# **ReClam the Bay**

20 Years and 30 Million Shellfish Later



Clam On

2005-2025

### Forward - Rick Bushnell

This book is about how a diverse group of coastal inhabitants organized a teaching and learning experience to preserve our coast for future generations. The reader will peek into ReClam the Bay from its inception, learn what brought these people together, and why they are growing and thriving 20 years later.

The author, Cheryl McCurry, writes in a conversational style and the book is a collection of stories about what RCTB volunteers did and what they remember. Cheryl shares the joy of discovery and celebrates curiosity. You will feel her warmth and enthusiasm in her words.

Assisting the author was Fran Shanchez. She has cleaned her share of clam poop and taken the sale of RCTB merchandise to an unexpected level. She helped write our history by finding and organizing many magazine and newspaper articles which provide a journalistic perspective on the many events and activities throughout the years.

As the founding president of RCTB I can point to a half dozen others who made it happen. An enduring nonprofit community supported organization, must have a firm foundation. More details will unfold within the pages. But I must identify four people who literally built the foundation of equipment, personal relationships, and knowledge.

**Gef Flimlin**, the Rutgers Marine Extension Agent for Ocean County, was the inspiration. His expertise in shellfish aquaculture and enthusiasm for community action were contagious. Gef patiently answered questions and approached every day, every question, and every mistake as a learning experience.

**Tom Green**, local marine construction business owner, could build, fix, or conceive anything. Tom loves the bay and anything to do with it. He worked tirelessly, day after day, in the early years. **Albert (Al) Nitche** was another creative innovator. Al was a visionary with a unique leadership style that attracted people and challenged them to go beyond the normal.

**Cara Muscio**, also from Rutgers Cooperative Extension, loved to teach both young and old. She taught the teachers. Her knowledge, enthusiasm, and willingness to jump into cold water (really ice cold) made members want to do the same.

These people set the tone for volunteers to come, example: the current President, **Bill Walsh.** He leads by example and jumps right into the learning, teaching, and doing. He is the impetus for the next 20 years and the newer volunteers demonstrate the same level of commitment as the founders.

As an early spokesperson for RCTB, I frequently demonstrated the filtering capability of shellfish by displaying two beakers of bay water; one with clams, one without. Within thirty minutes people could easily see the water with the clams was clear while the other was turbid. I explained that shellfish can do an amazing job. We need to improve the bay and we can use the shellfish to help. A well known academic heard of my talks and expressed the opinion that we could never put enough shellfish in the bay to clean it. He was right, of course. But he had not heard the second part of the talk. I explained that filter feeders are impressive, but PEOPLE need to take action to improve the bay. **Shellfish are a teaching and working tool**. He agreed with that! This book is about ordinary people who came together to do extraordinary things by involving over 40,000 people and devoting over 9,000 hours of service to the bay each year. It is about people finding enjoyment in saving the planet.....one shellfish at a time. KEEP CALM AND CLAM ON!

# President's Message

Welcome to *ReClam the Bay's* review of our first 20 years in action. This historical compendium covers the why and how of our existence and what drove those truly forward-thinking individuals whose love of our coastal way of life led them to hammer out a plan for what is now *ReClam the Bay*. A thirst for education and a desire to improve the conditions of the Barnegat Bay estuary served as the main drivers.

For over two decades, *ReClam the Bay* has been at the forefront of efforts to restore the health of Barnegat Bay, one of New Jersey's most important and ecologically fragile coastal waterways. Founded in 2005, this grassroots initiative has brought together environmentalists, scientists, local communities, and volunteers with a shared vision: to explain the benefits of filter-feeding shellfish and to rejuvenate the bay's ecosystem through the restoration of clams and other shellfish populations, which play a crucial role in maintaining water quality and biodiversity.

The past 20 years have seen a remarkable journey of growth and innovation for *ReClam the Bay*. From its humble beginnings as a community-driven project to the emergence as a leader in shellfish restoration, the organization has made significant strides in improving the health of the bay's waters. Through scientific research, volunteer-driven clam seeding programs, the Shellfish in the Classroom Program, and partnerships with local agencies, we have not only helped restore clam populations but have also helped raise public awareness about the broader environmental challenges facing the region.

This historical perspective explores the milestones and challenges that have shaped *ReClam the Bay*, examining how our work has influenced local conservation efforts, supported sustainable environmental practices, and contributed to the ongoing restoration of the Barnegat Bay ecosystem. By reflecting on this 20-year journey, we can better understand the lasting impact of community-led environmental movements and the importance of collaborative action in protecting our natural resources for future generations.

Thanks from the bottom of our Bays!

President, ReClam the Bay

Dil Wulsh



Bill Walsh



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"Shellfish are like the canary in the coal mine," explains Bushnell. "A decrease in their population is a sign that something is wrong, that things are out of balance."

# Time Blurs History

It shouldn't be surprising that people forget to look at the progression of historical events that allow the evolution of nature. It often happens at such a slow pace that it is hardly noticeable until the "Light bulb moment".

Historically the bays along the New Jersey shore were teeming with clams, oysters, and mussels. Colonial settlers stated that one could walk on oyster shells across the bay. The poorest souls in Philadelphia and New York City could affordably buy oysters on the street corners. The Delaware Bay was full of oyster sailing boats during the season. There were designated rail lines from South Jersey to Philadelphia and New York City. Baymen could make a decent living from the bay waters. Young folks could clam during the summer and pay for next year's college tuition. WHAT HAPPENED?

Overfishing, the declining health of the bays due to pollution, the rapid growth of populations near the bay (causing loss of habitat), unchecked predators, and two viral diseases that attacked the health of oysters all played their part in the eventual near total loss of this natural resource. The clamming industry, while not totally wiped out, was obviously in decline.

# The Light Bulb Moment

The initial concept for ReClam the Bay (RCTB) came from an International Conference on Shellfish Restoration in Charleston, SC in 2004. Gef Flimlin, the Rutgers Cooperative Marine Extension Agent for Ocean County, and colleagues, Greg Rivara and Kim Tetrault, met and were discussing a "SPAT" program that was operated under the Cornell Cooperative Extension in Long Island. Gef and another colleague, Dr. Gustavo Calvo from NJDEP Bureau of Shellfisheries, decided that Barnegat Bay had similar problems with diminishing shellfish populations. Gef pitched an idea to Jim Joseph the Chief of the NJ Bureau of Shellfisheries about possibly raising shellfish in Barnegat Bay. The discussion quickly changed from trying to repopulate the bay with clams to educating the public about shellfish and their place in the coastal bay ecosystems. This was the deal maker. Because of this discussion the Barnegat Bay Shellfish Restoration Project (BBSRP) was formed through the Rutgers Cooperative Extension of Ocean County.

It was obvious that money was needed to create shellfish nurseries to grow small shellfish. Gef Flimlin went to what was then known as the Barnegat Bay National Estuary Program and proposed an idea to have educational courses to teach people about shellfish and then have them be the messengers who would teach the public about clams and their place in the bay. He was asked if they were going to be raising clams. He answered probably but that's not what it's about. They asked if they were going to raise oysters. He answered "...possibly but that's not what it was about." They asked if they were going to raise bay scallops. He answered "...possibly but that was not what it was about." They asked why raising the shellfish in the bay to improve stocks wasn't what it was about. He answered because it is all about education and teaching about the shellfish, the bay and its

waters, and all of the watersheds that feed into the bay and can bring pollutants or nutrients into the bay. At that point the USEPA representative gave a slight nod of his head, and Gef knew immediately that they were going to get funds. The Estuary program donated about \$25,000. But the County of Ocean needed to be a partner in the process too. Freeholder Joseph Vicari led the discussion and ultimately the County realized the importance and cultural significance of clams and oysters in the bay. The County came up with about \$40,000 for equipment and shellfish seed and at that point the process began.

A series of classes were announced through the Rutgers Cooperative Extension and advertised as Shellfish Gardening. Topics such as Clams 101, water quality, anatomy and physiology of clams, how to raise clams, and eat clams were in the original syllabus for the class. The blueprints for how to grow shellfish came from commercial growers and the scientific affiliations with Rutgers University, the Aquaculture Innovation Center and the NJ Bureau of Shellfisheries. Classes were held in the Agricultural Center on Whitesville Road in Toms River, New Jersey, weekly for 6 weeks. Among that first class of 27 were members with unique backgrounds. Teachers, outdoor educators, clammers, boating enthusiasts, marina owners, engineers, pilots, businessmen and women, locals and retirees looking to get out of the house were attracted. The common thread that served as the initial impetus for ReClam the Bay was a strong desire to be a positive influence on the waters near their homes.



The first two upwellers at Surf City Yacht Club and The St. Francis Community Center, both on Long Beach Island, New Jersey

# Thoughts into Actions

The enthusiasm that was generated in the classes grew into the reality of building the upwelling system to actually house and grow the clams. An upweller is a tank about 4 feet wide by 8 feet long by 2 feet deep containing silos (mesh bottomed cylinders). Silos are the holding chambers for the shellfish. They were made from 16 " PVC Tubes with mesh bottoms. Mesh covering the bottom of the silo holds the shellfish. The size of the mesh is matched to the size of the nursery stock to allow maximum water flow into the tank while still keeping the shellfish from falling out. Bay water is pumped into the tank holding the silos and flows up (hence the name Upweller) through the mesh and over the shellfish. When the water has risen through the shellfish laying on the screens it overflows out of the tank through a sluiceway or channel and back to the bay. Bay water is delivered to the bottom of the tank by a pump taking water from the nearby bay. Upweller silos had to be built from scratch and all hands were needed. There were several "Work Days" at the Agricultural Center. The upweller tanks came from various places including two commercial shellfish hatcheries. One was Biosphere in Tuckerton and the other was Bayfarm in Ocean County.





Silo making at The Cooperative Extension, Whitesville Road, Toms River. Jigs were made and silos fabricated from wide PVC tubing.

After working 6 to 8 hours a day, the work crews usually decompressed at a local establishment for some fun after the hard day's work.





The group which was formed to bring this plan into fruition was composed of the members of the first Shellfish Gardening class. This class included Christine Bednash, George Benedict, Rick Bushnell, Gretchen and John Coyle, Gary DeFranco, Ed Frankovich, Tom Green, Sal Gutilla, Mike Gyurisin, Mike Halbeisen, Bill Huelsenbeck, Bill Jann, Kermit Koch, Tom Kosiba, Josephine Kozic, Fred and Joan Kruszewski, Rich Labor, Gary Lavorgna, Joe McDonald, Dave McGeoch, Lily McBeth, Jim Merritt, Lou Padula, Patricia Richards, Jeff Seddon, Jerry South, Gerard Todini, Peter Trainor, and Jackie Vilichuka.



# Rich Bushnell and Al Nitche measuring and sieving clams at Surf City.

The group was led by Rick Bushnell, who would later become president. They decided to call this new organization "ReClam The Bay". Mike Gyurisin, with a background in finance and accounting, was instrumental in establishing ReClam the Bay as a 501c3 Non-Profit. By October 15, 2005 ReClam the Bay, inc. was incorporated. The name evolved because Gef Flimlin, who conceived the project, had posted a phrase on his cork board in the

office, "In order to Reclaim the Bay you have to ReClam The Bay."

Establishing and organizing ReClam the Bay took a great deal of effort. The necessary paperwork and finances needed to be established and all the equipment needed to raise the shellfish had to be built.. Although all the people mentioned above contributed their varied skills, the new RCTB needed the support of tradesmen in fiberglass, plumbing, carpentry and electrical work. One early member who built and installed most of the early upwellers was Tom Green. He worked tirelessly to get things running in the first few years.

RCTB got the attention of then Ocean County Executive, Joe Vicari, who praised the local focus on the Bay. DEP got on board when they saw that progress was being made. A \$40,000 grant from Ocean County and a \$20,000 award from EPA established the funding. The donation of a 23' Carolina Skiff by Oyster Creek Power Plant, operated by Exelon Corporation, would prove to be helpful for "in bay" activities. Although it would be several years and the involvement of a very helpful member, Jeffery Silady, before the skiff (appropriately named "Clambo") would be put to work. In 2005 two sites were started. One at Surf City Yacht Club and the second at St. Francis Church on Long Beach Island.



# Gef with RCTB Crew in Clambo ReClamming the Bay!

Upweller tanks and silos were purchased from Biosphere, a clam production facility located at the foot of Green Street in Tuckerton. Jeff Pritchert, the manager of that facility, was instrumental to RCTB in the early days. Pumps were purchased from Ohio.

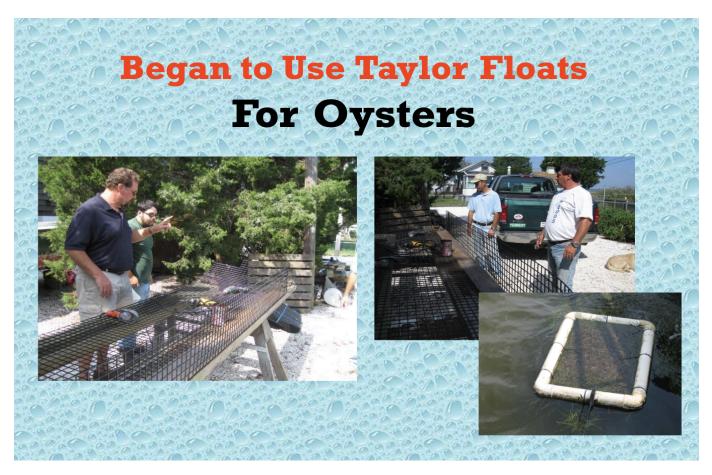
To get started, volunteers from the first Shellfish Gardening

Class were greatly supported by Gef Flimlin and Cara Muscio from Rutgers Cooperative Extension. And then more expertise chimed in. Dr. Gustavo Calvo from the NJDEP Division on Water Quality, various departments within Ocean County, John Wnek and students from the Marine Academy of Technology and Environment Science (MATES) all added their expertise. As time went on other DEP staff joined in.

Having the upwellers on line was just the start of the process. We had to show the results of actually growing shellfish! RCTB purchased 600,000 seed clams, approximately 2 mm in size (like a sesame seed) from local hatcheries such as the Crema's in AC, Billy from Brigantine, and Jerry Zodl. Teams of volunteers formed to perform the maintenance on the two upweller sites, kindly offered for use by St. Francis and Surf City Yacht Club. Cleaning was done weekly and sometimes was a social gathering as well as a working session. Curious onlookers joined the crew to find out just what was happening. With the exception of Gef Flimlin, the crews were unranked amateurs! It was a learn-as-you-go activity for people who until now had only confronted clams on their dinner plates or on clamming trips over summer vacations. Each weekly growth report drew exCLAMations of wonder from their teammates. The lessons learned in the Shellfish Gardening classes were coming to life. Early members report being very proud and surprised of their accomplishments. By the end of October the clams had grown to approximately ½ to ¾ inch but still needed to be nurtured longer to be able to survive in the bay unassisted. In nature only 1 in 1 million survive to adulthood from egg/sperm. But nothing goes to waste in nature. The unlucky become food for juvenile animals throughout the bay.

The next task was to overwinter the clams and oysters in bags on the bay floor. The experimental overwintering technique resulted in significant mortality of the first year's crop. But the group learned a great deal in the first year. What do you do with a bunch of live and dead clams? You have to sort them out and keep the ones that survived. Many hours were spent doing this. It was a great way to spend an afternoon! The oysters couldn't occupy space at the bottom of the bay over the winter, so

RCTB members had another work day and constructed a couple of Taylor floats. Floats are made of wire fencing that is bent into a 3'x12' wire basket surrounded by 4" PVC pipe as a flotation device. These floats were fastened to docks and heavy weight bags of oysters were wintered in them.



**Building Taylor Floats** 

# Let's try this again

A lot was learned from this rocky start and by 2006 ReClam the Bay (RCTB) had 70 volunteers and had fabricated an additional four Upwellers at Cedar Bonnet Marina (Tom Green's house/business), The Wheelhouse Marina (Seaside Park), Holiday Harbor Marina (Barnegat), and Barnegat Light Municipal Pier. The Upweller at Barnegat Light was operated the summer of 2006 by Eric Washburn as an Eagle Scout project with ReClam supervision. Evan had to get approval from Barnegat Light Borough. His project was conducted under the leadership of Stan Haviland and Ruth Reeder. Eric arranged the schedules and teams of volunteers. More "Work Days' led to more FUN. Each Upweller was plumbed a little differently and took on the character of the crews that manned them. RCTB grew 1.2 million clams that year! Our "grow out" improved due to overwintering clams on the bottom of the bay covered by protective screening, also made by ReClam's ingenious volunteers. The Sedge Island Marine Conservation Zone was one area used for planting clams. A Waretown

DEP lease site was also planted with many screens full of 6 month old clams. Currently, clams are

dispersed at sites determined by the Bureau of Marine Habitat & Shellfisheries.

