

## Alyssa Semerdjian

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### Education:

**PhD Biology. Anticipated graduation 2025.** Oregon State University, Corvallis, OR.

**M.S. degree in Natural Resources, wildlife option. 2019.** Humboldt State University, Arcata, CA. 3.95 GPA.

**Thesis:** Evaluation of range-wide occupancy and survey methods for the giant kangaroo rat (*Dipodomys ingens*) <https://digitalcommons.humboldt.edu/etd/280/>

**B.S. degree in Biology, concentration in field and wildlife. Minor in Anthropology/Geography. 2012.** California Polytechnic State University, San Luis Obispo, CA. 3.80 upper division GPA. Dean's list, 6 quarters. President's list 2010-2011 and 2011-2012.

### Pertinent course work:

#### Undergrad:

Animal Behavior (+lab)  
Herpetology (+ lab)  
Mammalogy (+ lab)  
Ornithology (+ lab)  
Vascular Plant Taxonomy  
(+ lab)  
Field Botany (+ lab)  
Conservation Biology (+ lab)  
Population Ecology  
Environmental Physiology  
(+ lab)  
Wildlife Management  
Wildlife Ecology (+ lab)

Genetics  
Evolution  
Applications in GIS  
Biostatistics  
Masters:  
Advanced Population Ecology  
(+ lab)  
Wildlife spatial ecology (+ lab)  
Advanced Habitats (+ lab)  
Meta Analysis  
Linear Regression/ANOVA  
Modern Statistical Modeling  
Scientific illustration

#### PhD:

Introduction to online course  
development and instruction  
The inclusive classroom:  
difference, power and  
discrimination  
Biogeography  
Environmental Physiology  
Evolutionary Genomics  
Quantitative and computational  
ecology

### Research projects:

Semerdjian, A. E., H. S. Butterfield, R. Stafford, M. F. Westphal, and W. T. Bean. 2021. [Combining occurrence and habitat suitability data to improve conservation guidance for the giant kangaroo rat](#). Journal of Wildlife Management. DOI: 10.1002/jwmg.22052.

Van Hattem, M., W. T. Bean, P. Belamaric, H. Gamblin, J. Jones Scherbinski, J. Olson, A. Semerdjian, K. Smith and I. Widick. Foothill yellow-legged frog breeding biology in a semi-regulated river, Humboldt county, CA. CDFW special edition. Accepted.

Semerdjian, A. E. 2019. Evaluation of range-wide occupancy and survey methods for the giant kangaroo rat (*Dipodomys ingens*). Masters thesis. Humboldt State University. <https://digitalcommons.humboldt.edu/etd/280/>

Semerdjian, A. 2012. Effect of food availability on social behavior in a captive group of bonobos (*Pan paniscus*). Senior project, California Polytechnic State University, San Luis Obispo. <http://digitalcommons.calpoly.edu/biosp/18>

### **Conference posters and presentations:**

Semerdjian, A., B. Stafford, M. Westphal, S. Butterfield & T. Bean. Evaluation of range-wide occupancy and survey methods for the giant kangaroo rat (*Dipodomys ingens*). Oral presentation at the Western Section of the Wildlife Society 2019 meeting, Fish Camp, CA.

Semerdjian, A., B. Stafford, M. Westphal, S. Butterfield & T. Bean. Evaluating the species distribution of the giant kangaroo rat (*Dipodomys ingens*). Poster at the American Society of Mammalogists 2018 meeting, Manhattan, KS.

Semerdjian, A., B. Stafford, M. Westphal, S. Butterfield & T. Bean. Evaluating the species distribution of the giant kangaroo rat (*Dipodomys ingens*). Poster at the Western Section of the Wildlife Society 2018 meeting, Santa Rosa, CA. **3<sup>rd</sup> place in student poster competition.**

Semerdjian, A., I. Widick, T. Bean & L. Prugh. Shrinking giants? Assessing the potential for climate driven morphometric change in the giant kangaroo rat (*Dipodomys ingens*). Oral presentation at the Western Section of the Wildlife Society 2018 meeting, Santa Rosa, CA.

