

# Timothy J. Ohlert

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## Research Interests

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Plant community ecology, biodiversity, global change, functional traits, climate sensitivity

## Education

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- PhD Candidate (4<sup>rd</sup> year) - Biology** 2017-Present  
University of New Mexico, Albuquerque, NM  
Advisor - Dr. Scott L. Collins
- Master of Science - Biology** 2019  
University of New Mexico, Albuquerque, NM  
Advisor - Dr. Scott L. Collins
- Bachelor of Science - Environmental Science, Policy, and Management** 2016  
University of Minnesota, Minneapolis, MN  
Minors: Plant Biology, Forest Ecosystem Management and Conservation

## Research positions

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- Research Assistant 2020  
US Forest Service, Washington D.C. Advisors: Dr. Linda Geiser, Dr. Robert Smith  
Prepared manuscript regarding uncertainty estimation in lichen-based critical load measurements
- Research Assistant 2019  
Rocky Mountain Research Station, USDA, Albuquerque, NM. Advisors: Dr. Paulette Ford, Dr. Jack Triepke  
Prepared General Technical Report reviewing fire and climate forcing impacts on carbon storage among ecosystems of Arizona and New Mexico
- Research Assistant. 2018-2020  
Extreme Drought in Grasslands Experiment (EDGE), Albuquerque, NM. Advisor: Dr. Scott Collins  
Analyzed long-term plant community data for publication and manage field operations for EDGE experiment at Sevilleta National Wildlife Refuge
- Community Ecology Technician 2016-2017  
Cedar Creek Ecosystem Science Reserve, Minnesota  
Managed global change and biodiversity field experiments in Minnesota tallgrass prairie

## Publications

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Collins, S., Y.A. Chung, L. Baur, A. Hallmark, **T. Ohlert**, J. Rudgers. (2020). Press-pulse interactions and long-term community dynamics in a Chihuahuan Desert grassland. *J Veg Sci.* doi.org/10.1111/jvs.12881

Seabloom, E., P. Adler, J. Alberti... **T. Ohlert**, S. Prober, A. Risch, M. Schutz, C. Stevens, E. Borer. (2020) Increasing effects of chronic nutrient enrichment on plant diversity loss and ecosystem productivity. *Ecology* doi.org/10.1002/ecy.3218

Fay, P., L. Gherardi, L. Yahdjian, ... **T. Ohlert**, P. Peri, M. Smith. Nutrient limitation governs the primary productivity-precipitation relationship (In Revision)

Asmus, A., E. Seabloom, J. Henning, ... **T. Ohlert**, S. Power, J. Price, A. Risch, M. Schuets, L. Shoemaker, C. Stevens, A. Strauss, P. Maximiliano Tognetti, R. Virtanen, L. Yahdjian, E. Borer. Environmental perturbations put core species at risk (In Revision)

## Invited talks and seminars

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Ohlert, T. Community dynamics and ordination in R (2020) *Sevilleta REU workshop*

Ohlert, T. What's the deal with desert grasslands? (2020) *Sevilleta REU summer seminar series*

Ohlert, T., M. Patton, S. Collins. Preliminary findings of drought induced changes to ecosystem functions (2020) *UNM Alumni Association legislative reception*. Santa Fe, NM. Poster presentation

Ohlert, T. Coding community dynamics in R (2019) *Advanced R Seminar*. University of New Mexico

Ohlert, T. Ordination in community ecology (2019) *Community Ecology* (course # BIOL 575). University of New Mexico

Ohlert, T., J. Rudgers, S. Collins. Rainfall changes alter plant communities in the Chihuahuan Desert (2019) *New Mexico State Capitol*. Santa Fe, NM

Ohlert, T. Community analyses and the CODYN package (2018) *Sevilleta REU workshop*

## Contributed talks and posters

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Ohlert, T., M. Patton, S. Collins. Preliminary findings of drought induced changes to ecosystem functions (2020) *Sevilleta LTER annual meeting*. Albuquerque, NM. *Central Arizona-Phoenix LTER All Scientist Meeting*. Tempe, AZ. Poster presentation.

Ohlert, T., J. Rudgers, S. Collins. Dominance and diversity in desert grasslands (2019) *Ecological Society of America meeting*. Louisville, KY. Oral presentation.

