

Andrew Zimmer

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EDUCATION

Ph.D. Geography • University of Arizona	2022
Dissertation Title: <i>Dynamics of Rural-Urban Food Systems in Southern Africa</i>	
MS Environmental Science & Technology • Lancaster University, UK	2017
BA Geography • Lancaster University, UK	2016
<i>Study-abroad at Oregon State University (2014-2015)</i>	

ACADEMIC POSITIONS

Research Scientist	2024 - present
Department of Earth Sciences, Montana State University Geospatial Core Facility, Montana State University	
Postdoctoral Researcher	2023
Department of Earth Sciences, Montana State University Geospatial Core Facility, Montana State University	
Graduate Instructor	2021-2022
School of Geography, Development & Environment, University of Arizona	
Graduate Research Assistant	2018-2022
School of Geography, Development & Environment, University of Arizona	

REFEREED JOURNAL ARTICLES

1. Andrea Gerlak, Zack Guido, Gigi Owen, Sofia Rodriguez-McGoffin, Elena Louder, Julia Davies, Kelly Jay Smith, **Andrew Zimmer**, Anna Murviet, Alison Meadow, Padmendra Shrestha, Nupur Joshi. (2023). Stakeholder engagement in the co-production of knowledge for environmental decision-making. *World Development*, 170, 106336. [View Here](#).
2. Amanda Ross, Richard Marcantonio, Laura Miller-Graff, Amber Pearson, Erin Bunting, **Andrew Zimmer**. (2023). Does water insecurity mediate the relationship between climate variability and intimate partner violence in sub-Saharan Africa? *Climate and Development*, 16(2), 134-148. [View Here](#).

3. Elizabeth Mack, Richard Marcantonio, Erin Bunting, Amanda Ross, **Andrew Zimmer**, Leo Zulu, Edna Liliana Gómez Fernández, James Herndon, Geoffrey Henebry (2022). A Systematic Literature Review of Quantitative Studies Assessing the Relationship Between Water and Conflict on the African Continent. *Sustainability*, 14(22), 14912. [View Here](#).
4. **Andrew Zimmer**, Zack Guido, Julia Davies, Nupur Joshi, Alan Chilenga, Tom Evans. (2022). Food Systems and Rural-Urban Linkages in African Secondary Cities. *Urban Transformations*, 4(1), 1-23. [View Here](#).
5. Julia Davies, Jordan Blekking, Corrie Hannah, **Andrew Zimmer**, Nupur Joshi, Patrese Anderson, Tom Evans. (2022). Governance of traditional markets and rural-urban food system in sub-Saharan Africa. *Habitat International*, 127, 102620. [View Here](#).
6. Corrie Hannah, Julia Davies, Rachel Green, **Andrew Zimmer**, Patrese Anderson, Jane Battersby, Kathy Baylis, Nupur Joshi, Tom Evans. (2022). Persistence of open-air markets in the food systems of Africa's secondary cities. *Cities*, 124, 103608. [View Here](#).
7. Zack Guido, Sara Lopus, Kurt Waldman, Corrie Hannah, **Andrew Zimmer**, Natasha Krell, Chris Knudson, Lyndon Estes, Kelly Caylor, Tom Evans. (2021). Perceived links between climate change and weather forecast accuracy: new barriers to tools for agricultural decision-making. *Climatic Change*, 168, 1-20. [View Here](#).
8. Julia Davies, Corrie Hannah, Zack Guido, **Andrew Zimmer**, Laura McCann, Jane Battersby, Tom Evans. (2021). Barriers to urban agriculture in sub-Saharan Africa. *Food Policy*, 103, 101999. [View Here](#).
9. Elizabeth Mack, Erin Bunting, James Herndon, Richard Marcantonio, Amanda Ross, **Andrew Zimmer**. (2021). Conflict and its relationship to climate variability in sub-Saharan Africa. *Science of the Total Environment*, 775, 145646. [View Here](#).
10. Amber Pearson, Elizabeth Mack, Amanda Ross, Richard Marcantonio, **Andrew Zimmer**, Erin Bunting, Audrey Culver-Smith, Joshua Miller, Tom Evans, HWISE-RCN. (2021). Interpersonal Conflict over Water is Associated with Household Demographics, Domains of Water Insecurity and Regional Conflict. Evidence from Nine Sites across Eight Sub-Saharan African Countries. *Water*, 13(9), 1150. [View Here](#).
11. Corrie Hannah, Stacey Giroux, Natasha Krell, Sara Lopus, Laura McCann, **Andrew Zimmer**, Kelly Caylor, Tom Evans. (2021). Has the vision of a gender quota rule been realized for community-based water management committees in Kenya? *World Development*, 137, 105154. [View Here](#).
12. **Andrew Zimmer**, Zack Guido, Cascade Tuholske, Alex Pakalniskis, Sara Lopus, Kelly Caylor, Tom Evans. (2020). Dynamics of population growth in secondary cities across southern Africa. *Landscape Ecology*, 25, 2501-2516. [View Here](#).
13. Zack Guido, **Andrew Zimmer**, Sara Lopus, Corrie Hannah, Drew Gower, Kurt Waldman, Natasha Krell, Justin Sheffield, Kelly Caylor, Tom Evans. (2020). Farmer Forecasts: Impacts of seasonal rainfall expectations on agricultural decision-making in Sub-Saharan Africa. *Climate Risk Management*, 30, 100247. [View Here](#).

