

JUSTIN M. VALLIERE, Ph.D.

La Kretz Center for California Conservation Science
Institute of the Environment and Sustainability
University of California, Los Angeles
Los Angeles, CA 90095, USA

email: valliere@ucla.edu
phone: +1 (774) 280-2285
skype: valliere.justin
website: www.justinvalliere.com

EDUCATION

Ph.D. Plant Biology – University of California, Riverside, USA 2016

Concentrations: Plant ecology, invasion ecology, soil ecology

Dissertation: “*Ecological impacts of nitrogen deposition, drought, and nonnative plant invasion on coastal sage scrub of the Santa Monica Mountains*”

Advisor: Edith Allen

B.A. Biology, Chemistry Minor – Green Mountain College, Poultney, Vermont, USA 2007

College Honors Program

Project 1: “*Exploring the role of soil chemistry in Beech Bark Disease*”

Project 2: “*Protein expression in diseased and resistant American Beech trees*”

PROFESSIONAL APPOINTMENTS

Postdoctoral Fellow, La Kretz Center for California Conservation Science 2016 – present
University of California, Los Angeles with Phil Rundel and Jen Funk

Research & Education Coordinator, Santa Rosa Plateau Foundation 2012 – present

Lecturer, Botany & Plant Sciences, University of California, Riverside 2016

Graduate Research Assistant and Ph.D. Candidate with Edith Allen 2011 – 2016
Botany & Plant Sciences, University of California, Riverside

Field Crew Leader for Invasive Species Control & Research 2009 – 2011
Audubon California’s Starr Ranch, Trabuco Canyon, California

Ecological Research Technician, U.S. Geological Survey 2009
Western Ecological Research Center, Bishop, California

Research Assistant, Boston University, Boston, Massachusetts 2008

Invasive Species Technician, Green Mountain College, Poultney, Vermont 2006 – 2007

Biological Research Assistant, Green Mountain College, Poultney, Vermont 2003 – 2007

Assistant to Wetland Scientists, EcoTech Inc., Worcester, Massachusetts 2005

GRANTS & FELLOWSHIPS

U.S. Department of Agriculture NIFA Postdoctoral Fellowship (\$131,256)	2017
UCLA La Kretz Center for Conservation Science Postdoc Fellowship (\$103,432)	2016
Dissertation Year Fellowship , UC Riverside (\$7,200)	2016
NSF Doctoral Dissertation Improvement Grant (\$19,000)	2015
Bloom-Hays Ecological Research Grant , Sea and Sage Audubon (\$2,000)	2014
Southern California Research Learning Grant , SCRL Center (\$4,000)	2014
National Park Service Air Resource Division , with E. Allen & I. Irvine (\$58,000)	2013
Santa Monica Mountains Fund (\$1,800)	2013
California Native Plant Society Education Grant (\$750)	2012
Dean's Fellowship , UC Riverside (\$30,267)	2011
Student Campus Greening Fund , Green Mountain College (\$4,000)	2006

PUBLICATIONS

6. **Valliere, J.M.**, A. Bytnerowicz, M.E. Fenn, I.C. Irvine, R.F. Johnson and E.B. Allen. Declines in native forb richness are associated with increased plant invasion across an anthropogenic nitrogen deposition gradient. *In prep.*
5. **Valliere, J.M.** and E.B. Allen. Plant functional traits and tradeoffs explain the dominance of invasive annuals over native species. *In prep.*
4. **Valliere, J. M.**, I. I. Irvine, L. Santiago, E. B. Allen. (2017) High N, dry: Nitrogen deposition exacerbates shrub die-off and invasion during a record-breaking drought. *Global Change Biology. In press.*
3. Allen, E. B., L. M. Egerton-Warburton, B. E. Hilbig, and **J. M. Valliere**. (2016) Interactions of arbuscular mycorrhizal fungi, critical loads of nitrogen deposition, and shifts from native to invasive species in a southern California shrubland. *Botany*, 94(6): 425-433.
2. **Valliere, J. M.** and E. B. Allen. (2016b) Nitrogen enrichment contributes to positive responses to soil microbial communities in three invasive plant species. *Biological Invasions*, 18(8): 2349-2364.
1. **Valliere, J. M.** and E. B. Allen. (2016a) Interactive effects of nitrogen deposition and drought-stress on plant-soil feedbacks of *Artemisia californica* seedlings. *Plant and Soil*, 403(1):277-290.

