

# Alexandra M. Weill

## 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

- 2019 - Present Outreach Coordinator, US Geological Survey Western Ecological Research  
Center, Sacramento, CA
- ◆ *Compile and disseminate weekly summary of science center research and events*
  - ◆ *Write and design research summary handouts and posters for conferences and outreach events*
  - ◆ *Write, edit, and design webpage content, online news stories, and social media posts about center research*
  - ◆ *Collaborate with scientists to communicate their research to partners and the public*
  - ◆ *Serve as a liaison to the Office of Communications and Publishing to promote center research*

- 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 50<sup>th</sup> 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)*

- [1] **Weill, A. M.**, Burge, D. and Latimer, A. M. Variation in fire-stimulated germination and seed traits of *Ceanothus* in California chaparral.

*In Review (manuscript available upon request)*

- [1] Miller, J.E.D., **Weill, A.M.**, and Villela, J. Increasing fire frequency reduces lichen diversity in a high-severity fire-adapted ecosystem. In review.

*Peer-Reviewed Publications*

- [4] **Weill, A. M.**, Watson, L. M., and Latimer, A. M. 2020. Walking through a 'phoenix landscape': hiker surveys reveal nuanced perceptions of wildfire effects. *International Journal of Wildland Fire*, 29(7), pp.561-571.
- [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 50<sup>th</sup> 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**

- 2019 **Weill, A.M.** Enlichenment 101: how loving lichens can change the way you see the world. Oral Presentation. Nerd Nite Sacramento. Sacramento, CA.
- 2019 **Weill, A.M.** California on fire: why it's happening and what you should know. Oral Presentation. Sac Science Distilled. Sacramento, CA.
- 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**

- 2020 & 2021 Part-Time Faculty, Lichens of the Bay Area, Merritt College
- 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**

- 2019 & 2020 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