Haley A. Oleynik

PhD Candidate

Institute for the Oceans and Fisheries, University of British Columbia

EDUCATION

Colby College, Waterville, Maine, B.A. Biology & Sociology

2015

University of Delaware, Lewes, Delaware, M.S. Marine Science

2020

University of British Columbia, Vancouver, BC, PhD Fisheries Science

in progress

RESEARCH EXPERIENCE

PhD Candidate

Sept 2020 - Present

Institute for the Oceans and Fisheries University of British Columbia

Thesis research will include a multifactor, multistock impact analysis of salmon and steelhead fisheries in British Columbia and a retrospective analysis of ecological and socioeconomic conditions in these fisheries

M.S. Student Sept 2018 - July 2020

School of Marine Science and Policy University of Delaware

Analyzed data from the Delaware state trawl survey using multivariate statistical methods in R to describe the fish and invertebrate community in Delaware Bay, identify physical drivers of community composition, and evaluate long-term changes in the community

Undergraduate Senior Honors Thesis

Sept 2014 - May 2015

Department of Sociology Colby College

Collected and analyzed quantitative and qualitative data to understand the societal impacts of the shifting lobster population and subsequent management on the lobster fishing industry in Maine

Research Intern June 2014 - Aug 2014

CIEE Bonaire Bonaire, Netherland Antilles

Used SCUBA field sampling methods to catch invasive lionfish species, *Pterois*, and observe behavioral patterns to explore the impact lionfish have on juvenile fish populations in Bonaire

Research Intern Jan 2013 - Feb 2013

Smithsonian Natural History Museum Washington D.C.

Curated, identified, and photographed over 50 species of pteropoda to catalogue morphology for research of the genetics, morphology, and biogeographic information of pteropods to better understand ocean connectivity

Haley A. Oleynik - CV

PROFESSIONAL EXPERIENCE

Teaching Assistant Sept 2023 - Present

Master of Data Science Program University of British Columbia

DSCI 552: Statistical Inference and Computation I

DSCI 561: Regression I DSCI 562: Regression II

DSCI 554: Experimentation and Causal Inference

Graduate Writing Consultant

Sept 2022 - Present

Center for Writing and Scholarly Communication University of British Columbia

Provide written and in-person consultations to graduate and undergraduate students on written work including class assignments, manuscripts, and dissertations

2021 NOAA Sea Grant John A. Knauss Marine Policy Fellow

Feb 2021 - Feb 2022

National Stock Assessment Program NOAA Fisheries

Supported the National Stock Assessment Program in the Office of Science and Technology by organizing a technical community, developing the Fisheries Integrated Toolbox, and assisting in research to advance the NOAA stock assessment enterprise

Communications Committee Chair

Oct 2022 - Present

Committee Member

June 2015 - Oct 2022

Association of the Marine Laboratories of the Caribbean

Manage internal and external communication for the AMLC, a nonprofit which connects marine laboratories, scientists, students, and stakeholders in the Wider Caribbean Region.

North Pacific Groundfish Observer

June 2016 – Jan 2018

Saltwater Inc. / NOAA Fisheries

Collected data on catch, bycatch, and fishing effort on board commercial Alaskan fishing vessels to be used by the National Marine Fisheries Service to monitor fish populations, set catch limits, and manage the commercial Alaskan fisheries

AWARDS AND FUNDING

Partnership Engage Grant Social Sciences and Humanities Research Council, Canada	2024
Buck Suzuki Legacy Bursary Award T. Buck Suzuki Foundation	2022
Frances Severance Thesis Distinction Award University of Delaware	2021
Daiber Fellowship University of Delaware	2019
Women of Promise Award University of Delaware	2019
Okie Fellowship University of Delaware	2018
Dean's List Colby College	2014-2015

OUTREACH AND ENGAGEMENT

REDI Committee Student rep, UBC Institute for the Oceans and Fisheries	2022-present
Society for Women in Marine Science Co-Chair, University of Delaware Chapter	2019-2020
Graduate Student Association Co-Chair, UD School of Marine Science and Policy	2019-2020
Hutton Junior Fisheries Biology Internship Reviewer, American Fisheries Society	2024
John A. Knauss Marine Policy Fellowship Reviewer, NOAA Sea Grant	2022, 2024

PUBLICATIONS

Oleynik, H.A., J.J Bizzarro, E.A. Hale, A.B. Carlisle. 2024. Environmental drivers of biogeography and community structure in a Mid-Atlantic estuary. Oecologia. https://doi.org/10.1007/s00442-023-05500-z

Zahner. J.A, M.A. Heller-Shipley, **H.A. Oleynik**, S.G. Beyer, P-Y. Hernvann, M. Véron, A.N. Odell, J.Y. Sullivan, A.L. Hayes, V.G. Gertseva, K.L. Oken, O.S. Hamel, M.A. Haltuch. 2023. *Status of Shortspine Thornyhead (Sebastolobus alascanus) along the US West coast in* 2023. Pacific Fishery Management Council, Portland, Oregon. 139 p. www.pcouncil.org/shortspine-thornyhead

Blackhart, K., and **H.A. Oleynik**. 2023. *Setting targets and analyzing data gaps for U.S. fish assessments*. NOAA Tech. Memo. NMFS-F/SPO-242, p. 77 https://repository.library.noaa.gov/view/noaa/51033

Oleynik, H.A. 2022. Living Resources: Fish Population Trends in Delware Bay: Climate and Community. Technical Report for the Delaware Estuary and Basin, J. Shinn, L. Haaf, L. Morgan, and D. Kreeger (eds). Partnership for the Delaware Estuary. https://delawareestuary.org/data-and-reports/state-of-the-estuary-report-2/

ICES (2022): Working Group on Technology Integration for Fishery-Dependent Data (WGTIFD; outputs from 2021 meeting). ICES Scientific Reports. Report. https://doi.org/10.17895/ices.pub. 19367885.v1

Mathews, J.A., E.A. Hale, **H.A. Oleynik**, et al. (2022) *Exploring Trends in Abundance of Young-of-the-Year and Age-1 Atlantic Croaker*, *Black Drum, Spot, and Weakfish in Relation to Salinity, Temperature, and Large-Scale Climatic Signals in a Mid-Atlantic Estuary*. Transactions of the American Fisheries Society, 151(2), 150–171. https://doi.org/10.1002/TAFS.10332

Oleynik, H.A. (2020). *Changes in a Mid-Atlantic Estuary: Trends and Drivers of the Fish and Macroinvertebrate Community in Delaware Bay.* https://udspace.udel.edu/handle/19716/28649

PRESENTATIONS

"Integrating Electronic Monitoring Data into U.S. Fish Stock Assessments" World Fisheries Congress 2024

"Long-Term Shifts in the Fish and Macroinvertebrate Community in a Mid-Atlantic Estuary" American Fisheries Society Annual Conference 2021 "Changes in a Mid Atlantic Estuary: Long Term Shifts in the Fish and Macroinvertebrate Community in Delaware Bay" NOAA Central Library 2021

"Long-Term Shifts in the Fish and Macroinvertebrate Community in a North American Estuary" World Fisheries Congress

"Changes in a Mid-Atlantic Estuary: Long-Term Trends in Environmental Conditions and Marine Community in Delaware Bay" American Fisheries Society Mid-Atlantic Chapter Meeting 2020

EXPERTISE

Computing

Advanced in R, WinBUGS, Git/GitHub; experience with C++, Stan, Stock Synthesis, Template Model Builder (TMB)

Field & Lab

AAUS Scientific Diver, SDI Rescue Diver, small boat operation, random field sampling, otolith collection, shark tagging, marine animal husbandry