Working Together to Restore New York Harbor

2020 Annual Report
AT 200,000 ACRES, New York Harbor is by far our city’s largest open space. It was once teeming with extraordinary wildlife, and still is—if you know where to look. Working on our reefs, I’ve seen pods of dolphins in Jamaica Bay, flocks of northern gannet, and huge schools of menhaden in Newtown Creek. Egrets, kingfishers, ibis and herons frequent the tidal creeks in Brooklyn and Queens. If you’re looking for seals, you can find them at Hoffman and Swinburne Islands just south of the Verrazzano Bridge.

Why is it then that as New Yorkers we are, for the most part, unaware of this resource? Don’t we have a right to understand, access, and enjoy the most expansive open space in the city and all the life to be found in it?

While we may all have the right, the vast majority of the city’s coastline remains inaccessible to the public. And even when access to the waterfront is allowed and convenient, not every community feels equally welcome at the water’s edge.

Oyster restoration provides a purpose for our staff, stakeholders and communities around the city to get into the water, build awareness and affinity for the resource, and work together to improve it. I’m proud to say that this year—by far the most challenging in Billion Oyster Project’s short history—we created hours of publicly accessible video content about NY Harbor for those learning from home, engaged 2,000 students in marine focused educational programming, and restored 17.4 million oysters on five acres of oyster reef habitat using shells collected from dozens of NYC restaurants.

As you review this annual report, I hope you are inspired to continue learning, cheering for, and supporting Billion Oyster Project as we watch life return to our reefs and waterways!

With thanks,
Pete Malinowski
BILLION OYSTER PROJECT was able to achieve total revenue of $4,169,297 for FY20, resulting in net income of $333,245 after total expenses of $3,836,052. Due to COVID-19 restrictions, BOP lost $450,000 in projected net income from its annual fundraiser, the Billion Oyster Party. However, this loss was offset by $480,573 from the Paycheck Protection Program (PPP). FY20 revenue also includes the donation of a vessel valued at $279,000. These financial results are derived from Billion Oyster Project’s financial statements for the year ended June 30, 2020, audited by Condon O’Meara McGinty & Donnelly.
**Soundview Park**

*IN JUNE 2020, the Billion Oyster Project crew installed 169 metal reef structures, called gabions, and 10 shell reef beds into the water off Soundview Park in the Bronx. Alongside eight Harbor School graduates, we also restored millions of loose oyster spat on shell. Soundview Reefs, funded by the New York State Department of Environmental Conservation (DEC), has been years in the making. With 15 million live oysters and half a million pounds of cured shell placed in NY Harbor, this 5-acre reef is our largest oyster installation to date.*

“**One of the most promising aspects of this restoration project is the addition of five acres of three-dimensional oyster reef habitat, which can support an incredible array of marine species.**”
— KATIE MOSHER, Director of Restoration

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**Bayswater Park**

*THE INSTALLATION OF approximately 500,000 oysters on 1,000 pounds of shell was completed by an all-women crew this summer at Bayswater Point State Park in Far Rockaway. This is our first community reef in Queens! At this site, local youth will be able to participate in reef monitoring coupled with classroom and field-based curriculum. We’re currently testing coconut fiber reef bags as an alternative to plastic in an effort to move towards the use of more sustainable materials.*

**Brooklyn Bridge Park**

*WE WRAPPED UP THE SUMMER with the addition of 30 SEAPA cages—each filled with hundreds of oysters—at One°15 Marina in Brooklyn Bridge Park. This oyster nursery, a stone’s throw from Governors Island and dozens of schools, will allow for easy monitoring by community groups, students, and volunteers. We’re grateful to the Simons Foundation, 11th Hour Racing, and the Doris Duke Charitable Foundation, for helping us kick off the first phase of this multi-year project.*
Building Capacity at Red Hook Terminals

THIS FIELD SEASON, we were able to scale our oyster-growing capacity by 500% with the launch of an aquaculture facility complete with four shipping containers retrofitted into oyster-setting tanks. NY Harbor water is pumped directly into the tanks, which are filled with reclaimed shell, followed by oyster larvae. The waterfront facility allows BOP to pick up shipping containers full of oysters and barge them directly to their final reef destination. This technique keeps juvenile oysters surrounded by water and food while in transit—offering the best chance of survival. Red Hook Terminals generously donated space and labor to make this new facility a reality for Billion Oyster Project.

