

## Who We Are

The Massachusetts Oyster Project (Mass Oyster) is dedicated to the restoration of oysters and native shellfish to the state's marine estuaries. Oysters naturally filter pollutants and runoff out of coastal water, promote biodiversity, and reduce coastal erosion.

We engage in four primary activities:

Restoration - We partner with local organizations to build and maintain oyster upwellers across coastal Massachusetts. These upwellers grow native oysters for local restoration and population enhancement. We support other programs by municipalities and nonprofits with aligned goals.

**Shell Recycling** - We gather and recycle oyster shells. That shell is processed, aged, and put to work growing native oyster populations.

**Education** - We speak with school groups, scout troops, and other environmental community organizations about native shellfish and coastal environmental issues.

**Advocacy** - We lobby state and local governments to adopt policies that support oyster recycling and restoration.



# Why?

The cities and towns of Massachusetts are rediscovering their coastlines. For over 100 years, overharvesting, shoreline development, and polluting practices have devasted coastal ecosystems. But that is changing.

We have a better understanding of how important these ecosystems actually are. Large-scale green engineering projects like New York's coastline are an example to communities everywhere. Communities are looking to living shorelines and the natural environment to protect against climate change. That includes oyster reefs.

A single oyster can filter pollutants from up to 50 gallons of seawater per day. Millions of oysters can clean billions of gallons of water. Oysters naturally grow in reefs, offering refuge for over 200 species of fish, crab, and other marine life. Oyster beds have 50 times the surface area of a simple ocean floor. These nooks and crannies offer protection and homes to the other species of marine life.

Beyond that, oysters can play a huge role in mitigating the effects of climate change on the Commonwealth.

Oyster reefs protect against storm surge. Wild oyster reefs offshore play a similar role that coral reefs play in tropical climates. Severe storms bring severe waves, which would break farther out, causing less damage.

Oysters mitigate ocean acidification. As the ocean warms, it's acidifying, killing marine life. Oyster shells are natural bicarbonates and help reduce acidification.

**Oysters prevent coastal erosion.** The nooks and crannies of a reef support an incredible amount of sea life. Bringing back reefs will turn a barren desert-like sea-bottom into a lush biosphere. That combination of the plants and the reefs themselves reduce coastal erosion.

## Letter from the President

As we begin another year here at Mass Oyster, I'd like to take the opportunity to share our successes. This was a stellar year with meaningful growth.

We are excited to add our first year-round paid staff member, Erika Smith. Erika was part of our shell recycling program over the summer months and is now our program coordinator. Erika brings many years of professional experience with her and being located on the cape, she has a boots on the ground view of our work.

I would like to thank outgoing board members. Andrew Hultin, Sarah Valencik, and Alexandra Coughlin have served as critical members of our team and we are thrilled they will be staying on as advisors. I also thank outgoing board members Joel Samen and Jon Pollak for their service and contributions to our success.

We doubled the effort in our shell recycling program this summer. Our staff of five took in over 36,000 pounds of shell from 17 participating restaurants. That shell will be aged in Wellfleet and put back into local waters.

We picked up another upweller in Manchester-by-the-Sea, bringing our total to five, and once again were able to place oysters in our waters. Thank you to our partners who help to maintain our tanks; without them, the program would not be a success. We had a successful fundraiser at the House of Blues in Boston and forged several new partnerships. Thanks to them and our donors, we increased our reserves significantly and ended our year with a 440% increase. This has put us in a strong position for next year to add more paid staff to our ranks and expand our programmatic impact.

On the following pages you will find more details of our efforts this year. I thank all our staff, volunteers, friends, and families for all the effort put into making 2022 a success. I hope you continue to support us, follow us, and stay in touch as we work to improve the world in which we live, one gallon of water, one oyster at a time. Stay tuned...we have another exciting year ahead.

Sincerely, Theresa N. Baybutt

### **Meet Erika**

Mass Oyster was pleased to welcome Erika Smith in fall 2022 as program coordinator. Before this role, Erika was part of our team that picked up buckets of oyster shells from participating restaurants in the Wellfleet area and brought them for aging at Wellfleet's transfer station. Summer 2022 was our second year recycling shells in Wellfleet, but the first of many Erika hopes to work on the program. Erika loved her work with Mass Oyster so much she eagerly applied for a year-round role.

Erika is already planning for an expanded Wellfleet area shell recycling program in 2023, both with restaurants as well as creating other pathways for dropping off shells. Erika is also working on expanding educational programming, improving our upweller program, and enhancing restoration efforts.

Learn more by reading our <u>In The</u>

<u>Muck staff profile</u> about Erika.



