

Alexandra M. Weill

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EDUCATION

- 2018 Ph.D., Ecology, University of California, Davis
Dissertation:
“Living with fire in California shrublands: from plants to people”
- 2018 Certificate in Conservation Management, University of California, Davis
- 2011 B.A., Biological Sciences with Honors and B.S., Geophysical Sciences,
University of Chicago

RESEARCH POSITIONS

- 2016 - 2018 Graduate Student Researcher, Kids into Discovering Science Program,
Davis, CA
♦ *Prepared 10-lesson curriculum for submission to peer-reviewed online digital library*
♦ *Designed assessment materials and collected data on program impact on student learning and perceptions of diversity in science*
- 2015 - 2016 Graduate Student Researcher, Institute for the Study of Ecological and
Evolutionary Climate Impacts, Davis, CA
♦ *Researched the adaptive capacity of fire-adapted chaparral plants under changing fire regimes at a network of research reserves throughout the state of California*
♦ *Worked with faculty, students, and staff in the institute to brainstorm future program directions*
- 2011 Jeff Metcalf Intern, Royal Botanic Gardens, Kew, London, UK
♦ *Used molecular techniques to address questions in plant evolution*
- 2010 Jeff Metcalf Intern, The Nature Conservancy, New Paltz, NY
♦ *Collected data on forest plant community change following fire*
♦ *Monitored invasive species and mapped invasive species occurrences*

OUTREACH AND SCIENCE COMMUNICATIONS POSITIONS

- 2018 AAAS Mass Media Fellow, KQED, San Francisco, CA
♦ *Wrote science news articles for KQED Science website*
♦ *Assisted with writing and production of “Deep Look” video series*
♦ *Participated in science journalism training with the American Association for the Advancement of Science*
- 2016 - 2018 Lead Coordinator, Kids into Discovering Science Program, Lower Lake, CA
♦ *Organized volunteer meetings, recruited and trained volunteers for classroom teaching and field trip*
♦ *Ran seminar on K-12 education and curriculum development*
♦ *Applied for grants and prepared reports on program achievements*

- 2014 - 2016 Instructor, Bio Boot Camp, UC Davis Bohart Museum of Entomology, Bodega Bay, Napa, Truckee, and Winters, CA
 ♦ *Supervised and instructed middle and high school students in a week of field ecology activities, including natural history hikes, individual research projects, and group research projects*
- 2014 - 2016 Founding team member and coordinator, California Phenology Project at Stebbins Cold Canyon Reserve, Winters, CA
 ♦ *Worked with a group of students and faculty to establish a new citizen science program for Stebbins Reserve*
 ♦ *Organized and co-led trainings for citizen scientists to monitor plants at a local reserve*
 ♦ *Wrote two successful grants to fund program continuation*
 ♦ *Established and maintained website, blog, and social media*
 ♦ *Worked with volunteers to re-establish program infrastructure following fire and design post-fire regeneration citizen science monitoring protocols*
- 2012 Education Intern, Hudson River Sloop Clearwater, Beacon, NY
 ♦ *Taught hands-on lessons in fish biology, water chemistry, watershed science, and geology to K-12 students*

FELLOWSHIPS AND AWARDS

- 2018 AAAS Mass Media Fellowship
 2015 Poster Award, UC Natural Reserve System 50th Anniversary Symposium
 2015 Graduate Group in Ecology Fellowship, UC Davis
 2014 Spurr Award for Outreach, Graduate Group in Ecology, UC Davis
 2013 NSF Graduate Research Fellowship Program, Honorable Mention
 2012 Graduate Group in Ecology Fellowship, UC Davis
 2012 Department of Plant Sciences Graduate Fellowship, UC Davis
 2011 Outstanding Undergraduate Thesis, University of Chicago

RESEARCH GRANTS

- 2017 California Lichen Society Grant (\$1000)
 2015 UC Davis Natural Reserve System Grant (\$1000)
 2014 Helen Sharsmith Grant, California Native Plant Society (\$400)
 2014 UC Davis Natural Reserve System Grant (\$2444)
 2013 Henry A. Jastro Research Fellowship (\$2250)

PUBLICATIONS

In Prep (manuscript available upon request)

- [2] **Weill, A. M.** and Latimer, A. M. Walking through a 'phoenix landscape': hiker surveys reveal nuanced perceptions of wildfire effects.
 [1] **Weill, A. M.**, Burge, D. and Latimer, A. M. Variation in fire-stimulated germination and seed traits of *Ceanothus* in California chaparral.

Peer-Reviewed Publications

- [3] Merrill, A., Thode, A., **Weill, A.**, Fites-Kaufman, J., Bradley, A., and Moody, T. "Fire and plant interactions." *Fire in California's Ecosystems*. Ed. van Wagtenonk, J. & Shaffer, K. E (Eds.). In press.

