

Chelsea Fowler

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EDUCATION

The University of Tampa 2016
BS, Marine science and biology

GRANTS AND AWARDS

COVID-19 Public Awareness Campaign Competition 2021
The Vaccination Crustacean, University System of Maryland

Maryland Sea Grant Fellowship 2020
Maryland Sea Grant Fellow, Maryland Sea Grant

Small Project Assistance Grant 2018
Mangrove and Beach Forest Rehabilitation Project, United States Agency for International Development

RESEARCH EXPERIENCE

Horn Point Laboratory, Cambridge, MD 2020-present
Graduate Assistant; Advisor: Louis Plough
Advancing monitoring and management of mid-Atlantic alosine fishes with eDNA analysis

- Developed novel qPCR assays for shad species (*Alosa sapidissima*, *Alosa mediocris*)
- Evaluated the capacity for high frequency eDNA monitoring to accurately reflect fish count data and integrated aspects of eDNA persistence and decay into eDNA estimates
- Managed field operations and equipment and performed lab processing on all eDNA samples collected during the 2021 river herring spawning season (March-June)

Municipal Agriculture Office, Casiguran, Philippines 2016-2018
Coastal Resource Management Specialist

Casiguran Municipality Participatory Coastal Resource Assessment

- Developed and implemented a coastal resource assessment to evaluate the interactions of local fisheries with biotic and abiotic factors
- Processed all collected data, and developed a comprehensive Coastal Environmental Profile to guide management for the next five years
- Transitioned local mangrove restoration program from single species plantings to community-based ecological mangrove restoration

Hillsborough County Environmental Protection Commission

Mar-May 2016

Research Technician

- Processed sediment samples and identified aquatic macro-invertebrates by phylum
- Assisted on sea-borne sample collection expeditions

TEACHING AND LEADERSHIP EXPERIENCE

Orange County Community College, Middletown, NY

Jan-June 2019

Physics, Biology and Chemistry Tutor

- Employed creative tactics to effectively communicate science topics to non-traditional students
- Provided tools and resources to help sustain student comprehension beyond sessions

Municipal Agriculture Office, Casiguran, Philippines

2016-2018

Coastal Resource Management Specialist

- Communicated complex topics to over 700 stakeholders in the local language, Bicol, to advance the fisheries program's goals
- Led training modules for Peace Corps training cohorts on resource assessments, environmental education, and collaborating with stakeholders on technical projects
- Represented Casiguran's Fisheries Sector at science, policy, and management, meetings across the Philippines

Tampa Bay Watch, Tierra Verde, FL

Jan-May 2016

Education Specialist

- Instructed laboratory and boat sessions about the Tampa Bay estuary
- Guided volunteer groups in restoration at local beaches to combat beach erosion

PROFESSIONAL ASSOCIATIONS

Society for Women in Marine Science, *co-chair*

Horn Point Laboratory Graduate Council, *treasurer*

Maryland PIRG Student Climate Action Coalition, *UMCES delegate*

American Fisheries Society, *national and local chapter member*

CONFERENCE PRESENTATIONS

Fowler, C., Plough, L.V., Ogburn, M., Heggie, K., Aguilar, R., Legett, H., Advancing monitoring and management of mid-Atlantic alosine fishes with eDNA analysis. Oral presentation delivered at the American Fisheries Society meeting, Baltimore, MD, November, 2021.