



2023 VIRGINIA OYSTER ANNUAL REPORT



CHESAPEAKE BAY
FOUNDATION

Saving a National Treasure

CBF.ORG

In 2023, CBF continued restoring oysters to Virginia's rivers and the Chesapeake Bay with the help of 1,710 volunteers who contributed 15,557 hours of their time. We are so honored that people across the region give their time to support the native oyster—and make CBF's work successful.

CBF CHAMPIONS SHELL RECYCLING LEGISLATION

Oyster restoration efforts and their economic benefits to the shellfish industry are stymied due to the limited number of shells available for restoration. This is why CBF championed legislation during the 2023 General Assembly session to create the Oyster Shell Waste Diversion Fund. The fund will provide grants for businesses and individuals that donate used oyster shells.

To encourage legislators to support the Oyster Shell Waste Diversion Fund and other clean-water initiatives, CBF and the Chesapeake Oyster Alliance (COA) hosted an oyster roast on Capitol Square in February. Many legislators stopped by for a tasty treat while hearing from oyster farmers, including Oyster Catcher Sea Farms growing in the Rappahannock; Big Island Aquaculture, growing in the York; Ragged Island Oyster Company, growing in the James; First Landing Seafood Company, growing in the Lynnhaven; and Walker's Seafood, from the Eastern Shore. While legislation to create the Oyster Shell Waste Diversion Fund passed, funding for the new grant program is still undetermined; CBF is urging legislators to fund the program during the 2024 legislative session.



OYSTERS HELP CREATE LIVING SHORELINES

CBF and our dedicated volunteers installed a 718-foot living shoreline in Portsmouth in summer 2023. The project of oyster reef and marsh grasses uses natural systems to help protect a waterfront property from the effects of sea level rise and erosion, reduce pollution, beautify the waterway, and create habitat. Over the course of 10 weeks, 90 volunteers helped CBF staff install 400 tons of sand, 2,400 oyster castles, 27 coconut fiber coir logs, 1,150 bushels of loose oyster shells, 35 bushels of live oysters, and 2,500 wetland plant plugs. Our partners at the Elizabeth River Project and James River Association provided their expertise and contributed funding from the Virginia Environmental Endowment to install the living shoreline.



As part of this project, and in partnership with COA, Natrx, and the Audi Environmental Foundation & Audi of America, we piloted a new innovation in oyster restoration technology—the first oyster shell bag made of basalt rock. CBF worked with Natrx, a company that applies nature-based solutions to coastal resilience and protection challenges, to develop the basalt bag prototypes. CBF and Natrx are piloting the 100 shell bags on the living shoreline to test their integrity in a marine environment. Using natural basalt fibers presents a unique opportunity to combine strength and stability with an inert and environmentally safe material. The basalt shell bags will be monitored over the coming months to determine their ability to stay intact in the water and outside elements.

CBF thanks our local partners without whom we would be unable to be as successful as we are: City of Hampton, City of Norfolk, City of Portsmouth, City of Virginia Beach, Elizabeth River Project, Friends of the Rappahannock, Hampton University, James River Association, Nansemond Indian Nation, Nansemond River Preservation Alliance, The Nature Conservancy, National Fish and Wildlife Foundation, National Oceanic and Atmospheric Administration, U.S. Army Corps of Engineers, Virginia Institute of Marine Science, and Virginia Marine Resources Commission.

We are also grateful to our donors, including Audi Environmental Foundation & Audi of America, CMA CGM, Deborah Loeb Brice Foundation, American Environment Foundation, Dickseski Charitable Fund, Eaton Marina Power and Lighting, David and Susan Goode, and Raymond C. & Jeanne K. Roberts.

Oyster Gardening Program Expands

cbf.org/vaostergardening

In summer 2023, CBF hosted 11 oyster gardening events throughout the region. Through the oyster gardening program, we collected 147,948 adult oysters which were planted locally by CBF and our partners in the Elizabeth, Hampton, Lafayette, Lynnhaven, Nansemond, Rappahannock, and Elizabeth Rivers. That's a lot of oysters filtering up to 7.3 million gallons of water a day! For the 2023-2024 growing season, 692 oyster gardeners made up of individuals, families, and organizations are now fostering oysters. Many thanks to American Environment Foundation for funding our oyster gardening program in 2023.