The predator control screens must be cleaned routinely and volunteers did the dirty job all summer long and well into the cold winter, removing the biofouling from the tops of the screens.





**Evan Washburn, Eagle Scout** 



Fouled screen cleaning at Sedge Island

The following year in late fall RCTB would hold a "Rake-out" in order to move the 1 ½ year old clams to their forever homes throughout the bay. By rakeout time the clams were usually near the legal size of 1.5 inches. This event drew a large contingent of ReClammers and other volunteers who donned waders or wetsuits to brave the then cold waters at our lease sites. The event usually featured hearty bowls of clam chowder (what else?),

hamburgers and hot dogs, hot chocolate, and pot luck dishes from members.





Cold November rakeout at Waretown Lease site.



### 2019 Rake-out crop of Clams

Now where did ReClam put all of these clams? It's a secret! Really! What can be said is that the clams were broadcast into Barnegat Bay in areas that are not open to commercial clammers. DEP (if they purchased the clams we were growing) dictated the dispersal destinations. Many were placed in the Conservation Zone around Sedge Island. Many were placed in deeper waters with the understanding that they would populate future generations of naturally spawned clams throughout the bay.

Although many people we meet ask where our own "Honey Spot" is, the answer is......RCTB doesn't give out that information!

# Through the Years...

For most of the volunteers being in or around the bay while combining their working skills was an ideal situation. All the while they were constantly passing on the benefits of the shellfish filtering of the bay to the general public. The Upwellers drew the attention of people passing by the sites, summer campers, families, and the curious. RCTB also drew the attention of many recent retirees and local advocates for the environment. Enter Rick Bushnell who got the bus motoring. He was an original member of our first Shellfish Gardener Class and brought with him his business expertise and financial acumen to lead RCTB through many years ahead. Marine construction business owners, like Tommy Green, shellfish growers like the Parsons family, teachers and outdoor enthusiasts like Dr. Jim Merritt, and multi-tasking do-it-alls like Dominic Tumas and Lou Fellner, additional leaders like Albert Nitche, who expanded the activities to the south end of LBI, and seamstress/embroiderers like Kathy Cannata, ReClam really drew a full house of talent. Even retired Air Force pilots and Bay enthusiasts, like Marty Sedlacko, became involved. The enthusiasm and followthrough of these lovers of the shore helped get ReClam started.



Rick Bushnell and Tom Kiseba measuring clam volume.

# **Giant Clams?**

In 2006 Gef Flimlin had an idea of fabricating giant clams from fiberglass as part of an awareness program. It was to be like the Cows in Chicago or Mermaids in Norfolk, etc. and would draw attention to the newly formed organization. The idea was to ask merchants for a \$3,500 donation (\$1,000 to fabricate the clam, \$500 for the artist to paint it and \$2,000 for the RCTB treasury) to locate the clam at their business for the artistic appeal and community involvement. The idea sparked some goodhearted debate. Jim Merritt thought it was "the dumbest idea ever conceived." Rick Bushnell kind of liked the idea but put a different "spin" on it. He and Cara Muscio suggested that each clam would have a plaque with a "fun fact" about the bay and the creatures that live in it. Then, he said we could make it an educational game to have tourists visit the clams and learn the fun facts. Cara Musio chimed in with the fun facts and Gef Flimlin got to work finding sponsors, artists, and someone to sculpt and build the clams.



Giant Clams invade LBI

Lillian Vespertino, the sculptor of the original Clam, the Santa Clam, and the LBI Christmas Parade

With the help of local artist and sculptor, Lillian Vestertino, a prototype was developed for and served as a 2 foot model for the 5 1/2 foot tall finished product. What started as "one big ass clam" due to its unique view from the rear, has grown to over 34 clams throughout Ocean County that include a QR code to link clam observers to promotional offers from sponsors. Our Clam Trail covers the shore areas in Ocean County bringing retailers, the Arts, restaurants, and businesses together to promote our Bays and ReClam activities. This concept won RCTB a Tourism award from the State of NJ in 2008.

By 2007 there were enough clams up and down Long Beach Island that RCTB wanted to show them off in the Christmas parade hosted by the Ship Bottom Borough. This event has been continuous since initiation and is a fun day for all involved.

Bob Stohrer owned the Shell gas station in Manahawkin and was the first business to sponsor a clam. As a community leader he wanted to be involved so he also provided one of his trucks to carry several of the clams in the Christmas Parade. This was the first year that RCTB participated in the parade and it has participated every year since; winning several "best in show" for the nonprofit category along the way. The first few years Rick Bushnell organized RCTB involvement. Subsequently, Dominic Tumas and Marty Volz organized it with participation by 10 to 15 RCTB members walking the parade route. In 2024 ReClam won second place with their Clamastoga Wagon entry.



RCTB shows off their Giant Clams, part of the Clam Trail, in the Ship Bottom Parade Asbury Park Press, Asbury Park, New Jersey August 08, 2007



"Digger" Marty Volz, "Sheriff" Ted Duda, and "Driver" Joe Shisler manned the RCTB Western themed float in the 2024 Ship Bottom parade. We won 2nd place!



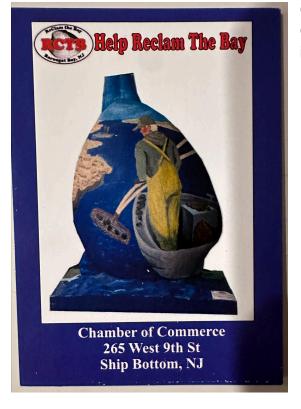
2008 Christmas Parade

### Giant Clam Locations

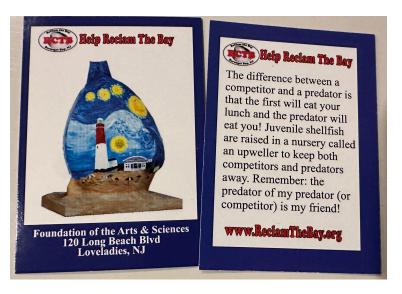
- 1. Barnegat Light Post Office 10 West 10th Street, Barnegat Light, NJ 08006
- 2. Bayview Harbor Marina 1301 1601 Bayville Ave., Barnegat Light, NJ 08006
- 3. Bayview Harbor Marina 1301-1601 Bayville Ave., Barnegat Light, NJ (2 clams at this location)
- 4. Bayview Park 6805 Long Beach Blvd., Long Beach, NJ 08008
- 5. Van's Rowboat Rental 801 Bayview Ave., Barnegat Light, NJ 08006
- 6. Viking Village 1801 Bayview Ave., Barnegat Light, NJ 08006
- 7. Off the Hook 1905 Bayview Ave., Barnegat Light, NJ 08006
- 8. High Bar Harbor Sunset and Arnold Blvd., High Bar Harbor
- 9. Robbie's Loveladies Marina 9 Lighthouse Way, Loveladies, NJ 08008
- 10. LBI Foundation for the Arts and Sciences 120 Long Beach Blvd., Loveladies, NJ
- 11. Sunset Park Holly Ave. at W. Salem Ave., Harvey Cedars, NJ 08008
- 12. SandBar Golf 105 N. 10th St. & The Boulevard, Surf City 08008
- 13. Scojo's 307 N. Long Beach Blvd., Surf City NJ 08008
- 14. Southern Ocean County Chamber of Commerce 703 Mill Creek Rd Unit G, Manahawkin, NJ 08050
- 15. Haven Beach Club Kentucky Ave. and 17 Long Beach Blvd., North Beach Haven, NJ 08008
- 16. Spray Beach Yacht Club 23rd Street, Beach Haven, NJ 08008
- 17. ABR Construction/Angelo Romas 325 Ninth Street, Beach Haven, NJ 08008
- 18. Bay Village, Taylor and Long Beach Blvd., Beach Haven, NJ 08008

- 19. Beach Haven Veterans Park, Engleside Ave. at S. Beach Ave., Beach Haven, NJ
- 20. NJ Maritime Museum, 528 Dock Road, Beach Haven, NJ
- 21. Beach Haven Shellfish Nursery, 420 Pelham Ave. and Bay Ave., Beach Haven, NJ 08008
- 22. Holgate End of the Island Park, Long Beach Blvd. and W. McKinley Ave., Beach Haven, NJ 08008
- 23. Mud City Crab House, 1185 E. Bay Ave., Manahawkin, NJ 08050
- 24. MATES, 185 Cedar Bridge Road, Manahawkin, NJ 08050
- 25. The Learning Experience, 1600 N. Route 72, Manahawkin, NJ 08050
- 26. Tuckerton Seaport Museum, 120 W. Main Street, Tuckerton, NJ 08087
- 27. American Abstract Agency, LLC., 513 Central Ave., Ship Bottom, NJ 08008
- 28. Gifted by the Sea, 6115 Long Beach Blvd., Brant Beach, NJ 08008
- 29. The Cheese Shoppe in Surf City, 1800 Long Beach Blvd., Surf City, NJ 08008
- 30. The Cheese Shoppe in Beach Haven, 615 N Bay Ave., Beach Haven, NJ 08008
- 31. Traders Cove Marina and Park, 40 Mantoloking, NJ 08723
- 32. Friends of Island Beach State Park, IBSP Interpretive Center, Route 35, S. Seaside Park, NJ 08752
- 33. Toms River Seaport Society, 78 E. Water Street, Toms River, NJ 08753
- 34. Lavallette Borough Hall, 1306 Grand Central Blvd., Lavallette, NJ 08735

2023 brought the Clam Trail into the digital age with interactive QR Codes that offer discounts, fun clam facts, or other advertisement opportunities for participants. Prizes were also offered for those who completed the series of Giant Clams. This technology enables the organization to track the number of "hits" on the site and offer real data to potential advertisers.



Clam Cards were given out at establishments along the Clam Trail for a few years. The cards became fun collector items with a photo of the Clam and a fun fact.





# Visit the CLAM TRAIL









The cooler months are the perfect time to experience the Clam Trail

Scavenger Hunt! Discover LBI in a whole new way, and learn interesting facts about the bay and the region.

You can earn a Certificate of Completion and get a ReClam the Bay Explorer Pin. More details and clam locations can be found here:

https://reclamthebay.org/the-clam-trail









# Keep Calm and Clam On

Let's get back to our mission. Our mission is to educate the general population on the benefits of shellfish to the health of the Bay, outreach, and helping restore the shellfish population in the Bay. RCTB does this by continuing to learn about the Bay and its immediate surroundings. Each year, the Rutgers Cooperative Extension of Ocean County hosts the Coastal Stewardship course which is a part of the Barnegat Bay Shellfish Restoration Program (BBSRP) and the collaboration with ReClam the Bay. The Coastal Stewardship class provides a fundamental educational experience many RCTB members have taken. This ten week course covered topics including Marine Ecology, Shellfish Biology and Aquaculture, Water Quality Monitoring and Shell Recycling, Shellfish and Seagrass Restoration, Habitat Restoration and Living Shorelines, and Climate Change and Coastal Resiliency. Graduates may attend future classes to learn current issues or refresh prior learnings.. This course serves to introduce new members to the "old timers" and refresh the memories of all after a long winter's nap.

The health of the Bay has become an increasingly important topic. Climate change is real. Gradually people have pricked their ears to the urgency of global warming, sea level rise, pollution, and the future of our environment. People are listening. ReClam is teaching through venues like Fairs and Festivals, Speaker's Bureau, Shellfish in the Classroom, and merchandising. ReClam is in the forefront of getting the word out. By focusing our motivation on factual education and inspiration by actions, we hope to set an example of stewardship for future generations. As Gef Flimlin once said, "Clams filter from the bottom up." ReClam the Bay is a single cog in the machinery that drives an ecologically minded community of organizations. Over the years we have collaborated with many. ReClam values its relationship with academic institutions like Rutgers University, Stockton University, MATES, and others. The Barnegat Bay Partnership, Save Barnegat Bay, The American Littoral Society, East Coast Shellfish Growers Association, Clean Ocean Action, NJ Maritime Museum, LBI

Foundation of the Arts and Sciences, etc. have all been partners with RCTB on various projects.



Stan Haviland and Jim Merritt at Chowderfest October 2018

# Fun, Fairs, and Festivals

Who doesn't like a warm day spent at a local County Fair or Festival? When living in a resort area, most weekends include events somewhere nearby. By having a booth at Fairs and Festivals ReClam can bring live animals to the people. Even though watching oysters filter water isn't a lively activity, it is amazing to see how quickly they can filter water right in front of your eyes. Everyone likes to see the tiny syphons protruding from the clams as they are filtering.

Scallops are more fun to watch even though they aren't our prime performer as they clatter around the tank. Their blue eyes are mesmerizing!

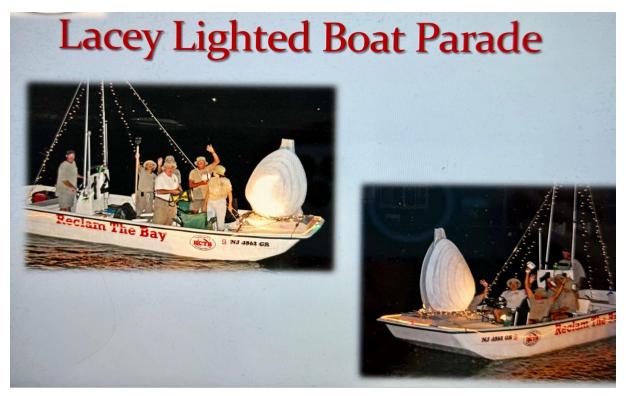


The Fair and Festival season is year round now, but the early days of ReClam were marked from the May Day Festival to the Chowder Fest in October. Some ReClammers are real naturals at captivating an audience. Bruce Beveridge remembers "jumping into ReClam with all four feet". He has a wealth of knowledge about shellfish and has started his own website called Barnegat Bay Shellfish to add links to local fauna. He taught us to look deeper into animals and their lifestyles,

predators, and individual characteristics.

Bruce Beverige at Lavallette Founders Day 2019

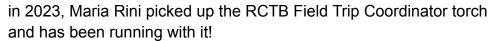
John and Deb Licatoa-Meiman and Frank Vives at the Beach Plum Festival in IBSP 2015.



2009 Clambo with Jeff Silady, Frank Vives, Marty and Caroline Sedlacko, Linette Lurig, and Kathy Canatta aboard.

# On the Road with ReClam

There is so much to be learned from watching others. ReClam is a small fish in a big sea of information. Diane and Louis Louis joined RCTB in 2012 looking for an ecology minded group to join after retirement. They were soon involved with Cattus Island Upweller and were drawn into education by Frank Vives. Their great organizational prowess led to the formation of educational field trips to Aquaculture Innovation Center, Haskin Lab, Bayshore Center at Bivalve, Viking Village, Parsons Seafood, John Schriever's clam farm, Tommy Burk's oyster farm, and many other enriching trips for RCTB members looking to reach beyond local confines. While expanding the knowledge base of RCTB members, these excursions connect members socially as well as educationally. More recently,





Haskin Lab, Bivalve, NJ summer 2017- Jack Duggan, Ed Pietrowicz and Marty Volz learning from Aquaculture Innovation Center staff

The Sedge Island Natural Resource Education Center (currently under the auspices of NJDEP Fish and Wildlife) has been a venue for teaching and outdoor education since the start of ReClam the Bay. Not only does ReClam help maintain a lease operation on the West side of the Island, but the building provides a location to immerse ReClammers into Bay culture. This collaboration has been an ongoing benefit to both organizations. Dr. Jim

Merritt, a member of the first Shellfish Gardeners class and an original ReClam member, worked as the director of programming at Sedge Island. ReClammers have enjoyed many adventures at the Sedge Island preserve.