NON-REFEREED PUBLICATIONS

Hilbig, B.E., A.C. Swanson, **J. M. Valliere** and C. McDonald. (2017) Field guide to the mustards of the Mojave Desert. UC Agricultural and Natural Resources, Publication 3548.

Valliere, J. M., B.E. Hilbig and E.B. Allen. (2016) The Santa Rosa Plateau Habitat Studies and Restoration Program: Working to restore California grasslands through research and education. *Grasslands*, 26(3):1-3.

Haraksin, A.K*., **J.M. Valliere**, and E.B. Allen. (2015) Variable responses of native species to nitrogen and soil inoculum from native and invasive species. University of California Riverside Undergraduate Research Journal, (9):55-60. *Undergraduate student

Valliere, J. M. and E. B. Allen. (2014) Too much of a good thing: Effects of nitrogen deposition on coastal sage scrub of the Santa Monica Mountains. *Wildflowers*, 9:2-3.

AWARDS

W.W. Thomson Award for Outstanding Research , UCR Botany & Plant Sciences	2016
Best Student Paper Award , California Invasive Plant Council Symposium	2016
Parkinson Award , Soil Ecology Society	2015
Best Student Paper Award , California Native Plant Society Conservation Conference	2015
Best Student Paper Award , California Invasive Plant Council Symposium	2014
Award for Academic Excellence in Biology , Green Mountain College	2006
Award for Academic Excellence in Biology , Green Mountain College	2005

TEACHING EXPERIENCE

University of California, Riverside

Instructor of record , <i>California's Cornucopia: From Farm to Table</i>	2016
Teaching assistant , <i>Plants and Human Affairs</i> , with Anthony Huang	2015
Teaching assistant , <i>Plant Ecology</i> , with Edith Allen	2014
Teaching assistant , <i>Spring Wildflowers</i> , with Exequiel Ezcurra	2013
Teaching Assistant Development Program , UC Riverside Graduate Division	2013

Green Mountain College

Teaching Practicum in Biology	2005 – 2006
Teaching assistant , <i>Cellular Biology</i> , with Natalie Coe	2006
Teaching assistant , <i>General Biology</i> , with Natalie Coe	2005

MENTORING

University of California, Los Angeles

Research mentor for Jacqueline Zhang, UCLA Grand Challenges Program 2016 – present

Student research grants

- Zhang, J.X. & **J.M. Valliere**. Metaplasticity in response to drought in native California plant species: Implications for restoration (\$3,000)
- Escobedo, E.B. & **J.M. Valliere**. Exploring the role of plant maternal effects in response to drought in plants (\$440)

University of California, Riverside

Advisor on undergraduate research projects for:

- **Cierra Wikman** - (2016) Effects of nitrogen deposition and drought on leaf biomass of native coastal sage scrub plants
- **Joshua Dansie** - (2016) Comparison of soil characteristics of coastal sage scrub soil in the Santa Monica Mountains with estimated annual nitrogen deposition
- **Daniel Sanchez** - (2015) Effects of mowing on soil seedbanks of weedy nonnatives
- **Amanda Haraksin** - (2014-15) Responses of native species to nitrogen and soil inoculum from native and invasive plant species

Undergraduate research assistants:

Joshua Dansie (2016)	Amanda Haraksin (2014-15)	Vincent Lam (2013)
Sameer Saroa (2016)	Sharon Orpet (2014-15)	Rodrigo Pangiban (2013)
Cierra Wikman (2015-16)	Alyssa Taylor (2013-15)	Amy Kwiecien (2012-14)
Daniel Sanchez (2015)	Erin Reilly (2012-13)	Dwight Williams (2011-14)
James Phillips (2015)	Jacob Soza (2013)	

Graduate Student Mentorship Program, GradSuccess, UC Riverside Graduate Division
Mentor for first-year Ph.D. students in Plant Biology & Entomology

Danielle Garceau (2015-16)	Alex Rajewski (2015-16)	Patrick Thomas (2014-15)
Michelle Miner (2015-16)	Michael Schwartz (2014-15)	Daniel Tracy (2014-15)

