Haylee Oyler

(661)-808-3338 | hoyler@bren.ucsb.edu | Santa Barbara, CA
haylee360.github.io | GitHub | LinkedIn

EDUCATION

Master of Environmental Data Science, 4.00 GPA (Expected June 2025)
Bren School of Environmental Science & Management – University of California, Santa Barbara

Capstone Project: Identifying Communities for Justice40 Investments Using Cumulative Impact Assessment of Climate and Environmental Burdens
Highlighted Coursework: Geospatial Analysis and Remote Sensing, Ethics and Bias in EDS, Data Visualization, Modeling Environmental Systems, Databases and Data Management
Leadership/Involvement: Capstone Committee Member, Bren Environmental Science Fellows Mentor, Teaching Assistant (Probability and Statistics Department)

Bachelor of Science in Environmental Science, 3.84 GPA (May 2021)
College of Natural Resources – University of California, Berkeley

Honors Senior Thesis: *It's not just for the Birds: Citizen Science Participation during COVID-19.*
Highlighted Coursework: Environmental Economics, Culture and Resource Management, Energy and Resource Policy, Quantitative Aspects of Global Environmental Problems, Energy and Society, Environmental Ethics

SKILLS

Technical: R, Python, SQL, Git & GitHub, HTML, CSS & Sass, WordPress, Microsoft Office, Google Suite
Language: Intermediate French, Basic Spanish
Training: Wilderness First Responder, CPR, and Epinephrine Injection

WORK EXPERIENCE

Graduate Student Assistant – UCSB Blum Center Central Coast Regional Equity Initiative, Santa Barbara, CA (September 2024-present)

- Managed and developed content for the Central Coast Regional Equity Initiative's WordPress site.
- Created data visualizations for equity indicators of demographics, basic needs, and civic connectedness.

Teaching Assistant – UCSB Department of Probability and Statistics, Santa Barbara, CA (September 2024-present)

- Led sections and coding-based labs for introductory statistics for life sciences students (PSTAT 5LS).
- Content included normal distributions, hypothesis testing, and linear regression in R.

Research Technician – Ecology & Evolutionary Biology, University of California, Los Angeles (Oct. 2021-June 2024)
Supervisor: Nathan Kraft, Ph.D.

- Conducted research related to plant community ecology and coexistence.
- Fieldwork and data analysis related to projects studying higher-order interactions among California native annuals.
- Maintained laboratory space and oversaw training and mentoring undergraduate students. Worked with students over multiple years to create and refine individual research questions.
- Data cleaning, visualization, and analysis in R.

Research Technician – Center for Stable Isotope Biogeochemistry, University of California, Berkeley (Sept. 2018- June 2021)
Supervisor: Todd Dawson, Ph.D.

- Assisted with graduate student projects examining plant water relations in coast live oaks and species distribution. Also studied the influence of temperature on the proliferation of fine roots and mycorrhizae.
- Prepared solid and liquid samples for various types of isotope analysis via mass spectroscopy and cryogenic water and leaf sugar extraction.

SERVICE AND INVOLVEMENT

Master's Capstone Committee Member – Bren School for Environmental Science and Management, University of California, Santa Barbara (Fall 2024)

- Served as a committee member to evaluate and select capstone projects for the Master of Environmental Data Science (MEDS) students.
- Reviewed and submitted scores for all submitted proposals, participated in the faculty and staff discussion around project fit, and voted for final selections.
- Facilitated review of the current Request for Proposals to promote projects with broad impacts and to encourage clients from historically underrepresented groups to submit.
- Presented the final projects to the MEDS cohort and organized discussion around student fit for projects.

Environmental Studies Fellows Program Mentor – University of California, Santa Barbara (September 2024-present)

- Meet quarterly with 2-3 undergraduate environmental science students from marginalized communities, low-income families, or are first-generation college students to provide career mentorship.
- One-on-one time to discuss research interests, give career advice, and answer questions.

CALPIRG Organizer – Plastic-Free Seas Campaign, University of California Berkeley (Spring 2019)

- Assisted with outreach and lobbying to eliminate single-use plastics from the campus and the state. Helped coordinate meetings, arrange outreach events, and recruit new members.

Peer Mentor – Environmental Science, University of California Berkeley (2018-2019)

- Served as a peer advisor for other environmental science majors in my department. Attended monthly meetings to discuss courses, and work-life balance.

Naturalist – Student Organic Garden Association, University of California Berkeley (Spring 2018)

- Maintained organic garden plots at the university's student-run garden. Gave tours to visitors and assisted in teaching student-run elective courses taught in the garden.

RESEARCH EXPERIENCE

Senior Thesis – Environmental Science, Policy, and Management, University of California, Berkeley (2020-2021) Advisor: Patina Mendez, Ph.D.

- Title: *It's not just for the Birds: Citizen Science Participation during COVID-19*
- Year-long senior thesis project that examined trends in citizen science participation during the COVID-19 pandemic using the open data source, eBird.
- Cleaning, wrangling, and visualizing large data sets of bird observations.
- Presented at ESPM research symposium with honors.

Undergraduate Research Assistantship – Brashares Wildlife Ecology Lab, University of California, Berkeley (2020-2023)

Advisor: Kendall Calhoun, Ph.D.

- Examined the effects of fire on wildlife across a UC Reserve using camera traps and audio monitors.
- Data collection and analysis including using the Deep Neural Network, BirdNet, to auto-detect species based on audio monitor observations.
- Created an occupancy model to map species presence before and after the fire.

Directed Research – Monteverde Institute, Costa Rica (2019)

Advisor: Frank Joyce, Ph.D.

- Title: "*Microplastic in Mangroves with Varying Levels of Human Impact"*
- Independent research project examining levels of aquatic microplastic pollution across a gradient of human influence near a marine protected area.
- Presented in a forum for community members. Led discussions for strategies to help reduce plastic pollution load in the community's mangrove estuary system.

PUBLICATIONS

Kendall Calhoun, Phoebe Parker-Shames, Zachary L. Steel, Haylee Oyler, Justin Brashares, 2024. Severity and pyrodiversity shape avian and bat species distributions following an Oak Woodland Megafire. *Ecosphere (submitted).*

AWARDS

2024 National Science Foundation Graduate Research Fellowship Program: Honorable Mention. Submitted under ecology and science policy.

ADDITIONAL EXPERIENCE

Study Abroad – Tropical Biology and Conservation Costa Rica, University of California Education Abroad Program (Fall 2020)

- Fieldwork and lectures taught in multiple national parks of the Guanacaste region of Costa Rica. Lectures on tropical community ecology, biodiversity, and agroecology.
- Interactions with local farmers of teak, coffee, and rice. Homestay in a fishing village with opportunities to explore the intersection of economic livelihood and marine conservation policy.