

ELI LEWIS

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EDUCATION

M.S., Marine Science August 2025 – Present

Moss Landing Marine Laboratories, San José State University

Advisor: *Michael Graham*

Thesis: How fishing destabilizes kelp-forest fish metacommunities in the California Bight

Relevant coursework: Marine Ecology, Physical Oceanography, Biology of Seaweeds, Invertebrate Zoology

B.S., Marine Biology December 2023

University of California, Santa Cruz

Relevant coursework: Marine Ecology, Behavioral Ecology, Kelp Forest Ecology (Field Quarter), Ichthyology, Corsica Field Quarter (study abroad)

RESEARCH EXPERIENCE

Ecological Assistant Intern June 2024 – 2025

Natural Resource Management, Biscayne National Park | PI: Dr. Amanda Bourque

- Conducted coral, seagrass, and mangrove conservation surveys in the South Florida–Caribbean region using SCUBA.
- Analyzed long-term park monitoring data in R.
- Supervised and trained new MOCC operators.

Field Technician, PISCO Subtidal MPA Monitoring August – November 2023

Raimondi–Carr Lab, UC Santa Cruz | PI: Prof. Mark Carr

- Conducted boat-based SCUBA monitoring of kelp forest ecosystems in Central California.
- Executed fish transects and sizing, band transects, and size-frequency measurements across MPA surveys.
- Performed data entry and quality control on large monitoring datasets.

FIELD COURSES

Kelp Forest Ecology Field Quarter Fall 2023

Hopkins Marine Station, Stanford University

Project: *Long-term effects of an epizootic and heatwave on a Central Californian kelp forest*

- Investigated the effects of Sea Star Wasting Disease on prey of affected *Asteroid* spp.
- Conducted subtidal surveys of *Asteroid* spp. and selected prey (*Tegula* spp.).
- Used time series analysis and mixed modeling to identify trends in predator–prey interactions.

Corsica Field Quarter Fall 2022

STARESO, Corsica, France

Project: *Cleaning preferences and behavior of the wrasse *Symphodus melanocercus**

- Investigated risk-taking behavior of the black-tailed cleaner wrasse in seagrass habitats.
- Applied multivariate statistics to analyze behavioral data.

PRESENTATIONS

Lewis, E. (2023). A behavioral analysis of cleaner–client interactions in Mediterranean cleaner wrasse *Symphodus melanocercus*. EEB Undergraduate Research Poster Fair, University of California, Santa Cruz. [Poster]

AWARDS AND FELLOWSHIPS

Arthur and Karin Nelson Fellowship — *San José State University* April 2026

Hoshaw Travel Award — *Psychological Society of America* April 2026

MLML Scholar Scholarship — *Moss Landing Marine Laboratories* April 2026

Student Training Award — *Scientific Boating Safety Association* November 2025

RESEARCH SKILLS

Quantitative analysis: Species–area regression (power-law models), rarefaction, mixed-effects modeling, multivariate statistics, time series analysis, Bayesian inference.

Programming: R (tidyverse, dplyr, ggplot2, vegan, sads), Python, C#.

Field methods: SCUBA-based subtidal sampling, band transects, fish transects, quadrats, random point contact, size-frequency surveys, photo and video documentation, small-boat operation.

Software: ArcGIS, JMP, Excel.

PROFESSIONAL TRAINING

NPS Scientific Diver (“Blue Card”), National Park Service <i>70+ NPS dives</i>	June 2024
AAUS Scientific Diver, UC Santa Cruz <i>200+ scientific dives</i>	September 2022
DOI Motorboat Operator Certification Course (MOCC), NPS	October 2024
Bayesian Statistics Specialization, UC Santa Cruz <i>Concept to Data Analysis; Techniques and Models; Mixture Models; Time Series</i>	January – March 2024
Geographic Information Systems (GIS) Specialization, UC Davis	January 2023

CERTIFICATIONS

Scientific & Technical Diving

- AAUS Scientific Diver (2022)
- NPS “Blue Card” Scientific Diver (2024)
- TDI Advanced Nitrox Diver (2022)
- TDI Decompression Procedures Diver (2022)
- TDI CCR Liberty Air Diluent Diver (2024)
- NAUI Nitrox Diver (2022)

Safety & Equipment

- PSI-PCI Visual Cylinder Inspector (2025)
- First Aid / CPR / AED (2024)
- Emergency Oxygen Provider (2024)

Recreational Diving

- PADI Rescue Diver (2022)
- PADI Drysuit Diver (2022)
- PADI Junior Open Water (2014)
- PADI Junior Advanced Open Water (2014)

Boating

- DOI Motorboat Operator Certificate (2024)
- MLML Small Boating Safety Course (2025)
- California Boater Card, CA Dept. of Boating and Waterways (2023)

SERVICE AND COMMUNITY INVOLVEMENT

Leader, CEnCal Network for Sea Urchin Settlement (CENSUS) Field Operations January 2022 – May 2023

Raimondi–Carr Lab, UC Santa Cruz | Advisors: Calvin Munson, Prof. Mark Carr

- Measured weekly larval counts of urchins, bivalves, gastropods, and crabs in Capitola and Santa Cruz.
- Coordinated, trained, and managed small student teams for weekly field deployments.

Student Body Treasurer — Moss Landing Marine Laboratories

June 2026 – Present

Member and Leader, Diversity, Equity, and Inclusion Group — NPS & Conservation Legacy

2024 – 2025

Dive Lead, UCSC Scuba Diving and Freediving Club

2023 – 2024

Member and Dive Guide, UCSC Submerged Slugs Diving Club

2023 – 2024

Volunteer Diver, Long Marine Lab, UC Santa Cruz

2023 – 2024

Volunteer Lab Tech, Purple Urchin Mesocosms, Raimondi–Carr Lab

2022