistant, University of Tennessee, Spring 2014

◇ *Geography 411: Introduction to Geographic Information Systems (GIS)*

- Performed laboratory TA duties, graded labs, attended lab course hour, helped professor with exam proctoring and grading exams. Spent 10 hrs/wk in GIS lab helping students with assignments and projects.

◇ *Geography 434: Climatology*

- Attended lecture, aided professor with grading of quizzes, assignments, term papers and projects, and helped proctor and grade exams.

Graduate Teaching Assistant, University of Tennessee, Fall 2013

◇ *Geography 101: World Geography*

- Attended lecture, aided professor with grading of map quizzes, assignments, and term papers, and help proctor and grade exams.

◇ *Geography 411: Introduction to Geographic Information Systems (GIS)*

- Performed laboratory TA duties, graded labs, attended lab course hour, helped professor with exam proctoring and grading exams. Spent 10 hrs/wk in GIS lab helping students with assignments and projects.

Research Intern, Oak Ridge National Laboratory, Geographic Information Systems and Technology Group, Summer 2013

- ◇ 10-week internship with GIST group. Aided with population density projects and researched economy and city structures. Assisted the LandScan project by settlement mapping several regions using the PuTTY program, and trained models to recognize anthropogenic structures, going province by province.

Physical Geography Chair, Steering Committee of the 2014 University of Tennessee Department of Geography Research Symposium, Fall 2012–Spring 2014

- ◇ Visited businesses to gain sponsorship funding, writing grant packages for funding, creating programs, transporting visiting professors, gathering abstracts for paper and poster presentations, organizing undergraduate poster competition, management of advertisements and marketing.

Graduate Teaching Assistant, University of Tennessee, Fall 2012

- ◇ *Geography 331: Natural Hazards*
 - Attended lecture, aided professor with grading of assignments and term papers, and help proctor and grade exams.
- ◇ *Geography 411: Introduction to Geographic Information Systems (GIS)*
 - Performed laboratory TA duties, graded labs, attended lab course hour, helped professor with exam proctoring and grading exams. Spent 10 hrs/wk in GIS lab helping students with assignments and projects.

Undergraduate Teaching Assistant, Ohio University, Spring and Fall 2009

- ◇ *Geography 201: Introduction to Weather*
- ◇ *Geography 301: Meteorology*
 - Ran labs separate from lecture by myself, helped students with assignments for a two-hour period, graded and submitted labs to Blackboard.

Weather Anchor, WOUB, Ohio University, 2008–2009

- ◇ Performed in front of a green screen during each newscast, worked on forecasting skills, and explained the weather to the public.

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, 2015. Dendrochronological Dating of Two Historic Log Cabins on

the Belle Meade Plantation, Davidson County, Tennessee, USA. *Vegetation History and Archaeobotany*, 1–11.

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.

GRANTS & AWARDS

Stewart K. McCroskey Memorial Grant, Department of Geography, University of Tennessee, Spring 2018, \$500
Chancellor's Fellowship, University of Tennessee, Knoxville, 2017–2018
Chancellor's Fellowship, University of Tennessee, Knoxville, 2016–2017
Special Award for Extraordinary Service to the Department of Geography at the University of Tennessee, 2015–2016 Academic Year.
Special Award for Extraordinary Service to the Department of Geography at the University of Tennessee, 2013–2014 Academic Year.
Student Publication Award, 2013–2014 Academic Year.
Student Publication Award, 2014–2015 Academic Year.

SELECTED PRESENTATIONS

Savannah A. Collins-Key, 2018. *Paper Presentation*. Policy Alternatives and Community Preparedness for Wildfire Management in the Southeastern US. Annual Meeting, AAG, 10–14 April 2018, New Orleans, LA.
Savannah A. Collins-Key, 2018. Dendrochronological analysis of abrupt and inexplicable mortality in urban hackberry (*Celtis occidentalis* L.), Augusta, Georgia, USA. *Lighting Talk Presentation*. UT Geography Research Symposium, 15–16 February 2018, Knoxville, TN.
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. *Poster Presentation*. Annual Meeting, SEDAAG, 19–21 November 2017, Starkville, MS.
Savannah A. Collins-Key, 2017. The Impact of Normalcy Bias on Public Response to Hazard Threats. *Poster Presentation*. Annual Meeting, AAG, 5–9 April 2017, Boston, MA.
Savannah A. Collins-Key, 2017. A Feminist Epistemological Approach to Climate Change Research. *Paper Presentation*. The Pipeline Women in STEM Research Symposium, 21 March 2017, Knoxville, TN.
Savannah A. Collins, Marie L. Urban, Amy N. Rose & David E. Axley, 2016. Systematizing Demographics to Enhance the Accuracy of Population Density. *Paper Presentation*. Annual Meeting, AAG, 29–2 April 2016, San Francisco, CA.