**Viking Village Tour** 



Pete McLane House at Sedge Island





All hands on deck for the rake out and lease clean up at Sedge Island 2024



Cleaning Taylor Floats at Sedge Island 2023







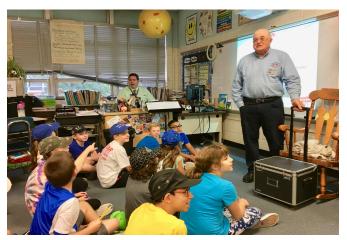
Working lunch at Sedge Island

# Can we take an Oyster to School?

It seems surprising to think that some members of the public are unfamiliar with the Bay that is almost in their backyards! Early in ReClam's organizational formation, outreach to schools was introduced and encouraged. In 2010, RCTB member and Vice President Wes Dalzell and Cara Muscio from the Cooperative Extension office collaborated to develop a curriculum for schools targeting the 4-5 grade level. In 2012, over 230 school children experienced ReClam the Bay activities in their schools. The Shellfish in the Classroom program has expanded significantly since then. In 2024, we reached 1,300 students in 12 schools throughout the state, as far north as Edison, NJ and as far west as Cranbury, NJ. Younger students learned about the ecological benefits of shellfish in our bays, including health, resiliency, habitat creation, and



shoreline stabilization. Older students were also introduced to scientific equipment used in assessing some environmental conditions and were able to grow oysters in their classroom with equipment supplied by RCTB.



Retired teacher and RCTB Volunteer, Frank Vives, teaching school children in Frog Pond Elementary school 2018.

COVID did slow down the expansion of the educational programs, but ReClam used the time wisely. Curricula were recreated for various age levels, presentations were created to add multi-dimensional approaches, and kits were assembled to provide hands-on viewing of animals. In the 2022-2023 school year RCTB reached out to

over 800 students. The 2023-2024 year saw 1,300 contacts!!



Weekly demonstration by RCTB Volunteer, Ellie Sawyer, at Maritime Museum in Beach Haven during July and August Deb Licato-Meiman has expanded outreach from pre-school levels to college. As of the first half of 2024 over 1,500 children have had a ReClam presentation in their classrooms, libraries, or preschools.

RCTB members Al Fasano and Wes Dalzell created a miniature upweller at Jenkinson's Aquarium in Point Pleasant Beach. This exhibit is a live demonstration of an upweller in action. The collaboration with Jenkinson's staff and RCTB is educational for both groups. Through sponsorships with West Marine, Woodhaven Lumber, and Petco, this project was opened in 2022. An ongoing collaboration with the Aquarists at Jenkinson's is a valuable resource for future programming and research.



Al Fasano with the Point Pleasant RCTB Exhibit in the construction phase



Upweller exhibit at Jenkinson's Aquarium, Point Pleasant, NJ

# We Talk a Good Game

Getting the word out to all levels of the population is imperative for the RCTB mission. The speaker's bureau has brought ReClam's message to many organizations throughout our region. Garden Clubs, Rotary Clubs, Homeowner Associations, Scout Troops, Church Groups and others benefit from this particular hands-on approach to learning.

In recent years there has been, and will continue to be, an uptick in people interested in "living shorelines" and oyster reefs as a method of mitigating the effects of wave action and sea rise. ReClam has been a part of several restoration areas around Barnegat Bay including sites located in Forked River, Green Street, Iowa Court, Mystic Beach, Parkertown, and Mordecai Island. As the water levels continue to rise and the weather patterns continue to intensify throughout our coastal systems, neighborhoods are feeling the effects in their own backyards. This evolution has brought new attention to the benefits of shellfish. People want to know more about the threats to their

immediate environment and what they can do about it. While RCTB doesn't have all of the answers it can become part of the solutions. ReClam has teamed up with other action groups such as The Littoral Society, Clean Ocean Action, Save Barnegat Bay, Barnegat Bay Partnership, The Maritime Museum, Tuckerton Seaport Museum, Toms River Seaport Museum, NJDEP, NJ Fish and Wildlife, The Friends of Island Beach State Park, NOAA, and many others to discuss where we are going in the future.

# You've Gotta have a Tee Shirt

Of course! ReClam the Bay has had many tee shirts since its origin in 2005. What started as an attempt to advertise ReClam while adding appeal to closets has evolved into a monumental economic support to ReClam. Kathy Canatta's part time embroidery business served to start an interesting sideline for ReClam. Kathy embroidered the logo for ReClam onto one of her white tee shirts to wear while cleaning the upweller at Island Beach State Park Marina. After one particularly messy cleaning



day, she quickly realized ReClam needed a different color tee shirt! Finding a special medium brown cotton tee shirt she created the illustrious Mud Shirt. From then on, receiving that particular "clam poop" brown color shirt became the traditional gift to Clam College spring semester attendees along with a pair of gloves. Many old timers still wear theirs with pride to this day. The idea of parlaying the logo and message to merchandise took a leap in 2017 when our supply of Mud Shirts were running low (and Kathy had retired to Florida). The "Keep Calm and Clam On" shirts had been a roaring success and had mostly sold out by 2017.

### Bill Walsh wearing his mud shirt for upweller duties



As with all progress, new leaders are needed to further the cause. The call went out and Fran Sanchez answered with enthusiasm. Her creative, organizational, and merchandising skills have meant the difference between functionality and fashion forward fundraising. Whether it's individual donations, our yearly raffles, memberships, partnerships and grants, or selling our very trendy merchandise, we raise the money we need to support our mission. Without

funding we would not be able to maintain our upwellers, purchase the clam seed or oyster larvae we raise, maintain our watercraft, or buy the educational materials needed for our Shellfish in the Classroom. Funding is a vital branch of RCTB as it affords us the opportunities to sustain our programs and continue the education. Our merchandise not only provides funds, it also makes us more visible in the community. It is a way to "clam on" and get people talking about us. And it has worked! Although we have new merchandise available every year, occasionally you can get a glimpse of our veteran members wearing their "vintage" yet classic and endearing RCTB clothing. Just show up at a meeting or event to see for yourself.







The first ReClam the Bay shirt is believed to be a pocket tee with our logo individually embroidered above the pocket. Many other shirts would be created in a variety of colors and designs throughout the years. Cheryl McCurry was the volunteer in charge of merchandising from about 2017-2019 when she created a design that would be used for a number of years. This design, with an oyster flexing his muscle and cleverly signed by A.W. Shucks, came out in March of 2018. There were two different sayings accompanying the oyster: Powerful Friend of the Bay and Humans Filter beer, oysters filter the bay.

Marty Sedlocko in his first embroidered shirt, made by Kathy Canatta





At the time of our twentieth year celebration, the Humans Filter Beer, Oysters Filter the Bay design is still popular and sure to get a chuckle at our events.

RCTB also began using Shopify, an online store where customers can purchase or make donations by credit card or check. By then William

Seddon, Jeff's son, became the go-to person to set up the sales venue. Shopify has allowed for real time inventory updates and numerous analytical calculations. By 2019, Heather Butera joined the sales team and worked together with Fran Sanchez to keep the store stocked and merchandise shipped and transported to various events.



Merchandise and educational display in Huddy Park, Toms River July 2022



In 2022, RCTB began sourcing most of its clothing line and design work from Jetty. Jetty, a B-Corp Certified company, is known for their high quality and sustainable printing practices and supporting coastal communities through their nonprofit arm, the Jetty Rock Foundation, which has donated millions of dollars to clean water

initiatives and disaster relief efforts for over a decade. They are the perfect fit for ReClam the Bay. The following designs have been used on a variety of hoodies, long sleeve shirts, UV shirts, tee shirts, and youth, toddler, and onesies. The expanded color line and diversity soon filled the RCTB store and sales soared to a new level.

ReClam the Bay's first design by Jetty has now become a classic, being the highest profit margin for this non-profit organization. The design says it all in a very simple yet meaningful way: clam rake, oyster tongs, and three single bivalves which are dear to our mission.





# The following Jetty designs came after this initial one:

2020-Rakes and Shells design on unisex tees, women's v-necks, hoodies, UV shirts

2021-Happy as a Clam design on toddler tees and onesies

2023-Map Upweller design on unisex tees, women's v-necks, youth tees

2024-Clam Seed design on unisex tees and a tank top

2024- "Get on Board" design on tees and a long sleeve tee

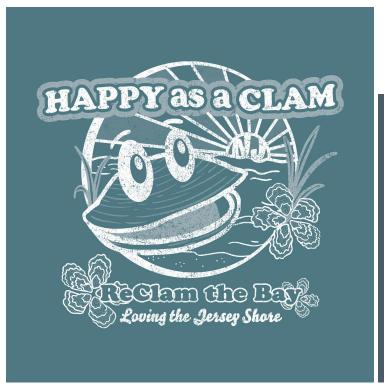
2024-Map Upweller design updated to include the 13th Upweller at Normandy Beach





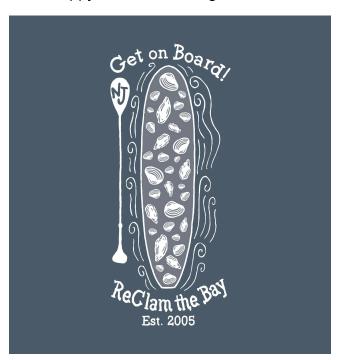


These three designs were used on the front of the Jetty shirts.



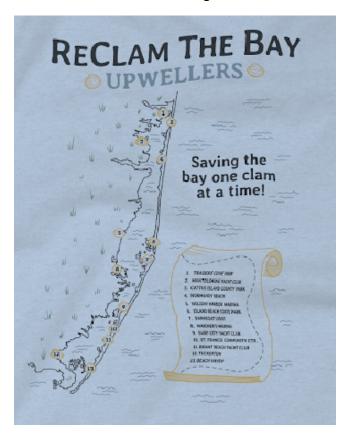


2021 Happy as a Clam Design



2024-Get on Board Design

2023-Clam Seed Design



2023/2024-Upweller Shirt





In addition to shirts, RCTB hats have been very popular. The Adams Hat proved to be a good quality choice for our embroidered logo. From solid blanks to brim color variations, both have been popular with our members and supporters. A trucker hat was introduced in about 2022, with a simple clean line version of the RCTB logo, which proved to be a popular addition and style.

These "Epic" style hats, also an Adams Hat Brand, are available in three colors and have repeatedly sold out.

Our warm knit embroidered "Clam Beanie" and clam hat entered the scene in 2023 and 2024 respectively. Here three volunteers, Fran Sanchez, Heather Butera, and Ted Duda, display the hats while participating in the Ship Bottom Christmas Parade on Long Beach Island in December 2023.

ReClam the Bay has had a regular presence at the Surf City Farmers Markets since at least 2018. These summer long Monday morning markets have



allowed RCTB volunteers to educate market visitors and local residents about the bay. They also provide an avenue to sell our merchandise and raffle tickets, meet new volunteers, and inform the public about our upcoming bay and upweller activities.

All the merchandise has a purpose: to raise funds, to make our logo visible and get the word out on the great work ReClam the Bay is doing!



August 2024-Surf City Farmers Market Paul Brown, John Montone, and Bill Walsh and a future ReClam the Bay Volunteer



Busy ReClam booth at 2024 Beach Haven Chowder Cook-Off

# Holding the Line

At the inception of ReClam the Bay it was the clam that stood as the focus and tool of our educational efforts. Very shortly thereafter the organization evolved to add the oyster to its champions. After all, oysters filter the bay at a greater per animal rate than clams, but they just can't survive on the floor of the bay due to the very muddy bottom in many areas. Clams can live on the siltier bottom.

In 2007 Gef Flimlin raised the idea of raising oysters from spat-on-shells with the Shellfish Gardening (Clam College) classes. The students soon learned that Gef was talking about experimenting with raising oysters from larvae that would undergo metamorphosis and set (or attach themselves) on clam or whelk shells and then become known as spat. This was indeed a shift from growing clams in the upweller tanks. The experiment of raising oysters took place in spat tanks located first at Ocean

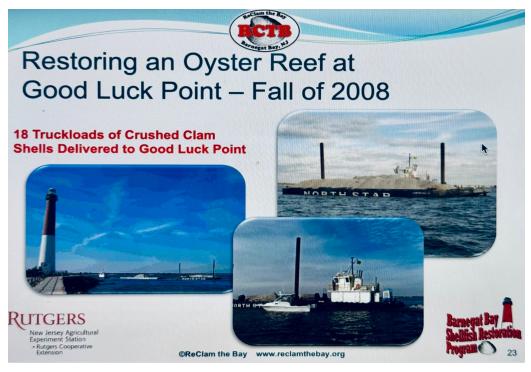


Gate Marina in 2009 and then also at Cattus Island in Toms River the following year.

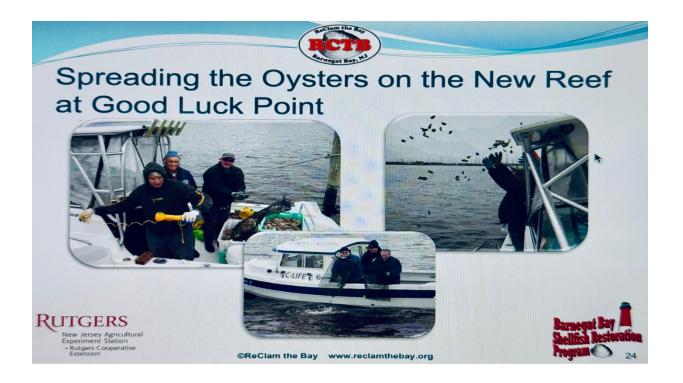
#### Mordecai Island in Beach Haven

Prior to initiating this spat-on shell trial, RCTB volunteers met several times with Rutgers Marine Scientists and two professors from the University of Maryland Donald W. Meritt and Donald W. Webster, to learn techniques for raising oysters from larvae. Eyed larvae (larvae ready to set on a shell) were obtained first from the Rutgers Haskins Lab in Port Norris and later from the

Rutgers Aquaculture Center in Cape May. However, the results of these early experiences were found to be only marginally successful. It could have been the water quality, the learning curve of the volunteer spat tank operators, the weather, or a dozen variables that negatively affected the outcomes. A successful larvae to spat ratio is deemed to be a ten percent rate, however the Cattus baby oyster yields ranged from zero to just five percent. The results of these attempts to start oysters from larvae were dispersed amongst a Tuckerton Parson's reef, Good Luck Point reef, or at the discretion of DEP, placed at a Delaware Bay or Mullica River site.



2008 Oyster disbursement at Good Luck Point



Raising oyster spat from larvae is a meticulous process fraught with potential hazards. An oyster larvae cohort arriving from a spawning facility must be ripe and ready to set, they are carefully transported in a cooler bag or in their spawning solution, the larvae next are dispersed into the spat tank and must set on a shell within three days. Any interruption, deviation, or unexpected occurrence during the process may cause the cohort to crash. At Beach Haven our spat tanks have experienced power outages, lightning strikes, and invasive marine life all to the detriment of the spat set. Nevertheless you plan for what you can and allow for Mother Nature to have an impact. Over time our success rate for raising spat at Beach Haven has ranged from a low of a 4.5% set rate to a high of 21.2%. It's not about the numbers, but about the experience at raising spat. Later years have seen better success rates.

While the Cattus Island experiment continued, two Beach Haven Volunteers, Albert Niche and Jack Duggan, met with Mordecai Island Land Trustees (MLT) in the spring of 2014 to propose a plan for shoreline stabilization using shell bags and spat on shell to stem the forces of wave action that were seriously eroding the Mordecai Island western shoreline. Shortly after this meeting a Memorandum of Understanding was initiated between MLT and RCTB to work toward stabilization of the southern section of Mordecai Island.

Mordecai is a twenty-seven acre sedge island that sits to the west of Beach Haven in the open waters of Barnegat Bay. The island's continued existence is of great importance due to it being a sanctuary for shore birds and terrapins as well as serving as a buffer to blunt the force of devastating storm wave action from reaching the Beach Haven shoreline. The Army Corp of Engineers has reported that Mordecai has lost almost half its size in the last one hundred years. If no remedial action is taken the island may be washed over and disappear within twenty to thirty years. While RCTB would target its efforts on the southern section of the island, the Army Corps and MLT would restore the north.

# RECLAM THE BAY: Group to educate public on restoration



Bob Handschuh of Ocean Gate, along with other volunteer ReClam the Bay shellfish gardeners, clean out the upweller at a clam and oyster nursery.

