

2025 Bioblitz Report

by Rashid Poulson and Bella Ciabattoni

At the end the summer of 2025, Brooklyn Bridge Park (BBP) was thrilled to partner with [Macaulay Honors College](#) (MHC) to host a 25-hour species survey, appropriately named [The Bioblitz!](#)

Starting in 2013, MHC partners with one park per year in New York City to conduct this ecological assessment of greenspaces, providing sophomore students across their campus the (required) opportunity to participate in an exercise in citizens science, bringing students transformative, real-world experiences, educating them about the science of ecology in the city, by cataloguing as many species as possible within the event time-period. Students were led by field specialists, as well as BBP Horticulture and Education departments' staff across all areas of the park to closely examine and identify park wildlife in Salt Marshes, Meadows, Freshwater Ponds and Woodlands. The data is collected directly by the students with the support of specialists, who train them on how to properly make field assessments, allowing students to practice skills associated with observation and scientific thinking; while also helping students narrow down observations to verified identifications. At the end of the event, students and leaders audit all collections into a database use in their end of semester STEAM Festival Research Projects; centralized around environmental science.

The beauty of this event is that it brings forth an understanding of the vitality of urban green spaces through showcasing its species diversity, habitat value and functionality through hands-on interactions. In 2016, BBP hosted its first Bioblitz through MHC that produced a dataset of 248 species observed and logged across a partially developed park and a juvenile landscape composed of mostly resilient native plants. This year, BBP Staff had exceedingly more excitement and eagerness to host because this event would be the first site to be revisited by the Honors Program. Working alongside BBP's Horticulture and Education Department, nearly 500 students descended on BBP, studying many walks of life in the park like birds, spider, fish, mammals and even lichen and algae. We even welcomed the involvement of long-time park partner, [The Kayak Foundation](#), to lead a group of students on kayaks to survey plants in otherwise unreachable areas of the Park's waterfront. And with the park's initial development ending in 2022 and it's thriving urban ecosystems, we see the successes in the park's presence and staffs' stewardship; leading to an **astonishing count of 499 species observed across 42 classes of organisms**. Not including the 2320 genera of bacteria surveyed from the East River's marines and BBP's Freshwater Wetlands to eventually add to the species count once verified!

This event continues to be a victory for NYC greenspaces, as it infers the importance of organic land care practices and stewardship that uplifts ecology through thoughtful plant selection that encourages habitat. At BBP, knowing what organisms are present in the park gives us a stronger guiding light in what to plant and how to manage the landscapes in ways that cause the least harm and foster the healthiest urban habitats possible.

With our 2025 Fall Planting Season at a close, BBP's Horticulture staff is carving out time to comb through this new data in hopes of finding floral/faunal connections that can strengthen our understanding of the benefits of the parks initial species established in its development, as well as

select choices by the departments; whose preference is using NY native plants to further increase the biodiversity of the park to lead to its continued success as habitat and long-term sustainability. After only 2 hours of the BBP horticulture team's research, thus far, reassure and exciting correlations between park landscapes and wildlife are coming to light.

Possible indicators of shifting native range changes like finding:

- *Palaemon paludosus*, **Glass Shrimp**, found in Freshwater to slight brackish water from Florida to New Jersey native range, now observed in NYC.
- Intriguing **fungi** like *Panellus stipticus*, which is bioluminescent and develops on deadwood, which the horticulture intentionally allows such deadwood to break down in woodland edges, rather than wood being disposed of for a pristine aesthetic to our gardens.
- To add to findings, we find continued evidence of the revitalization of NYC's estuaries along the waterfront and freshwater ponds interior to BBP with *Clamitans*, **Green Frogs** having year-round resources. This amphibious friend thrives in habitats that offer thick vegetation, such as reeds, grasses, sedges, small shrubs, and trees, all found at Pier 1 Turtle Pond
- Though native to North American and managed very closely by BBP Gardeners, *Toxicodendron radicans*, **Poison Ivy**, is a host of *Aculops rhois* or **Poison ivy gall mite**. These mites are a food source for beneficial insects like **Lacewings** and **Lady Beetles**, adding to a cycled food web that heightens the capacity for our landscapes to serve as functional urban ecosystem at our Brooklyn Waterfront.
- We observed and documented 15 different species of **Lichen**, that come to the park from trees procured through nurseries in sub-rural areas of the tri-state. A sustainment of these populations long-term, can add to benchmarks of air quality in public landscapes. By nature, Lichen are sensitive to air pollutants and absorb nutrients and moisture from the air. This is an important context clue for a park that is meters away from the intensity of the Brooklyn Queens Expressway.
- *Lasionycteris noctivagans*, **Silver-haired bats** make long migrations from summer forest roosts to winter forests sites and almost exclusively form maternity colonies in tree cavities (small hollows) and require high densities for tree snags to meet their habitat needs. This discovery within BBP further aligns with our arboricultural practices that makes use of trees that are succeeding out of our dense canopy, where rather than remove them entirely, we utilize techniques which leave behind groves, perches, snags and coronet cuts in trees that have been outcompeted in their plant communities supporting this niche in habitat!

This event took careful planning, diligent combing of landscape and commitment to the field of environmental science to reach these outcomes. Brooklyn Bridge Park shares a heartfelt thank you to the dedicated staff at MHC Kelly O'Donnel, Lisa Brungade, & Janet Fu, and their enthusiastic students who bring the Blitz to reality across our city's landscapes and natural areas. We also send great thanks the phenomenal field specialists who led students with confidence and excitement around these scientific fields of study! All are listed below:

Peter Park (Fish)

Jeremy Howland, Molly Rouzie (Lichens)

Nic Comparato (Bats)

Zihao Wang, Rashid Poulson, Bella Ciabattone & Evelyn Manlove (Plants)
Ken Chaya, Jen Kepler, Anna Kuo & Laura Waterbury (Birds)
Olga Calderon, Xenia Freilich, Pawel Pieluszynski & Amy Berkov (General Insects)
Ansel Oommen (Lepidopteran)
Zeke King Phillips (Mollusks)
Sarah Kornbluth (Bees)
Caitlin Fisher-Reid & Nicol Fusco (Amphibians and Reptiles)
Theodore Muth (Microbes)
Andrew Cannon (Mushrooms)
Isabella Torres (Oysters)
Haley McClanahan (Plankton & Algae)
Christian Liriano (Spiders and Flies)
Gabriella Quartica & Ellen Van Wilgenburg (Ants)
Seth Wollney (Urban Ecology)

Internally at Brooklyn Bridge Park, these massive events would not lead to such successes without the support and knowledge of our stellar teams. A final thanks you to Bella Ciabattone, Evelyn Manlove, Pawel Pieluszynski, Haley McClanahan, Anna Kuo, Laura Waterbury, Kelli Diorio, Jennifer Hemp, Elliot Hass, Christina Severin, Camila Guzman Nunez, Conrad Ventur, Uri Sarig, Jonah Goldstein, Kate Mirand Calleri, Christopher Serna for their contributes!

To learn more, visit [Macaulay's Honors College](#), [The Science Forward Program](#), [The Bioblitz](#), [STEAM Festival](#), and [STEAM Festival coming presentations](#).