



## 2025 Doyle Fellowship Proposed Projects

See <https://seagrant.unh.edu/fellowships/doyle-fellowship> for more details and to apply.

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## Aquaculture Education

**Overview:** Work with NH Sea Grant and UNH Marine School researchers and extension professionals to develop and implement educational opportunities in aquaculture, in collaboration with the Seacoast Science Center.

**Background:** NH Sea Grant and the UNH Marine School have been working with the Seacoast Science Center and oyster farmers to build educational opportunities focused on messaging sustainable aquaculture to a wide range of audiences from around the Gulf of Maine watershed and beyond. One major project in 2025 will be a continuation of a research and educational oyster farm site within Odiorne Point State Park, which will stand as a model for interactive aquaculture experiences for families, students, and other members of the community.

**Fellow role:** The student selected for this role will have the opportunity to work with NH Sea Grant and UNH Marine School staff as well as education collaborators at the Seacoast Science Center to develop and implement educational resources focusing on aquaculture and aquaculture research.

**Position requirements:** Interest in aquaculture and education. Experience in informal education preferred. Access to a vehicle is helpful, but can arrange carpooling with others.

**Primary position location:** This position will be based between the UNH main Durham campus and the UNH New Castle Marine Research Complex, with time spent in Odiorne Point State Park in Rye, NH.

**More information:** <https://seagrant.unh.edu/our-work/aquaculture/>

## Blue Crab Monitoring

**Overview:** Work with NH Sea Grant research and extension professionals to develop and implement a larval and juvenile blue crab monitoring program and contribute to other monitoring efforts in Great Bay Estuary.

**Background:** NH Sea Grant and other partners (Great Bay National Estuarine Research Reserve, Manomet) are investigating the range expansion of the blue crab (*Callinectes sapidus*) into the Northeast through crowdsourcing observations and trap monitoring to get a better understanding of their spatial and temporal distribution, however, what is missing is an understanding of the spatial and temporal distribution of earlier life stages of blue crabs.

**Fellow role:** The student selected for this role will have the opportunity to work with NH Sea Grant and other partners develop and pilot a larval and juvenile blue crab monitoring program in Great Bay Estuary and collect critical data that that can be useful for future research, mitigation and management efforts.

**Position requirements:** Interest in participatory science, field work, invasive/range expanding species, aquaculture and outreach. Some experience in field research, boat handling and participatory science preferred. Access to a vehicle is necessary as this work will require driving to field sites.

**Primary position location:** This position will be based between the UNH main Durham campus and the UNH Jackson Marine Lab.

**More information:** <https://www.unh.edu/unhtoday/news/release/2022/09/14/unh-researchers-discover-first-pair-mated-blue-crabs-great-bay> <https://www.manomet.org/bluecrab/>

## Coastal Science Communications

**Overview:** Work with the NH Sea Grant (NHSG) communications team to create digital marketing content, document NHSG-funded research projects in the field, and contribute to NHSG's blog.

**Background:** NHSG's communications team serves as a central hub for NHSG's work – helping to connect our research, extension, and education efforts with diverse audiences through rich, authentic, and visually-appealing stories, photos, videos, and online content.

**Fellow role:** The student selected for this role will have the opportunity to work with NH Sea Grant staff and partners to produce photo and video content, podcast episodes, blog posts, ArcGIS Story Maps and post-copy for social media. A typical week will include spending time both in-office writing, developing and post-producing content, and 1-2 days in the field conducting interviews and collecting photo and video content. The fellow will have the opportunity to learn communications skills, while networking with NH Sea Grant-funded researchers, and community partners. The student will have creative freedom to pursue projects that interest them throughout the duration of this Fellowship, with guidance from the Science Communication Specialist.

**Position requirements:** An interest in science communication, strong writing skills, and general experience managing social media (this can be through personal accounts) is required. An educational background in marine science, conservation or policy is preferred but not required. Formal marketing and communications experience is not required. Access to a vehicle is strongly encouraged but carpooling can be arranged with the Science Communication Specialist for days in the field. Comfort on boats and working in the water is preferred but not required. A camera and audio recording gear will be provided. Experience in photography, videography, and audio production is not required.

**Primary position location:** This position will be based out of the UNH main Durham campus, with frequent travel expected to document fieldwork across Great Bay and the NH coastline.

