David Fastovich

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Appointments

2022 - Present

Postdoctoral Scholar

Department of Earth and Environmental Sciences, Syracuse University

Syracuse, New York

Advisor: Tripti Bhattacharya

Education

2018 - 2022

Ph.D. in Geography

Thesis: Patterns, mechanisms, and legacies of abrupt climate change: examining the Younger Dryas in eastern North America

University of Wisconsin—Madison

Madison, WI

Advisor: John (Jack) W. Williams

2016 - 2018

M.S. in Geography

Thesis: Temperature controls on no-analog community establishment in the

Great Lakes Region

University of Wisconsin—Madison

Madison, WI

Advisor: John (Jack) W. Williams

2012 - 2016

B.S in Environmental Science and Management with honors

University of California, Davis

Academic Emphasis: Climate Change and Air Quality

Minor: Biological Sciences

Davis, CA

Research Interests

Paleoclimatology, paleoecology, organic geochemistry, climate dynamics

Publications

$in\ prep$

BioDeepTime ver 1.0: a new database of biodiversity time series for the Cenozoic

Jansen Smith, Marina Rillo, Ádám Kocsis, Seth Finnegan, Pincelli M. Hull, Maria Dornelas, **David Fastovich**, Huai-hsuan May Huang, Wolfgang Kiessling, Lee Hsiang Liow, Miranda Margulis-ohnuma, Stephen Meyers, Amelia Penny, Katherine Pippenger, Johoan Renaudie, Erine Saupe, Manuel J. Steinbauer, Mauro Sugawara, Adam Tomasovych, John Williams, Moriaki Yasuhara. *Global Ecology and Biogeography*.

- in prep Holocene hydroclimate and wetland development in the mid-Atlantic United
 States: vegetation and fire regimes of Great Dismal Swamp
 Debra A. Willard, Miriam C. Jones, Jay Alder, David Fastovich, Kristen
 Hoefke, Frederic C. Wurster. Quaternary Science Reviews.
- in prep Detecting legacies of millennial scale climate oscillations on modern biodiversity: lessons from a proxy-model comparison
 David Fastovich, David P. Helmers, Volker C. Radeloff, Benjamin Zuckerberg, and John W. Williams.1 Philosphical Transactions of the Royal Society B.
 - Spatial fingerprints and mechanisms of precipitation and temperature changes during the Younger Dryas in eastern North America
 David Fastovich, James M. Russell, Shaun A. Marcott, John W. Williams.
 Quaternary Science Reviews. 294, 107724. doi:10.1016/j.quascirev.2022.107724
 - More than one way to kill a spruce forest: The role of fire and climate in the late-glacial termination of spruce woodlands across the southern Great Lakes. Allison M. Jensen, **David Fastovich**, Benjamin I. Watson, Jacqueline L. Gill, Stephen T. Jackson, James M. Russell, Joseph Bevington, Katherine Hayes, Katherine B. Lininger, Claire Rubbelke, Grace C. Schellinger, John W. Williams *Journal of Ecology.* 109(1), 459-47. doi:10.1111/1365-2745.13517
 - 2020 Spatial fingerprint of Younger Dryas cooling and warming in eastern North America.

David Fastovich, James M. Russell, Stephen T. Jackson, Teresa R. Kruase, Shaun A. Marcott, John W. Williams. *Geophysical Research Letters*. 47(22), e2020GL090031. doi:10.1029/2020GL090031

2020 Deglacial temperature controls on no-analog community establishment in the Great Lakes Region.

David Fastovich, James M. Russell, Stephen T. Jackson, John W. Williams. *Quaternary Science Reviews.* 234, 106245. doi:10.1016/j.quascirev.2020.106245

Invited Talks

2022 American Quaternary Association Biennial Meeting

Spatial fingerprint and mechanisms of Younger Dryas warming and wetting in eastern North America.

2021 Woods Hole Oceanographic Institution

Spatial fingerprint and mechanisms of Younger Dryas warming and wetting in eastern North America.

