



NATURAL AREAS CONSERVANCY

INTERNSHIP PROGRAM PROJECT GUIDE

Summer 2024 - Spring 2025



Please note that eligible applicants for the Summer Internship are current students and recent graduates (up to 2 years post-graduate). Eligible applicants for the Fall Internship are current students.

TRACK 1) Monitoring & Assessment

Wetlands, rivers, & shorelines

Natural & Nature-Based Features

Project Description: Climate change and increased incidence of storm-related hazards are pushing coastal communities and decision-makers in New York State to consider innovative approaches to coastal protection. Natural and nature-based features (NNBF) are an increasingly popular alternative to conventional shoreline armoring. Still, to confidently recommend NNBF implementation, decision-makers need data to demonstrate that NNBF can provide community



protection and resilience benefits at least equal to that of conventional techniques. From 2018–2020, the NY–NJ Harbor & Estuary Program (HEP) worked with partners to build a statewide framework for monitoring a suite of shoreline types. The resulting Measuring Success monitoring framework informs three factors of resilience: ecological function, hazard mitigation and structural integrity, and socio-economic outcomes. For this project, summer interns will implement the Measuring Success monitoring framework at selected shoreline sites on the Harlem and Bronx Rivers that are of interest to the EPA’s Bronx & Harlem Rivers Urban Waters Federal Partnership. The collected data will provide site managers, community organizations, and practitioners with uniform environmental baseline data needed to measure progress and achievement of improved shoreline resiliency through NNBF features. Interns will also participate in elements of data analysis using the data they collected with support and guidance from staff at the Science and Resilience Institute at Jamaica Bay (SRIJB).

More information about NNBF & *Measuring Success*: https://www.srijb.org/nys_nbnf/

Timing: Summer 2024 (8 weeks at 35 hours per week, June–August)

Made possible through funding by: Hudson River Foundation’s NY–NJ Harbor & Estuary Program (HEP)

Jamaica Bay Seed Increase and Restoration

Project Description: Following Hurricane Sandy, the Jamaica Bay–Rockaway Parks Conservancy and its partners at the National Park Service, NYC Parks Department, and the NAC created the Marian S. Heiskell Nursery at Floyd Bennett Field (FBF) to supply beachgrass for dune restoration projects in New York City. Beachgrass (*Ammophila breviligulata*) plays an important role in fortifying dunes, which are crucial for protecting coastal communities and ecosystems from storms and sea level rise. The production site at FBF is managed by the Seed Increase Program (SIP) at the Greenbelt Native Plant Center (GNPC), part of the NYC Parks Department. In the intervening years, the site has expanded to produce native seed from over 20 species for use in restoration projects around the city. In this position, interns will 1) gain an understanding on the importance of ecological restoration through hands–on learning, 2) work alongside groups such as NYC Parks staff, volunteer groups and JBRPC Wetlands Fellows to actively improve ecosystems in Jamaica Bay, and 3) be a part of the team establishing, cultivating, and harvesting native seed and plants at FBF. Interns will also get hands–on experience at GNPC’s Staten Island facility. Under the guidance of GNPC staff members, interns will also have an opportunity to assist on a project that is a priority for GNPC that will fall under the three focus areas above. As a publicly–funded center for ecological restoration, GNPC can provide a well–rounded, real–world experience to CUNY students interested in pursuing careers in horticulture and green jobs.

More information about the Seed Increase Program at GNPC and the Beach Grass Nursery at FBF:

- [Seed Increase Program \(formerly Founder Seed Program\) at GNPC \(NYC Parks\)](#)
- [Marian S. Heiskell Nursery at Floyd Bennett Field \(Jamaica Bay–Rockaway Parks Conservancy\)](#)

Timing: Summer 2024 (8 weeks at 35 hours per week, June–Aug.); Fall 2024 (12 weeks at 14 hours per week, Sept. – Dec.); Spring 2025 (12 weeks at 14 hours per week, Feb. – May)

Made possible through funding by: Jamaica Bay–Rockaway Parks Conservancy



Upland Natural Areas

Ecological Assessment Field Assistant (long season)

Project Description: From 2013-2014 the NAC and NYC Parks Department conducted the first ever citywide Ecological Assessment (EA) to assess the ecological conditions of 10,000 acres of forest, saltmarsh, and freshwater wetlands in NYC. The data from this effort contributed to the Forest Management Framework, Wetland Management Framework, and informed on the ground management of natural areas citywide. Summer 2024 marks the beginning of data collection and desktop analysis for EA 2.0, with the goal of refreshing our forest, saltmarsh, and freshwater wetland datasets, and analyzing changes over the last decade. The NAC is seeking to hire four (4) Field Assistants to support field crews conducting the assessment in Forests. Field Assistants will contribute to day-to-day data collection operations during a dynamic field season. Skills the Field Assistant will learn include plant identification, quantitative vegetation data collection techniques, navigation, tree tagging, data entry and quality control, and operation and maintenance of field equipment (GNSS receivers, compass, clinometer, DBH tape, etc.). Field Assistants are expected to adhere to field safety protocols including wearing proper field attire, function as a productive team member, and maintain professional attendance standards.

More information about the NAC's Ecological Assessment and the Forest Management Framework:

- [How information from the Ecological Assessment is being used across NYC \(NAC\)](#)
- [Forest Management Framework](#)

Timing: May 20th - September 30th 2024 (8 weeks at 35 hours per week); training to occur from May 20 - May 31 and field work to begin June 3rd

Made possible through funding by: Natural Areas Conservancy

TRACK 2) Trails

Trails Crew (North 40)

Project Description: Since 2017, NYC Parks and the Natural Areas Conservancy (NAC) have partnered on the Citywide Trails Program to work on achieving the vision of a healthy accessible and enjoyable trail experience for all New Yorkers. The NAC has also worked closely with the Jamaica Bay-Rockaway Parks Conservancy (JBRPC) to increase trail management, activation and community engagement on nature trails throughout Jamaica Bay and the Rockaways since 2016. Some trails are in need of rehabilitation to mitigate erosion, while in other places networks of social trails (called desire lines) are promoting damage to natural resources and should be closed to restore a healthy forest. Trail Mapping Interns will work in close partnership with NAC, NYC Parks, JBRPC, and National Park Service (NPS) to collect trail condition data at Floyd Bennett Field in Brooklyn, NY, to help inform future management and restoration plans. Training will be provided on using the GPS mapping equipment, trail navigation, plant identification and data collection.

More information about Citywide Trails: <https://naturalareasnyc.org/trails>

Timing: Summer 2024 (8 weeks at 35 hours per week, June-Aug.); Fall 2024 (12 weeks at 14 hours per week, Sept. - Dec.); Spring 2025 (12 weeks at 14 hours per week, Feb. - May)

Made possible through funding by: Jamaica Bay-Rockaway Parks Conservancy