# ellfish, anyone'?

By KIRK MOORE

Summer visitors and families can get a first-hand look at baby clams and oysters being raised for the Barnegat Bay Shellfish Restoration Program. when its ReClam the Bay volunteers host open houses at their clam nurseries around the bay shore.

The group is raising some 100,000 seed clams this summer as part of its public education effort to teach people about the bay's environmental prob-lems and what they can do to help. Volunteers at each location will explain how the shellfish feed and grow, and why they are an important part of the bay ecosystem.

Nurseries will be open for visits at these locations and times:

and times:
Surf City Yacht Club,
Ninth Street and the bay in
Surf City, Thursdays at 5
p.m. to Sept. 2.

Island Beach State Park
Marina, 24th Avenue and
the bay, South Seaside
Park, Mondays at 1 p.m.
until Aug. 30.

Museum of New Jersey
Maritime History, Dock
Avenue at the bay, Beach
Haven, Fridays at 11 a.m.
until Sept. 3. until Sept. 3.



Rick Bushnell of Surf City and ReClam the Bay holds a spat on the shell, which are oysters growing on a large clam shell (below).

Barnegat Light at 10th Street and the bay, Fridays at 11 a.m. until Sept. 3.

■ Mantoloking at Bay and Downer avenues, Fridays at 10 a.m. until Sept. 3.

Holiday Harbor Marina, 115 Admiral Way at the bay, Waretown, Saturdays, at 8 a.m. until Aug. 28.

For information, call the Rutgers Cooperative Extension of Ocean County at 732-349-1152, or visit www.reclamthebay.org.



Ocean Gate Upweller and Spat tank, July 2010



Calving of shoreline along the SW edge of Mordecai.

During the summer of 2014 Dominic Tumas, Ed Pietrowicz, and Jim Dugan joined the core team. RCTB Crew Members at Beach Haven worked to fill shell bags. The first test bags were laid off Mordecai Island in November of 2014.



Dominic Tumas, Jim Dugan, and a Community Volunteer adding bags to Mordecai shoreline site.

Early efforts to raise spat on shell at Beach Haven were conducted in a single grow out tank and operated by a small cadre of adventurous RCTB volunteers. The first set of spat on shell bags were culled from the tank late August 2014. The set contained a good sample of spat fixed to shells. The

spat bags were then boated out to the waters off Mordecai Island to test winter survival. The Spring 2015 examination verified many juvenile oysters had survived and thrived. Success meant that the Mordecai project would move forward. The site now includes two spat tanks, an upweller tank, a flupsy (floating in the bay upweller system), and a shell bagging enclosure.

The construction of a 600 foot shell bag reef off Mordecai Island continued for several years during the decade with support from the Army Corps of Engineers who gifted RCTB \$2000 to purchase shells for bagging and with funding directed to the project from MLT and RCTB. Bagging shell is a time and energy consuming process and bags can be deployed only when the tide is low and the weather and wind cooperate. The reef design called for foundation bags to be situated on the sandy bottom of the bay and spat on shell bags to be placed on top of the foundation bags preferably at mid-tide level. This technique is similar to building a house on blocks. First the foundation is laid and then the living quarters are fixed on top. In our case the living quarters are the spat-on-shell bags. During early construction and continuing until this day the Beach Haven Crew will draw a number of

the deployed shell bags off the reef and inspect for survivorship and mortality. Coincidentally with this inspection an additional twenty five varieties of marine life have been found inhabiting the shell bags, hence, the term Living Shoreline has been coined as a more fitting descriptor of the shell bag reef.



RCTB Volunteer, Aileen Alonzo helping to transport bag shell

Volunteer shell baggers meeting to ready bags for deployment at Beach Haven



Fred Orlandi, Ted Duda, and Ziggy Bomba placing bags at Mordecai



Atlantic City
Electric
volunteers at
the shell
bagging center
in Beach Haven



# The Spat tank is warmed up and ready to receive oyster larvae

A bubbler, tank heater, and plumbing were installed. Bags of cured surf clam and whelk shells were fitted into the tank and larvae were purchased from Haskins Labs in Port Norris. The "Set rate" (number of baby oysters that adhere to the shells) has varied over the years.

Most of ReClam's early attempts at clutching (growing) oyster larvae varied greatly. There are as many reasons for successes as for failures. But each attempt furthered the understanding of the

process and increased the understanding of the results. In 2023 ReClam had a 22% success rate on one set of spat! This is impressive since one year ReClam had a 0% spat rate at our Cattus Island Spat Tank.



# Loading bagged shell onto the RCTB boat

After growing out the "spat-on-shell" for a couple of weeks, the bags are then transported to their next sites. ReClam would often get a bag brigade of volunteers to pass bags in lines to the RCTB boats, Clambo or Leaking Lena, and transport them to installation sites. Another "bag brigade" would offload the bags at the site for

inclusion on a new oyster reef or living shoreline. The inclusion of bag brigades into the process helps involve the public in a short term exposure project to hopefully peak their interest into further volunteering. This method has proven to work, being an effective way of helping potential volunteers "get their feet wet" in RCTB activity.



#### Bag Brigade of volunteers to Parkertown Living Shoreline

Work continues on the Mordecai Living Shoreline although it is now a formidable structure that has stabilized the southern segment of the Island. The most encouraging news is that there is no evidence of further shoreline erosion at the project site coupled with actual evidence of sand accretion (retention) between the shell bag line and the Island. The tide will work

to carry sand over the line of bags and drop it where it will build up the sandy floor base.



After several years the Island may be able to build out to the shell bag line and thus reclaim its 1977 shoreline. The work completed over this ten year period at Mordecai is staggering. A total of 13,180 shell bags and more than 1,500,000 baby oysters have been deployed to the Living Shoreline to stem the destructive forces of nature and protect Mordecai Island. And the work continues!

Mystic Beach Volunteers celebrating successful shell bag placement.



2024 view of western Mordecai Island showing oyster bags and backfill of sand and grasses.

#### Where are we going with this?

The work of RCTB at Mordecai Island has not gone unnoticed. Several articles about the Mordecai Project and the raising of spat on shell have appeared in such publications as The Asbury Press, The Press of Atlantic City, The Sandpaper, The Beach Haven Times and The Associated Press. Other shore towns engaged in beach replenishment projects have reached out to RCTB to participate in their restoration efforts on the Barnegat Bay mainland side.



In Little Egg Harbor and Tuckerton, RCTB capped off large rock sill stabilization projects by deploying 936 spat-on- shell bags containing 655,411 oysters. At Parkertown Beach RCTB added 897 spat-on-shell bags with an astonishing 2,022,750 oysters. For the most recent project at Mystic Beach, RCTB deployed 400 clutch bags (bags with live single oysters) to the open bay side of elongated rock sills and 400 spat-on-shell bags containing 1,112,762 oysters on the interior side of the rock sills. Community involvement in all of our RCTB projects are encouraged through several media outlets and the turnout is usually outstanding. The Mystic Beach Project alone saw more than 40 community volunteers come to participate in the deployment of spat on shell bags.

The expansive reach of RCTB will continue. We have served as advisers to several shoreline stabilization projects. The Cattus Island spat tank has been reactivated with an improved water quality now at that site. Potential projects north and south on the Bay are being explored. The raising of spat and the deployment of shell bags are anticipated to continue to be in demand as shoreline stabilization becomes of increasing importance to shore municipalities and RCTB stands ready to meet that demand.



Dominic Tumas and Heather Butera selling Raffle tickets at Chowderfest 2018.

How does ReClam keep our momentum going into the future? After the initial start-up funding was depleted, continued funding was needed to keep RCTB functioning and expanding. Surely members reached into their own pockets to subsidize expenses on many occasions. There were many talented craftsmen and women providing donated knowledge, equipment and TIME to the

cause. ReClam's early budgets were minimal. ReClam did have success with donations from some clam growers like Dale Parsons, Theo Gerik and John Schreiver. DEP Bureau of Shellfisheries historically buys some seed clams for RCTB and dictates coordinates for planting after the grow-out period. Oysters are used in living shoreline projects and for Shellfish in the Classroom. Donations of bay scallops, while dependent on availability, certainly liven up the diversity of the tank. The Bay Scallops are returned to their natural eelgrass beds at the end of our growing season in November. The individual upweller sites provide space for tanks and the electric power to operate the pumps 24/7 for the 4-5 months of operation. We want to acknowledge those who supported RCTB in the beginning because we were new and the investment demonstrated a belief that we would carry on as we have done for 20 years now.

Donation jars brought in some money, but it was quickly realized that more was needed. The Giant Clams brought in more revenue as well as recognition. That recognition is leading ReClam to acceptance as a group that puts its thoughts into action.

Early grants and foundation supporters include: The Myth, Exelon, Ocean County Tourism Board, The George and Miriam Martin Foundation, The Campbell Foundation, The Eiff Foundation, and The Mordecai Land Trust. Federal, State, County, and Local government grants and projects add to our growing collection of credits. Merchandising, as noted in a separate chapter, has also helped with funding. Our caring public has also recognized ReClam's efforts and sent individual and family donations. All of these funding methods help to keep RCTB in action.

### It's not about the numbers, BUT here are the numbers

It is hard to talk about raising clams and oysters without discussing the success rate by the end of the growing seasons. Even though it is not about the numbers, being successful draws a crowd. Organizations do learn even when they have less than stellar results. In nature only one in a million clams survives from egg/sperm to adult clam. Those are startling odds imposed by nature. Why such ominous odds? There are so many variables. Spawning (Mating) takes place in the water column, totally randomly. When the larvae are formed they become prime food for juvenile fish who make the Bay their nursery. Good for the fish, bad for the clams. Once the larvae develop their shells and drop to the bottom of the bay they become food for many predators such as crabs, moon snails, rays, drills, and whelks. Even hiding below the sand doesn't protect the clam. Larger clams are also sought after by gulls. Clams are on the human menu too. Historically, clams and oysters have abounded in Barnegat Bay. It is said that one could walk across Barnegat Bay on oyster shells in early colonial times.

There is evidence of shell mounds (middens) on the western banks of the Bay where many local tribes would summer by the banks to take advantage of the plethora of shellfish available. One such site exists at the Sands Point Harbor Preserve. It is located on 120 acres near the mouth of Oyster Creek as it joins Barnegat Bay. The site was once prominent enough to be seen by sailing vessels in the Bay and dates back to Late Archaic through Late Woodland Indian cultures per the NJ Natural Lands Trust.

Oysters through the years were considered a poor man's food. Every street corner in NYC and Philadelphia sold oysters to day laborers. There were two rail lines starting in each city and culminating in appropriately named Bivalve, NJ. The oystering industry was done in sailing ships, it was backbreaking work, and obviously weather dependent. A tour of the Bayshore Center at Bivalve, NJ revisits the early, and now obsolete, process of oystering in the Delaware Bay.

During the 1950's two diseases spread through the oyster population. Dermo and MSX wiped out the commercial oyster farmers by causing catastrophic death in the oyster population. Although not transmitted to the human population, oyster popularity in restaurants and seafood stores declined drastically. The State and Federal Government became involved in finding disease resistant strains of oysters to start a breeding program in order to repopulate the species throughout the area.

To add to the problem, the bays became more inhospitable to oysters due to the increasingly silty bottom habitat. To quote some researchers, oysters have become "functionally extinct" in New Jersey bay systems. Commercial farmers have had to use raised beds, floating beds, or cage and bag systems to bring oysters to market profitability. As of 2024 oysters farms have increased to 17 commercially throughout Barnegat Bay. Oyster bars are popular throughout the world. Oyster connoisseurs opine on the merroir of the many uniquely named oyster farms. (Forth North, Sloop Point, Cape May Salts, etc.) The Barnegat Oyster Collective is a site that acts as a collective of

businesses to distribute shellfish throughout the state and further. Its founder, Matt Gregg, was an early intern with ReClam the Bay.

RCTB has been involved in the research to promote a resurgence of natural oyster beds in the Barnegat and Delaware Bays. In 2008 RCTB tried to create an artificial oyster reef at Good Luck Point, just off of the Toms River. A large barge of shell was to be placed on the bottom of the bay. The enterprise started off poorly when the barge became grounded due to blow-out tides in the bay and they were stranded for over a month..

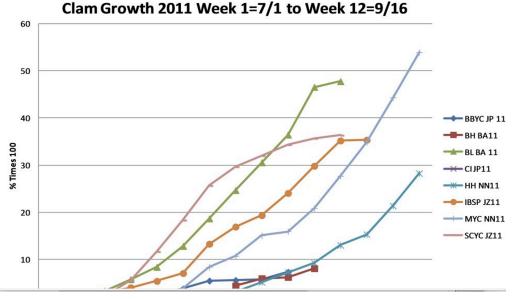


# Smaller barge dumping shell at Good Luck Point

The load of shells had to be dumped in one place to free up the barge. Then the shell had to be dredged and spread out into place along the bottom. Bags of spat on shell bags were deployed at the site. Again misfortune occurred when heavy storms that winter spilled large volumes of silt over the site. A year later another smaller barge was deployed in the area with additional shells, many of which were signed by children who visited upwellers and festivals,

or participated in Shellfish in the Classroom. The area was again seeded with spat on shell bags. Little or no evidence has been found of natural sets being started. We learn something with every endeavor.

And in October of 2012 there was Hurricane Sandy. Fortunately, most of our upwellers had been emptied for the winter and the clams were snugly under the mud with their protective mesh blankets. But several tanks situated on the bay shores were damaged or uprooted. Island Beach State Park, IBSP, upweller was found floating in the bay several blocks from her initial site. Members of ReClam also had to deal with damage to their private houses. With all of the recovery efforts, ReClam was able to assist some of the commercial growers by providing clams and oysters to ten farmers to help get over the devastating losses that were suffered.



Clam growth at upwellers during growing season 2011

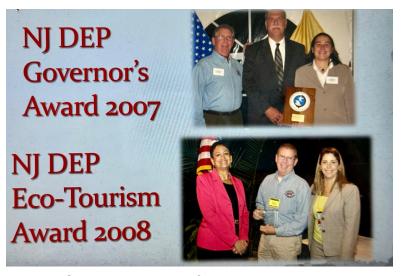
As you can see from reading this chapter there is a roller coaster of successes and failures involved in the history of ReClam the Bay. By looking at an overview of this timeline one realizes that, like agriculture on land, aquaculture requires taking care of the water in which we grow our shellfish and being willing and able to bounce back from setbacks.

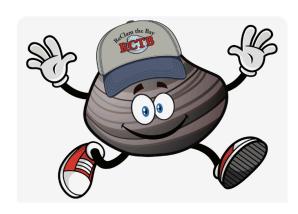
## Patting Ourselves on the Back

ReClam the Bay was recognized for their efforts.



Tommy Green and Rick Bushnell are Volunteers of the year as presented by Gef Flimlin, Extension Agent.





- 2008 Governor's Award for Tourism
- 2009 Honorable Mention Governor's Environmental Excellence
- 2012 NJDEP Healthy Ecosystems Program Environmental Quality Award



## Research, Research, Research

It is disheartening that innovation takes place more quickly when there is a problem to solve; but this seems to be the case when environmental issues are not addressed. When clams and oysters were so plentiful they

were considered "poor man's" food, no one stopped to think that there would be a time when they wouldn't thrive in the bay. Certainly early indigenous peoples loved the fact that this food source didn't need great effort to be found or captured. It even came in its own convenient storage container.

Over the years necessity has always been the impetus for invention. It has been so with ReClam over the years. By 2005 there were already few natural oysters in Barnegat Bay. Boys, like my father, who helped support their families during hard times, college-agers who paid their school fees, baymen who supported their families had all but disappeared. It is no wonder that by 2005 "Clams were harder to find". Each year of ReClam's data was carefully analyzed and different judgments were rendered as to the success or failure of this years' crop of clams. Alterations were then debated as to the water temperature, food sources, density of clams, and flow rates to and from the upwellers,

Some discussions were held of the brood stock used, the methods of breeding, and sizes ReClam started growing over the years. Adaptations were made, and the new seasons were started with high hopes. These great expectations are made by every "farmer" at the beginning of a growing season.

