

# Quentin D. Read

Using big open data to understand how humans influence the natural world

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## Professional appointments

**Agricultural Research Service, U.S. Department of Agriculture**, Raleigh, NC 2021–  
*Applied Consulting Statistician*, Southeast Area (located at North Carolina State University)

- Support USDA researchers by designing experiments, processing and visualizing data, and doing statistical analyses using R, Stan, SAS, and Python
- Assist researchers with git for collaborations and high-performance computing on Linux
- Pursue a research program modeling the impacts of the food system on human and natural communities, using techniques from ecology, environmental science, and economics

**National Socio-Environmental Synthesis Center (SESYNC)**, Annapolis, MD 2018-2021  
*Data scientist (2019-2021); Postdoctoral fellow (2018-2020)*

- Provided data science consulting for socio-environmental research teams
- Maintained and wrote content for [SESYNC's cyberhelp website](#) using Markdown and Jekyll
- Developed and taught lessons for [data science curriculum](#)
- Modeled impacts of food waste and benefits of food waste reduction interventions
- Obtained \$130,000 NSF fellowship for SESYNC's postdoctoral immersion training program

**Michigan State University (MSU)**, East Lansing, MI 2016-2018  
*Postdoctoral researcher*, Department of Forestry

- Compiled, analyzed, and processed environmental and biodiversity datasets in R
- Designed spatial Bayesian models; did GIS analysis in R and GDAL

## Education

**University of Tennessee (UT)**, Knoxville, TN 2011-2016  
Ph.D., Ecology & Evolutionary Biology

**University of North Carolina**, Chapel Hill, NC 2005-2009  
B.S., Environmental Science

## Publications (for full list see [Google Scholar](#))

- Ten first-authored publications in journals including *PNAS*, *Resources Conservation & Recycling*, *Science of the Total Environment*, *Ecography*, and *Biology Letters*
- Twenty-three co-authored publications in journals including *Science*, *Ecology*, *Science of the Total Environment*, and *Global Ecology and Biogeography*

## Selected invited talks

- N.C. State University, Plant & Microbial Biology department seminar, Raleigh, NC 2022
- Duke University, University Program in Ecology Seminar Series, Durham, NC 2020
- Commission for Environmental Cooperation, Arlington, VA 2018

## Software

- Co-developer, *epi2me2r*: R package that helps users import Nanopore data into R 2022
- Lead developer, *Ostats*: R package for trait analysis of ecological communities 2021
- Co-developer, *ggalluvial*: R package adding functionality to ggplot2 2020
- Co-developer, *rslurm*: R package for running R code in parallel 2019

## Selected teaching and mentoring experience

- Mentored student team that won grand prize in a 75-team data science competition 2021
- Designed and taught SESYNC workshops on geospatial data and git 2020-2021
- Co-instructor of graduate seminar course in ecology at MSU 2017
- Mentored 17 undergraduates through MSU, Bryn Mawr College, Rocky Mountain Biological Laboratory, and UT 2012-2020