Members of Virginia Indian Nations transplanted 7,000 oysters they grew through CBF's Oyster Gardening program onto a protected reef on Chuckatuck Creek that is leased and maintained by our partners at the Nansemond River Preservation Alliance. The Nansemond Indian Nation grew the oysters along the shores of their tribal lands at Mattanock Town in Suffolk.

Members of the Upper Mattaponi, Nottoway, Chickahominy, and Rappahannock Tribes were present to help count and plant the oysters. At the ceremony, Nansemond Indian Nation Tribal Council Vice Chair, Nikki Bass, spoke about the historical significance of her tribe putting a culturally essential resource back into the water for the first time in centuries.



Shell Recycling Program Flourishes

cbf.org/shellrecycling

During 2023, CBF recycled 2,630 bushels of oyster shells—nearly twice as many as we did last year! We also welcomed five new restaurants to the shell recycling program, which gives us 43 participating businesses. Special thanks to the 53 volunteers who contributed 873 hours of their time to collect shells weekly from local restaurants. Additionally, CBF added five new recycling bins to our public shell recycling locations, providing more opportunities for the public to save our shells.

Reef Balls Installed in Portsmouth

In August, Portsmouth Parks and Recreation, Portsmouth Public Schools, STARBASE Victory, CMA CGM, COA, and CBF partnered to engage Portsmouth students in a hands-on restoration project in the Western Branch of the Elizabeth River. Ten oyster reef balls, concrete structures that create an ideal habitat for oysters, crabs, and fish, were placed shoreward of an existing reef near City Park in Portsmouth to create a scientific field experience for students. Five of the reef balls were set with spat (baby oysters) and placed near the shore, which is accessible at low tide so students can monitor oyster growth and other species on the structures. CBF and partners added signage to educate visitors about the partnership and the important role oysters play in the river's ecology.



Oysters Planted in the Bay

Throughout 2023, we hosted 25 shell bagging events where a total of 350 volunteers dedicated 598 hours and made thousands of shell bags that will be used in spat-on-shell production. These efforts helped CBF add 604,618 spat-on-shell oysters to the Chesapeake Bay in 2023. Volunteer groups included members of PRA Group, a global leader in the non-performing loan industry; Operation Smile, a non-profit medical services organization; Norfolk Academy; Bank of America; and CMA CGM Group, a shipping and logistics company that created 142 bags of recycled shell—in an hour!

Future Efforts Focus on Hampton

From May through October, CBF conducted a spat catcher survey at nine sites throughout the Hampton River in partnership with Hampton University students. A spat catcher is a cage containing oyster shells designed to attract baby oysters. The data collected show where oyster recruitment occurs in the river and where we should focus our restoration efforts—and is informing the placement of CBF's planned new oyster reefs in the Hampton River.

Chesapeake Oyster Alliance Grows

chesapeakeoysteralliance.org

This fall, the Chesapeake Oyster Alliance (COA) welcomed its 100th partner, marking an important milestone for the coalition. COA consists of non-profits, academic institutions, businesses, and aquaculture operations working together to restore the Chesapeake Bay's oyster population, with a goal of adding 10 billion new oysters to the Bay by 2025. The 100th partner is Black in Marine Science, a network focused on increasing diversity in marine science while highlighting the many Black scientists already in the field. The connection to COA creates new opportunities for collaboration around oyster restoration, research, and aquaculture.

CBF Educates Special Guests

CBF hosted many special guests this year to see, learn, and contribute to our oyster restoration efforts. In March, Congresswoman Abigail Spanberger toured our Mobile Oyster Restoration Center. During the summer, members of Norfolk's Teens With a Purpose, a teen group which is dedicated to empowering young people, came to CBF's Brock Environmental Center to sample some oysters from First Landing Seafood, after learning about the oyster restoration process.



CBF Mourns the Loss of Bill Newton

Late summer became a mournful time for CBF when our Oyster Maintenance Assistant, Bill Newton, passed away. Bill worked with CBF since 2019 and was instrumental with ensuring that the *Prudence H. and Louis F. Ryan Mobile Oyster Center*—also known as the Oyster Barge—was functional and productive. We will miss Bill's ability to fix almost anything and his curmudgeonly sense of humor.