This is where ReClam resorts to the advice of the "experts". Research data is studied, journal articles are perused, Coastal Stewardship classes attended, talks with similar groups from around the world are initiated, and information from professionals is evaluated. ReClam has recently formed a connection with SeaWilding in Scotland and held zoom meetings to share data. (The award-winning charity, Seawilding, is the UK's first community-led native oyster and seagrass restoration project. Check their website at Seawilding.org.) The world is our oyster! Linda Peters, a citizen scientist, has been conducting research for several years near High Bar Harbor on natural setting oysters and local flora and fauna observed in the bay. Thanks to her observations, RCTB obtained a small scientific research permit in 2022 to study the natural spat of oysters in this area. Early growth efforts are promising, but require human intervention to overcome the heavy silting. Every farm needs tending!

ReClam is offering internships for the summer to students to explore potential new ideas. In 2024 ReClam offered three internships. One intern is exploring the effects of mercury paints on clam growth near marinas, one is working with a ReClam member experimenting with oyster reef formation, and one is leading a teaching session weekly at the Maritime Museum on Long Beach Island. Although the remuneration is minimal, the effect on the student and the environment is impressive and formative. ReClam continues to be impressed with the commitment of the students it has fostered. The summer of 2024 awards went to Ellie Sawyer who has been volunteering with ReClam since she was 8 years old. She is now a freshman in college and provides weekly talks at the Maritime Museum in Beach Haven.

## Young environmentalists awarded



2017 Junior Volunteer of the Year Award recipients Grace Sawyer, 12 and her sister Ellie, 11 (center) receive their honors from the Beach Haven contingent of Reclam the Bay. On Friday, August 18, the Beach Haven contingent of ReClam the Bay honored the Sawyer sisters of Weehawken and Beach Haven, with awards for 2017 Junior Volunteer of the Year in recognition of their dedicated, hands-on efforts with the non-profit environmental group. The Sawyer sisters have been filling shell bags and cleaning silos almost every Friday throughout the summer for the last three years. For each of the last two years they donated approximately \$300 to the group from money they raised selling American flags over the 4th of July holiday weekend. Grace also devotes a summer morning each week at the Museum of N.J. Maritime History in Beach Haven giving a presentation targeted for young people, "How Do Clams/Oysters Help to Keep the Bay Clean". COURTESY DIANE JOHNSON

Ellie Sawyer and Grace Sawyer, August 2017



#### Ellie and sister sold flags at age 8

Nick Guerriero has received his third summer internship award and is now a student at Stockton University. Owen Piepsak is a senior at The Peddie School and is doing hands-on work in the bay building an oyster reef. And the list will go on for the next generation of ReClammers.



Nick Guierre, above

Owen Piepszac, left



#### Curious? How to stay informed....

Reclam the Bay has developed various methods of keeping their members informed and provides ways to become Lifelong Learners. The ReClamtheBay.org website has evolved since its inception in 2006. Members and the public can keep up with events, festivals, upweller cleaning times, as well as shopping and educational articles. Class Members of the Shellfish Gardening/Coastal Stewardship classes have an

open ticket to attend all future presentations. This serves as a refresher course and a way to initiate new ReClammers. We can learn so much from our alumni. With the addition of the dual option of online learning ReClam can expand its reach to distant participants and homebound members through online programming.

Visit ReClamtheBay.org

Follow ReClam the Bay on Social Media (Facebook and Instagram)

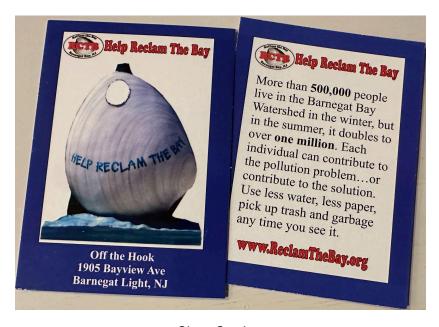
A RCTB Newsletter was created back in 2009. John Meiman now creates a Quarterly Newsletter, beginning in 2022. Copies of this Newsletter are available on the website. Members are encouraged to submit related articles to share with others.

The call for volunteers needed in our outreach programs is also aided by internet interaction. Reporting our hours on a weekly basis may seem excessive, but it is a way to assess the value of volunteerism. Many grants document participation through this method.

The action doesn't stop when the clams and oysters are put in their warm winter beds. Education doesn't take a winter break. Our speakers bureau is busy all year. **Shellfish in the Classroom** gets into full swing during the school year. Educators need to be educated in the skills needed to spark the minds of students, research grants need to be written, planned purchases for upweller maintenance need to be made, and budgets need to be finalized.

# "Unless someone like you cares a whole awful lot, nothing's going to get better" Dr. Seus - The Lorax

The future of ReClam the Bay depends on our dedicated volunteers keeping our learning and education efforts alive. The involvement and education of our youth, through Internships and Shellfish in the Classroom are crucial as are maintaining upwellers, restoration projects, and educating the public. Our efforts are worth it. The future of our bay depends on it!



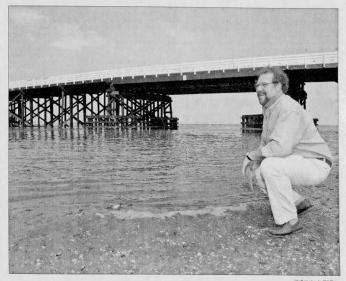


Clam Card Clam Seed

## In the News, Upwellers, and More...

#### Press of Atlantic City Atlantic City, New Jersey Tue, Apr 19, 2005 Page 7

## Part of the solution



Seaf protes by Bill Gross Gef Filmlin of the Rutgers Cooperative Extension in Ocean County kneels near the water off Great Bay Boulevard in Little Egg Harbor on Monday, Filmlin wants to repopulate the bay with clams by getting people who live by the water to raise baby clams, likening it to gardening.

#### Maritime agent proposes clam gardening

By MIKE JACCARINO

TOMS RIVER — Gef Flimlin is the



he says. "At worst, people will be educated."

Tom Koshiba of Ship Bottom is one of 20 volunteers who have already signed up for the plan.

"I decided to see what I can do to help the cause, so to speak," Koshiba says. He was on bayfront property on 13th Street and likes the idea of tending

Filmlin holds parts of a Taylor Float, a device used to grow the baby clams. Volunteers for his program would get a Taylor Float as well as 6,000 baby clams to raise.

the morning. They all have stories. They rejoice in nature and they provide food, and they're paid for it.

"You know, over 20 years. New Jersey has lost 900 full-time clammers?" he says. "Last time there was good clamming (around here) was in Little Egg Harbor. That was in 1988."

On the walls of his office is bric-abrac that can best be described as clam memorabilia. One poster from 1961 shows a clammer with a bucketful catch and the caption. "Eat Clams off a Halff Shell. (Ocean) County Clams are clean clams.

Despite all the reasons Flimlin can enumerate about why clams are disappearing, he has a short answer that wraps the topic up in a neat, tidy package.

Peonle love nature, he says. They love.

pearing, he has a short answer that wraps the topic up in a neat, tidy package.

People love nature, he says. They love to be around nature, and so many people from northern New Jersey and New York feel this way they moved to Ocean County for their golden years. Ensuing development ruined the bay.

"They love it," he says. They loved it to death."

But here's where Flimlin holds his ace. He'll turn the numbers game back on itself. There are plenty of new residents. So why not make every one of them a clam gardener, he asks.

It's ingenious when you think about it. Turn the very thing that likely caused the problem—overpopulation—into a solution.

"You got to have a gimmick," he says.
"Do I think we're going to have billions and billions of hard clams in the bay? No, but we have to do something," he says. "You know there's a saying, You can light one candle or curse the darkness. Well, would you rather plant one clam or never eat chowder again?"

To e-mail Mike Jaccarino at The Press:

To e-mail Mike Jaccarino at The Press:

"People clean from the top down. Shellfish clean from the bottom up." Gef Flimlin

#### Efforts to rebuild clam, oyster populations planned for Barnegat Bay

GANNETT NEW JERSEY

There was a time, says Waretown fisherman William Hammarstrom, when a man could fill his boat with 3,000 clams in a day from the bottom of Barnegat Bay.

Those days were disappearing, along with the clams and the baymen, by the mid-1960s. Now an ambitious shellfish restoration project is planned for the bay, where corganizers think they can bring volunteers and scientists together to re-establish clam and oyster populations.

By late this summer, a shellfish nursery could be set up and the first seedings under way, said Gef Flimlin, a marine agent with the Rutgers Cooperative Extension Service of Ocean County, who outlined the project during a meeting of Barnegat Bay experts at Ocean County College on Tuesday. By this summer, the state Department of Environmental Protection hopes to use its 32-foot shellfish boat to probe promising sites where the remains of old oyster reefs could provide foundations for replanting those bivalves, said James Joseph, a DEP shellfish biologist.

But the job of bringing the shellfish stocks back is too big for any government agency, Joseph said. "It will take community involvement," he

Plans sketched by Flimlin call for the project to connect with community and environmental groups, maritime museums, fishing clubs and any local residents willing to pitch in.

SEE SHELLFISH / A14



CONTINUED FROM / A13

Flimlin said a meeting with Ocean County Freeholder
Joseph H. Vicari led to a commitment from the county for \$17,500 a year for two years to help pay for the project startup. Organizers are discussing possibly siting a hatchery with the Natural Resources Foundation of New Jersey, which is converting the former Lighthouse Camp in Waretown (Ocean Township) to an environmental education center, he said.

Daily Record, Morristown, New Jersey Sunday, February 06, 2005 Excerpt from Part 1 and Part 2





Press of AC, Wednesday, September 21, 2005, Part 1

Press of Atlantic City, Atlantic City, New Jersey Wednesday, September 21, 2005, Part 2

# Restoration project moves baby clams into bay

By BERNARD VAUGHAN Staff Writer, (609) 978-2012

Like diehard gardeners, Gef Flimlin and about 20 volunteers braved the cold, wet wind and 64-degree bay water this weekend to delicately deposit a most vulnerable crop in Barnegat Bay: baby clams.

The "clam planting" was the next step in the Barnegat Bay Shellfish Restoration Program, which Flimlin, a marine extension agent with the Rutgers Cooperative Extension of Ocean County, directs.

Flimlin hopes the program, in conjunction with educational programs, will revive the clam population in the bay. Next year, he plans to include oysters in the program.

"(Education) helps people not do things that could pollute the bay," Flimlin said. "For example, just use enough fertilizer to get the job done, don't over do it, because that runs off

into the bay. If people understand a little more about the bay, they'll buy into protecting it."

Reasons for the depletion of

The clams put into the bay's clams since the 1980s are still debated, including over-development.

pressure-treated lumber and fertilizer run-off. And with the decrease in clams came the decrease in baymen, the men who harvested the bay's shellfish for generations. There are 900 fewer commercial clamming licenses sold in New Jersey today than 20 years ago, accord-

ing to Flimlin.

The program began in August, with about 30 trained volunteers nursing 600,000 baby clams in two offshore upweller systems on Long Beach Island. The systems pumped 60 to 80 gallons of bay water per minute into the upwellers, which housed the clams in plastic silos and acted as a protective aquatic nursery for the bivalves.

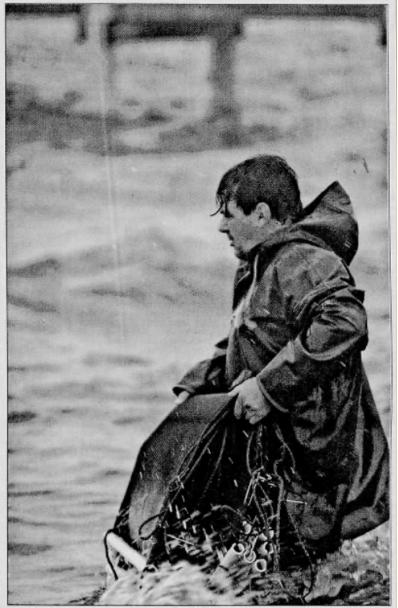
Flimlin and the volunteers waded into the 4-foot-deep bay on Saturday in rubber water-resistant gear and placed 20 3½-by-1-foot protective mesh bags, with 150,000 baby clams in all, in a secure location.

The rest of the clams will be deposited in three other locations. Flimlin is keeping the exact locations of the four deposits, from Waretown to Little Egg Harbor, secret to protect them from vandals and poachers. The clams are worth 3 cents each, Flimlin said.

Flimlin is hoping for a cold winter to allow the clams to hibernate comfortably, Flimlin said.

"Once water temperature goes below 45 degrees they hibernate for the winter," Flimlin said. "This time of year, (clams) stop adding size to their

See Clams, Page C4





Press photo by Arm Maris Coen Martin McHugh, director of the state Division of Fish and Wildlife, above, carries bags of baby clams into Barnegat Bay for planting Saturday. At left, Lou Padula of the Lanoka Harbor section of Lacey Township and Mike Connolly of Fair Haven bring baby clams to the beach. Press of

Atlantic City, Tuesday,

October 25, 2005 (part 1 of

53

#### Clams

(Continued from Page C1)

shell, and start converting the food they're eating into glycogen (a sugar), which we think helps them survive over the winter."

But sunny, warm weather spells in February and March can effectively confuse the clams to come out of their hibernation at a time when phytoplankton — microscopic plants clams eat — aren't available because it is still too cold

for photosynthesis to take place.

"If (clams) start feeding and there's nothing for them to feed on they're wasting they're metabolic stores," Flimlin said.

Volunteers will take the clams out of the bags at the end of March or beginning of April and plant them under water beneath protective screens until next summer, Flimlin said. The clams should be adult size - about 25 millimeters by the fall of 2006, Flimlin said, when they will be dispersed in the bay at a very low density.

Along with an education

campaign, the Rutgers Cooperative Extension is also organizing a fundraiser committee to sponsor public art projects, Flimlin said. One pro-ject Flimlin discussed involved artists creating 5½-foot fiber-glass clams the extension would auction off.

Flimlin is also looking for four more upweller sites for next year. Anyone interested e-mail him flimlin@aesop.rutgers.edu.

To e-mail Bernard Vaughan at The Press: BVaughan@pressofac.com

Press of Atlantic City, Atlantic City, Tuesday, October 25, 2005 Part 2

×

Asbury Park Press, Asbury Park, New Jersey, Thursday, April 27, 2006 (Excerpt from "Nature Takes Its Course")

Reclaim the Bay volunteer Martin Sedlacko of Lacey demonstrates a nursery for shellfisl Wednesday during the Barnegat Bay Environmental Educators Roundtable in Waretown.

### RECLAM THE BAY CLAMS, **OYSTERS AND BEER** FUNDRAISER: 1 to 5 p.m.; Manafirkin Brewery presents A Day With ReClam the

Bay; educational station, fresh clams; Manafirkin Brewery, 450 E. Bay Ave., Suite 2, Manahawkin, \$20. 609-848-4254 or ReClamTheBay.org.



Tom Egan at clam rake out, screen cleaning



Sorted Clams from rake out, 2017



Phil, Al, Art, Jack, and Tony



**Iowa Court Spat on Rock Wall** 



Happy Sedge Crew 2024



Bill with new Eagle Scout, Jackson Bubnowski



# ReClam The Bay opens nurseries

STAFF REPORT

The Barnegat Bay Shellfish Restoration program and it's volunteer staff of ReClam The Bay are opening its six baby clam nurseries to the public so that they may learn more about how important these filter feeders are to the health of Barnegat Bay

ReClam the Bay volunteers will show visitiors what the more than 100,000 baby clams at the nursery feed on, how they develop and how individuals can participate in the program to place millions of clams in the bay.

These programs, developed along with the Rutgers Cooperative Extension of Ocean County, will provide the public with information on the

ecology of Barnegat Bay and what needs to be done to protect it.

Barnegat Bay was once a shellfish bonanza that helped drive the early economy of Ocean County. The loss of hard clams and oysters in the bay not only ended a thriving commercial enterprise, but also removed the natural filtration system the shellfish provided.

The visits are free of charge and will take place at the all of the nurseries located throughout the bay area.

For additional information call the Rutgers Cooperative Extension of Ocean County at (732) 349-1152 or visit www. reclamthebay.org.

Asbury Park Press, Asbury Park, New Jersey Fri, Jul 9, 2010 · Page 57



425,000 young shellfish planted in the Mullica, where a brawl made history just a century ago



ReClam the Bay volunteers Al Nitche (left) and Rick Bushnell retrieve young oysters from a floating upweller in Beach Haven. Top left: They've nearly tripled in size over two months. (STAFF PHOTOS: KIRK MOORE)

# Rebuilding oyster beds

By KIRK MOORE

A century ago these waters were crowded with hundreds of fishermen, anxious to pull up millions of young oysters from the bottom of the Mullica River — and ready to fight over the bounty.