Hudson Reefs Update

IN LATE 2019, BOP and the Hudson River Foundation reported on the thrilling discovery of wild oysters settled on hundreds of reef structures designed and built by BOP and installed by the NY Thruway Authority in 2018. This fall, we found that last year’s oysters grew and more oysters settled! At times, there were so many new oysters that we struggled to count them all. This finding reassures our hope for the sustainability of oysters in NY Harbor and the settling of more wild oysters downstream.
Many things have changed in 2020, but our vision remains the same. We imagine a future in which New York Harbor is the center of a rich, diverse, and abundant estuary. The communities that surround this complex ecosystem have helped construct it, and in return benefit from it, with endless opportunities for work, education, and recreation. The harbor is a world-class public space, well used and well cared for — our Commons.

Embracing Virtual Learning

In March 2020, the BOP crew responded to the pandemic by converting portions of our curriculum and in-person activities to a remote learning format. More than 100 minutes of educational videos—from constructing an Oyster Research Station from recyclable materials to building a paper dory—were uploaded to YouTube. To support teachers, we held virtual office hours and professional development opportunities.

Symposium

On Friday, June 12, BOP hosted the 6th Annual (and first virtual) Research Symposium. In the lead up to this celebration of NY Harbor and local environmental stewardship, students across NYC were invited to submit a variety of technology, science, literary, and art projects. Despite the challenges our city was up against, our education team received more than 70 projects—spanning the topics of overharvesting, climate change, water quality, CSOs, and the history of oysters in our harbor! During the Zoom celebration, exemplary projects were recognized from the Hebrew Language Academy, Manhattan International High School, MS 447, St. Stans Academy, and The Calhoun School.
Harbor School Spotlight

MEET ASHLEY CRUZ, graduate of the Vessel Operations CTE program, and winner of the 2020 Marine Society Raymond Garcia Memorial Scholarship Award

What did winning this award mean to you? Finding out that I was the recipient of the Scholarship was unbelievable. I read the email three times and called my mom with the great news. I learned about the scholarship during my sophomore year and ever since then was trying my best to be eligible for it. When I found out I got it, it was surreal. I finally achieved my goal after two years!

How did the Harbor School and BOP prepare you for SUNY Maritime?

The Harbor School prepared me for the professional aspect of the Maritime Industry. The events, meetings, and different people we met on a daily basis set me on the right path to get into a maritime career. BOP has prepared me when it comes to the scientific side of the industry, and has made me want to learn more about the restoration process and how oysters can change our lives.

What are you studying at SUNY Maritime?

My intended major at SUNY Maritime is Marine Operations with a Deck License. I will graduate in 2024 as a third mate with an unlimited tonnage license, meaning I can drive any ship around the world!

Williamsburg Field Station

COINCIDING WITH WORLD OCEAN WEEK, in early June, Billion Oyster Project installed five oyster research stations with approximately 5,000 oysters at Domino Park—launching a new partnership with Two Trees. This event was the first step in an ambitious habitat restoration project along the East River, and took place just south of our new water quality lab.

The new lab allowed BOP staff and volunteers to team up with the Citizens Water Quality Testing program to test harbor water quality at dozens of testing sites, from Newtown Creek to the Hudson River. Each week, this group discovered marine wildlife that seeks shelter in oyster reefs! Next year, we plan to install 800,000 oysters at this site!
Here's what we accomplished this year!

17.4M OYSTERS RESTORED TO NY HARBOR

2000 STUDENTS ENGAGED IN BOP PROGRAMMING

500K LBS OF SHELL PLACED AT BOP REEF SITES

Scan this QR code with the camera app on your phone or visit bit.ly/bopAR20 to view videos and other Billion Oyster Project bonus content.

Thank you to Steven DeWitt, Roy Ritchie, and Douglas Lyle Thompson for the photography in this report.