

## Tyler J. Mitchell

404, Graham Building  
1009 Spring Garden Street  
Greensboro, NC 27412

lab: <https://ges.uncg.edu/tree-ring/>  
email: [tjmitche@uncg.edu](mailto:tjmitche@uncg.edu)  
ORCID: 0000-0002-4665-1760

### Education

**University of North Carolina at Greensboro.** *Greensboro, NC.*  
Ph.D. Geography, expected 2023.  
Post-Baccalaureate Certificate, Statistics, expected 2022.  
Advisor: Paul Knapp.

**University of North Carolina at Greensboro.** *Greensboro, NC.*  
M.A. Applied Geography, 2019.  
Advisor: Paul Knapp.  
Thesis: Tropical Cyclone Frequency Inferred from Intra-annual Density Fluctuations in Longleaf Pine

**University of West Florida.** *Pensacola, FL.*  
B.S. Environmental Science, 2017.  
Advisor: Jason Ortegren.

### Employment

**University of North Carolina at Greensboro.** *Greensboro, NC.*  
Graduate Assistant, Research Assistant, Teaching Assistant, Teaching Associate, Department of Geography, Environment, and Sustainability. *August 2017–current*

**University of West Florida.** *Pensacola, FL.*  
Research Assistant, Hal Marcus College of Science and Engineering. *July 2017–August 2017*  
Research Assistant, Department of Earth and Environmental Sciences. *May 2016–August 2016*

### Publications

Soulé PT, Knapp PA, Maxwell JT, Mitchell TJ (2021) A comparison of the climate response of longleaf pine (*Pinus palustris* Mill.) trees among standardized measures of earlywood, latewood, adjusted latewood, and totalwood radial growth. *Trees: Structure and Function*, In Press.  
<https://doi.org/10.1007/s00468-021-02093-z>

Knapp PA, Soulé PT, Maxwell JT, Ortegren JT, Mitchell TJ (2021) Tropical cyclone precipitation regimes since 1750 and the Great Suppression of 1843–1876 along coastal North Carolina, USA. *International Journal of Climatology*, 41(1), 200–210.  
<https://doi.org/10.1002/joc.6615>

Mitchell TJ, Knapp PA, Patterson TW (2020) The importance of infrequent, high-intensity rainfall events for longleaf pine (*Pinus palustris* Mill.) radial growth and implications for dendroclimatic research. *Trees, Forests and People*, 1, 100009.  
<https://doi.org/10.1016/j.tfp.2020.100009>

Foglietti RV, Mitchell TJ, Ortegren JT (2020) US tornado outbreak climatologies based on different definitions of "outbreak," 1975–2014. *Southeastern Geographer*, 60(1), 6–22.  
<https://doi.org/10.1353/sgo.2020.0002>

Mitchell TJ, Knapp PA, Patterson TW (2019) Changes in southeastern USA summer precipitation event types using instrumental (1940–2018) and tree-ring (1790–2018) data. *Environmental Research Communications*, 1(11), 111005.  
<https://doi.org/10.1088/2515-7620/ab4cd6>

Mitchell TJ, Knapp PA, Ortegren JT (2019) Tropical cyclone frequency inferred from intra-annual

density fluctuations in longleaf pine in Florida, USA. *Climate Research*, 78(3), 249–259.  
<https://doi.org/10.3354/cr01573>

Mitchell TJ, Patterson TW, Knapp PA (2019) Comparison of climate–growth responses of montane and piedmont longleaf pine (*Pinus palustris* Mill.) chronologies in North Carolina. *Trees: Structure and Function*, 33(2), 615–620.  
<https://doi.org/10.1007/s00468-019-01823-8>

## Awards and Funding

*2019–2023 Minerva Scholar*, UNC Greensboro Graduate School.

*2019–2022 Greensboro Graduate Scholar Award*, UNC Greensboro Graduate School.

*2020 Diversity Initiatives Mini-Grant*, UNC Greensboro College of Arts and Sciences.  
Lane JM, Mitchell TJ, Catherwood AA, Harward M. Teaching Geography to K–12 Students Using National Geographic’s Giant Map.

*2020 Summer Assistantship Award*, UNC Greensboro Graduate School.

*2020 D. Gordon Bennett Award for Outstanding Geography Graduate Student*, UNC Greensboro Department of Geography, Environment, and Sustainability.

*2019 Outstanding Graduate Research Award*, UNC Greensboro Department of Geography, Environment, and Sustainability.

*2019 Michael E. Lewis Graduate Teaching Award for Outstanding Classroom Performance*, UNC Greensboro Department of Geography, Environment, and Sustainability.

*2018 Best Masters Paper Award*, Southeastern Division of the American Association of Geographers.

*2018 Michael E. Lewis Graduate Teaching Award for Outstanding Classroom Performance*, UNC Greensboro Department of Geography, Environment, and Sustainability.