Awards and Honors

2021	Presidential Management Fellowship Finalist Fellowship created by Executive Order to bring promising early-career scientists into public policy development and management. Awarded to 1,100 promising early-career scientists from 8,065 applicants.
2021	EarthCube Early Career Travel Grant
2021	Department of Geography Trewartha Travel Grant
2021	University of Wisconsin Graduate School Student Conference Travel Award
2021	Department of Geography Olmstead Award for Outstanding Publication Awarded annually to two individuals in recognition of impactful publication within the field of Geography.
2020	College of Letters and Science Teaching Fellow Award Awarded annually to 15 Teaching Assistants among all within the College of Letters and Science in recognition of excellent teaching, facilitation, and com- munication.
2020	Reid Bryson Poster Competition Runner Up
2019	Department of Geography Trewartha Travel Grant
2019	University of Wisconsin Graduate School Student Conference Travel Award
2015	John M. Long Endowed Scholarship
	Presentations and Posters
2022	Pliocene variability in the strength of the Pacific Walker Circulation David Fastovich , Tripti Bhattachrya, Ran Feng, Theodor Mayer. <i>American Geophysical Union. Poster.</i>
2022	Spatial fingerprints and mechanisms of temperature and precipitation changes during the Younger Dryas in eastern North America. David Fastovich, David P. Helmers, Voelker C. Radeleoff, Benjamin Zuckerberg, John W. Williams. American Geophysical Union. Poster.
2021	Spatial fingerprints and mechanisms of temperature and precipitation changes during the Younger Dryas in eastern North America. David Fastovich, James M. Russell, Shaun A. Marcott, John W. Williams.

American Geophysical Union. Poster.

2021 Spatial fingerprints and mechanisms of temperature and precipitation changes during the Younger Dryas in eastern North America.

David Fastovich, James M. Russell, Shaun A. Marcott, John W. Williams. *Geological Society of America. Presentation.*

2020 Mechanisms for a spatial fingerprint of Younger Dryas warming in the southeastern United States.

David Fastovich, James M. Russell, Shaun A. Marcott, John W. Williams. *American Geophysical Union. Virtual Poster.*

2019 Spatial fingerprint of temperature changes in eastern North America during the Younger Dryas.

David Fastovich, James M. Russell, Stephen T. Jackson, Teresa R. Kruase, Shaun A. Marcott, John W. Williams.

American Geophysical Union. Poster.

2019 Spatial fingerprint of temperature changes in eastern North America during the Younger Dryas.

David Fastovich, James M. Russell, Stephen T. Jackson, Teresa R. Kruase, Shaun A. Marcott, John W. Williams.

International Union for Quaternary Research. Presentation.

2018 Spatial fingerprint of temperature changes in eastern North America during the Younger Dryas.

David Fastovich, James M. Russell, Stephen T. Jackson, Teresa R. Kruase, Shaun A. Marcott, John W. Williams.
American Geophysical Union. Poster.

Abrupt deglacial temperature and vegetation changes reconstructed from brGDGT and pollen at Bonnet Lake, OH.

David Fastovich, James M. Russell, Stephen T. Jackson, John W. Williams. *Ecological Society of America. Presentation*.

Research Experience

2016 – 2022 Graduate Research Assistant

John W. Williams - Paleoecology Lab University of Wisconsin - Madison

2015 – 2016 Undergraduate Research Assistant

Andy Sih - Behavioral Ecology Lab University of California, Davis

2015 – 2016 Undergraduate Research Assistant

Alan Hastings - Theoretical Ecology Lab University of California, Davis

Teaching Experience

Fall 2021 Instructor, GEOG 335: Climatic Environments of the Past

University of Wisconsin - Madison Average student rating: 4.85/5.

Spring 2021 Instructor, GEOG 206: The Global Environment

Middlebury College

Average student rating: 4.6/5.

2017 - 2020, Teaching Assistant, GEOG120: Introduction to the Earth System

2022 University of Wisconsin - Madison

Head Teaching Assistant (3 years) and Teaching Assistant (1 year).

Average student rating: 4.70/5.

2016 Teaching Assistant, GEOG127: Physical Systems of the Environment

University of Wisconsin - Madison Average student rating: 4.52/5.

Service

Peer Reviewer: Proceedings of the National Academy of Sciences, Geophysical Research Letters, Journal of Quaternary Science, Ecosphere

2018 – 2020 Ecological Society of America Paleoecology Section Student Liaison

Technical Skills

Programming languages

Proficient in: R, Python

Familiar with: Julia, MATLAB, bash/zsh, CSS

Software

LATEX, Git, Docker, Binder

Languages

English (fluent), Russian (fluent)