Environmental Science Graduate Program Seminar Series

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Dr. Supp is an ecologist who is currently teaching in the new Data Analytics Program at Denison University (2017-present). She considers herself to be a combination of biodiversity scientist, macro-ecologist, and data scientist. Prior to her position at Denison, she co-led an international working group on biodiversity change (sChange, iDiv 2015-2017), was an NSF funded Postdoctoral Research Fellow (University of Wisconsin-Madison, UMaine), and was a postdoc for a NASA funded project, working on hummingbird migration (Stony Brook University, with Catherine Graham). She received her PhD in 2013 from Utah State University (with Morgan Ernest). While she has done field work on birds, plants, and small mammals, these days she mostly works with other people's data, which—along with her involvement in The Carpentries—has facilitated her transition from ecology to data science. Her newest project is working with long-term butterfly biodiversity and prairie restoration data at The Wilds, and co-leading an NSF RCN-UBE group assessing the state of data science education in undergraduate biology curricula. She lives with her family, including he cat, in Granville, OH

Sarah Supp, PhD

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Smith 3150 | 2 - 22 - 19 | 3:00 pm - 4:00 pm

What does the biogeography of biodiversity look like in the Anthropocene?

We exist as members of the Anthropocene - an era where human activity is the dominant influence on climate and the environment. Human activities reshape the world around us, including fundamental changes to the living world that we depend upon. Biodiversity, commonly defined as the number and different types of species in an area, is undergoing changes across the planet; but our understanding of the magnitude and direction of these changes is patchy, or based on models that "fill in the gaps". Recent advances in computing and data availability have made it possible to assess biodiversity change using multiple measures across the planet, and to identify critical hotspots to prioritize. This talk will highlight recent research on the biogeographic patterns for biodiversity change using the largest aggregation of assemblage time-series to date, the BioTIME database (Dornelas et al. 2018), as well as the value of an interdisciplinary and data science lens to solving the critical ecological problems of our time.