



Habitat Science Intern C-StREAM Internship Program

Project Description The NOAA Chesapeake Bay Office (NCBO) and Chesapeake Research Consortium (CRC) seek a summer intern for late May through mid-August 2023 (12 weeks) to assist with collecting fish biodiversity data (fish species composition) in support of the Poplar island restoration project. Poplar Island is a restored island made of dredge material from shipping channels and is considered a model for wildlife habitat restoration. The intern will use various methods to collect fish, such as rod and reel, traps, nets, and others, and collect habitat data with camera technology (drop camera, aerial images) to support NCBO's acoustic telemetry efforts. With this data, the intern will quantify fish species composition and link it with habitat features (e.g., submerged aquatic vegetation and oyster reefs) using image methodology (drop camera, aerial images). Then, the intern will complement habitat data with aerial images from the NOAA Coastwatch maps to describe the surrounding habitat. This research aims to measure restoration success within the selected sites using structural diversity (combination of fish diversity and fauna structure) as an indicator of restoration success and compare fish composition between the different habitats.

Opportunities

Nearshore and tidal wetland habitats are at risk along the East Coast from sea level rise and subsidence. These habitats serve an important ecological function in supporting fish nurseries for species. Restoration of these habitats is a tool to mitigate climate impacts and maintain their fish habitat functions. The intern will assist the habitat science team with our Poplar island restoration project. This project aims to compare fish habitat use in restored and unrestored habitats using acoustic telemetry. This project will enhance the understanding of restoration success in terms of fish usage and provide this knowledge to future restoration projects in the Chesapeake Bay. During this internship, the selected candidate will gain experience working in boats, data collection, basic GIS skills, synthesis of information, organizing data, data analysis, presentation skills, and scientific writing.

Deliverables

- A report and visualizations that will illustrate the extent to which engineered marsh is used by fish in the same way as the natural marsh
- Presentation to NCBO staff at the conclusion of the internship summarizing the experiences gained and work conducted

Requirements

- Willingness to engage in physically demanding work, typically taking place outdoors on a boat
- Experience handling live organisms
- Familiarity with data visualization and analysis tools such as excel, R and ArcGIS
- Motivated self-starter with ability to work and reason independently
- Must be a college-level student entering sophomore, junior, or senior year of undergraduate study
- Must be a U.S. citizen and willing to undergo a security background check

Work Location and Duration

This position will be an in-person position based out of the Cooperative Oxford Lab, Oxford, Maryland.

The position will begin in mid-May and conclude in mid-August and will be in place for 12 weeks. We plan on providing interns with access to a NOAA computer, email, and phone services (in the office).

Compensation

The intern will receive a stipend at the end of each month, for a total of up to \$6,000 (\$500/week) for the equivalent of 12 (in-person) weeks of full-time activities (400–480 hours). Funds are available to compensate interns for occasional work-related travel and a \$1000 housing stipend will be available to support housing cost related needs. Candidates should expect to follow a normal weekday work schedule (roughly 9-5, Monday-Friday) with occasional variations for possible field work or other activities. No benefits are provided. We offer assistance in arranging local housing if the position is an inperson opportunity if desired.

Diversity and Inclusion

The NOAA Chesapeake Bay Office is committed to supporting a diverse and inclusive science oriented workforce. Our internship program endeavors to recruit from a diverse, qualified group of potential applicants to secure a high-performing workforce drawn from all segments of American society. NOAA is strongly supportive of broadening the participation of historically black colleges and universities, Hispanic-serving institutions, tribal colleges and universities, and institutions that work in underserved areas. We highly encourage applications from students at any of the above institutions as well as students that identify as a member of underrepresented and underserved groups in science, including students who identify as people of color, women, American Indian or Alaska Native, persons with disabilities, members of the LGBTQAI+ community, persons from economically disadvantaged backgrounds and first-generation college students.

Application Instructions

Applicants are instructed to register with the Chesapeake Jobs online application website: https://chesapeake.org/c-stream/ to apply. You will be instructed to submit a resume and cover letter, along with three references. The deadline for applications is February 20, 2023.