PROFESSIONAL SERVICE

Search committee member for La Kretz Postdoctoral Fellowship, UCLA 2017

California Invasive Plant Council

Member	2010 – present
Moderator, California Invasive Plant Council Symposium	2016
Board of Directors Student Liaison	2014 – 2016
Co-Chair, Student Chapter	2013 – 2016
Student Chapter Member	2011 – 2016

PROFESSIONAL SERVICE (continued)

Co-chair & Secretary, UCR Botany Graduate Student Association 2013 – 2014

Professional Memberships

California Invasive Plant Council (Cal-IPC)	2010 – present
National Organization of Gay & Lesbian Scientists (NOGLSTP)	2015 – present
Ecological Society of America (ESA)	2013 – present
Soil Ecology Society (SES)	2013 – present
California Society for Ecological Restoration (SERCAL)	2014
California Native Plant Society (CNPS)	2010 – 2015

Reviewer: *Bulletin of the Southern California Academy of Sciences*; *Restoration Ecology*;
PLOS ONE; *Oecologia*

PRESENTATIONS

13. **Valliere, J.M.** & E.B. Allen. Exploring traits and tradeoffs in native and nonnative plant species of California's coastal sage scrub. California Invasive Plant Council Symposium, Yosemite, CA. November 2016.
12. **Valliere, J.M.**, E.B. Allen, S. Balch, C. Bell, G. Greaves, S. Hanson & B. Hilbig. Integrating research and education to restore California grasslands. California Invasive Plant Council Symposium, San Diego, CA. October 2015. ***Best Student Paper Award**
11. **Valliere, J.M.** & E.B. Allen. Nitrogen deposition reduces native plant diversity of coastal sage scrub. Santa Monica Mountains Science Day, Thousand Oaks, CA. October 2015.
10. **Valliere, J.M.** & E.B. Allen. Interactive effects of nitrogen deposition and drought on plant-soil feedbacks of native shrub seedlings. Soil Ecology Society Meeting, Colorado Springs, CO. June 2015.
9. **Valliere, J.M.** & E.B. Allen. Ecological effects of nitrogen deposition in the Santa Monica Mountains. Science for Parks, Parks for Science, UC Berkeley, CA. March 2015.
8. **Valliere, J.M.** & E.B. Allen. High N, Dry: Effects of nitrogen deposition on drought response of *Artemisia californica* seedlings. California Native Plant Society Conservation Conference, San Jose, CA. January 2015. ***Best Student Paper Award**
7. **Valliere, J.M.** & E.B. Allen. Nitrogen deposition and invasion: The effects of N availability and plant-soil feedbacks on the success of three invasive plant species. California Invasive Plant Council Symposium, Chico, CA. October 2014. ***Best Student Paper Award**
6. **Valliere, J.M.** & E.B. Allen. Effects of nitrogen deposition on coastal sage scrub invasion and native seedling establishment. Santa Monica Mountains Science Day, Thousand Oaks, CA. September 2014.

PRESENTATIONS (continued)

5. **Valliere, J.M.** & E.B. Allen. Nitrogen deposition facilitates nonnative plant invasion through changes to plant-soil feedbacks. ESA, Sacramento, CA. August 2014.
4. **Valliere, J.M.** & E.B. Allen. Effects of nitrogen deposition on coastal sage scrub invasion and reestablishment. California Society for Restoration Ecology, Santa Rosa, CA. May 2014.
3. **Valliere, J.M.**, I. Irvine & E.B. Allen. The effects of nitrogen deposition on coastal sage scrub invasion and reestablishment. California Invasive Plant Council Symposium, Lake Arrowhead, CA. October 2013.
2. **Valliere, J.M.** & E.B. Allen. Nitrogen deposition and arbuscular mycorrhizae: Implications for drought tolerance of a native shrub (Poster presentation). Soil Ecology Society Meeting, Camden, NJ. June 2013.
1. N.R. Coe, R. Sleith, J. Herzer, **J.M. Valliere**, J. Gallagher & A. Adirisio. Beech Bark Disease: Nature and Nurture in the New England Forest (Poster presentation). ESA, Memphis, TN. August 2006.

INVITED TALKS