# **Upwellers**

One of our most active program areas is our upwellers. We have five upwellers across the state in Gloucester, Marblehead, Barnstable, Nantucket, and a brand-new one we opened this year in Manchester-bythe-Sea. Upwellers:

- Show how oysters improve water quality
- Help grow oysters for our restoration efforts
- Serve an important role to get the general public interested in shellfish conservation

In the beginning of the summer, we buy baby oysters, called spat, from a hatchery. They begin as the size of red pepper flakes and will grow to about an inch by fall. At that point, we release the oysters at locations we have arranged.







# A New Upweller in Manchester-by-the-Sea

This year we added our fifth upweller. Kerri Bisner with the Manchester Harbor Boat Club had heard about our upwellers in Gloucester and Marblehead. She wanted to help get one started in her town. When they built their upwellers last year, our partners in Nantucket worked with the Nantucket High School woodworking program. The class had built an extra upweller frame they didn't have a use for. In February, we delivered the Nantucket-built upweller to Manchester-by-the-Sea for finishing and setup. We're proud to connect organizations across the state who care about our beaches and shores.



# A Challenging 2022 Growing Season

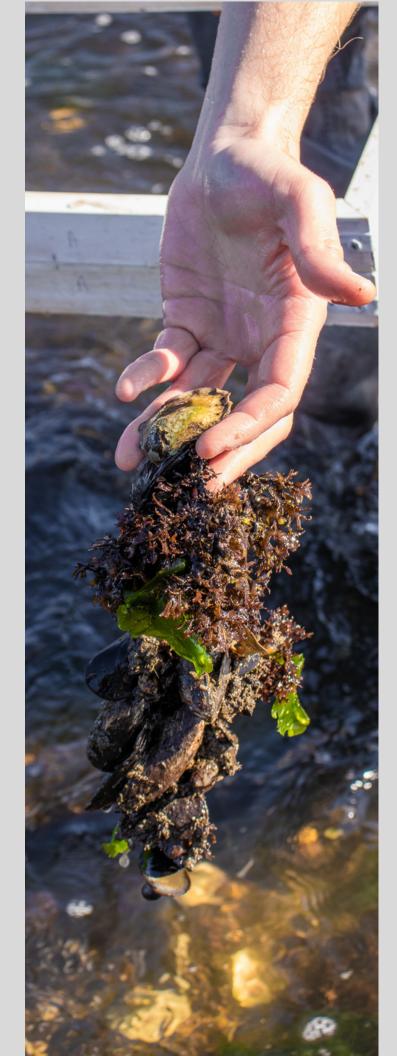
Our upweller program has a lot in common with commercial farmers. Many commercial oyster farms have on-site upwellers to help grow oysters. Like farmers, we have good years and we have tougher years. This year a combination of factors made it a tougher year. We planted about 100,000 oysters in the Mill River and Barnstable, below what we've done in previous years.

Some of those challenges included:

- an under-performing batch of spat
- warmer water meant that our oysters were more susceptible to disease

Even if we didn't plant as many oysters as we hoped, we are proud that our program continues to grow and we learn more every year.





## **Upweller Partners**

These are organizations we work with on some of our programs. We couldn't have had the success we had in 2022 without these organizations and the people who power them. We are grateful for the continued and growing support of people and communities around coastal Massachusetts who are aligned with this important work.

#### Maritime Gloucester

The maritime museum, sea pocket aquarium and working waterfront is the long-time home of our first upweller in Gloucester. They hosted the upweller on the pier for another year.

#### The Town of Barnstable

#### **Barnstable Clean Water Coalition**

BCWC ran the upweller in Hyannis and the oysters grown in that upweller were seeded by the Town of Barnstable into local shellfishing beds.

#### Marblehead Shark Club

The kids and adult leaders at the Marblehead Community Charter Public School were once again helpful volunteers at our Marblehead upweller.

#### **Madaket Marine**

Now in their third year, our friends in Nantucket successfully ran one upweller this year.

#### Manchester Harbor Boat Club

MHBC joined our upweller program this year. They finished building a small upweller that had been gifted by Madaket Marine at the end of June and soon thereafter had their first batch of oysters in it.

All North Shore upweller oysters were seeded at our restoration site in Gloucester's Mill River.

## **Shell Recycling**



Shell recycling is the fastest-growing part of our programs. We collect shells from events like Oysterfest in Wellfleet, but the bulk of it comes from restaurants on Cape Cod.

We partner with the Town of Wellfleet and local restaurants to collect and recycle oyster shells. Instead of ending up in a landfill, we reuse these shells for projects including restoring habitats and providing substrate for new oyster beds. Restaurants normally pay to dispose of shells, so our free shell pickups are a win-win for restaurants and the environment.