**More information:** <https://seagrant.unh.edu/blog>, <https://www.instagram.com/nhseagrant/>

## Estuarine Aquaculture Research, Restoration, and Extension

**Overview:** Work with NH Sea Grant staff and their regional partners to support aquaculture research, restoration, and extension in the Great Bay estuary.

**Background:** Aquaculture has the potential to sustainably produce seafood while helping coastal communities build resilience to environmental and economic change. NH Sea Grant has been developing, educating, and training individuals in responsible aquaculture methods for decades for both food and restoration. The 2025 summer project includes research on oysters, salicornia, and more!

**Fellow role:** The student selected for this role will have the opportunity to work with NH Sea Grant staff, shellfish farmers, and others to support a range of research, monitoring, and outreach projects.

**Position requirements:** Access to a vehicle is strongly encouraged, but can arrange carpooling with others. Comfort on boats and working in the water (and mud) will be required.

**Primary position location:** This position is based on the UNH campus in Durham, with significant field visits throughout Great Bay.

**More information:** <https://seagrants.unh.edu/our-work/aquaculture>

## Flood Ready Neighborhoods – Youth Engagement

**Overview:** Work with NH Sea Grant staff and community partners to support a resident-engaged project building coastal resilience at a neighborhood scale in the NH Seacoast.

**Background:** The Flood Ready Neighborhoods program (FRN) seeks to bring residents together to increase their neighborhood’s ability to prepare for and respond to worsening coastal and stormwater flooding. FRN staff support and collaborate with six neighborhoods around the NH Seacoast to identify strategies for making neighborhoods more resilient to flooding while protecting the natural resources that support and safeguard both human and natural systems. This program takes a holistic view toward resilience, including both preparing for physical risks and building social capacity, following a set of [guiding principles](#). In one of our partner neighborhoods – a Seacoast public housing community – a desire for summer youth programming has emerged as a priority. Ideas for programming include nature-based exploration both on and off-site, environmental education, art activities, gardening-based programs, etc.

**Fellow role:** The FRN team is seeking two Fellows for summer 2025. The students selected for this role will have the opportunity to work with each other and with NH Sea Grant staff, partners, and residents to plan and implement youth engagement activities to build connections to nature and community. There also may be opportunities to support programming in other FRN neighborhoods.

**Position requirements:** Experience in youth education/engagement is helpful. Openness to being part of a highly collaborative program that centers community voices and makes decisions according to a series of [guiding principles](#). Willingness to take a training on trauma-informed care for educators and possibly other training to support responsive youth programming. Access to a vehicle is highly encouraged but can arrange carpooling with other staff and/or explore public transportation options.

**Primary position location:** UNH campus in Durham with travel to partner communities (primarily in Portsmouth)

**More information:**

Flood Ready Neighborhoods: <https://seagrant.unh.edu/flood-ready-neighborhoods-project>

## Great Bay Estuary Bottom Habitat Monitoring Project

**Overview:** Work with Piscataqua Region Estuaries Partnership (PREP) staff and partners to support habitat monitoring for use in watershed management.

**Background:** The Piscataqua Region Estuaries Partnership (PREP) is a National Estuary Program tasked with protecting, monitoring, and improving the water quality and overall health of the Great Bay and Hampton-Seabrook Estuaries in New Hampshire. PREP achieves this by working closely with local partner organizations, agencies, and municipalities to carry out the actions in our Comprehensive Conservation & Management Plan. Annually, PREP is working with the University of New Hampshire's Jackson Estuarine Laboratory to monitor 25 sites throughout the Great Bay Estuary, characterizing seagrass, seaweed, and sediment, along with water quality parameters.

**Fellow role:** Work with Lara Martin of the UNH Jackson Lab to process seagrass, seaweed, and sediment samples. The candidate will have the opportunity to assist in the field and on boats (saltmarsh surveys, eelgrass restoration, instrument deployments) if they are interested.

**Position requirements:** Must be detail-oriented and enjoy lab work. This position's main function is to accurately measure and characterize eelgrass and seaweed specimens. Careful data compilation, entry, and management are of utmost importance. The candidate needs to be comfortable working independently and indoors on tasks requiring significant focus. Access to a vehicle is highly encouraged as the work hours and days can vary but carpooling with other students is a possibility.

