

Curriculum Vitae

Kevi Claire Mace-Hill

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EDUCATION

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| University of California, Berkeley, GPA: 3.92 | <i>present</i> |
| Wesleyan University, Middletown, CT | |
| Master of Arts in Biology/ GPA: 4.23 | <i>June 2008</i> |
| Bachelor of Arts in Biology/ GPA: 3.74 | <i>May 2007</i> |
| Certificate in Environmental Studies | <i>May 2007</i> |
| Ecological Horticulture Apprenticeship, Alemany Farm, San Francisco, CA | <i>January 2009</i> |

PUBLICATIONS

2015: Kevi C. Mace and Nicholas J. Mills. Response of walnut aphid populations to increasing foliar nitrogen content. *Agricultural and Forest Entomology*. DOI: 10.1111/afe.12103

2015: Lauren C. Ponisio , Leithen K. M'Gonigle , Kevi C. Mace , Jenny Palomino , Perry de Valpine , Claire Kremen. Diversification practices reduce organic to conventional yield gap. *Proceedings B*. DOI: 10.1098/rspb.2014.1396

2009: Singer, M.S. Mace, K.C., and Bernays, E.A. Self-medication as adaptive plasticity: increased ingestion of plant toxins by parasitized caterpillars. *PLoS One* 4(3): e4796. DOI:10.1371/journal.pone.0004796

POSTERS and TALKS

2014: Kevi C. Mace-Hill and Nicholas J. Mills. Predator to Prey Ratio: A Good Way to Judge Biological Control in the Field? 62th Annual Meeting of the Entomology Society of America.

2014: Kevi C. Mace-Hill and Nicholas J. Mills. Natural enemy evenness in biological control in organic and conventional walnut orchards in California. Pacific Branch Meeting of the Entomology Society of America.

2013: Kevi C. Mace-Hill and Nicholas J. Mills. Natural enemy evenness in biological control in organic and conventional walnut orchards in California. 61th Annual Meeting of the Entomology Society of America.

2012: Kevi C. Mace-Hill and Nicholas J. Mills. Walnut aphid (*Chromaphis juglandicola*) population growth tied to foliar nitrogen in walnuts. 60th Annual Meeting of the Entomology Society of America.

2008: Kevi C. Mace and Michael S. Singer. Adaptive plasticity in the use of plant secondary chemicals: A woolly bear caterpillar self-medicates. 93rd Annual Meeting of the Ecological Society of America.

RESEARCH POSITIONS

Graduate Student in Extension, Department of Environmental Science, Policy, and Management at UC Berkeley, CA
June 2014 – July 2015

- Developing a research and extension program with help from a mentorship team
- Conducting applied entomology research and presenting relevant results to extension clientele
- Coordinating and participating in extension and outreach activities related to entomology

- Organizing Skill Share workshop and seminars to develop extension skills in graduate students

Graduate Student Researcher, Mills Laboratory at UC Berkeley, Berkeley, CA

Aug 2011 – present

- Designing and conducting experiments on biological control in walnut orchards. Field and lab experiments on the effect over fertilizer management on beneficial and pest insects.
- Starting and maintaining insect colonies relevant to my research project
- As the Lab Safety Officer, coordinated fire extinguisher training and maintain an earthquake safe laboratory space.
- Mentoring undergraduate researchers on lab projects and for their thesis projects

Lab Assistant II, Mills Laboratory, UC Berkeley, Berkeley, CA

June 2009-August 2011

- Conducted a series of lab experiments to test the acute and sub-lethal toxicity of a range of new pesticides on walnut aphids, *Trioxys palidus* (their main parasitoid), and *Syphophagus aphidivorus* (a hyper-parasitoid of *Trioxys*).
- Contributed to field work to design an insect trap intended to help farmers monitor the abundance and phenology of beneficial insects in their fields and orchards.
- Cultured Australian parasitoids and conducting host choice experiments on possible biological controls for Light Brown Apple Moth in the UC Berkeley quarantine facility.
- Oversaw all lab safety: designated to write and update all hazardous waste protocols and ensure proper disposal, track and update chemical inventory, and ensure compliance with UCB department of Environmental Health and Safety.
- Hired and supervised undergraduate research assistants, order supplies, support the graduate students, and fulfill other managerial duties in the lab.
- Collected and reared *Trichogramma*, a native parasitoid of Light Brown Apple Moth eggs. Designed protocols and conducted laboratory experiments for this species.

