

Save Our Shell Program

Sanctuary oyster reef has typically been built from dredged fossil oyster shells which are becoming a scarce commodity.

The Save Our Shell program began with eight restaurants as a pilot in the summer of 2006. By the next summer, we had secured funding to continue the program year round. Today, we collect shells five days per week from 19 restaurants in Virginia Beach, two public drop off locations and special events throughout the year.

To be an SOS restaurant takes some extra effort. The wait staff has to be vigilant to separate the shells from other trash and put them in special containers that can then be picked up by our LRNow staff. We hope that you will visit our SOS restaurants and thank them for participating in this important program. (See the list of restaurants below.)

You can bring your oyster and clam shells to one of our public drop off sites. In the southern part of Virginia Beach, you will find the shell can in the Virginia Aquarium eastern parking lot and in the northern part of Virginia Beach, there is a shell can in front of our office, 1608 Pleasure House Road, Suite 108.

Special event oyster roasts can generate a lot of shells and we are happy to collect those also. Please contact us at least a week before your event and we will make arrangements to drop off shell baskets before the event and pick them up after.

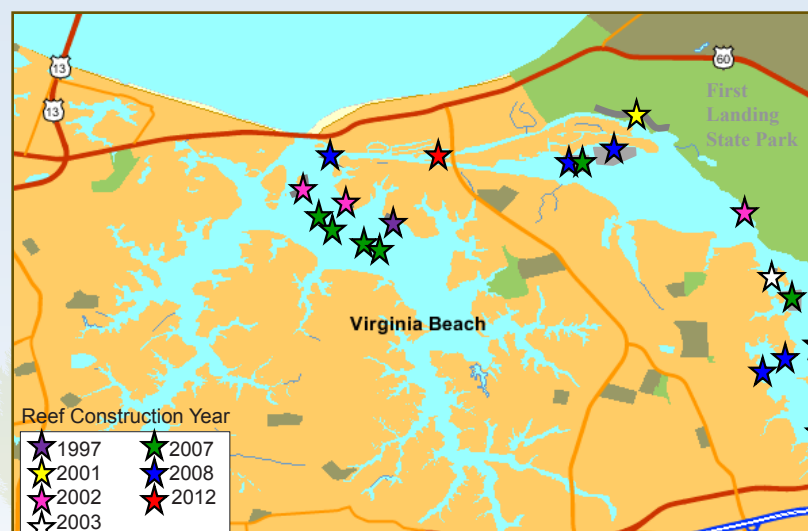
All of the shells collected through this program are used to build sanctuary oyster reef in the Lynnhaven and help us reach our goal of 100 acres of sanctuary reef.

SOS Restaurants:

- Bubba's, 3323 Shore Drive
- Captain George's, 1956 Laskin Road
- Chick's Oyster Bar, 2143 Vista Circle
- Coastal Grill, 1427 N Great Neck Road #104
- CP Shuckers, 1400 Atlantic Avenue
- CP Shuckers, 3232 Shore Drive
- Croakers, 3629 Shore Drive
- Croc's 19th Street Bistro, 620 19th Street
- Dockside, 3311 Shore Drive
- Five 01 City Grill, 501 North Birdneck Road
- Harpoon Larry's, 24th Street and Pacific Avenue
- Lucky Oyster, 2165 General Booth Boulevard
- McCormick & Schmick's, 211 Market Street
- Nick's, 508 Laskin Road
- Prime 103 Steakhouse, 972 Laskin Road
- Rockefeller's, 308 Mediterranean Avenue
- Shaka's & Seaside Raw Bar, 2014 Atlantic Avenue
- Steinhilber's, 653 Thalia Road
- Tautog's, 205 23rd Street



OYSTER UPDATE



Lynnhaven River Sanctuary Reefs

Lynnhaven River NOW has as a goal to build 100 acres of Sanctuary Oyster Reef in the Lynnhaven. This represents approximately 10% of our original oyster reef and will play a significant role in helping us rebuild our native oyster population. The reefs shown on this map represent 63 acres of sanctuary reef that will never be harvested, are contributing spat to the native population every summer and are helping to filter the water every day. Sanctuary reef construction has been a joint effort of LRNow, the US Army Corps of Engineers, the City of Virginia Beach, the Virginia Marine Resources Commission, NOAA (National Oceanographic and Atmospheric Administration), Chesapeake Bay Foundation and the Fish America Foundation.

Oysters are a keystone species in our Lynnhaven River ecosystem. An oyster reef becomes a thriving community not only for the oysters that make it their home but for the many other species that live with the oysters in their reef. In addition, oysters provide a critical water filtering function. One adult oyster can filter as much as 50 gallons of water per day.

Many factors including pollution, loss of reef habitat and disease almost completely destroyed the native oyster population in the Lynnhaven River and the entire Chesapeake Bay. The native oyster population was 1% of historic levels here and throughout the Chesapeake Bay. After 15 years of focused work on restoring our native oysters in the Lynnhaven River, we are now at about 18% of historic levels. Reducing sediment runoff and increasing habitat are two key factors in continuing our efforts to increase our oyster population.

Lynnhaven River NOW with our partners and our members has been working hard for ten years to restore native oysters to the Lynnhaven River. I hope you enjoy this update on current oyster restoration projects and find ways that you can get involved.

OYSTER GARDEN PROGRAM OYSTER GARDENERS

Our Lynnhaven Oyster Gardeners play an important role in the recovery of our native oyster population. Tiny young oysters are very susceptible to predation by birds, rays and crabs. To help speed rebound of the population, our Oyster Gardeners grow baby oysters for their first year in very protected conditions.

At the end of the first year, when each individual oyster has grown to 1-2 inches in length, they are much less susceptible to predators and can be placed on a sanctuary reef.