A few days shy of the anniversary of the Oct. 1, 1907 "oyster war," biologists Jeff Normant and Gustavo Calvo were over the Fitney Bit oyster bed near the mouth of the Mullica. On one boat, Calvo and volunteer Al Nitche muscled boxes of oysters onto the gunwale and emptied them over a quarter-acre of bottom marked out with buoys.

More than 200,000 young oysters grown by

ReClam the Bay — the volunteer arm of the Barnegat Bay shellfish restoration project — were planted Wednesday not far from Graveling Point, where an early 20th-century oyster industry flourished on, and fought over, the seed shellfish that nature alone provided.

Next year, ReClam volunteers hope to replant another historic oyster reef — the Good Luck Point beds at the mouth of the Toms River, where Barnegat Bay's oystermen had their last hurrah at the end of the 1950s.

"The Army Corps of Engineers requires a permit before we can put

See Oysters, Page A2



A boxload of Juvenile oysters is deposited on the Fitney Bit oyster bed in the Mullica River.



ON THE WEB: Visit our Web site, www.app.com, and click on this story to view video and to join the online conversation about this topic in Story Chat.

#### IN THE COMMUNITY

# A new approach to learning about the sea

By HARTRIONO B. SASTROWARDOYO

The Jersey Shore is known for many things, among them its clams. Where else can you find a multicolored clam that's 5% feet tall?

Don't know where to find them? Just pick up a map and follow the clues. It's part of a new educational outreach program by Reclam The Bay, an organization dedicated to restoring the levels of shellfish in Barnegat Bay. The initiative was begun in 2005 by the Rutgers University Cooperative Research and Extension of Ocean County in partnership with the state Bureau of Shellfisheries and the Barnegat Bay National Estuary Program.

The clam sculptures were designed by local artists and originally designed as a way to promote the efforts of Reclam the Bay as well as to raise money for the nonprofit organization. Sponsors of the sculptures pay \$3,500, which enables the organization to place 400,000 clams in Barnegat Bay as well as provide educational programs about caring for the bay.

The giant clams mark locations where people can learn about the various marine life in Barnegat Bay through plaques mounted on their bases. Other plaques can be found at various businesses, which may not have the clam sculptures but are marked with the Reclam the Bay leep.

On the plaques, one can learn that historians believe the decline of the oyster industry is due to salty ocean water brought in by the Bay Head-Manasquan canal, or that all oysters start out as males, among other tidbits.

Maps are available at six locations: Barnegat Light, at borough hall, 10 W. 10th St.; in Beach Haven, also at borough hall, 300 Engelside Ave.; in Ship Bottom, at the Southern Ocean County Chamber of Commerce, 265 W. Ninth St.; in Toms River, at County Connection in the Ocean County Mall and at the Rutgers Cooperative Extension, 1623 Whitesville Road; and in Tuckerton, at the Tuckerton Seaport, 120 W. Main St.

Currently, there are four clam trails: Long Beach Island North and South, the Manahawkin section of Stafford and points south, and Waretown and points north. The Waretown segment has the fewest locations, six LBI north, the most



Reclam The Bay, an organization dedicated to restoring the levels of shellfish in Barnegat Bay, has placed art-covered sculptures of clams in the area and invites those interested to pick up a map and follow several clam trails. Designed by local artists, the clams raise money for the nonprofit organization. The sculpture shown above is in Harvey Cedars.

with 22.

In addition to learning about the various marine life in Barnegat Bay, there is a chance to earn awards, ranging from an honorary clam digger certificate from the Ocean County Board of Freeholders to a metal clam pin. The awards are based on points earned by the participant, which are earned by reading the fact and location number as well as jotting down a special, boilded word.

"It's really neat. Parents get their kids involved, taking notes (on the facts)," said Kathy Larson, owner of Viking Outfitters in Barnegat Light, where one of the fact plaques is located inside the store.

Hartriono B. Sastrowardoyo: (609) 978-4581 or harts@app.com



www.app.com,

and look under Community for this story and a link to

Reclam The Bay.

#### DIG IN

- According to Reclam The Bay, the number of clams in Barnegat Bay has steadily declined since the 1950s. By 2005, very few commercial clammers were working the Bay. Barnegat Bay Shellfish Restoration Program, of which Reclam The Bay is an offshoot, began in 2005, with initial funding from Ocean County and the Barnegat Bay Estuary Program, among others. That year, volunteers constructed the first nursery upwellers at the Surf City Yacht Club and the St. Francis Center on Long Beach Island.
- Last summer, the program distributed 1.5 million clam and 100,000 oyster seeds among upwellers in Barnegat Light, Surf City Yacht Club, Cedar Bonnet Island, the St. Francis Center and Hollday Harbor Marina in Waretown.
- For more information or to join the group, call (732).
   349-1152.

Asbury Park Press, Wednesday, August 8, 2007

# Clam sculpture unveiled

Artwork in Ocean Gate helps shellfish restoration effort

By CHELSEA MICHELS TOMS RIVER BUREAU

OCEAN GATE — Buffeted with wind on the glistening bay-front, a new piece of borough history has been unveiled.

The large clam sculpture, which has joined nearly 20 others in Ocean County, is part of the Barnegat Bay Shellfish Restoration Program. Businesses or organizations sponsor one of the artworks, providing funding for the growth of baby oysters and clams to be deposited in the Barnegat Bay.

Standing 5½ feet high, the sculpture, painted by local artist Virginia Perle, depicts the past, present and future of this small borough, with scenes from the yacht club, a now-demolished water slide on a waterfront dock, a small replica of the Barnegat Lighthouse, the borough pavilion and lighthouse, wind turbines and a ribbon signifying the town's recent 90th anniversary celebration.

"The other clams can be moved around, but this is just Ocean Gate's, and it will never leave," said Mayor Paul J. Kennedy, who was at the unveiling ceremony at the Ocean Gate Yacht Basin on Wednesday. "What a perfect ending to our 90-year celebration."

The shellfish restoration program, "ReClam the Bay," was started by Gef Flimlin, a marine extension agent with the Rutgers Cooperative Extension Service of Ocean County.

"The program was created to raise public awareness about the bay and people's impact on the bay," explained Flimlin, as gusty winds made a mini-turbine replica atop the clam whirl crazily.

He said the program will be rejuvenating an antique oyster bed off Good Luck Point here.

"Hopefully the salinity of the water will be lower because of the fresh water from the Toms River," Flimlin said.

Rick Bushnell, volunteer president of ReClam the Bay, said the giant clams help bring art and science together and are an excellent source of education for local children.

"If we get kids involved, they'll get their parents involved," Bushnell said. "They need to learn about the environment and what it takes to make a clam happy. We want to see people make some change, even a very slight change, in their lifestyles."

Virginia Perle, owner of the Virginia Perle Art Gallery in downtown Toms River, said she



Marie Mease Savoy (from left), owner of the Ocean Gate Yacht Basin; Gef Flimlin, marine extension agent for the Rutgers University Cooperative Estension of Ocean County; and artist Virginia Perie show off the giant clam that was unveiled as part of the "ReClam the Bay" project, which grows baby clams and oysters to be placed in the Barnegat Bay. Gef Flimlin (below right) explains the importance of the project.



This depiction of the Ocean Cate Yacht Club was painted by local artist Virginia Perle in addition to other scenes on the clam sculature.

often paints themes related to the Barnegat Bay, and that it was hard to give up the clam after getting attached to it while painting it.

"I called her a 'Clam for Ocean Gate,' " said Perle, 65, who was approached by Marie Mease Savoy, owner of the Ocean Gate Yacht Basin in Berkeley with her sons, Dwayne and Gary Mease.

"I ended up getting very involved in the clam," Perle said. "It's all about Ocean Gate; it can't be anywhere else. It represents the past, present and future, and I hope that it's very spirited and people like it."

Perle included a mermaid.

"It's fantastic, and the purpose of what they're having it for is wonderful. It's a very nice depiction of Ocean Gate."

> - Carolyn Opanowicz, who vacations in Ocean Gate

the "spirit of the future," and real clam and oyster shells around the base to represent the restoration of the shellfish in the bay.

"Ocean Gate is a sweet town on the waterfront," she said. "It's a quaint, lovely town and the people are just wonderful."

Carolyn and Thomas Opanowicz, Nutley residents who vacation in Ocean Gate every September, came to the ceremony to see the giant clam.

"It's fantastic, and the purpose of what they're having it for is wonderful. It's a very nice depiction of Ocean Gate," said Carolyn Opanowicz, 85.

ON THE WEB: Visit www.app.com/oceangate and click on this story in the Ocean section for a link to ReClam the Bay.



#### THE CLAMS

As part of the Barnegat Bay Shellfish Restoration Program, "ReClam the Bay," about 20 large clam sculptures — depicting marine-related images — are at locations in Ocean Gate, Toms River, Tuckerton, Barnegat Light, Ship Bottom and Beach Haven.

Asbury Park Press, Asbury Park, New Jersey, September 25, 2008

# Big clams to fetch big bucks for group

#### **Fundraising** effort to help ReClam the Bay

By KIRK MOORE

TOMS RIVER nore than six months, artist Phyllis Nichol has shared her living room with a monster mollusk.

But that time's almost up, and soon the 51/2-foot-tall, 75-pound artwork will join 13 other giant clam sculptures near the shores of Barnegat

"We got it in the middle of July," she said of the fi-berglass model. "Because my work schedule is so busy, it's taken this long to



raising and education promotion by ReClam the Bay, the volunteer arm of the Barnegat Bay Shellfish Restoration Program. Each of the public art installabusy, it's taken this long to pull it together," said tions is sponsored by a Nichol, who painted the sculpture, as she applied more touches to it. The each one. Every clam rouse is about \$2,000 for the group's efforts to teach people about the ecological value of shellfish and rerina in Long Beach Town ship for public display.

The models of shucked
Barnegat clams are a fundbeds, said Gef Flimlin, an

agent with the Rutgers Cooperative Extension Service of Ocean County.

"We'd like to get more "We'd like to get more (clam sculptures) in the northern part of the bay," where ReClam volunteers are installing new onshore shellfish nurseries, Flimlin said. "We're open to hav-ing businesses sponsor them, and also individu-als."

Master Gardener program for nine years, and that's where she learned about the giant clams from Flim-lin. She is also an accom-plished decorative artist who paints and teaches with the Sandpiper Decora-tive Painters, "about 35 women, all ages, all walks of life," Nichol said.

For the clam art, Marina owner Robert Holzwarth wanted a work that reflects Nichol has been in- life in Barnegat Light just



www.reclamthebay.org

before the turn of the 19th century, with "components of Long Beach Island that brought our ancestors brought our ancestors here," Nichol said. "I went to Barnes & Noble and spent about \$250 on books" about local history. "I adapted the pictures to the

The resulting land- and waterscape shows the mas-sive lighthouse keepers' house that once stood at

#### "I went to Barnes & Noble and spent about \$250 on books."

Phyllis Nichol

Barnegat Light. Gaff-rigged sneakboxes sail on the bay, and a clammer tongs his catch into a flatbottomed garvey workboat. Children fly a kite into a blue sky suffused with the pale-pink horizon of a warm day on the bay's southern reaches.

"When first I started out, when first I started out, it seemed strange to have pink on the horizon," she said. "But when you look for it, it's there."

for it, it's there."

Nichol started painting
in 1993, using cast-off furniture for some of her
early projects. Now, "if it
doesn't move, it gets
painted," quipped husband
Norman, who met his wife
30 years ago during their
carreers Gying for Trans careers flying for Trans World Airlines. The couple will rent a U-

Haul box truck to deliver the clam to Robbie's, once they maneuver the piece safely out the front door of their Sun Valley Road

#### Asbury Park Press, Asbury, New Jersey February 27, 2009



Bob Handschuh of Ocean Gate cleans out the upweller, a clam and oyster nursery, as he works with other ReClam the Bay volunteers in

The Central New Jersey Home News, New Brunswick. New Jersey August 03, 2010 (Excerpt from article "Barnegat **Bay Under Stress**")



Photo Courtesy of CHARLES BRANDT

Doctor Jim Meritt of ReClam the Bay brings clams in the classroom to local sixth grade students.

# 'ReClam the Bay' to educate Lavallette students, community

By Kelly D'Anna

Saving Barnegat Bay has been an issue for local Jersey Shore towns recently, specifically Lavallette.

The Barnegat Bay is suffering greatly due to the negative effects of pollution, nitrogen and chemicals which can be found in fertilizers and common cleaning products. These harmful substances are entering into the bay, affecting the ecosystem.

As last week's council meeting was spent defending the town's efforts at conserving the Bay, the local volunteer organization ReClam the Bay (RCTB), plans to educate local students and communities about the pollution issues.

A number of local schools are participating in RCTB's pilot program, Shellfish in the Classroom. Volunteers and local teachers come together to bring baby clams and oysters into the classrooms.

"The goal is to help students understand how those creatures live, what they contribute to the quality of the Bay environment, and what needs to be done to increase the shellfish population in Barnegat Bay," Charles Brandt of RCTB described in an e-mail Saturday.

According to Brandt, about

"The bay is not just a body of water. It is a place where their shellfish are living."

- Rick Bushnell President, ReClam the Bay

500 students participated in this pilot program.

"We're very enthusiastic about this program because we understand that simply putting shellfish in the Bay is only part of the solution." said Rick Bushnell, President of ReClam the Bay. "The really cool thing is if and when the kids get involved in growing the shellfish. After caring for them, shellfish are placed in the bay. Then kids feel really connected to the bay. The bay is not just a body of water. It is a place where their shellfish are living."

The Lavallette council and mayor plan to introduce ReClam the Bay by attending the open house an open house at Cooperative Rutgers Extension from 7 to 9 p.m.

The schools of Lavallette have taken initiatives to help ReClam the Bay, as described in Wednesday night's council meeting.

"The high school [Point Beach] has been very involved in the process of reclaming," said Lisa Taylor, a member of the Lavallette Board of Education.

The Lavallette Elementary School's Environmental Club also won the The Universal Record Database's (URDB) world record for most people wearing sea nettle (jellyfish) hats at one time.

The URDB is a place where anyone can record their personal records and achievements. According to the website, www.urdb.org, in order to qualify, the general guidelines are; "every record in the database must be, quantifiable, breakable and include indisputable media evidence."

"We are very involved in helping the Barnegat Bay," said Superintendent Peter Morris.

We are teaching the kids they can be the change that we need," said Alison Zylinksi, president of the board of education.

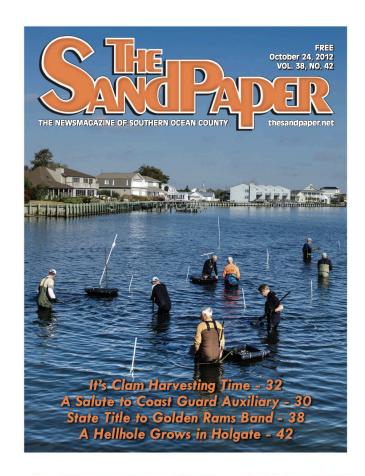
Jim Merrit educating Lavallette students The Ocean Star March 25, 2011

"You can't have conservation without education." Jack Hanna



"In the end we will conserve only what we love. We will love only what we understand. And we will understand only what we are taught."

Baba Dioum Senegalese Conservationist





Photographs by Ryan Morrill

FINDING SHELL-TER: (Above left) Volunteer baymen and women dot the waterscape as they rake and retrieve the clam crop. The bivalves were grown from clam 'seed' that was planted by ReClam the Bay last fall after it was first raised to quarter-inch size in upwellers. (Top) Netting sheltered the baby clams from predators as they grew. (Above) After the clams were collected, other volunteers stood by to count them, all 40,000 for this phase of the project.



Claiming Last Year's Planted Clams

# It's Harvest Time For ReClam the Bay With a Hardy Crop

Excerpted from The Sand Paper, October 24, 2012 Vol. 38 No. 42



## ReClam The Bay seeks help in search for wild oysters

The ReClam (RCTB), a grass-roots environmental organization based in Toms River that is dedicated to educating the public about the envi-ronmental benefit of shellfish filtering on the health of Barnegat Bay, is looking for some wild oys-

RCTB would like to enlist the help of the public in identifying locations where wild oysters are found in Barnegat Bay. The idea is to use all available eyes to keep a look out and document the presence of eastern oysters in the bay, adjacent lagoons and tributaries.