*2017 GeoCUR Award for Excellence in Student Research*, National Council on Undergraduate Research - Geoscience Division.

*2017 Research Experience Away Fellowship*, UWF Hal Marcus College of Science and Engineering.

*2016 Summer Undergraduate Research Fellowship*, UWF Hal Marcus College of Science and Engineering.

## Presentations

Mitchell TJ, Knapp PA, Patterson TW (2019) Changes in Southeastern USA Summer Precipitation Event Types Using Instrumental (1940–2018) and Tree-Ring (1790–2018) Data. Southeastern Division of the American Association of Geographers Annual Meeting.

Mitchell TJ, Knapp PA (2019) Tropical cyclone frequency inferred from intra-annual density fluctuations in longleaf pine. American Association of Geographers Annual Meeting.

Mitchell TJ, Knapp PA (2018) Utilizing Cellular Level Radial-Growth Anomalies as a Paleoclimate Indicator. American Geophysical Union Fall Meeting.

Mitchell TJ (2018) Tropical Cyclone Frequency Inferred from Intra-Annual Density Fluctuations in Longleaf Pine: A Case Study from Florida. Southeastern Division of the American Association of Geographers Annual Meeting.

Mitchell TJ, Ortegren JT (2017) Oceanic Influences on Southeastern United States Tornado Variability. Southeastern Division of the American Association of Geographers Annual Meeting.

Mitchell TJ, Foglietti RV, Ortegren JT, Maxwell JT (2017) Oceanic Influences on Annual U.S. Non-Tropical Tornado Variability. UWF Student Scholar Symposium and Faculty Research Showcase.

Mitchell TJ, Foglietti RV, Ortegren JT, Maxwell JT (2017) Oceanic Influences on Annual U.S. Non-Tropical Tornado Variability. National Conference on Undergraduate Research.

Mitchell TJ, Foglietti RV, Ortegren JT, Maxwell JT (2016) Ocean–Atmosphere Influence on U.S. Tornado Variability. Southeastern Division of the American Association of Geographers Annual Meeting.

Mitchell TJ, Foglietti RV, Ortegren JT (2016) Oceanic Precursors to U.S. Tornado Outbreaks. UWF Hal Marcus College of Science and Engineering Summer Research Symposium.

## Teaching

### 2021 Spring

GES103L: Earth Science Laboratory

BSC1005C: General Biology, Northwest Florida State College (Guest Lecturer)

BSC1005L: General Biology Laboratory, Northwest Florida State College (Guest Lecturer)

### 2020 Fall

GES103: Introduction to Earth Science

BSC1005C: General Biology, Northwest Florida State College (Guest Lecturer)

BSC1005L: General Biology Laboratory, Northwest Florida State College (Guest Lecturer)

### 2020 Summer

BSC1005C: General Biology, Northwest Florida State College (Guest Lecturer)

BSC1005L: General Biology Laboratory, Northwest Florida State College (Guest Lecturer)

### 2019 Fall

GES103: Introduction to Earth Science (Guest Lecturer)

GES319L: Climatology Laboratory

### 2019 Spring

GES106L: Geosystems Science Laboratory

### 2018 Fall

GEO103: Introduction to Earth Science (TA)

GEO311L: Climatology Laboratory

### 2018 Spring

GEO106L: Geosystems Science Laboratory

## Invited Presentations, Outreach, and Service

Editorial Assistant, *Southeastern Geographer*. (2019–current)

Treasurer, Geography Graduate Student Association, UNC Greensboro. (2019–2021)

Departmental Representative, Graduate Student Association, UNC Greensboro. (2019–2021)

Judge, SEDAAG Undergraduate Student Poster Competition. (2019)

"How to apply for and prepare for graduate school". University of West Florida College of Science and Engineering GeoScholars Professional Development Workshop. (2019)

Panelist, University of West Florida College of Science and Engineering Summer Undergraduate Research Program Workshop. (2017)

Departmental Representative, University of West Florida Hal Marcus College of Science and Engineering Open House. (2017)

"Oceanic Precursors to U.S. Tornado Outbreaks". University of West Florida Donor Dinner. (2016)

Chemistry Judge, West Panhandle Regional Science and Engineering Fair. (2016)

Engineering Judge, West Panhandle Regional Science and Engineering Fair. (2015)

#### **Data and Herbarium Contributions**

Mitchell TJ, Knapp PA, Patterson TW (2020) Uwharrie National Forest – *Pinus palustris* latewood radial growth measurements – ITRDB NC028.  
<https://www.ncdc.noaa.gov/paleo/study/29272>

Mitchell TJ (2020) Gulf Islands National Seashore – *Pinus palustris* tree cores – University of North Carolina at Chapel Hill Herbarium.  
<https://sernecportal.org/portal/collections>

#### **Journal Referee**

North Carolina Geographer

#### **Professional Organizations**

American Association of Geographers, American Geophysical Union, Gamma Theta Upsilon, Southeastern Division of the American Association of Geographers