

Olivia Cattau
ocattau@uw.edu
(224) 217-7340

Education

University of Washington 2021-present
M.S. School of Aquatic and Fisheries Sciences

University of Chicago 2014-2018
S.B. Environmental Science with Honors
Minor in Visual Arts

Research Experience

University of Washington Seattle, WA
School of Aquatic and Fisheries Sciences 2021-present

Graduate student in the Roberts Lab at SAFS starting in April 2021. Current projects include maturation control in geoduck (*Panopea generosa*) and thermal stress response in pacific oysters (*Crassostrea gigas*).

Hood Canal Mariculture Hood Head, WA
Biologist August 2020-present

Co-lead for the production of sugar kelp (*Laminaria saccharina*) for the 2021 growing season from gametophytes to full fronds. Processed sugar kelp samples to assess the effect of growing sugar kelp on pH, dissolved inorganic carbon and other carbonate chemistry. Assisted in various kelp research projects.

Pacific Hybreed Manchester, WA
Research and Production Biologist September 2019-present

Led eelgrass (*Zostera Marina*) survey efforts for the 2020 summer season. Led and assisted with rock scallop, kumomoto (*Crassostrea sikamea*), and pacific oyster (*Crassostrea gigas*) spawning and hatchery seed production. Was the primary lead on growing algae cultures for shellfish feed and conducted small experiments testing ideal salinities of algae cultures. Other duties include, animal husbandry, fieldwork, data collection/analysis, and facilities maintenance. Worked with CEO Joth Davis on producing a proprietary triploid pacific oyster strain for the Pacific Northwest oyster market.

Puget Sound Restoration Fund Manchester, WA
Sea Cucumber Researcher September 2019-April 2020

Ran multiple larval and juvenile giant red sea cucumber (*Parastichopus californicus*) experiments with the goal of creating an aquaculture program for this species in order to relieve environmental pressure due to illegal poaching. Was the primary lead on sea cucumber and cockle (*Clinocardium nuttallii*) husbandry, and conducted an ocean acidification experiment on how temperature and low pH (7.3) affects the growth and survival of cockles.

Puget Sound Restoration Fund

Washington Conservation Corps: Hatchery Technician

Manchester, WA

October 2018-September 2019

Led and assisted with all aspects of hatchery production of restoration-grade Olympia oysters (*Ostrea lurida*), pinto abalone (*Haliotis kamtschatkana*), kelp (various species), giant red sea cucumbers and cockles. Other duties included animal husbandry, microalgae culturing, fieldwork, data collection/analysis, and facilities maintenance. I also assisted in graduate student experiments by collecting water quality data such as temperature, spectrophotometric pH, alkalinity and more. Funding was through Americorps and Washington Conservation Corps.

Pfister Lab at the University of Chicago

Field Technician

Seki, WA

June 2018-September 2018

Primarily assisted in field data collection on Tatoosh Island, ran *in situ* kelp and *Littorina* snail experiments, ran bird surveys, marine fish surveys and assisted in data analysis using R studio and excel. In the field, I collected ocean chemistry data on conductivity, temperature, depth, pH, Dissolved Oxygen, and more. Assisted PhD students from the University of Washington run the alkalinity titrator as well as doing spectrophotometric pH chemistry.

Relevant Skills

Advanced programming experience in: 'R' studio statistic software, ArcGIS, Stata, MatLab and Python; **professional proficiency in:** Microsoft Office programs (Word, Excel, Powerpoint, etc...), Autodesk Inventor, Revit and Meshmixer, Adobe Photoshop and Lightroom, Kuvik Capture 3, and Final Cut X; **other skills:** NAUI SCUBA certified up to 60 feet; Firefighter 2 'Red Card' certified, and Conversational in French (France).

Professional Conferences and Talks

- Undergraduate Research Symposium at the Marine Biological Laboratory and Biological Sciences Symposium: "*Analyzing the metrics and behavioral context of rapid neural polyphenism in cephalopod mollusks*" (September 2016)
- University of Chicago department of Geophysical Sciences and Environmental Sciences Symposium: "*Water quality and museum specimens: how to predict historical pollution levels using *Rana pipiens**" (June 2018)
- Department of Ecology and Washington Conservation Corps member conference: "*Puget Sound Restoration Fund and Sea Cucumber husbandry, structure helps increasing growth rates*" (August 2019)
- Salish Sea Ecosystem Conference: "*Improvements to Sea Cucumber Aquaculture*" (April 2020)*cancelled due to COVID-19
- NOAA Sea Cucumber Workshop at Manchester Washington: "*Improvements to Sea Cucumber Aquaculture*" (April 2020) *cancelled due to COVID-19

Awards, Honors and Leadership

- University of Chicago Odyssey Scholar 2014-2018
- Dean's List 2016-2018
- Graduated with Honors in Environmental Science 2018
- NCAA Academic All-American 2018
- Metcalf Fellow 2016-Marine Biological Laboratory