Ohlert, T., S. Collins. A collaborative approach to plant community research (2019) *Sevilleta LTER annual meeting*. Albuquerque, NM. *Central Arizona-Phoenix LTER All Scientist Meeting*. Tempe, AZ. Poster presentation.

Ohlert, T., J. Rudgers, S. Collins. Harmony and hegemony in desert grasslands (2019) *Biology Department brown bag seminar series*. Albuquerque, NM. Oral presentation

Ohlert, T., J. Rudgers, S. Collins. Climate variation alters plant community dynamics in Chihuahuan Desert grassland. (2018) *Shared Knowledge Conference*. University of New Mexico – Top Poster award

Ohlert, T., J. Rudgers, S. Collins. Community response to climate extremes (2018) *Sevilleta LTER Research Symposium*. Sevilleta National Wildlife Refuge. Oral presentation.

Ohlert, T., K. Kimmel, F. Isbell, P. Reich. Simultaneous Global Change Pressures May Mitigate Species Loss (2018) *Ecological Society of America meeting*. New Orleans, LA. Poster presentation

Ohlert, T., E. Goldberg. Plant mating strategy affects probability of island colonization (2018) *Department of Biology Research Days*. Albuquerque, NM – Honorable Mention poster

Ohlert, T., K. Kimmel, F. Isbell. Interactions of Multiple Global Change Factors Affect Biodiversity. (2017) *Cedar Creek summer research symposium*. Cedar Creek Ecosystem Science Reserve. Oral presentation

Ohlert, T., K. Kimmel. Relationship between Photosynthetic Rate and Biomass Production in Elevated CO<sub>2</sub> (2016) *Cedar Creek summer research symposium*. Cedar Creek Ecosystem Science Reserve. Oral presentation

Ohlert, T., E. Goldberg. Island Colonization Distance and Self-Compatible Reproduction in Plants (2016) *Winchell Undergraduate Research Symposium*. University of Minnesota

## Fellowships and grants (total funding, \$44,650)

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INTERN Fellowship - National Science Foundation, *Uncertainty estimation in lichen critical loads with the U.S. Forest Service* (2020) \$28,500

New Mexico Research Grant - Graduate and Professional Student Association, *Drought impacts on desert ecosystems* (2019) \$3,000

Graduate student fellowship - Sevilleta LTER *Drought impacts on desert ecosystems* (2019) \$4,000

Graduate student summer grant - Central Arizona-Phoenix (CAP) LTER. *Drought impacts on desert ecosystems* (2019) \$4,000

Grove Scholarship - UNM Biology Department *Drought impacts on desert ecosystems* 2019 \$1,000

Biology Graduate Student Association, various awards (2017-2020) \$1,750

Student Research Grant - Graduate and Professional Student Association. *Drought impacts on desert ecosystems* (2018) \$500

Ecological Research Projects - Cedar Creek Ecosystem Science Reserve, various awards (2016-2017) \$400

Undergraduate Research Opportunities Program - University of Minnesota, *Plant mating systems across island biogeography* (2016) \$1,500

## Mentoring

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Azad Vojdani 2017-2020  
UNM undergraduate student

Chloe Cromer 2019  
Sevilleta REU student  
Project title: Dominant species influence on soil properties

Andrew Hsiao 2018  
Sevilleta REU student  
Project title: Influence of soil properties on aridland plant communities

Gabriela Jackson 2018  
Sevilleta REU student  
Project title: Roadside plant ecology

## Teaching experience

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Teaching Assistant 2017-2018  
Plant and Animal Form and Function (BIOL 204/L)  
University of New Mexico, Albuquerque, NM

## Service

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Sevilleta LTER graduate student representative 2020

Health Science Center Orchestra-Student representative on board of directors 2019-2020  
Graduate and Professional Student Association-Biology department representative 2018-2019

## Outreach and Policy

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New Mexico Capital Outlay 2020  
Advocated for Capital Outlay Project on behalf of Museum of Southwestern Biology with New Mexico state legislature

Ecological Society of America Graduate Student Policy Award 2019  
Advocated for National Science Foundation funding on behalf of the Ecological Society of America with federal legislative staff

## Technical skills

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R - Advanced R coding including statistical analysis, data manipulation, and data visualization

SQL - Basic SQL coding including database management for the Drought Network (DroughtNet)

Adobe Illustrator - Figure editing for publication including Collins et al. (2020) *J Veg Sci*