

Ruth Havener

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Education

Duke University, Durham, NC

Bachelor of Science, Marine Science and Conservation

Aug 2022 - May 2026 (expected)

GPA: 3.76

- **Leadership:** Publicity Chair, Sustainable Oceans Alliance; Leadership Team, Duke Cru
- **Awards:** Rachel Carson Scholarship
- **Relevant Coursework:** Core Concepts in Chemistry, Organic Chemistry I, Data Analysis/Statistical Inference, Oceans and Health, Sensory Physiology and Behavior of Marine Animals, Coastal and Marine Pollution, Genetics and Evolution, Laboratory Calculus I, Marine Megafauna, General Physics I-A, The Dynamic Earth

University of Edinburgh, Edinburgh, Scotland

Study abroad

September - December 2024

- **Relevant Coursework:** Natural Hazards, Earth Sciences for Society

Research Experience

Research Independent Study Participant, *Wong Lab*

Duke University Marine Lab, Beaufort, NC

July 2025 - ongoing

Advisor: Dr. Juliet Wong

- Assessing organismal health by analyzing the gonadal somatic index (GSI) in sea urchins and the ratio of live oyster shell wet weight to total shell wet weight in oysters

Program Participant, *Nepal Climate and Health Transect*

Lumbini to Lo Manthang, Nepal

May - June 2025

- Participated in a 3-week transect exploring how climate affects human health in Nepal, starting in Lumbini and ending in Lo Manthang.
- Used the Donut Economic Model and the Planetary Health Framework to evaluate sustainability issues.
- Collaborated with an interdisciplinary team of students from the US, Nepal, India and China.
- Travelled from the Terai lowlands (150m elevation) and to the high Himalayas (3840m).
- Used photojournalism to communicate planetary health issues in Nepal

Research Assistant, Duke-Monterey Bay Aquarium Partnership

Monterey Bay Aquarium, Monterey, CA

July - August 2024

- Participated in a 6-week summer program investigating the presence of microplastics in fish
- Developed research protocols with Duke and Aquarium scientists
- Collected tissue samples of fish from the Monterey Bay and local fishermen
- Gained experience dissecting several species of fish native to Monterey Bay, CA
- Designed engaging lesson plans aligned with research objectives for high school outreach programs

Research Independent Study Participant

Duke University Marine Lab, Beaufort, NC

Aug 2023 - Dec 2023

Advisor: Dr. Tom Schultz

- Developed an independent research project investigating the response of *Crassostrea virginica* to different densities of microplastic fibers
- Collected and analyzed biological data from bivalve lab experiments
- Wrote a final research paper summarizing findings
- Presented results to peers and faculty as part of a formal research symposium

Aquaculture Experiment Station Intern, University of Maine

Darling Marine Center, Walpole, ME

May - Aug 2023

- Completed a 10-week internship working as an Experimental Aquaculture Site Technician and conducting independent biofouling research
- Maintained experimental aquaculture systems and equipment
- Investigated whether environmental DNA could be used to predict mussel and barnacle biofouling
- Designed experimental procedures and collected environmental samples
- Learned eDNA techniques, including PCR
- Presented research at a scientific poster symposium

Skills and Certifications

- **Laboratory Techniques:** PCR, eDNA analysis
- **Software:** Excel, RStudio

Work Experience

Self-Employed Lobster Fisherwoman

F/V *Sea Ya*, Friendship, ME

Summer 2014 - Summer 2024

- Fished 150 lobster traps on a commercial fishing vessel for 11 consecutive summers
- Operated 32' Holland and 35' Duffy fishing vessels

Duke Aquafarm Work Study

Duke University Marine Lab, Beaufort, NC

Aug 2023 - December 2023

- Maintained the Duke Aquafarm and assisted in daily operations
- Built and repaired aquafarm equipment
- Learned and applied oyster aquaculture techniques
- Operated and anchored a 28 ft Carolina Skiff