We collect the shells and dump them at the Wellfleet Transfer Station. The shell goes through a one-year aging process before finding its way to Wellfleet's public oyster beds. The Wellfleet Shellfish Department placed our 2021 shell this year as 1.5 strips of cultch formed into boxes 100' long by 3' wide by 6" high. We are performing a spat study based on a survey conducted in July and October.

In the water, the shell supports generations of native oysters. Those oysters benefit water quality, support biodiversity, and provide economic and recreational harvest opportunities.

Shell recycling has formed the foundation of a long-term investment in the Wellfleet area. We're expanding education and outreach with the community at events and farmers markets. Likewise we're engaging local partners including Wellfleet SPAT, and further expand recycling and restoration.

# Shell Recycling by the Numbers

The 2022 program kicked off on Memorial Day weekend and ran through Labor Day.

We recycled a total of 37,841 pounds of oyster shells from 17 restaurants. This is a 13,000 pound increase from 2021, and equates to 2,147 buckets collected from restaurants.



That is shell that would have ended up in a landfill. Instead, it will go towards the cultivation of more oysters.



We also collected roughly 10,000 pounds of shell from event partners.

Given the success of the shell recycling program in 2021 and 2022, we're setting big goals for 2023. Those goals include:

- Collect 50,000 lbs of shell
- Add six new restaurants
- Establish community drop-off locations
- Expand the program through early October

## Our Shell Recycling Team



Shell recycling expanded to 17 restaurants in 2022. We knew we would need a more sustainable and resilient staffing model for shell pickup. We expanded the program team from just one person to five. This larger team allowed us to expand our footprint and provide more reliable and frequent pickups from our restaurant partners.



Thank you to our 2022 shell recycling team:

- Rick Handman
- Marla Hyora
- Natasha Largey
- Adelia Marquis
- Erika Smith
- Sarah Valencik

The team did an amazing job collecting and coordinating the pickup of 2,147 buckets of shell from 17 restaurants across Cape Cod. We are grateful to them.

We also want to thank the Town of Wellfleet's Shellfish Department, Department of Public Works, and Transfer Station. This program wouldn't be successful without their support and ongoing partnership.

#### **Restaurant Partners**

Seventeen restaurants in the Outer Cape Cod region participated in the shell recycling program.

#### Provincetown, MA

• Governor Bradford Restaurant

#### Wellfleet, MA

- CShore
- Beachcomber
- Hog Island Surf Lodge
- Mac's Shack
- Moby Dick's
- The Pearl
- Wicked Oyster
- Winslow's Tavern
- Wellfleet Bookstore & Restaurant
- Van Rensselaer's

#### Eastham, MA

- Arnold's Lobster and Clam Bar
- Brine

#### Orleans, MA

- The Barley Neck
- The Rail

#### Chatham, MA

- Mac's Chatham Fish and Lobster
- Del Mar Bar & Bistro



We thank these restaurants and their staff for participating and hope to work with them in the future!

If you are a restaurant on the Lower or Outer Cape that would like to join our recycling program, reach out to <a href="mailto:contact@massoyster.org">contact@massoyster.org</a>.

Learn more at <u>massoyster.org/shell-recycling</u>

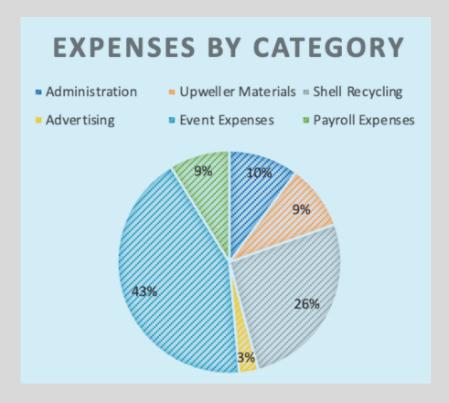
## Financial Overview

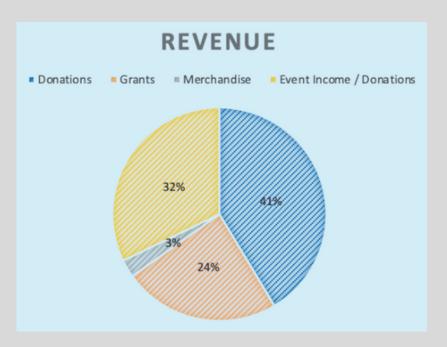
2022 was our strongest year yet. The success of our upwellers and shell recycling programs has brought us attention from donors, sponsors, and grant makers. In addition, our development and finance committee worked incredibly hard to raise money to support our expanded programs.