Graduate Student Researcher, Singer Laboratory at Wesleyan University, Middletown, CT

June 2007-June 2008

- Examined adaptive plasticity in feeding behavior of an Arctiid larvae (*Genura incorrupta*) when parasitized with a Tachinid parasitoid (*Exorista mella*).
- Collected, recorded, and interpreted data from feeding and parasitism experiments to observe whether a specific chemical in one plant in *G. incorrupta*'s diet reduced survival of *E. mella* in parasitized larvae (based on previous research).

Undergraduate Research Assistant, Singer Laboratory at Wesleyan University, Middletown, CT

May 2004-June 2007

- Collected field and lab data on the host use, parasitism load, and genetic differentiation of fall webworms with fellow grad student. Analyzed data and presented results to the lab group. Results made into an ESA poster.
- Contributed to a multiyear, large scale collection of forest caterpillars in Connecticut with the goal of analyzing and documenting host plant-caterpillar-parasitoid interactions.
- Participated in a predator exclusion experiment to document effects of bird predation on forest caterpillar survival on several common tree species.

TEACHING EXPERIENCE

Graduate Student Instructor for Introductory Biology, Integrative Biology Department at UC Berkeley, Berkeley, CA
Dec 2014 – May 2014

- Leading lab sections in which the students conduct experiments related to class material
The lab accounts for almost half of students' grades and is a vital part of the course
- Grading of weekly lab reports, weekly quizzes, 3 mid-terms, and a final
- Weekly office hours
- Weekly GSI meetings to plan the labs and write quizzes

Graduate Student Instructor for Agroecology, Department of Environmental Science, Policy, and Management at the UC Berkeley, Berkeley, CA
Aug 2013 – Dec 2013

- Giving 2 lectures on ecosystem services and biodiversity
- Leading lab section in which student conducted a semester long field experiment on agroecological practices
- Creating and grading bi-weekly reading quizzes and the mid-term. Grading final papers.
- Weekly office hours

Teaching Assistant for Conservation Biology, Biology Department at Wesleyan University, Middletown, CT
Sept 2007-Dec 2007

- Held office hours to help students with ecological concepts.
- Assisted in grading exams.
- Lead nature walks for students as part of discussion section

Teaching Assistant for Biodiversity, Biology Department at Wesleyan University, Middletown, CT
Jan 2008-May 2008

- Designed and facilitated semi-weekly discussion sessions to encourage students to engage with the course material.
- Held office hours to answer specific questions from students.
- Assisted in grading exams.

RELATED WORK EXPERIENCE

Lab Assistant II, Mills Laboratory, UC Berkeley, Berkeley, CA
June 2009-August 2011

- Conducted a series of lab experiments to test the acute and sub-lethal toxicity of a range of new pesticides on walnut aphids, *Trioxys palidus* (their main parasitoid), and *Syphophagus aphidivorus* (a hyper-parasitoid of *Trioxys*).
- Contributed to field work to design an insect trap intended to help farmers monitor the abundance and phenology of beneficial insects in their fields and orchards.
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- Oversaw all lab safety: designated to write and update all hazardous waste protocols and ensure proper disposal, track and update chemical inventory, and ensure compliance with UCB department of Environmental Health and Safety.

- Hired and supervised undergraduate research assistants, order supplies, support the graduate students, and fulfill other managerial duties in the lab.
- Collected and reared *Trichogramma*, a native parasitoid of Light Brown Apple Moth eggs. Designed protocols and conducted laboratory experiments for this species.