Oysters have been were found on the riprap of Oyster Creek, on rocks at the inlet, attached to the bulkhead at Barnegat town dock and occasional boat bottoms. Other places to look include the ribbed mussels attached to the salt marsh sod bank margins. They seem to prefer the vinyl bulkheads and other smooth attachment sites.

As they leave the larvae state early in their life, oysters settle and attempt to find a hard surface to which they attach themselves and then remain there for the balance of their life. Very often they are found close to the surface and as a result often spend part of their day out of the water.

The best time to look is on a low or blow out tide and it makes a great excuse for a kayak tour.

If possible, RCTB is asking people to note the location, substrate, number and approximate size of the oysters. One could either use a hand held GPS, or pick up a DEP shellfish map and mark the location as well as notes on it.

Any questions or to submit finds please go to: barnegatbayoysters @gmail.com

ReClam The Bay has for several years been raising baby oysters and placing them on a reef of shell built in Barnegat Bay with the assistance of Barnegat Partner-o. Those oysters should now be of breeding age and their larvae, the organziation hopes, would now be attaching to hard surfaces around the bay. There is an open sea-

son for harvesting oysters, but you must have a New Jersey Shellfish li-cense and observe all rules and regulations-Maps are available where one purchases a recreational shell fishing li-

ReClam The Bay is best known for its educational programs at both its nurseries and various townships schools, and each year raising over a million baby clams and 300,000 oysters to be released in Barnegat Bay.

May 15 is the target date for the arrival of baby clams, the size of the head of a pin, to arrive at the nurseries around the bay The Barnegat Bay Shellfish Restoration Pro-gram's "Shellfish Garden-er" program trains most Restoration of ReClam The Bay's volunteers. Their Open House is held May 7, in association with the Rutgers Cooperative Extension Program of Ocean Coun-ty. For more information either visit the web site at ReClamtheBay.org or call 732-349-1152.

May 3, 2013

# Group: Visit baby bivalves this summer

By Kirk Moore @KirkMooreAPP

With 1 million new baby clams and 300,000 oysters in its nurseries, the Barnegat Bay shellfish restoration group ReClam the Bay is inviting the public to come for a look all summer long into October, on days when its volunteers are cleaning and looking after the growing shellfish.

Visitors can peek into tanks and see clams and oysters as they live in the bay - pumping water through their bodies to extract food - and can pick them up and feel them move as they tighten their shells, volunteers say. Re-Clam's main mission is to educate people about the bay, and volunteers welcome families and visitors of all ages.

Up through the late 20th century, Barnegat Bay had a bounty of clams that enabled self-employed baymen to work full time harvesting shellfish on the water. That began to change in the 1990s, as the numbers of clams in the bay and their natural reproduction rates fell. Baymen turned to aquaculture—planting seed clams from nurseries and nurturing them like farmers, on underwater plots leased from the state.

ReClam volunteers use the knowledge acquired by baymen to raise shellfish - in hopes of eventually increasing the stock



ReClam the Bay volunteers work at the Cattus Island County Park upweller in Toms River while visitors look on. PHOTO COURTESY OF RECLAM THE

of wild clams in the bay, but primarily as an educational project so people can learn how the bay works, and the possibilities for rebuilding its ecosystem by controlling stormwater pollution from land and restoring the clam population in key locations.

Seven nurseries are operating along the length of the bay, since the group recovered and restored its tanks and pumps after superstorm Sandy. The operations are technically called upwellers, because they siphon water from the bay - thick with microscopic plants that clams and oysters feed on - and pump it upward through tiny shellfish in small barrels. Raising the young in those tanks protects them

from crabs, starfish and other predators that snack on baby bivalves

By early fall, clams that started off at less than one-tenth of an inch wide are big enough to spend winter in the bay. Volunteer "shellfish gardeners" take a seven-week training course in the spring with the Barnegat Bay Shellfish Restoration Program, a joint effort of the Rutgers University Ocean County Extension Service and the state Department of Environmental Protection. Apprentice gardeners take on 20 hours of volunteer work and another five weeks of classes in the fall is offered each year.

But organizers say anyone who wants to help raise clams can just show up on nursery days. "Working at the nursery each week will teach you a great deal about not only the clams and oysters, but also Barnegat Bay and what we all must do to protect it," the organizers say in their invitation. Their schedule runs into October.

Mondays: 1 p.m. at Seaside Park Marina, J Street and West Central Avenue.

Wednesdays: 10 a.m. at Cattus Island County Park, 1169 Bandon Rd., off Yellowbank Road east of Fischer Boulevard in Toms River, at the dock behind the Ocean County Department of Parks and Recreation administration office.

Thursdays: 5 p.m. at the Surf City Yacht Club, between 9th and 10th streets at the bay in the north parking lot.

Fridays: Three locations at 10:30 a.m. at the Mantoloking Yacht Club, Bay Avenue and Downer Avenue; 11 a.m. at the Barnegat Light municipal boat ramp, 10th Street and Bayview Avenue; 11 a.m. in Beach Haven at the old Coast Guard station at the west end of Pelham Avenue near Mordecai Island.

Saturdays: 8 a.m. in Waretown at Holiday Harbor Marina, 115 Admiral Way.

Kirk Moore: 732-557-5728; kmoore@ nipressmedia.com

# ReClam the Bay gets boost

# Maine artist organizes fundraiser

By Kirk Moore
@KirkMooreAPP

After her own family suffered the effects of superstorm Sandy, Maine artist Jerri Finch Holmes wanted to do something to help people at the Jersey Shore. So she organized a raffle using her own artwork in her hometown Belfast.

Not long after, Gef Flimlin and volunteers with the Barnegat Bay shellfish restoration group ReClam the Bay were stunned to see a \$1,700 check from Maine show up in the mail.

The money will help the bay's hard-hit shellfish growers, said Flimlin, a marine agent with the Rutgers Cooperative Extension Service and one of ReClam's organizers.

"This is ReClam the Bay's, Barnegat Bay Shellfish Restoration Program's payback for losses during the storm,"



Jerri Finch Holmes at her home in Belfast, Maine, with Gef Flimlin of the Rutgers Cooperative Extension Service. Holmes raised \$1,700 to help the Barnegat Bay volunteer group ReClam the Bay recover from superstorm Sandy. PHOTO COURTESY OF GEF FLIMLIN

Flimlin said.

The ReClam group is raising an additional 50,000 young oysters and 100,000 clams for each of several shellfish farms in the bay and its lower reaches at Little Egg Harbor, where harvests were delayed for as long as five months after the storm.

Holmes said she's glad to know Belfast's donation will go to help working people. Her brother Jim Finch of South Seaside Park and sister Sharon Becker of Little Egg Harbor had homes in the storm's path.

After the storm, "I'm up here feeling absolutely powerless. My sister lost her house. Jimmy didn't have access to his house for three months," Holmes said from her place near Penobscot Bay.

People in Belfast were talking about the extent of destruction from Sandy, and thinking "that could have been us," Holmes said.

With people organizing collections and donations, Holmes arrived at the idea of an art raffle.

"People were extremely generous and open ... I sold \$10 tickets. Some people bought 10 tickets. It has been a community effort," she said.

Holmes did not know

Holmes did not know to whom she should contribute the money, so she asked her brother, who suggested ReClam the Bay.

The group is very active in the Seaside area and often hosts visitors and school groups to one of its bayside nurseries there.

Holmes and Flimlin were surprised to learn of one more shared connection between the small worlds of Barnegat Bay and downeast Maine. Flimlin recently built a second home two miles down the road from Holmes, on land once owned by her husband's family.

Last month, Flimlin paid a visit with ReClam the Bay T-shirts and other mementos to thank them for the donation.

Kirk Moore: 609-709-5036; kmoore@ njpressmedia.com

Asbury Park Press, August 2, 2013

MAHRAG

#### Surf City man featured in new book about clams



TIM MCCARTHYN/SBURY PARK PRESS Alliance for a Living Ocean held an informative talk and demonstration on life in the Barnegat Bay. Rick Bushnell President of ReClam the Bay is holding a beaker of water with tiny clams the use to seed the bay ottom.

BY DAN RADEL @DANIELRADELAPP

Rick Bushnell, president of ReClam the Bay, is featured in a new book about clams. The Secret Life of Clams: The Mysteries and Magic of Our Farorite Shellifsh, hy awardwinning author Anthony D. Fredericks, tells the story of this fascinating creature that has existed for more than 500 million years, been worshiped by the Moche people of ancient Peru), studied by Leonardo da Vinci, used as artistic icons, and become part of our lexicon ("happy as a clam"). The book is a combination of humor, history, scientific research, legends and tales, along with extended visits to clam sites around

the country.

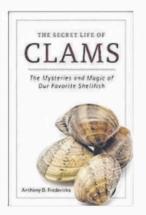
Bushnell is one of several experts who shared his experiences and expertise in this new book. He was interviewed by the author about the

health of Barnegat Bay and how ReClam the Bay has been working to provide education and awareness about the environmental benefits of shell-fish filtering, feeding and cleaning to the estuary. Bushnell was able to provide information on his organization's general mission, the success they've enjoyed over the past several years, and how the public can get actively engaged in this environmental cause. The author also celebrates Barnegat Bay as a viable tourist spot and a "must see" destination for armchair marine biologists of all stripes.

Anthony D. Fredericks

is a professor of education at York College in York, Pennsylvania and the author of 150 books. His titles have garnered many positive and enthusiastic reviews over the years. The Secret Life of Clams (304 pages) is available in local bookstores or from on-line booksellers.







Asbury Park Press December 6, 2014



FILE PHOTO

Rick Bushnell, president of ReClam the Bay.

## Help Barnegat Bay shellfish at open house

TODD B. BATES

@TODDBBATESAPP

TOMS RIVER — A Barnegat Bay Shellfish Restoration Program open house is scheduled for 7 p.m. on April 28 at Rutgers Cooperative Extension of Ocean County, 1623 Whitesville Road.

The program — entering its 10th year — is run by Rutgers Cooperative Extension of Ocean County and the Bureau of Shellfisheries in the state Department of Environmental Protection, with support from Ocean County and ReClam the Bay volunteers, according to a statement.

The Barnegat Bay Shellfish Restoration Program and ReClam the Bay volunteers raise more than 1 million clams and 300,000 oysters annually for release in Barnegat Bay, the statement said.

This year, the program will begin working with bay scallops, another shellfish that once was quite common in Barnegat Bay.

The program also will launch a new teaching nursery on Long Beach Island and is seeking volunteers interested in learning about the bay, working to help preserve it and helping to run the new nursery, according to the statement.

Educational programs by Barnegat Bay Shell-fish Restoration Program and ReClam the Bay visit local schools, and members of all ages with teaching, public relations, computer and other skills are being sought, the statement says. People can also become certified shellfish gardeners in a program that will begin in early May.

Refreshments will be served at the April 28 meeting and people can call the Rutgers Cooperative Extension of Ocean County office at 732-349-1152 if they have any questions or want more information.

# Baby clams arrive at local nurseries

THE OCEAN STAR

Baby clams and oysters have arrived at the ReClam The Bay nurseries, and residents and visitors can come and see, touch and learn all about these baby shellfish and their future in helping keep Barnegat Bay healthy in the future.

This free family fun takes place weekly through October and is a great place for children of all ages, and even the grandparent looking to do something on their own at the Jersey Shore.

Those interested can visit each week as follows at the ReClam The Bay Nurseries.

Cattus Island County Park, 1169 Bandon Road, Toms River, at the Ocean County Parks & Recreation Dock at 10 a.m., every Wednesday.

Surf City Yacht Club, 9th Street and the Bay, Surf City, at 5 p.m., every Thursday.

Mantoloking Yacht Club, Bay Avenue and Downer Avenue, Mantoloking, 10:30 a.m., every Friday.

Barnegat Light Nursery, Municipal Boat Ramp, 10th & Bay, Barnegat Light, 11 a.m., every Friday.

Old Coast Guard Station. Pelham Avenue & Bay, Beach Haven, 9 a.m., every Friday.

Morrison's Marina, 525 2nd St., Beach Haven, 12 p.m.,

every Friday.
Holiday Harbor Marina, 115
Admiral Way, Waretown, 8
a.m., every Saturday.

For further information, call 732-349-1152, the Rutgers Cooperative Extension of Ocean County.

Asbury Park Press
Thu, Apr 23, 2015 ·Page A7



Volunteers demonstrate the shellfish grown for future harvest as part of the Reclam the Bay project at Barnegat Light. PHOTO PROVIDED/RICK BUSHNELL, PRESIDENT OF RECLAM THE BAY

July 27, 2014



Dominic Tumac of ReClam the Bay shows part of the process the volunteer group uses to repopulate Barnegat Bay's clam and oyster population.

From "Nature Trail Officially Opens in Loveladies"

Asbury Park Press Sat, Apr 30, 2016 ·Page A7



PHOTOS BY DOUG HOOD/STAFF PHOTOGRAPHER

Wes Dalzell of ReClam the Bay teaches fourth- and fifth-grade students of Silver Bay Elementary School in Toms River at the Barnegat Bay Blitz about clams and their role in keeping the water clean.

Asbury Park Press Thu, Jun 15, 2017 ·Page X1

# Oysters seen as 'answer' to island's erosion

Ridges of stacked 'oyster castles' put in bay to shore up endangered Mordecai Island

STEVE MORAN CORRESPONDENT

BEACH HAVEN - Since 2001 when it was first founded, The Mordecai Land Trust has been raising funds to stop the erosion of Mordecai Island, a 45 acre uninhabited coastal salt marsh island in Barnegat Bay, off Beach Haven.

The island's uplands, tidal marshes, salt ponds, intertidal zones and eel grass beds support a variety of breeding and migratory bird species.

Severe erosion of the western shores of Mordecai Island has resulted in the loss of 26 acres of habitat since the 1930s. Strong tidal currents, wake from vessels traveling the NJ Intracoastal Waterway, sea level rise and increased development on Long Beach Island, are blamed as probable causes for the loss of marsh and beach habitat.

The Mordecal Land Trust, a community-based organization, is working with the Army Corps of Engineers and NJDEP to implement two restoration projects with the goal of inhibiting erosion.

This year's house tour and cocktail party raised funds for a project the trust is doing with ReClam the Bay, building a reef of "oyster castles" along the shoreline of Mordecai Island.

The island is not only a vital habitat for breeding and migratory species of indigenous birds, but helps protect large portions of Beach Haven itself from flooding.

flooding.

The island serves as a buffer for the borough from strong westerly winds pushing large waves ashore.



COURTESY OF THE MORDECAL ISLAND LAND TRUST An oyster castle is covered in mature oysters at a similar project in Virginia.

Jim Duggan, who is the oyster castle project director for the Trust, said the oyster castles are the latest in a series of efforts to create a new "living shoreline" to restore Mordecai as a habitat for shore birds, terrapins and fish.

It was estimated the island already had shrunk by 35 percent when the trust began its work, according to its website.

Each oyster spat castle is 12-inch by 12-inch by 8 inches and weighs 30 pounds.

They are made of concrete, crushed oyster shells, limestone, and silica, said Duggan.

Early on a misty morning, Tuesday, July 25, using boats and a barge, volunteers from ReClam the Bay and the Mordecai Land Trust moved piles of spat castles, spotted with larvae grown at Re-

#### See OYSTERS, Page 2

"The goal of the project is to blunt the fetch of wind and wave action that erodes the western edge of Mordecai."