### **Experience in Academia:**

**Graduate Teaching Assistant** September 2020 – Present  
Oregon State University Corvallis, OR

Lab instructor for introductory biology series. Instruct students lab material and then ask and answer questions while they work through the lab. Responsible for assigning and grading lab work to be done in lab and as a group outside of lab. Teaching occurred through zoom.

**PhD Student** September 2020 – Present  
Oregon State University Corvallis, OR

Developing research project investigating small mammal morphological responses to climate change.

**Lab instructor** January 2020 – May 2020  
Humboldt State University Arcata, CA

Solely responsible for teaching and grading all lab material concerning taxonomy and identification of species using skull characteristics for a mammalogy section. Set up labs and creating testing material with other instructors. Teaching occurred in person, and asynchronously online.

**Museum Technician** August 2019 – May 2020  
Humboldt State University Arcata, CA

Manages and cares for research and teaching collection under the instruction of the main curator. Procures teaching materials for mammalogy classes, maintains dermestid colony, coordinates with community members and HSU faculty to obtain new specimens, delegates tasks to undergraduate interns and volunteers, prepares specimens and trains undergraduates to do so as well.

**Graduate Student** May 2016 – May 2019  
Humboldt State University Arcata, CA

Thesis project involved developing a range-wide occupancy map for the giant kangaroo rat (*Dipodomys ingens*), as well as a standardized non-invasive survey protocols. Assisted and managed undergraduate students participating in a range-wide survey for giant kangaroo rats sign using aerial

imagery. Collected data in the field with assistants. Conducted studies using museum specimens to investigate whether giant kangaroo rats and co-occurring kangaroo rat species have undergone body size changes in response to environmental changes. Presented findings at The Wildlife Society, Western Section conference in 2018. Volunteered in the museums on campus preparing specimens and teaching other students how to prepare specimens.

**Graduate Assistant**  
Humboldt State University

August 2018 – May 2019  
Arcata, CA

Graduate assistant for WLF 430 – Ecology and management of wetland habitats for wildlife and WLDF 422 – Wildlife management (mammals). Proctored tests, graded assignments, collected equipment for lab exercises and field trips, provided support for students during labs, assisted students on class projects, including logistical and statistics advice. Completed various other tasks for the instructor as needed.

**Vice President – WiGSS**  
Humboldt State University

May 2017 – June 2018  
Arcata, CA

Board member for the HSU Wildlife Graduate Student Society. Assisted in organizing weekly speaker series in which local and non-local biologists give 45-minute talks that are open to students and the community. Duties included inviting and coordinating with speakers, compiling the semester schedule and emailing reminders to a list of regular attendees. Also developed a plan for weekly graduate student coffee-hours and provided input for other club social activities. Assisted in club fundraising and communicated and contributed to logical tasks, along with the rest of the club board.

### **Field Experience:**

**Carrizo Plain Ecosystem Project – Crew Lead**  
Humboldt State University

May 2019 - July 2019  
Carrizo Plain National Monument, CA

Hired assistants, created work schedule, purchased field supplies and managed all aspects of fieldwork. Conducted pit fall trapping for insects and small mammal trapping focusing on San Joaquin antelope squirrels and giant kangaroo rats. Trained assistants on protocols and monitored their work. Entered and error checked data.

**Carrizo Plain Ecosystem Project – Crew Lead**  
Humboldt State University

May 2018 -June 2018  
Carrizo Plain National Monument, CA

Participated and trained others on protocols for trapping endangered giant kangaroo rats (*Dipodomys ingens*). Lived on site with coworkers in remote government housing. Entered and error checked data.

**Contractor**  
San Diego Natural History Museum

February 2016 – May 2016  
San Diego, CA

Compiled glossary and appendix for a book - the San Diego County Mammal Atlas. Participated in a small mammal specimen collecting trip in the Mojave Desert.

