

Emma Reich

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EDUCATION

- In Progress **Northern Arizona University**
Ph.D. Informatics and Computing— Ecological and Environmental Informatics
Advisor: Dr. Kiona Ogle
Year of Study: 1st year
4.0 GPA
- 2019 **University of California, Berkeley**
B.S. Molecular Environmental Biology— Ecology concentration
3.6 GPA

GRADUTATE COURSEWORK

- Spring 2021 Ecological Modeling (in progress)
Modern Regression II (in progress)
Data Mining & Machine Learning (in progress)
- Fall 2020 Advanced Survey in Ecoinformatics Tools
Modern Regression I
Concepts in Ecology
- Spring 2019 Stable Isotope Ecology (completed during undergraduate degree)

RESEARCH

- 2020 **Graduate Research Assistant**, Northern Arizona University
• Contributed to project on *Ecohydrological controls on evapotranspiration across a semiarid elevation gradient*, under the mentorship of Dr. Kiona Ogle and Dr. Kimberly Samuels-Crow.
- 2017-19 **Research Assistant**, UC Berkeley, Ackerly Lab
• Collaborated on project on vulnerability to embolism in California oaks led by Dr. Robert Skelton and Dr. Leander Anderegg.
• Independent research on flower phenology and pollinator resources across a heterogeneous grassland landscape after fire disturbance.
• Assisted with project on phenology dynamics in California grassland communities as part of doctoral candidate Rachael Olliff Yang's dissertation.
• Assisted with project on genetic diversity in red oaks.
- 2018 **Field Biologist/Student Researcher**, Richard B. Gump South Pacific Research Station, Mo'orea, French Polynesia
• Studied the effects of temperature on decalcification in crustose coralline algae and the susceptibility to grazing of crustose coralline algae from different thermal environments.
- 2017 **Research Assistant**, UC Berkeley, Sousa Lab

- Prepared leaves for stable isotope analysis and determined soil chemical composition as a part of doctoral candidate Audrey Hayne’s dissertation.

- 2016 **Research Assistant**, UC Berkeley, Koehl Lab
- Recorded movement patterns of marine larvae in response to acceleration from videos on Image J and recorded data in Excel. Observed biomechanical response and larval settlement of organisms swimming in turbulent flow.
- 2016 **Research Assistant**, UC Berkeley, Looy Lab
- Assisted with project on the diversity of tropical plant fossils from the Cretaceous period as part of Dr. Dori Contreras’ dissertation.

TECHNICIAN POSITIONS

- 2019 **Field Technician**, National Ecological Observatory Network, Alaska
- Collected vegetation diversity data in northern Alaska.
- 2018-19 **Prep Room Assistant**, UC Berkeley, Museum of Paleontology
- Prepared marine vertebrate and invertebrate fossils from the Miocene as a part of the Calaveras Dam project.

PUBLICATIONS AND PRESENTATIONS

Samuels-Crow, K. E., **Reich, E.**, Litvak, M. E., and K. Ogle. Across semiarid ecosystems, evapotranspiration responds to environmental drivers over longer timescales when conditions are dry. Poster presented at AGU Fall Meeting (2020).

Skelton, R. P., Anderegg, L. D. L., Papper, P., **Reich, E.**, Dawson, T. E., Kling, M., Thompson, S. E., Diaz, J., and D. D. Ackerly. 2019. No local adaptation in leaf or stem xylem vulnerability to embolism, but consistent vulnerability segmentation in a North American oak. *New Phytologist*. doi.org/10.1111/nph.15886

Reich, E. The acclimatization and susceptibility to grazing of crustose coralline algae from thermally variable and stable environments. Poster presented at Bay Area Conservation Biology Symposium (2019). Talk presented at UC Berkeley Integrative Biology department symposium (2018).

CONFERENCES ATTENDED

- 2019 Bay Area Conservation Biology Symposium
 2018 California Native Plant Society Conference

PROFESSIONAL SOCIETIES

- 2018 California Native Plant Society
 2018 California Botanical Society

CERTIFICATIONS

- 2019 Wilderness First Aid and CPR
 2019 NSF Arctic Field Training