

Quentin D. Read

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

SESYNC
1 Park Place, Suite 300
Annapolis, MD 21401 USA

Email: qread@sesync.org
Website/Blog: quentinread.com
GitHub, StackOverflow: [qdread](#)

Professional experience

National Socio-Environmental Synthesis Center (SESYNC), Annapolis, MD 2018-present

Data scientist (50% time); Postdoctoral fellow (50% time), beginning September 2019

Postdoctoral Fellowship: “Food waste and the environment”

Mentor: Dr. Mary Muth (RTI International, Research Triangle Park, NC)

Michigan State University (MSU), East Lansing, MI 2016-2018

Department of Forestry; Ecology, Evolutionary Biology, & Behavior Program

“Intraspecific trait variation and community structure at a continental scale”

Advisors: Dr. Phoebe Zarnetske (MSU) and Dr. Sydne Record (Bryn Mawr College)

Education

University of Tennessee (UT), Knoxville, TN 2011-2016

Ph.D., Ecology and Evolutionary Biology

Dissertation: “Individual variation in plant traits drives species interactions, ecosystem functioning, and responses to global change”

Advisor: Dr. Nathan Sanders

University of North Carolina, Chapel Hill, NC 2005-2009

B.S. with highest distinction, Environmental Science

Skills

Data processing, visualizing, and analysis in R, including tidyverse and Rmarkdown

Bayesian modeling with Stan and JAGS

Spatial analysis and modeling with GDAL and GIS libraries in R

Working knowledge of Python

High-performance parallel computing using Linux server

Using GitHub for version control and remote collaborations

Fluent in spoken and written German; communicate effectively in spoken and written Spanish

Grants

Macrosystems Biology, NEON-Enabled Science (National Science Foundation; \$536,800)

Role: senior personnel, co-writer of grant

2019-2024

Publications and presentations

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

Six first-authored publications in *Ecography*, *Biology Letters*, *Journal of Plant Ecology*, *Journal of Vegetation Science*, *Oikos*, and *Functional Ecology*

Two publications first-authored by undergraduates whom I mentored, in *Ecology* and *Oecologia*

Eleven other co-authored publications in journals including *Science of the Total Environment*, *Global Ecology and Biogeography*, and *PLoS One*

Conference presentations

U.S. Society for Ecological Economics, Louisville, KY

2019

| | |
|---|------------|
| International Association of Landscape Ecology, Chicago, IL | 2018 |
| Ecological Society of America, Baltimore, MD; Portland, OR | 2015, 2017 |

Invited research talks

| | |
|---|------|
| Commission for Environmental Cooperation, Arlington, VA | 2018 |
| German Centre for Integrative Biodiversity Research (iDiv), Leipzig, Germany | 2017 |
| National Ecological Observatory Network, Boulder, CO | 2017 |
| MSU Department of Forestry, Hanover Forest Science Seminar Series, East Lansing, MI | 2016 |
| University of Notre Dame biology education seminar, Notre Dame, IN | 2015 |
| Rocky Mountain Biological Laboratory seminar, Gothic, CO | 2014 |
| Oak Ridge National Laboratory, Environmental Sciences Division, Oak Ridge, TN | 2014 |

Teaching and mentoring

Teaching

| | |
|--|-----------|
| Co-instructor of graduate course at MSU | 2017 |
| Graduate teaching assistant for eight semesters at UT | 2011-2016 |
| Delivered four guest lectures in undergraduate courses at UT | 2013-2015 |

Curriculum development and course design

| | |
|--|-----------|
| Designed graduate teaching module at MSU | 2018 |
| Designed and led workshop on R and ggplot2 | 2015 |
| Designed and led workshop on statistical analyses in R | 2014 |
| Served on panel developing and reforming undergraduate biology curriculum at UT | 2013-2014 |
| Surveyed biology instructors on current professional development opportunities for graduate teaching assistants, creating recommendations to improve TA training | 2013 |

Mentoring

| | |
|--|-----------|
| Mentored 4 undergraduates through Summer Research Opportunities Program and High Performance Computing Center, MSU | 2017-2018 |
| Mentored 8 summer research undergraduates, Rocky Mtn. Biological Laboratory | 2012-2015 |
| Mentored 3 undergraduate laboratory assistants, UT | 2013-2015 |

Selected honors and awards

| | |
|--|-----------|
| Science Alliance award, for exemplary accomplishments as a graduate student, UT | 2015 |
| Outstanding Outreach and Community Service award, UT Department of Ecology and Evolutionary Biology (awarded for leadership of Darwin Day) | 2014 |
| Dr. Jean H. Langenheim Endowed Graduate Fellowship in the Ecology and Evolution of Plants, Rocky Mountain Biological Laboratory | 2013-2014 |
| Dr. Lee R. G. Snyder Memorial Fellowship, Rocky Mountain Biological Laboratory | 2012 |

Professional and public outreach

| | |
|---|--------------|
| Peer reviewer for >30 manuscripts in 23 different journals | 2013-present |
| Maintainer, R package <i>rslurm</i> | 2019-present |
| Review panelist, SESYNC immersion postdoctoral fellowship program | 2019 |
| Gave public research talks on climate change and citizen science, MSU | 2017, 2018 |
| Volunteered at kids' science education events in TN, CO, and NC | 2011-2015 |
| Organized Darwin Day, a campus-wide science education event, UT | 2014 |

Selected work experience

| | |
|--|-----------------|
| Jim Clark Lab, Duke University , Durham, NC | |
| Research technician | 2008; 2010-2011 |
| North Carolina Botanical Garden , Chapel Hill, NC | |
| Conservation and Land Management internship | 2009 |