- Savannah A. Collins**, Lauren A. Stachowiak, Elizabeth A. Schneider, Maegen L. Rochner, & Henri D. Grissino-Mayer, 2015. Dendrochronological Dating of Two Historic Log Cabins on the Belle Meade Plantation, Davidson County, Tennessee, USA. *Paper Presentation*. Annual Meeting, SEDAAG, 22–24 Nov 2015, Pensacola, FL.
- 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. *Paper Presentation*. Annual Meeting, AAG, 8–12 April 2014, Tampa, FL.
- 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. *Poster Presentation*. Annual Meeting, SEDAAG, 24–26 November 2013, Roanoke, VA.
- Savannah A. Collins** & Henri D. Grissino-Mayer, 2013. The Influence of Climate Anomalies on the Development, Sequence and Outcome of Hurricane Sandy. *Poster Presentation*. Annual Meeting, AAG, 7–11 April 2013, Los Angeles, CA.

LABORATORY & FIELD EXPERIENCE

Laboratory of Tree-Ring Science, University of Tennessee, 2013–Present

Assist with lab projects; travel with lab members to research sites; process samples; present projects at conferences; write/edit lab reports for publication.

- ◇ *Cumberland Homesteads*: Dendrochronological dating of trees surrounding Homesteads Tower. Crossville, Tennessee. February 2013.
- ◇ *Wynnewood State Historic Site*: Dendroarchaeological dating of the Spencer's Cabin and Bledsoe's Cabin. Gallatin, Tennessee. March 2013.
- ◇ *Historic McKenzie Home*: Dendrochronological dating of the historic McKenzie Home. Meigs County, Tennessee. April 2013.
- ◇ *Belle Meade Plantation*: Dendroarchaeological dating of Harding Cabin. Belle Meade, Tennessee. May 2013.
- ◇ *Rembrandt painting*: Dendroarchaeological dating of artwork contended to be painted by Rembrandt, using WinDENDRO. Knoxville, Tennessee. June 2013.
- ◇ *Shipwreck in Acadia National Park*: Dating of shipwreck remains. Winter Harbor, Maine. June 2015.
- ◇ *Hackberry Mortality at Augusta National Golf Club*: Analyzing abrupt urban hackberry death. June 2017.
- ◇ *Past Wildfire in the Turks and Caicos*: Dendroecological dating of fire-scarred Caribbean pine to potentially establish fire history. Ongoing.

Scalia Laboratory, Senior Weather Forecaster, Ohio University, 2007–2009

- ◇ Submitted forecasts online and also recorded them on a phone line for local residents to call. Forecasts were completed several times a week at different times of the day.

PROFESSIONAL MEMBERSHIPS

Association of American Geographers (**AAG**), 2012–Present
Southeastern Division of Association of American Geographers (**SEDAAG**), 2013–Present
American Meteorological Society (**AMS**), 2007–2010, 2017–Present
American Association for the Advancement of Science (**AAAS**), 2017–Present
American Geophysical Union (**AGU**), 2017–Present
Association of Fire Ecology (**AFE**), 2017–Present
Tree-Ring Society (**TRS**), 2017–Present
Association of Southeastern Biologists (**ASB**), 2018–Present

SERVICE TO THE COMMUNITY

Science Fair Judge, 7th grade. 13 February 2013, Heritage Middle School, Maryville, Tennessee.

RESEARCH AND TECHNICAL SKILLS

Microsoft Office
 ◇ Word, Excel, Powerpoint
ArcGIS/ArcMap
R & R Studio
Dendrochronology software
 ◇ COFECHA, WinDENDRO, Velmex
Keynote & Infographics Lab
ENVI
PuTTY