- [2] **Weill, A.**, Fernandez, B., Stanton, M., Copeland, S., Cortez, C., Camp, L., Ng, J., and Moore, K. Kids into Discovering Science: A Framework for Place-Based, Hands-On Ecology. 2017. ESA EcoEd Digital Library.
- [1] Caro, T., Charles, G. K., Clink, D. J., Riggio, J., **Weill, A.M.**, and Whitesell, C. 2016. Protected areas under threat. In Sample, V. A., Bixler, R. P., & Miller, C. (Eds.) *Forest Conservation in the Anthropocene: Science, Policy, and Practice*. University Press of Colorado.

Other Technical Publications

- [1] **Weill, A. M.** 2011. Evolution, biomechanics, and morphometrics of the lower jaw of *Tiktaalik roseae*. *The Chicago Biological Investigator*. Spring 2012, p.34-44.

Publications for General Audience

- [13] **Weill, A.** 2018. Fuel Matters: Why Wildfire Behavior Depends on What's Burning. *KQED*.
- [12] **Weill, A.** 2018. Interior Secretary Ryan Zinke Says California Fires 'Have Nothing to Do With Climate Change.' He's Wrong. *KQED*.
- [11] **Weill, A.** 2018. Redding's Fire Tornado Was Not Your Garden Variety Firewhirl. *KQED*.
- [10] **Weill, A.** 2018. California Fires Are Breaking The Rules By Burning Downhill Fast. *KQED*.
- [9] **Weill, A.** 2018. One Way To Save Birds: Pay Farmers To Flood Their Land. *KQED*.
- [8] **Weill, A.** 2018. Should All Ph.D.'s Be Called 'Doctor'? Female Academics Say Yes. *KQED*.
- [7] **Weill, A.** 2018. Anyone Thinking About Planting Grasslands to Fight Climate Change? They Should. *KQED*.
- [6] **Weill, A.** 2018. The Giants of California: How Redwoods and Whales Got So Big. *KQED*.
- [5] **Weill, A.** 2018. Women of Wildfire: Revolution, Superheroes, and the Case for Diversity in Fire Management. *The Forestry Source*. April 2018, p. 16-17.
- [4] **Weill, A.** *Eagle Island Nature Trail Guide*. 2017.
- [3] Miller, L., Ng, J., and **Weill, A.** UC Davis graduate students inspire future scientists at the 2016 Kids into Discovering Science Field Day. *The Aggie Brickyard*, Volume 2 (Spring 2016), p.19-20.
- [2] Steel, Z. and **Weill, A.** Telling the story of fire in California. 2016. *The Aggie Brickyard*, Volume 1 (Winter 2016), p.13-14.
- [1] **Weill, A. M.** 2011. The elephant problem: a case study in modern conservation biology. *The Triple Helix*. Fall 2011, p. 25-28.

SELECTED BLOG POSTS (TALKABOUTFIRE.COM)

- 2018 "A Florida fire story: a visit to the Disney Wilderness Preserve"
- 2018 "The firefighters of Florida: on the ground at my first prescribed burn"
- 2018 "The case of the 'pyromaniac' birds: what the Australian firehawks tell us about evidence and anecdote"
- 2016 "Can we use Christmas trees for fire management?"
- 2016 "Letting fires burn: paper policy and public opinion (Parts 1 & 2)"
- 2016 "Beyond forest fires: bringing chaparral fire stories to light"

- 2016 "Fire at Fort McMurray: talking about fire in real time"
 2015 "It's not just California forests: what's your local fire story?"
 2015 What we talk about when we talk about fire (Parts 1 & 2)"

SELECTED ORAL PRESENTATIONS

- 2017 **Weill, A. M.** From plants to people: Californians at work and play in post-fire landscapes. Association for Fire Ecology Fire Congress. Orlando, FL.
 2017 **Weill, A. M.** How well do fire-adaptive traits in *Ceanothus* species correspond to fire regimes? Society of America Annual Meeting. Portland, OR.
 2015 **Weill, A. M.** Fire and functional traits: how do fire-adaptive traits relate to historical, recent, and future fire regimes in post-fire reseeding *Ceanothus* species? Association for Fire Ecology Fire Congress. San Antonio, TX.
 2011 **Weill, A. M.** Evolution, biomechanics, and morphometrics of the lower jaw of *Tiktaalik roseae*. Undergraduate Research Seminar, University of Chicago Department of Biological Sciences. Chicago, IL.

SELECTED POSTER PRESENTATIONS

- 2017 **Weill, A. M.** From growing season to fire season: when the California Phenology Project met wildfire. Citizen Science Association Conference. St. Paul, MN.
 2015 **Weill, A.** Ng, J., Camp, L., Pagan, C. and Moore, K. Kids into Discovering Science: place-based science education at McLaughlin Reserve. Natural Reserve System 50th Anniversary Symposium. Davis, CA.
 2015 **Weill, A. M.** 2015. Fire and functional traits: how do fire-adaptive traits relate to historical, recent, and future fire regimes in post-fire reseeding *Ceanothus* species? Ecological Society of America Annual Meeting. Baltimore, MD.
 2015 Caro, T., Charles, G. K., Clink, D. J., Riggio, J., **Weill, A.**, and Whitesell, C. Shifting perceptions of threats to protected areas: what threats do researchers care about, and where do they study them? (Poster). Parks for Science Summit. Berkeley, CA.
 2014 **Weill, A. M.** Drought and ice plant invasion at Bodega Bay, CA. American Geophysical Union Annual Meeting. San Francisco, CA.
 2014 **Weill, A. M.** Modeling fire in Mediterranean shrublands. Large Wildland Fires Conference. Missoula, MT.