Atkinson Conservation Fellow at New England Wild Flower Society, Framingham, MA

May 2008-August 2008

- Assisted in coordinating a 600+ person volunteer program monitoring rare plant sites.
- Maintained and updated data documenting rare plant sites in three states.
- Assisted with migration of plant site data from paper files to electronic database.
- Participated in botanical inventories and invasive plant removal.
- Wrote newsletter reports.

Organizer and Farmer at Long Lane Farm, Wesleyan University, Middletown, CT

October 2003-May 2008

- Co-created and managed Long Lane Farm, the student-run Wesleyan farm. Volunteered 5-20 hours per week throughout college, and worked one full summer.
- Coordinated and ran regular volunteer workdays for the school and community.
- Planned events and ran outreach programs for the community.
- Planned, planted crops, picked, and distributed crops.
- Wrote grants and press releases.

BioBlitz Intern, Middletown, CT

June-July 2007

- Wrote a grant for an internship to help coordinate Middletown's 24-hour biodiversity survey. Compiled and presented data on species presence collected.
- Wrote and distributed a summary report, which is now publicly available.

GRANTS, FELLOWSHIPS and AWARDS

Van den Bosch Research Fellowship 2014

Graduate Division Travel Award 2014

Van den Bosch Research Fellowship 2013

Van den Bosch Travel Award 2012

Graduate Student Assembly Travel Award 2012

Atkinson Conservation Fellow at the New England Wild Flower Society 2008

Garden Club of America Environmental Studies Grant 2006

Service Career Fellow at Wesleyan University 2006

Robert Schumann Environmental Stewardship Award 2006

VOLUNTEER EXPERIENCE

Coordinator Diversified Farming Systems speaker series, UC Berkeley, Berkeley, CA

May 2013 – present

- Create schedule and invited speakers
- Coordinate food and room reservations
- Host visiting speakers and arrange meetings with campus community

Entomology Student Organization Member and organizer, UC Berkeley, Berkeley, CA

September 2011 – present

- 2013-2014 president – Coordinated meetings and applied for funding. Assisted in coordinating a popular weekly talk series known as Essig Brunch and regular meetings
- Coordinated the 2013 and 2014 photo contest for Evolution Day at the Essig Museum
- Planning and participating in entomology events on Cal Day
- Managing T-shirt sales

Students in Nutrition and Agriculture Policy Member and organizer, UC Berkeley, Berkeley, CA

September 2012 - present

- Organized a talk by Edwin Dobb on the role of journalism in science and public policy in the SNAP dinner series.
- Attend coordinator meetings
- Manage email list

Student representative on the executive committee of the Berkeley Food Institute, UC Berkeley, Berkeley, CA

September 2012 – August 2013

- Attended monthly meetings and provided student perspective on the formation of the Berkeley Food Institute

Natural History Club member and organizer, UC Berkeley, Berkeley, CA

September 2012 - present

- Helped organize a weekend trip to Angelo Reserve
- Organize and attend meetings
- Treasurer

Volunteer Farmer at Alemany Farm, San Francisco, CA

September 2008-2013

- Participated in any and all farm work at Alemany, a volunteer run farm designated as a public park in San Francisco.
- Trained and managed groups of volunteers doing farm work.

Climate Science Fellow at Global Alliance for Incinerator Alternatives, Berkeley, CA

February 2009-June 2009

- Worked on a project with the Zero Waste campaign at GAIA to quantify the effective of greenhouse gas emissions of different waste management strategies in six international cities, mainly using the EPA WARM model to quantify emissions.
- Corresponded with city officials to collect waste and waste management data.

Coordinator and Tutor with Wes English as a Second Language (ESL), Wesleyan University, Middletown, CT

October 2003-May 2007

- Hired and trained tutors, led group tutoring sessions, and evaluated progress.
- Participated in designing curriculum.
- Led and participated in conversations with the custodial staff to make the program more effective for them.
- Tutored two ESL students.

RESEARCH SKILLS

ArcView and qGIS and map creation in R

Statistical analysis in R

Rearing insects (lepidopteran, parasitoids, dipertan, lacewings)

Surveying and collecting insects, particularly in orchards and forests

Insect identification

Entomology and agricultural focused outreach
JMP Statistics
Proficient in Spanish