# **Budget Overview**

A larger paid shell pickup staff plus expenses related to our in-person event were some of our biggest expenses in 2022. Event costs were more than offset by the money we made from the event itself and the increased shell recycling costs were in line with our expected budget. Event fundraising combined with grants and non-event donations means MOP ended the year on strong financial footing.







## 'Give a Shuck' Fundraiser

After several long years of the pandemic, we felt it was time to celebrate in person again. On Thursday, May 26th, we hosted friends and supporters at the House of Blues in Boston for "Give a Shuck." Guests enjoyed drinks and oysters, live music, and some amazing keynote speakers. Through a combination of ticket sales, merch sales, and our silent auction, we raised just under \$40,000.



We also learned a lot about in-person fundraising. We're excited to take what we've learned into 2023.

We want to give a special thanks to everyone who made the event a success, including:

- The staff at the House of Blues
   Foundation Room
- The Golden Years of Dutch Pop
- Reverend Mariama White-Hammond from the City of Boston
- Steve Kirk from The Nature Conservancy
- Long Wharf Supply Co.
- Treasure Bay Jewelry
- Newburyport Fish
- Rockland Trust



## Other Fundraising

Online fundraising was strong, but our year-end campaign wasn't as successful as previous years. We raised almost \$20,000 online and through the mail this year, including just under \$14,000 from 46 people as part of our end-of-year campaign.

Our end-of-year digital fundraising campaign continues to be a strong close to the year. We fell short of our end-of-year goal, likely because we did less outreach and had channeled a lot of our regular supporters to our Give A Shuck event. However, we still raised enough money to fund our upwellers for 2023, which is the year-end campaign's main goal.

We are learning and growing, but we are still raising four to five times as much per year as we were just a few years ago. Our plans for 2023 is to think more about how online fundraising fits into our new live events schedule.

## 11th Hour Racing



Oyster restoration programs were made possible with support from 11th Hour Racing's grant program, funded by The Schmidt Family Foundation.

11th Hour Racing's grant program supports pilot programs that model best practices of sustainability, restore coastal ecosystems, and advance ocean stewardship to create systemic change to restore ocean health. Focus areas include ocean literacy and stewardship, clean technologies and best practices, and ecosystem restoration.

With support from 11th Hour Racing's grant program, we were able to successfully relaunch our oyster shell recycling program in the Wellfleet area. Additionally, support is helping Mass Oyster grow capacity for educational programming. 11th Hour Racing's support of Mass Oyster began in 2021.

## **Corporate Sponsors**

#### Long Wharf Supply Co



Long Wharf is a company with Massachusetts roots that makes sustainable apparel out of recycled plastic, natural wool, and oyster shells. Every garment diverts five oyster shells and eight water bottles from landfills. By developing high-quality and timeless garments that promote the use of recycled materials and that directly support reseeding coastal oyster reefs, they aim to reduce waste, change the narrative, and help clean up our inshore waterways for the next generation.

Through sales of apparel in their SeaWell<sup>TM</sup>
Collection, Long Wharf Supply Co has helped reseed over 400,000 oysters, which naturally filter 20 million gallons of seawater every day.

**Heineken International** - An international company with a focus on sustainability. We partnered with Heineken around the launch of the new Dos Equis Ranch Water.

**Moet Chandon** - A 300-year old company that continues to channel the innovative and pioneering spirit of its founder.

**Proud Pour** - One of our longest-running sponsors, Proud Pour donates a portion of the profit from each bottle of their sauvignon blanc to coastal restoration nonprofits. We're proud to be one of them.

**Sailormade** - A local company that uses its nautical heritage to inspire beautiful accessories. We helped provide them with oysters for their decoupage kits and received a portion of every kit sold.

**Treasure Bay Jewelry** - A longtime partner that donates a portion of every piece of pearl jewelry sold.

## **Board of Directors**

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Nate Bernitz
Michael Bridges, Treasurer
Joseph Caiazzo
Bridget Callahan
Emily Clark
Gisella de la Rocha
Josh Gee
Andrew Rosenberg, Vice Chair
Damon Wei

# **Advisory Board**

Alexandra Coughlin
Adam Heilemann
Andrew Hultin
Andrew Jay
Mike Lamagna
Travis Marcoux
Sarah Valencik
Steve Parkes
Mark Wagner

## Staff

Erika Smith, Program Coordinator





















Board of Directors, in order listed









# Massachusetts Oyster Project Annual Report 2022

Editor: Josh Gee Design: Nate Bernitz

A special thank you to Cory Silken Photo, who took many of the photos in this report.

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