

Freshwater Mussel and Diamondback Terrapin Surveys Internship

Summer 2026

INTERNSHIP DESCRIPTION

The Narragansett Bay Estuary Program (NBEP) seeks an intern for approximately 8-10 weeks during summer 2026 who loves being outside and has an interest in gaining field work experience and learning about local biology to conduct field sampling for freshwater mussels and the Diamondback Terrapin. Data collected in this internship will contribute to the development of a regional report on environmental conditions and will improve documentation of the regional distribution of these species.

PROJECT BACKGROUND

Every 10 years, NBEP publishes a [Status and Trends \(S+T\) report](#) that explores a diverse array of regional indicators of environmental condition, such as land use/cover, estuarine biodiversity, stormwater discharge, and recreational access points to aquatic resources. The S+T report is used as a communication tool to showcase the region's natural resources and biodiversity, highlight conservation challenges, identify restoration opportunities and successes, and explore the different ways that people recreate and access local nature. The report may be used by multiple audiences, including practitioners to identify restoration project opportunities, researchers for writing grant applications and citing regional conditions, the interested public for learning more about their home, and policy makers or managers to identify critical resource needs related to aquatic resources. This report compiles data from many different sources to tell the story of the Narragansett Bay (NB) region.

The NB region has a diverse array of aquatic habitats from cold, headwater streams, to large sandy rivers, to coastal salt marsh, sandy beaches, and rocky coastline. The species that inhabit these aquatic spaces can provide information about the habitat quality (e.g., water quality or connectivity), inform conservation or restoration minded programs (e.g., where to direct resources or conduct additional monitoring), and help provide an indication of the success of different management strategies.

Freshwater mussels and the Diamondback Terrapin have particular sensitivity to prevalent environmental problems like water pollution or habitat connectivity and can be excellent habitat indicators. The Diamondback Terrapin is listed as endangered and threatened in Rhode Island and Massachusetts, respectively, and about half of the freshwater mussel species that occur in the region (for example, the Eastern Pearlshell and Eastern Pondmussel) are species of special

concern. Despite the importance of these species, there is a lack of data on their occurrence and distribution in the NB region.

INTERNSHIP GOALS AND LEARNING OBJECTIVES

NBEP envisions three internship phases. Phases 2 and 3 are expected to be overlapping.

Phase 1: Trainings and site selection in collaboration with Rhode Island Department of Environmental Management (RIDEM) staff, MassWildlife staff, and the University of Rhode Island Rinehart lab.

- Survey methods: Mussel surveys are done with snorkel or view bucket and Diamondback Terrapin surveys involve site observations with binoculars.
- Species identification: The intern will learn to identify the extant mussel species using photos and shell specimens.
- Field and survey safety trainings
- A survey schedule and priority sites will be developed with the team and will identify access points

Phase 2: Surveys

- Both types of surveys (mussel surveys and Diamondback Terrapin surveys) involve self-transportation to and from sites, spending lots of time outside in hot humid weather, getting wet, walking in potentially rough terrain, and careful record keeping (particularly geographic coordinates and mussel or DT occurrence).
- All necessary gear will be provided

Phase 3: Data Summary

- Survey findings (e.g., mussel results, latitude, longitude, date, and any other noted environmental conditions) will be digitized into Excel.
- Maps or other visuals will be made to show results.
- Data and associated visuals will be shared with wildlife agency staff (RI DEM and MassWildlife).

INTERNSHIP EXPECTATIONS

- The intern will meet with the NBEP mentor at least weekly to review the project timeline, develop the site list and schedule, discuss surveys, review findings, etc.
- The intern will undergo several trainings related to wildlife surveys, field safety, and species identification.
- Deliverables will include a list of sites surveyed with an associated mussel or DT observation.
- If the intern is interested, the mentor will support them in creating a poster presentation for a local conference to show the results of their survey work.
- The intern will be invited to attend any relevant meetings that the mentor attends.
- The intern will have the opportunity to learn about and participate in other projects led by NBEP summer interns or staff.

- This internship will take place in summer 2026, with flexible start and end dates depending on intern availability.

APPLICANT QUALIFICATIONS

REQUIRED QUALIFICATIONS

- Currently enrolled in an undergraduate program
- Coursework in wetland and stream ecology, biology, and/or environmental conservation
- Highly motivated to work in the environmental field and to learn new skills
- A love of field work and being outside
- Located in Massachusetts, Rhode Island, or Connecticut, with access to a reliable personal vehicle for transportation to field sites throughout the Narragansett Bay region (Figure 1)
- Ability to swim and/or walk for extended durations in shallow slow-moving freshwater streams for snorkel surveys
- Ability to cross rough terrain that may be difficult to access
- Ability to tolerate outdoor conditions such as (but not limited to) buggy habitats, muddy ground, hot/humid weather, and/or overgrown vegetation.
- Ability to carry field gear that weighs up to approximately 25 pounds

PREFERRED QUALIFICATIONS

- Experience conducting field surveys in freshwater streams and/or coastal wetlands
- Familiarity with freshwater mussel and/or Diamondback Terrapin life history and species identification
- Access to personal computer for data entry

INTERNSHIP COMPENSATION

NBEP expects the internship to last 8-10 weeks with the intern working up to 29 hours per week at a compensation rate of \$20/hour. The intern will be hired as a part-time employee of NBEP's host entity, Roger Williams University.

APPLICATION INSTRUCTIONS

For more information, please contact Darcy Young, NBEP Executive Director by phone (401-633-0553) or email (dyoung@nbep.org). Please email all applications to Darcy with the subject heading "Aquatic Habitat Connectivity Mapping Internship." The deadline to apply is 11:59 PM EST on Friday, March 27, 2026. All applications must include:

- (1) 1-2 page cover letter stating your interest in working on the project, how this internship will help your overall academic and/or career goals, and what skills you can bring to the project;
- (2) Resume or CV with your contact information;
- (3) Contact information for three professional or academic references.

ABOUT THE NARRAGANSETT BAY ESTUARY PROGRAM

The [Narragansett Bay Estuary Program \(NBEP\)](#) is a catalyst for scientific inquiry and collective action to restore and protect water quality, wildlife, and quality of life in the Narragansett Bay region, including Narragansett Bay, Little Narragansett Bay, the Coastal Salt Ponds, and their watersheds in Massachusetts, Rhode Island, and Connecticut (Fig 1). Founded in 1987, NBEP is one of 28 National Estuary Programs (NEP) created by §320 of the Clean Water Act that enable voluntary, community-driven actions to protect and restore “estuaries of national significance.” Hosted by Roger Williams University (RWU), with a staff of five and governed by a 30-member Steering Committee, the program operates across boundaries to communicate science, lead collaborative planning, and fund pre-construction work that helps build a pipeline of future projects that sustain the natural environment and communities.



Figure 1. The Narragansett Bay Estuary Program Study Region.