PRESENTATIONS FOR GENERAL AUDIENCE

- 2017 **Weill, A.M.** What we talk about when we talk about fire: from forests to Burning Man. Oral Presentation. Center Camp Café Speaker Series. Black Rock City, NV.
 2012 **Weill, A. M.** Fire 101 (Talk). Geophysical Sciences Student Union, University of Chicago Department of Geophysical Sciences. Chicago, IL.

COLLEGE TEACHING AND OUTREACH

- 2018 Guest Speaker ("Fire in Global Shrublands"), Fire Ecology, UC Davis
 2017 Teaching Assistant, Trees and Forests, UC Davis
 2017 Teaching Assistant, Paleobotany, UC Davis
 2016 & 2017 Panelist, ESA SEEDS Panel on Graduate School, UC Davis
 2016 Hike Leader, ESA SEEDS Field Trip, Stebbins Cold Canyon Reserve

2016 Teaching Assistant, Introduction to Ecology, UC Davis
2015 Reader, Introduction to Ecology, UC Davis
2013 Reader, Global Change Biology, UC Davis
2011 Teaching Assistant, A Serious Introduction to Biology for Majors,
University of Chicago
2010 Teaching Assistant, Biological Diversity, University of Chicago

SEMINARS ORGANIZED

2014 - 2016 "Getting Kids into Ecology Outreach", UC Davis
2015 "Phenology, Climate Change, and Citizen Science", UC Davis
(*open to citizen science volunteers and the general public*)
2013 "Fire and Global Change", UC Davis

ADDITIONAL YOUTH AND FAMILY OUTREACH AND TEACHING

2018 Organizer, Women in Science Festival, Yolo County Public Library, Davis,
CA
2017 Volunteer, The Science of Harry Potter, Woodland Public Library,
Woodland, CA
2016 Volunteer, Fire Science Field Day, Hopland Research and Extension Center,
Ukiah, CA
2015 - 2016 Master Plant Science Team Mentor and Facilitation, Planting Science online
mentoring program
2014 - 2015 Field Day Co-Coordinator and Classroom Volunteer, Kids into Discovering
Science Program, Lower Lake, CA
2013 Field Day and Classroom Volunteer, Kids into Discovering Science
Program, Lower Lake, CA

ADDITIONAL ADULT OUTREACH AND TEACHING

2018 Introduction to California Lichens, Jepson Herbarium
Berkeley, CA
2017 Nature walk guide, Eagle Island, Inc. Open Island Days, Saranac Lake, NY

PROFESSIONAL DEVELOPMENT

2017 Student Association for Fire Ecology Prescribed Burn, The Nature
Conservancy Disney Wilderness Preserve, Kissimmee, FL
2017 Human Factors in the Wildland Fire Service (National Wildfire
Coordinating Group L-180)
2017 Introduction to Wildland Fire Behavior (National Wildfire Coordinating
Group S-190)
2017 Firefighter Training (National Wildfire Coordinating Group S-130)
2017 Introduction to Incident Command System (Emergency Management
Institute ICS-100)
2017 National Incident Management System (NIMS) An Introduction
(Emergency Management Institute IS-700)
2017 Project Learning Tree Educator and Facilitator Training: Integrating Fire
Ecology into Standards-Based PLT Activities and Training
Blodgett Forest Research Station, Georgetown, CA
2016 ComSciCon: Communicating Science Workshop for Grad Students
San Diego, CA

2016 Work with Data Institute, National Ecological Observatory Network,
Boulder, CO
2016 Science Communication Seminar, Powerhouse Science, Sacramento, CA
2015 Intro to Plant Identification, UC Davis Cooperative Extension, Davis, CA
2014 PaleON Summer Course: Assimilating Long Term Data into Ecosystem
Models, Land O'Lakes, WI

SERVICE

2016 - Present Grants Committee Member, Eagle Island, Inc., Saranac Lake, NY
2015 - Present Landscape and Ecosystem Ecology Student Representative, UC Davis
2014 - Present Graduate Group in Ecology Admissions Reviewer, UC Davis
2012 - 2017 Ecology Graduate Students Association, Volunteer, UC Davis
2013 - 2016 Ecology Symposium, Organizing Committee, UC Davis
2015 White Mountains Odyssey Orientation, Teaching Assistant, UC Davis
2013 Bay Area Conservation Biology Symposium, Organizing Committee