**Museum Volunteer**  
San Diego Natural History Museum

February 2014 - February 2016  
San Diego, CA

Variety of tasks including specimen preparation, collection care, cataloging new specimens, morphometric analysis, identifying species from bone fragments in owl pellets to study owl diets, small mammal trapping (San Diego, CA), multiple day small mammal survey (Baja California, Mexico) and vegetation surveys (Riverside Co. CA).

**Small Mammal Crew Lead**  
U.S. Forest Service

May 2015 - November 2015  
Arcata, CA

Lead teams of assistants in small mammal trapping and vegetation surveys in Redwood National and State Parks for a study aiming to assess prey availability in hopes of reintroducing the Humboldt marten. Entered and managed data collected by myself and teammates.

**Scientific Aid**  
California Department of Fish and Wildlife

October 2014 - April 2015  
San Diego, CA

Habitat restoration, endangered species conservation, herbicide application, and general maintenance of Fish and Wildlife lands and facilities. Collected samples, ear-tagged, and gave injections to captured bighorn sheep for a radio collaring project. Cared for rehabilitated burrowing owls before they were released. Handled and gathered DNA material from a variety of small mammals as a part of a study.

**Carrizo Plain Ecosystem Project – Crew Lead**  
UC Berkeley & University of Alaska, Fairbanks

March 2014 - August 2014  
Carrizo Plain National Monument, CA

Participated and trained others on small mammal trapping focused on endangered giant kangaroo rats (*Dipodomys ingens*) and San Joaquin antelope ground squirrels (*Ammospermophilus nelsoni*) Also conducted vegetation, reptile, kit fox den surveys, insect pitfall traps, insect identification and spotlight surveys for predators and lagomorphs. Managed construction of experimental rainfall shelters. Responsible for managing data and coordinating with project manager

**Kakamega Monkey Project – Field Manager**  
Columbia University

June 2013- December 2013  
Kakamega, Kenya

Collected and managed behavioral data from over 200 individual blue monkeys (*Cercopithecus mitis*) as a part of a long-term project in Kakamega forest, Kenya. Also responsible for creating work schedules, communicating with the project's principle investigator abroad, and overseeing four Kenyan field assistants.

**Carrizo Plain Ecosystem Project - Intern**  
UC Berkeley & University of Alaska, Fairbanks

April 2013 - May 2013  
Carrizo Plain National Monument, CA

Participated in small mammal trapping focused on endangered giant kangaroo rats (*Dipodomys ingens*) and San Joaquin antelope ground squirrels (*Ammospermophilus nelsoni*) as part of a long-term study. Pit tagged, ear tagged and collected skull measurements, weights and breeding condition information on captured animals. Also conducted vegetation and reptile surveys.

**Chacma Baboon Field Assistant**  
Barnard College

June 2012 - December 2012  
Cape Town, South Africa

Collected behavioral data on chacma baboons (*Papio ursinus*) in Tokai forest, Cape Town, South Africa. Acted as unofficial crew lead. Arranged work schedules, communicated with principle investigator abroad, collected biological samples and processed them for shipment.

**Behavioral Biology Internship**  
San Diego Zoo's Institute for Conservation Research

Summer 2011  
Escondido, CA

Ten weeks conducting behavioral focal observations on captive bonobos. Analyzed the data and wrote a publication style paper based on it for my senior project.

**Skills:**

Data analysis  
Microsoft Excel, Word and  
PowerPoint  
ArcMap  
Program R  
Program Mark  
GPS (Garmin and Trimble)

UAV operation  
Hand and power tools  
Some work with chainsaws  
Weed whackers  
Herbicide application  
Jepson manual (dichotomous key)  
Grinnell style field notebook

Binoculars and spotting scopes  
Camera trapping  
Small mammal trapping  
Pitfall trapping  
Mist netting  
Radio telemetry  
Museum curation

**Other:**

Rabies vaccinated (2010)  
California Drivers license

FAA UAS pilot certification (May 2017)

**Professional organizations:**

Wildlife Society, Western section  
American Society of Mammalogists