

Alexander K. Loomis
Ph.D. Candidate
Department of Biology
Duke University, Durham, NC
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Education:

Duke University, Durham, North Carolina

August 2016-Present

Ph.D. Candidate, Biology

Committee: William F. Morris (Chair), James S. Clark, Kathleen Donohue,
Justin P. Wright, Stephen G. Weller (UC-Irvine)

University of Colorado, Boulder, Colorado

August 2009-May 2013

B.A. in Geography and Environmental Studies

Minor in Evolutionary and Ecological Biology, Certificate in Western American Studies

Magna cum laude

Thesis: Montane pine species differ in water use efficiency under drought conditions
across a small, headwater catchment

Advisor: Dr. Holly Barnard, Geography and Institute of Alpine and Arctic Studies

Professional Experience:

Oahu Army Natural Resources Program

Pacific Cooperative studies Unit, Research Corp. of University of Hawaii

July 2013-June 2016

Natural Resource Management Technician I & II

June 2010-August 2012

Intermittent Natural Resource Management Technician

- Executed federally mandated stabilization plans for endangered plant, snail, and bird species

The Nature Conservancy, Colorado Chapter, Boulder, CO

August 2012-December 2012 Conservation Intern

- Developed management plans, monitored, and assisted implementation of conservation easements on private land

Publications:

1. Weller, S. G., A. K. Sakai, D. R. Campbell, J. M. Powers, S. R. Peña, M. J. Keir, **A. K. Loomis**, S. M. Heintzman, and L. Weisenberger. 2017. An enigmatic Hawaiian moth is a missing link in the adaptive radiation of *Schiedea*. *New Phytologist* **213**:1533-1542.

2. Adams, H. R., H. R. Barnard, and **A. K. Loomis**. 2014. Topography alters tree growth–climate relationships in a semi-arid forested catchment. *Ecosphere* **5**:1-16.
3. Morris, W.F., J.P. Dahlgren, J. Ehrlen, **A.K. Loomis**, A.M. Louthan. 2019. Biotic and anthropogenic forces are rival climatic/abiotic factors in determining global plant population growth and fitness. *Proceedings of the National Academy of Science*. 117(2), 1107-1112.

Teaching:

- Ecology of Human Health (Bio 209), Teaching Assistant, Fall 2020
- Ecology of Human Health (Bio 209), Teaching Assistant, Fall 2019
- Ecology of Human Health (Bio 209), Teaching Assistant, Fall 2018
- Microbiology (Bio 212L) Lab Teaching Assitant, Fall 2017

Conference Presentations:

- **Loomis, A.K.**, Keir, M.J., “Creating and implementing seed zones as a tool for collections and restoration of native plant communities”, Hawaii Restoration and Weed Control Workshop, April 2019 (Invited seminar, breakout group leader, and panel member)
- **Loomis, A.K.** , “Life history, species, and interactions: demography of *Schiedea*”, Hawaii Native Seed Conference, May 2018
- Keir, M.J., **Loomis, A.K.**, “Delineating Seed Zones to guide collections and restoration of native plant communities in Hawai‘i”, Hawaii Native Seed Conference, May 2018
- Adams, H.R., **Loomis, A.K.**, Barnard, H.R., “Linking Topographic, Hydrologic, Climatic, and Ecologic Processes in Semi-arid Forests: an investigation of aboveground growth dynamics”, American Geophysical Union Fall Meeting, December 2013

Grants and Awards:

- Duke Graduate School Dissertation Research Travel Fellowship- Domestic, \$1,865 (2018-2019)
- Grant-in-Aid of Research, Duke Biology, \$940 (2017)
- Lamb Family Fellowship, Duke Graduate School Summer Research, 2017
- Duke Biology Departmental 1st Year Fellowship, 2016-17
- University of Colorado-Boulder Deans List, Fall 2009, Fall 2012, Spring 2013

Service:

- **Trustee**, Friends of the Honolulu Botanical Gardens Board of Trustees, 2019-Present
- **Specialist**, IUCN Species Survival Commission, Hawaii Plant Specialist Group 2016-present
- **Volunteer GIS Specialist**, Laukahi, the Hawaii Plant Conservation Network, 2016-present

Outreach and Guest Lectures:

- Guest Teacher, Winter term weeklong intensive course “Exploring Hawaiian Biodiversity”, Punahou School, Honolulu, Hawaii
- Guest Lecture, “ Ecology and Conservation in Hawaii: Using simple transects for complex questions”, Biology Honors (2 sections), Punahou School, Honolulu, Hawaii, February 2020
- Guest Lecture, “ Ecology and Conservation in Hawaii: Using simple transects for complex questions”, Biology Honors (3 sections), Punahou School, Honolulu, Hawaii, February 2019
- Guest Lecture, “Ecology, Statistics, and Malama Aina”, AP Statistics, James Campbell High School, Ewa Beach, Hawaii, May 2018