If you are currently an Oyster Gardener, the **Round-ups** this summer in the Lynnhaven will be:

Saturday, July 28th and Saturday, September 8th, 9-11 a.m. at the Narrows, 64th Street entrance to First Landing State Park. We always enjoy seeing the oysters come back in after their year of growing in the river. Please register ahead with the Chesapeake Bay Foundation to receive your new baby oysters. There is a \$30 charge for baby oysters. Register at: www.cbf.org/virginiaoysters.

If you are interested in becoming a **New Oyster Gardener**, there will be two seminars in Virginia Beach this summer. **Thursday, August 2nd from 6-7:30 p.m. at Great Neck Rescue Squad**, and **Thursday, September 6th from 6-7:30 p.m. at Virginia Wesleyan**. Please register in advance with the Chesapeake Bay Foundation to attend a workshop and receive your new baby oysters. There is a \$30 charge to receive your baby oysters. Register at: www.cbf.org/virginiaoysters.

Prior to the New Oyster Gardener workshop, sign up for a **Taylor Float Building Workshop** to construct a Taylor Float to house your oysters and receive the materials you will

need including a mesh bag and dock lines. The workshop will be conducted on **Thursday, July 26, 6 p.m. at the Lynnhaven River NOW office**, 1608 Pleasure House Road, Suite 108. Pre-registration is required. There is a \$75 charge for all of the materials for your float. Register by emailing Kris McKinnon at kris@lrnow.org or by calling 757-962-5398. Go to www.lynnhavenrivernow.org/need-oyster-growers.aspx for a complete list.

Oyster Gardening is not only good for the river; it's also fun to do and rewarding to know that you are contributing to the restoration of the Lynnhaven. Each time that you pull up your oysters, you will see that they support a thriving community of harmless miniature organisms, like little fish, little crabs and little shrimp. Our oysters need our help to recover and this is one important way that you can help. If you cannot participate in oyster gardening yourself, but would like to offer your dock to someone else, please let Kris know by emailing kris@lrnow.org.

This program is offered in partnership with the Chesapeake Bay Foundation.



Cleaning our Oysters

Spat Catcher Program



Kris smashing a toilet for the Spat Catcher cages.

LRNow started a new Spat Catcher program this summer with 20 of our members on the Lynnhaven River. Spat is the term for a baby oyster when it connects to hard surface. In our Spat Catcher program, the hard surface could be an oyster shell, a piece of granite or a piece of porcelain.

Our new Spat Catchers have each received three small wire cages to hang from their dock. Each cage contains a different type of substrate for our baby oysters looking for a home. One contains oyster shell, one contains pieces of granite, and one contains pieces of porcelain from old toilets. The Spat Catchers simply shake the cages every couple of weeks and hope that the new baby oysters find the material in the cages and make a home there. At the end of six months, LRNow will collect the cages and analyze the results. Then the babies will be returned to the river on a sanctuary reef where we hope they will continue to grow and live a long and productive life.

From this program, LRNow staff will be able to compare the three types of substrate, shell, granite and porcelain, at each location and determine if our oysters have a significant preference for one type of substrate over another. Shells are becoming increasingly difficult to get for building sanctuary reef and we are considering various alternatives to shell for reef construction. In addition, we will be able to compare the various areas of the river where Spat Catchers are located and evaluate the settlement of oysters in different areas of the river.

We appreciate the volunteers who are helping us with this program and look forward to sharing what we learn with you soon.

OYSTER CASTLE PROJECT BUILDING CASTLES FOR OYSTERS

As we know, suitable habitat for oysters is one of the factors limiting their population growth. On Broad Bay Island, we are trying a new approach. We are building castles for our oysters.

LRNow has recently completed the first section of a new oyster reef restoration project and we constructed it using a novel new material called "oyster castles." Around the end of May and early June, we built a chain of intertidal structures located on the north facing shoreline of the western end of Broad Bay Island on Long Creek.

The structures measure between 3 and 8 feet long and are built out of oyster castle blocks which are 12" x 12" x 8" concrete blocks that interlock for stability when stacked. The blocks, made with crushed oyster shell, are certified environmentally safe. Since this project looked like it was going to be like building reefs with LEGOS, we decided to use actual LEGO blocks in one of our committee meetings to try out different stacking ideas and shapes!



Oyster Castle Volunteers: Laurie Sorabella, Steve Sims, Nick Anderson, Chris Good, Bob Clifton, Allison Ricco and David Crandall. Photo by Joe Scalf

The castle blocks were ferried over by boat with the assistance of local watermen, Cameron Chalmers, Chris Pace and Dirk Sanford. The blocks were stacked by hand by LRNow staff and volunteers. The built castles do not encroach channel-ward more than 4 feet, or one foot of depth, past the low water line.

The three-dimensional structures, between 13 and 18 inches tall, offer a lot of surface area and interstitial spaces — important components for successful oyster reefs. They will provide immediate habitat for oysters, fish and other aquatic organisms in the Lynnhaven River.

Beyond providing habitat, a secondary benefit of the project is that it will give us a test project to see how oyster castles work at protecting the shoreline from erosion.

The project site, which is owned by the City of Virginia Beach, is on the northwest shoreline of Broad Bay Island. You can get a good view of our new oyster castles at low tide from Long Creek, Long Bay Pointe Marina or Inlet Fitness.

Oyster larvae will be settling on the castles over the warm summer months and we expect to document rapid recruitment and growth over the next 12 months.

A second phase is planned to be installed in May, 2013. The total project will cover 559 feet of shoreline.

Funding for the oyster castle project was provided by the Broad Bay Island Fund with the Hampton Roads Community Foundation.



Oyster Castle Construction in Long Creek