**Primary position location:** UNH Jackson Estuarine Laboratory, Adams Point, Durham, NH

**More information:**

<https://prepestuaries.org/>, [Project Plan Overview](#)

<https://scholars.unh.edu/prep/475/>

## Great Bay Estuary Oyster & Eelgrass Restoration Project

**Overview:** Work with Piscataqua Region Estuaries Partnership (PREP) staff and partners to support a multi-habitat restoration project in Great Bay

**Background:** The Piscataqua Region Estuaries Partnership (PREP) is a National Estuary Program tasked with protecting, monitoring, and improving the water quality and overall health of the Great Bay and Hampton-Seabrook Estuaries in NH. PREP achieves this by working closely with local partner organizations, agencies, and municipalities to carry out the actions in our Comprehensive Conservation & Management Plan. PREP is working with the University of New Hampshire's Jackson Estuarine Laboratory on a habitat restoration project that will include 1 acre of new oyster habitat and ½ acre of new eelgrass habitat in the Great Bay Estuary.

**Fellow role:** Support the coordination, implementation, and monitoring of a multi-habitat oyster and eelgrass restoration project in the Great Bay Estuary. Activities would include in-water harvesting and transplanting of adult eelgrass shoots and installing adult oysters per a planting plan, as well as collecting and working with monitoring data, coordinating and supporting project volunteers in the field, and more.

**Position requirements:** Must be comfortable swimming and working in the water. Required gear includes a wetsuit with diving boots and a snorkel (project mentor can provide recommendations on quality gear if you do not already have these items and financial assistance for gear is available for those with demonstrated need). A boating license to operate small craft is preferred but not required. A car is required for traveling to and from the laboratory.

**Primary position location:** UNH Jackson Estuarine Laboratory, Adams Point, Durham, NH

**More information:** <https://prepestuaries.org/>



## Human Dimensions of Coastal Issues

**Overview:** Work with NH Sea Grant staff and partners to advance research and analysis related to the human dimensions of coastal issues – including opportunities to work on fisheries and aquaculture topics and/or coastal and estuarine water quality perceptions.

**Background:** While research often focuses on biological questions, management of coastal systems also requires an understanding of the human elements, including but not limited to demographics, community perceptions, trust in science and management, economics, and more. NH Sea Grant is working with several partners to expand the role of social science and human dimensions research to help inform work in seafood (fisheries and aquaculture) and water quality management.

**Fellow role:** The student selected for this role will have the opportunity to work with NH Sea Grant staff and partners on several projects related to the human dimensions of coastal issues. In particular, the fellow will have the opportunity to help analyze survey data to better understand perceptions of aquaculture by NH residents and/or design a survey of residents related to water quality perceptions.

**Position requirements:** Courses in sociology, anthropology, or other social sciences encouraged but not required. Coursework and/or interest in statistics preferred.

**Primary position location:** This position is based on the UNH campus in Durham.

## Human Impacts on Estuarine Ecosystem Conditions

**Overview:** Work with NH Sea Grant staff and partners to support applied research on human impacts on coastal and estuarine ecosystem health including condition monitoring and tracking of microbial contamination.

**Background:** Long-term research at UNH continues to seek to understand trends in coastal and estuarine ecosystem health. This year's focus will include work on the 2025 EPA National Coastal Condition Assessment (NCCA) Program field assessment for the complete NH Seacoast area, continuation of tracking and identifying sources of fecal-borne microbial contamination in the Lamprey River watershed and assessing public health risks in shellfish from exposure to toxic chemicals and pathogens. In this project, the team will interact with EPA, NH Department of Environmental Services, UNH and local agency researchers, as well as the Lamprey River Advisory Committee and others in watershed towns where problems have been recorded.

**Fellow role:** The student selected for this role will have the opportunity to work with NH Sea Grant staff and other researchers to support field sample collection (fish trawls, sediment samples, water quality, etc.) and laboratory work related to data collection and analysis in support of coastal condition assessment and both microbial and toxic chemical contamination tracking.

**Position requirements:** Access to a vehicle is highly encouraged but may be able to arrange carpooling with other students.

**Primary position location:** UNH Jackson Estuarine Laboratory, Adams Point, Durham, NH