

JULIA CARDWELL

✉ jmcard@email.unc.edu 🌐 <https://jucardwell.github.io> ☎ 301-943-7066

EDUCATION

University of North Carolina at Chapel Hill

Ph.D. Candidate, Department of Geography and Environment *Expected May 2025*

Dissertation Title: Weather-Related Disruptions to North Carolina's Road Networks

Committee: Dr. Charles Konrad (co-advisor), Dr. Paul Delamater (co-advisor),
Dr. Conge Song, Dr. Nikhil Kaza, Dr. Chris Fuhrmann

University of North Carolina at Chapel Hill

M.A. Geography *Dec 2021*

Thesis Title: Trends in Recovery Aid Concentration after Hurricane Florence
in North Carolina

Committee: Dr. Charles Konrad (advisor), Dr. Paul Delamater, Dr. Conge Song

Davidson College

B.A. Environmental Studies with Honors, *Magna Cum Laude* *May 2019*

Data Science Minor

Thesis Title: Flooding and Floodplain Management as Part of the Waterscape:
Flows of Water and Power in Charlotte, North Carolina

Advisor: Dr. Fuji Lozada

CURRENT POSITIONS

Graduate Research Assistant *Aug 2020 - Present*

Southeast Regional Climate Center

TEACHING EXPERIENCE

Introduction to Spatial Data Science

Instructor of Record *Summer 2024, Summer 2023*

Teaching Assistant - Dr. Paul Delamater *Fall 2021*

Introduction to Geographic Information

Teaching Assistant - Dr. Javier Arce-Nazario *Spring 2023*

The Blue Planet

Graduate Research Consultant - Dr. Erika Wise *Spring 2023*

Environmental Conservation and Global Change

Teaching Assistant - Dr. Aaron Moody *Spring 2022*

AWARDS AND HONORS

Graduate Research Fellowship Program, National Science Foundation *2022*

Honorable Mention

Phi Beta Kappa, Davidson College *2019*

Environmental Studies Outstanding Senior Award, Davidson College 2019

GRANTS, FUNDING, AND FELLOWSHIPS

Summer Research Grant, UNC Chapel Hill , \$1500 2021
Graduate Merit Fellow, UNC Chapel Hill, \$20,000 2020-2021
Weiss Urban Livability Fellow, UNC Chapel Hill, \$4,000 2020-2021
Duke Endowment Resiliency Grant, Davidson College, \$500 2019
Summer Internship Grant, Davidson College, \$800 2018

PEER REVIEWED PAPERS

Cardwell, J., & Cowan, K. N. (2023). Local news sentiment towards FEMA recovery efforts after Hurricane Florence in North Carolina. *Disasters*, 47(4),1025-1046.
Cardwell, J. (2023). Community perceptions of a floodplain buyout program in Charlotte, North Carolina. *Natural Hazards*, 115(3),2141-2160.
Cardwell, J., & Konrad, C. E. (2023). Trends in recovery aid concentration following Hurricane Florence in North Carolina: Exploring the role of physical damage, community vulnerability, and Hurricane Matthew. *Environmental Hazards*, 22(2), 177-199.
Cardwell, J. (2022). Disruption to EMS service during flood scenarios in Western North Carolina. *Journal of Rural Social Science*, 37(3), 6.
Cardwell, J. (2022). Examining the shifting role of the human in disaster studies. *Journal of the Bulgarian Geographical Society*, 46, 51-55.
Cardwell, J. (2021). Trends in flood insurance behavior following hurricanes in North Carolina. *North Carolina Geographer*, 20, 2-12.

OTHER PUBLICATIONS

Martin, A., Cardwell, J., Mundt, J., Kramer, R., & Beckham, T. (2020). Climate justice. In *North Carolina climate risk assessment and resilience plan* (Chapter 4). State of North Carolina.

SUBMITTED PAPERS

Cardwell, J., Delamater, P.L., Konrad, C.E., Daily Impacts to Habitual Travel in North Carolina due to Weather-Related Road Closures from 2016-2023, submitted to *Journal of Transport Geography*

CONFERENCES AND TALKS

2024

Konrad, C., Cardwell, J., & Fuhrmann, C. The development of an impacts-based high wind climatology that is tailored to social vulnerability, presented at Southern Appalachian Weather and Climate Workshop III, Roanoke, VA

Sheridan, S., Kalkstein, A., Fuhrmann, C., Silva, A., **Cardwell, J.**, & Konrad, C.
 Assessing the Wet-Bulb Globe Temperature as a predictor of overall mortality in summer,
 presented at American Association of Geographers, Honolulu, Hawaii
 Brooks, C.D. & **Cardwell, J.** Poop in the air, should we care? Estimating the educational
 impacts of hog farm pollution in North Carolina, presented at the annual meeting of the
 Association of Education Finance and Policy, Baltimore, MD
Cardwell, J. Weather-related Impacts to Local Travel in North Carolina, presented at
 American Association of Geographers, Virtual

2023

Brooks, C.D. & **Cardwell, J.** Poop in the air, should we care? Estimating the educational
 impacts of hog farm pollution in North Carolina, presented at the annual meeting of the
 Association of Public Policy Analysis & Management, Atlanta, GA
Cardwell, J. Methods to Analyze Disruption of EMS Service During Flood Scenarios,
 presented at American Association of Geographers, Denver, Colorado
Cardwell, J. Exploring the Impacts of Weather-Related Road Closures in North Carolina,
 presented at Highway Safety Research Center, Chapel Hill, North Carolina
Cardwell, J. Impacts to Local Travel During Weather-Related Road Closures in North
 Carolina, presented at Southeastern Division of the American Association of Geography,
 Norfolk, Virginia
 Brooks, C.D. & **Cardwell, J.** Poop in the air, should we care? Estimating the educational
 impacts of hog farm pollution in North Carolina, presented at the annual meeting of the
 Association of Education Finance and Policy, Denver, CO

2022

Cardwell, J. Analyzing Recovery Aid Concentration in North Carolina Following
 Hurricane Florence, presented at American Association of Geographers, Virtual

2021

Cardwell, J. Trends in NFIP (National Flood Insurance Program) Participation after
 Major Hurricanes in North Carolina, presented at Annual Meeting of the North Carolina
 Geographical Society, Virtual

ADDITIONAL WORK EXPERIENCE

Graduate Research Assistant Dr. Nikhil Kaza	<i>Jan 2024 - Aug 2024</i>
Graduate Research Assistant Dr. Paul Delamater	<i>May 2023 - May 2024</i>
Data Verification Specialist The Odum Institute for Research in Social Science	<i>May 2022 - Dec 2023</i>
Graduate Research Assistant Data-Driven EnviroLab, Department of Public Policy	<i>Jan 2021 - Dec 2021</i>
Program Assistant Environmental Justice Program, NC Department of Environmental Quality	<i>Jun 2019 - Jul 2020</i>

Volunteer GIS Analyst
Davidson Lands Conservancy

Jun 2019 - Jul 2020

UNIVERSITY SERVICE

Graduate Student Representative , Faculty Committee	<i>2023-2024</i>
Co-President , Graduate Association of Geography Students	<i>2022-2023</i>
Graduate Student Representative , Graduate Committee	<i>2020-2022</i>

SKILLS

Languages: R, Python, VB.NET, JavaScript, Stata

Technologies: ArcGIS Pro, ArcMap, ArcGIS Online, QGIS, Google Earth Engine, SPSS, ENVI, cluster computing

AFFILIATIONS

American Association of Geographers, North Carolina Geographical Society, Queer Graduate Students and Professionals (UNC Chapel Hill)