

Chhaya M. Werner

cwerner5@uwyo.edu

University of Wyoming ◊ Laramie, WY

<http://chhayawerner.com>

PROFESSIONAL EXPERIENCE AND EDUCATION

- University of Wyoming** 2020 - Present
Postdoctoral Associate
Modelscape project Advisor: Lauren Shoemaker
- German Centre for Integrative Biodiversity Research** 2019 - 2020
Postdoctoral Researcher
*project coordinated by University of Oulu, Finland
and Helmholtz Centre for Environmental Research, Germany*
Advisor: Anu Eskelinen
- University of California Davis** 2014 - 2018
PhD in Population Biology
Advisors: Truman Young and Susan Harrison
- Princeton University** 2010 - 2014
B.A. in Ecology and Evolutionary Biology, *magna cum laude*
Advisor: Stephen Pacala

PUBLICATIONS

- Werner, CM**, D Kimuyu, K Veblen, E LaMalfa, R Sesenig, and TP Young. Synergistic effects of herbivores and previous fire on fine-scale heterogeneity of prescribed grasslands burns. Accepted: *Ecology*.
- Werner, CM**, KL Stuble, AM Groves, and TP Young. 2020. Year Effects: Inter-annual variation as a driver of community assembly dynamics. *Ecology* doi:10.1002/ecy.3104
- MJ Koontz, MP North, **CM Werner**, SE Fick, and AM Latimer. 2020. Local forest structure variability increases resilience to wildfire in dry western US coniferous forests. *Ecology Letters* 23:483-494.
- Werner, CM**, DJN Young, HD Safford, and TP Young. 2019. Decreased snowpack and warmer temperatures reduce the negative effects of interspecific neighbors on regenerating conifers. *Oecologia* 191:731-743
- Young, DJN, **CM Werner**, KR Welch, TP Young, HD Safford, and AM Latimer. 2019. Post-fire forest regeneration shows limited climate tracking and potential for drought-induced type conversion. *Ecology* 100:e02571.
- North, MP, JT Stevens, DF Greene, M Coppoletta, EE Knapp, AM Latimer, ... **CM Werner**, P Wyrsh. 2019. Reforestation for Resilience in Dry Western Forests. *Forest Ecology and Management* 432:209-224.
- Young, TP, KL Stuble, JA Balachowski, ME Lulow, **CM Werner**, and K Wolf. 2017. Experimental approaches to addressing climate change challenges in prairie restoration. *Grasslands* special issue: Climate change and grasslands. 27:10-15.
- Young, TP, KL Stuble, JA Balachowski, and **CM Werner**. 2017. Using priority effects to manipulate competitive relationships in restoration. *Restoration Ecology* 25:S114-S123.

Werner, CM, KJ Vaughn, KL Stuble, K Wolf, and TP Young. 2016. Persistent asymmetrical priority effects in a California grassland restoration experiment. *Ecological Applications* 26:1624-1632.

TEACHING

Fire Ecology

Instructor

February 2020

Leipzig, Germany

- Taught a four-day intensive workshop on fire ecology for graduate students. Gave discussion-based lectures, and designed a series of assignments to stimulate in-depth investigation of students' study systems for a breadth of topics and presentation styles.

Plant Communities of California

Teaching Assistant

Spring Quarters 2016 and 2017

Davis, CA

- In 2017, co-lead the field course of the class, an in-situ approach to botany and ecology in California communities, while the instructor was on sabbatical. Wrote and delivered field lectures, planned itineraries, developed research-based homework assignments, and wrote and graded exams.
- In 2016, assisted in coordinating and teaching the field course. In both years guest lectured for the lecture section of the class.

Principles of Ecology and Evolution

Teaching Assistant

Winter Quarter 2016

Davis, CA

- Ran two lab sections of the UC Davis course, part of the Introduction to Biology series.

MENTORING AND SERVICE

Chaparral Drought and Fire

Mentor

2016 - 2018

Davis, CA

- Worked with UC Davis undergraduate Rebecca Serata for three years on my fieldwork project. Taught plant identification and community survey skills in the field, and analysis of data. Included Rebecca on the manuscript writing and submission process as a coauthor. Additionally, assisted Rebecca in developing an independent sub-project, which she presented as a poster at the California Invasive Plant Council symposium.

Sierra Nevada Post-fire Regeneration

Fieldwork Coordinator

2016 - 2018

Davis, CA

- Led and mentored nine undergraduate research assistants on my fieldwork project, including multiple students who worked 30 hours for official internship credit. Students helped with construction of field experiment and data collection.

Natural Areas Conference

Student and Volunteer Committee Chair

2016

Davis, CA

- Served on the organizing committee for the 43rd Natural Areas Conference. Recruited student participants, and organized activities, awards, and volunteer opportunities for student attendees.

Women in Science and Engineering Mentoring

Mentor

2015-2016

Davis, CA

- Mentored a UC Davis undergraduate student in the Women in Science and Engineering program.

CONFERENCES AND PRESENTATIONS

British Ecological Society. Belfast, Northern Ireland. December 12, 2019. **Talk:** *Recovery of tundra communities from nutrient deposition*

German Centre for Integrative Biodiversity Research seminar. Leipzig, Germany. March 6, 2019. **Invited Talk:** *Priority promotes coexistence in a grassland restoration experiment*

Oikos Finland Conference on Ecology and Evolutionary Biology. Oulu, Finland. February 5, 2019. **Talk:** *Extreme pre-fire drought decreases shrub regeneration after fire*

Ecological Society of America 103rd Annual Meeting, New Orleans, LA. August 8, 2018. **Talk:** *Post-fire regeneration on harsh soils is more resilient to climate change.*

Ecological Society of America 102nd Annual Meeting, Portland, OR. August 9, 2017. **Poster:** *Post-fire recruitment of two conifer species under manipulated drought and shrub competition conditions*

Northwest Science Association 88th Annual Meeting, Ashland OR. May 31, 2017 **Invited Talk:** *Post-fire climate as a driver of forest community regeneration*

Northwest Science Association 88th Annual Meeting, Ashland OR. May 30, 2017. **Poster:** *Spatial and temporal contingency in rapid primary succession following removal of the Elwha River dams*

Center for Population Biology seminar series, University of California Davis. November 22, 2016. **Talk:** *Plant community responses to post-fire drought*

Natural Areas Conference 43rd Annual Meeting, Davis CA. October 19, 2016. **Talk:** *Post-fire climate as a driver of forest community regeneration*

Princeton Environmental Institute's Discovery Day. Princeton, NJ. May 2014. **Poster:** *Restoration, regrowth, and invasion in the drained Elwha River reservoirs*

GRANTS AND AWARDS

Ecology

NSF Graduate Research Fellowship Program \$138,000	2016 - 2018
UC Davis Plant Sciences MacDonald Fellowship \$80,000	2014 - 2018
Henry A. Jastro graduate research scholarship \$2500	2018
Henry A. Jastro graduate research scholarship \$2000	2017
University of California ISEECI graduate student research fellowship \$11,500	2016
University of California Natural Reserve System research grant \$1200	2016
Henry A. Jastro graduate research scholarship \$1750	2016
Henry A. Jastro graduate research scholarship \$1600	2015
Ben A. Madson scholarship \$1000	2015
Leslie Kilman Johnson senior thesis award	2014

Computer Science

2nd place Software Project, Hack Princeton	2014
--	------

TECHNICAL STRENGTHS

Main Computer Language	R
Experience With	MATLAB, Javascript, Arduino
Other Tools	LaTeX, Google Earth Engine, LANDIS-ii, ImageJ