RESEARCH IN PROGRESS

1. **Andrew Zimmer**, Cascade Tuholske, Andrea Gaughan, Nina Brooks. Global Urban Demographic Change and Migration Patterns. *Submitted*.
2. **Andrew Zimmer**, Zack Guido, Kathy Baylis, Patrese Anderson, Junren Wang, Tom Evans. Socio-Environmental Determinants of Maize Price Volatility in Southern Africa. *Submitted*.
3. **Andrew Zimmer**, Cascade Tuholske, Carolynne Hultquist. Global Patterns of Extreme Heat and Flooding Risk. *In Prep*.
4. **Andrew Zimmer**, Gaige Kerr, Cascade Tuholske, Soo-Yeon Kim, Susan Anenberg. Global Urban Demographic Exposure to Extreme Heat and Air Pollution. *In Prep*.

PRESENTATIONS

* Invited | AGU = American Geophysical Union, AAG = American Association of Geographers

- 2024 Cloud-Based Open Science: Reflections from Integrating Earth and Social Data. Webinar presentation at NASA Socioeconomic Data and Applications Center (SEDAC). Open Science Workshop.
- 2023* Illuminating demographic exposure to extreme heat and flooding. Lightning presentation at AGU. San Francisco, CA.
- 2023 A global comparison of urban demographic change and migration patterns. Presentation at AGU. San Francisco, CA.
- 2023 Demographic exposure to extreme heat and flooding. Poster presentation at the World Climate Research Program. Kigali, Rwanda.
- 2023* Data and Analytical Tools for Studying Heat Stress, Land Cover Change and Health. Webinar for the International Food Policy Research Institute – Nigeria.
- 2023 Demographic exposure to extreme heat and flooding. Presentation at Managed Retreat Conference. Columbia University, NY.
- 2023* Security Technological Advantages II – Human Systems. Presentation at the National Security Innovation Network – Critical Resource Summit. Bozeman, MT.
- 2023* Understanding the rural-urban-climate nexus in Africa. Seminar for the Department of Earth Sciences at Montana State University. Bozeman, MT.
- 2023 Socio-environmental determinants of maize price volatility in southern Africa. Presentation at AAG. Denver, CO.
- 2022 Socio-environmental determinants of maize price volatility. Webinar for the International Institute of Migration and Development.
- 2022 Dynamics of rural-urban food systems in southern Africa. Presentation for the Center for Climate Adaptation Science & Solutions at the University of Arizona. Tucson, AZ.

- 2019 Rural-Urban Linkages of Maize Price in Zambia. Presentation at the Commonwealth Geographic Bureau International Conference on Food Systems. Maputo, Mozambique.
- 2019 Weather Forecasts, Farmer Perceptions and Adaptation to Climate Change in Sub-Saharan Africa. Presentation at AAG. Washington, DC.
- 2019 Patterns of Urban Growth in southern Africa. Poster presentation for the Graduate Interdisciplinary Program at the University of Arizona. Tucson, AZ.
- 2019 Texting the climate: How farmers in southern Africa are meeting the future. Presentation at the Borderlands Brewing Public Lecture Series. Tucson, AZ.
- 2019 Small-scale farmers strategies to mitigate fall armyworm impact in Zambia. Presentation for the Food Security and Social Justice Network at the University of Arizona. Tucson, AZ.

GRANTS

Submitted

- 2024 Erica Goto (PI), Zack Guido (Co-I), **Andrew Zimmer** (Co-I). Feedbacks between perceived climate change and the use of weather forecasts: a multi-country analysis of small-scale farmers. NSF-HEGS. (\$400,000). 2024-2026.

Funded

- 2023 World Climate Research Program Conference Travel Grant.
- 2023 I-GUIDE Summer Workshop Travel Grant.
- 2021 Roots for Resilience Data Science Assistantship, Data Science Institute, University of Arizona.
- 2021 Summer Research Grant, Graduate Interdisciplinary Program, University of Arizona.
- 2019 Carson Scholar Science Communication Program, University of Arizona.
- 2019 Sustainable Development Goals Summer Research Grant, University of Arizona.

TEACHING AND MENTORING

Instructor of Record

GEOG 230: Our Changing Climate – University of Arizona
Fall 2022, Winter 2021 2022, Summer 2022

Guest Lecturer

GPHY 121D: Human Geography – Montana State University
Fall 2023

Teaching Assistant

GEOG 230: Our Changing Climate – University of Arizona
Fall 2021, Spring 2022

Graduate Student Committees

Dissertation: Eqi Luo, Montana State University (current)

Mentorship

Mentor – Diana Liverman Scholars Program, University of Arizona 2021
Peer Mentor – School of Geography, Development & Environment, University of Arizona. 2020

PROFESSIONAL SERVICE

Professional Memberships: American Association of Geographers (AAG)
American Geophysical Union (AGU)
Population Association of America (PAA)
Population-Environment Research Network (PERN)
Global Land Programme (GLP)

Manuscripts reviewed: Nature Cities (1), World Development Perspectives (1), Environmental Development (1), Weather, Climate & Society (1), Climate Services (1), Cogent Food and Agriculture (1), International Journal of Agricultural Sustainability, Environment and Planning B: Urban Analytics and City Science (1).

Committees: AAG Population Specialty Group – Student Paper Competition

OTHER INFORMATION

Citizenship: United Kingdom
United States Permanent Resident

Fieldwork Experience: Kenya, Zambia

Computing Skills: R, Python, Google Earth Engine, High-Performance Computing Systems, Microsoft Azure, ArcGIS, QGIS, Qualtrics

SELECTED PRESS COVERAGE

2023 Researcher maps places and populations who face extreme heat risk. Yale Climate Connections. [View Here](#).

2021 Texting the climate: How farmers in sub-Saharan Africa are meeting a changing future. Terrain.org. [View Here](#).