#### JIM DUGGAN

DYSTER CASTLE PROJECT DIRECTOR FOR THE MORDECAL LAND TRUST



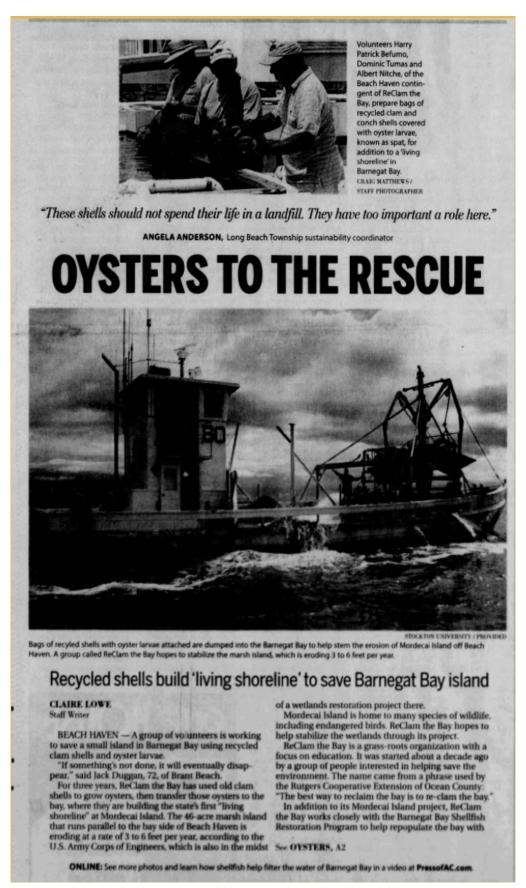
COURTESY OF JACK DUGGAN

John Weber and Warren Warner lower spat castles into the bay July 25.

Asbury Park Press Sat, Aug 05, 2017 ·Page A1







Press of Atlantic City, Atlantic City, New Jersey, Monday, August 07, 2017 Part 1

#### OYSTERS

Continued from A1

oysters and clams.

The clams and oys ters, we're growing them here to plant them in the bay," Duggan said. "It's called aquaculture."

Stockton University's Field Marine Station is also helping to restore the oyster population. In June, 150,000 spat that had been started by partners Parsons Mariculture were planted in the Tuckerton Reef.

Changes in the water quality, disease and overharvesting caused the New Jersey oyster population to drop significantly.

According to Stockton, the spat used were a combination of whelk shells that were purchased and the first batch of recycled clam and oyster shells from the Old Causeway Steak and Oyster House and Mud City Crab House in

Manahawklin. Restaurant owner Melanie Magaziner started a shell recycling project in 2015.

Long Beach Township Mayor Joseph Mancini took notice of the oyster harvesting project and reached out to Stockton's Marine Field Station to see how his town could help. Township sustain-ability coordinator Angela Anderson helped recruit six restaurants to provide discarded shells, and township employee Joe Mar.gino collects and sorts through 50-pound bushels of shells.

These shells should not spend their life in a landfill," Anderson said. They have too important a role here.

On a recent Friday afternoon, Duggan met fellow ReClam the Bay volunteers Albert Nitche, 75. of Beach Haven and Roselle Park, Harry Patrick Befumo, 52, of Beach Haven, and Dominic Tumas, 71, of Beach



STOCKTON UNIVERSITY / PROVIDED

Haven and Little Egg Harbor Township, at the old Coast Guard station at Pelham Avenue.

Workers from Stockton University's Marine Field Station covered in spat for planting in Barnegat Bay.

The all-volunteer group gets oyster larvae — about 2.5 million in just a small drop - from the Rutgers University Aquaculture Innovation Center in Cape May and places them in a 15-by-6-foot tank of water called an upweller. They add several bags of recycled clam and conch shells, giving the larvae three days to attach to the old shells and

develop into spat. Duggan said the clam

shells come from a clam-processing plant in North Jersey. The group also uses conch shells shipped from Cape May.

After two to five weeks. the volunteers move the bags of shells with oyster spat to the bay.
"Those oysters can be

used to build structure,"

Duggan said. In addition to the agged shells, the living shoreline is made up of 12-by-12-by-8-inch "oys-ter castles" created from cinderblocks with spat attached.

ReClam the Bay is completing th. roject in conjunction with the Mordecai Island Trust. The shoreline, also called a breakwater, will enable tidal exchange, promote sediment transport and support aquatic habitat. Duggan said the project also helps protect homeowners

"The bay is very much open here, and when the storms come, they'll be a strong fetch that will rush up against the island," he said. "If that island isn't there, Beach Haven gets pounded."
For more information,

visit reclamthebay.org. Contact: 609-272-7251 CLowe@pressofac.com Twitter@clairelowe

#### Press of Atlantic City, Atlantic City, New Jersey, Monday, August 07, 2017 Part 2

# **BRICK TOWNSHIP**

Volunteers for Reclam The Bay clean tanks containing clams and oysters at a demonstration Aug. 9 , at Traders Cove Marina in Brick Townshin.

WWW.STARNEWSGROUP.COM

FRIDAY, AUGUST 17, 2018 THE OCEAN STAR PAGE 7



## Restoring shellfish to renew Barnegat Bay

ReClam the Bay seeks to bring shellfish back to Barnegat Bay

BY CHARLOTTE WALSH

BRICK TOWNSHIP — The best way to reclaim the bay is to "reclam it," according to ReClam the Bay.

The group, for over 10 years, has been attempting to do just that through education and outreach with events like the one that took place this past Thursday at Trader's Cove.

"Years ago there were millions of shellfish in the bay." ReClam the Bay volunteer Wes Dalzell said. "The habitat has changed. Oyster reefs

#### **BRICK TOWNSHIP POLICE BLOTTER**

The Brick Township Police Department has announced the fol-lowing recent activity in the town-

JUNE 8: Derek Lyle Johnson was

Avenue by Officer Ulman, Mr. sky-Gonzalez was charged with

simple assault.

JUNE II: James Stanley Water Jr.

was arrested in Lakewood by Officer
Bennett II. Mr. Wister was charged
with contempt of court and simple

JUNE 11: Jose Manuel DaSilva

on and clam beds have been lost.

We're trying to get these gays to come back naturally:

BeClam the Bay is an allwith the solution of the card of t

The shellish, Mr. Dalzell said, are important to the bay because they are filter feeders. Bay water is pumped into the upweller, and the shell-fish eat different types of plankton in it. The water that is then pumped back into the bay is cleaner than what had occording the shell sh

Throughout the talk, volunteers invited adults and
children who visited to touch
live shellifish while explaining
the environmental conditions
needed for them to thrive.
The oysters and claims grown
by the group have been
smaller this year, Mr. Dalzell
seplained, because of environmental factors like high
amounts of freshwater in the
says. Hellish, Mr. Dalzell
said, are important to the buy
because they are filter feeders. Bay water is pumped into
the upweller, and the shellfish cat different types of
"Kids are so curious about
"Kids are so curiou

plankton in it. The water that is then pumped back into the bay is cleaner than what had gone in.

An adult oyster, Mr. Daizell said, can filter up to 50 gallons of water per day, while

The Ocean Star, Brick, NJ, Aug 17, 2018

# ReClam the Bay critter count proves success of living reef

By Albert Nitche, Captain, Beach Haven contingent of ReClam the Bay Special to the Times-Beacon Newspapers USA TODAY NETWORK NJ

BEACH HAVEN -BayVolunteers with ReClam the Bay (RCTB) in Beach Haven have released exciting new results of the living reef they have assisted in building off the western shore of Mordecai Island.

The reef, constructed of clam shell bags filled by volunteers from the Mordecai Land Trust, RCTB and friends, provides three major benefits: 1. It provides habitat that attracts a wide range of species

 the reef's shellfish are filtering the water, aiding in the quality of the bay.
 the reef shell bags are being cov-

 the reet shell bags are being covered in sediment, which is protecting Mordecai Island from further erosion.

To verify that the reef is actually building a living shoreline, RCTB volunteers recently formalized a "critter count" to monitor species growth by regularly examining shell bags for signs of life.

They selected random shell bags from various spots around the reef,



ReClam shall bag sampling by ReClam the Bay volunteers Phil Leong and Marty Volz. COURTESY CAPT. ALBERT NITCHE, RE CLAM THE BAY

brought the bags back to their Beach Haven upweller site, and did a complete count of the living and dead organisms in each bag. ReClam the Bay's latest results indicate that the reef is enabling rapid, as

well as sustained habitation. Newly-placed bags are colonized immediately; in as little as two months a variety of species are easily visible. Shell bags that were placed two and

Shell bags that were placed two and three years ago show healthy population growth among species.

In addition to oysters, ReClam the Bay has documented at least 25 species inhabiting the reef, including black and white claw mud crabs, ribbed mussels, limy tubeworms and amphipods, as well as vegetation like sea lettuce.

The presence of these species confirms that the reef has become a viable intertidal community that adds to the food chain, in addition to its aforementioned benefits

ReClam the Bay will provide future updates of its critter counts and other new developments as part of the organization's mission to provide environmental education to the public

mental education to the public.

The public is encouraged to visit their Beach Haven upweller, one of the other ReClam the Bay upweller locations, or stop by RCTB's education station at one of the many community events in which the organization participates throughout the year. To check out the calendar of events, visit www.reclamthebay.org.



Clam shell withe blue mussels, jiggle shell, oyster and limy tubeworms



A toadfish that was collected in the shell bag sampling.



rom left to right: ReClam the Bay volunteers Steve Zak, Norman Cella, Ed Pietrowicz, Albert Nitche, Jack Duggan, Domini umas and Tony McCall work at an RCTB upweller, or "nursery," for raising baby clams and oysters. DURTEY BC CLAM THE RAY

Asbury Park Press, November 1, 2018

From "ReClam the Bay Kicks off Fundraising Campaign"
Asbury Park Press
Thu, Mar 08, 2018 ·Page A1

# Learn how to 'ReClam' the bay twice each week on LBI

BEACH HAVEN -- Visitors to last Friaay's (RCTB) staging area at Pelham Avenue, got to see the start of another chapter in its mission "to use shelifish as living representatives of the bay ecosys-

"We just got in 50,000 new seed ms," said ReClam volunteer Joe astella.

While that may seem lots a lot of

While that may seem lots a lot of clams, it is just a drop in the bucket compare to the number of mature ones the non-profit organization has placed in the bay waters off Long Beach Island since it was founded in 2005. Guastella and three other volunteers, including Jack Duggan, explained the process of how the seed clams that are just slightly larger than grains of sand are "nursed" for about a year until they grow large enough to go into the bay. The seeds are placed in the bottom of large plastic containers that are about

grow large enough to go into the bay.

The seeds are placed in the bottom of large plastic containers that are about four times the size of a five gailon paint bucket that are perforated at the bottom and have a hole drilled near the top on both sides to hold a metal rod that runs through them.

The new 50,000 acquisitions only filled the container a few inches.

Guastella held up a narrow test tube to show that 100 of the seeds only came up to the one millimeter mark on it. The freshly loaded bucket was then placed into a row with others in a long wooden through called an Upweller that circulates bay water in and back out. As the water passes through, the clam's bivalve system feeds on its nutrients and at the same time absorbs some of the chemicals and pathogens that are present from things like herbicides and pharmaceuticals that run off or get discharged into the bay.

They then release the water back into the Upweller to head back to the open water.

When fully errown a clam can filler on filler the sea on the sea.

water.
When fully grown, a clam can filter up to 10-15 gallons of water a day, said

Up to a second program of the control of the contro

the total contraction that they feed equally over the year, said Gusatella. After a year or so, the claims grow to about one inch across and are ready to be transferred to bay, he said.

There they will continue to grow as they feed and filter out any toxicity.

Two other RCTB volunteers were getting ready to take their skilf out on the bay to check on the beds already out in the water.

The tide is too high right now otherwise they would be able to add more clams," said Duggan.
Guastella said the Friday sessions are

Guastella said the Fóday sessions are both informal and hands on. They are scheduled from 9 a.m. to 320 a.m., but often run longer, he said. Those attending also have the opportunity to learn about volunteer opportunities, said Duggen. RCTB also participates in the flutgers Extension Cooperative in Ocean Guntry in its Shellifa Gardeners Course that focuses on teaching about the ecology of Bannezat Raw and nostifive environmental contractions. focuses on teaching about the ecology of Barnegat Bay and positive environmen-tal stewardship using the biology and aquaculture of shellfish as teaching

tools.

This year's courses have been completed but information about the course, volunteering, upcoming events and more is available on the RCTB web-



ReClam the Bay team heads out to check on their clam beds. STEVE



Joe Fuastell holds a beaker with 100 seed clams that measwith 50,000 new seed clams they just receiv

time Museum's Friday Morning Kids Program along with the Alliance of a Living Ocean and fun activities includ-ing a scavenger hunt around the mu-

rm is located at 528 Dock

LBIStev@gmail.com RCTB is a non-profit organization

and partners in the Barnegat Bay Resto-ration Project along with the American Littoral Society, The Barnegat Bay Pro-ject, Ocean County, and NJ Division of Fish and Wildlife.



Seed clams are only slightly bigger than grains of sand STEVE MORAN



Clams that were grown in land-based upweller nurseries for a year are ready to be added to the beds out in the bay. STEVE MORN

#### The Beacon, New Jersey July 5, 2018

#### ReClam the Bay on-site education/volunteering

See, touch and learn about tiny baby clams and oysters. Learn how we're helping to improve the quality of our bays and protect our environment through the construction of living shorelines. Through October, from 9 to 11 a.m. Fridays, volunteers are invited to pitch in with upweller activities. Old Coast Guard Station, 420 Pelham Ave., Beach Haven, 609-462-1051.

**LONG BEACH TOWNSHIP** — The Long Beach Island Foundation of the Arts and Sciences will be offering their SEAFOOD SAMPLER COOKING DEMO at 11 a.m., noon and 1 p.m., 120 Long Beach Blvd., in the Loveladies section. On hand will be scallop, oyster and clam farmers who grow and catch the things you will be eating. Proceeds benefit the LBIF and ReClam the Bay. Fee is \$45 per person. For info, call 609-494-1241.

June 13, 1919

Science Saturdays return: The Long Beach Island Foundation of the Arts and Sciences welcomes back Science Saturdays hosted by Rick Bushnell of Reclam the Bay and ASU Professor Darlene Cavalier, founder of SciStarter.

At 11 a.m. Jan. 20, Douglas Zemeckis, associate professor at Rutgers University, will discuss "Responsible Stewardship of New Jersey's Valuable Marine Resources" via Zoom.

The presentation will cover the diversity and value of New Jersey's marine resources and industries with an emphasis on responsible stewardship practices and citizen science opportunities for people to adopt in Ocean County and throughout the state.

Science Saturdays tackle scientific studies, the state of our environment and issues that directly affect the shore community and Barnegat Bay. All sessions are free, but space is limited. Register at Ibifoundation.org/science.

January 20, 2020

# Shellfish gardener visits fifth graders at Memorial Middle School

Memorial Middle School fifth grade science classes and the Animal Club were treated to an educational program by ReClam the Bay, a 501c3 non-profit, all-volunteer group that oversees the birth, growing, and replanting of clams and oysters in the bay areas of New Jersey. Volunteer shellfish gardener Deb Licato-Meiman presented the programs.

For the science classes, students worked on finding volume to chart the growth of baby clams. This skill was reinforced as they have been practicing the concept in math as well.

After school, the Animal Club members got an in-depth look at the life cycles of clams, scallops and oysters, and their contribution to keeping the waters clean. They learned that the creatures filter and keep the water clean. They can each filter some 20 to 50 gallons of water a day.

With the growing coastal communities creating problems that are harmful to marine life, nature's solution is the creatures that ReClam the Bay is releasing into the waters of the Barnegat, Manahawkin and Little Egg Harbor bays, as they clean and filter the water and stabilize the shorelines. The more clams and oysters that live in the bays, the cleaner the water will be.

Licato-Meiman stressed to the students that they can be environmental stewards at the shore and at home. They can pick up litter when at the beach. At home, they can use reusable bags for produce, fruit and school



Deb Licato-Meiman worked with Memorial Middle School students. WOODLAND PARK SCHOOL DISTRICT

lunches to reduce disposable waste. Student club advisor Mrs. Donato scheduled the program after seeing Re-Clam the Bay at a street fair down the shore. "It is an environmental phenomenon as to how these animals

filter our waters," she not-

Since forming in 2005, ReClam the Bay has grown over 15 million clams and 5 million oysters and planted these shellfish in Barnegat Bay Watershed.



# Passaic Valley Today Thu, Jan 30, 2020 Page A9



Deb Licato-Meiman, Shellfish in The Classroom Educator



Workers place bags of shells containing baby oysters into the water in Beach Haven, N.J. on Aug. 19 as part of a project to stabilize the shoreline by establishing oyster colonies to blunt the force of incoming waves.

August 30, 2022 Excerpt from Tiny Oysters Play Big Role in Stabilizing Shorelines



COURTESY OF DERDRE CAMPBELL

Residents of Bay Head and friends and family members of the Bay Head Fire Department came out to the department's sole fundraising event for the year.

Bay Head Firehouse Clam Bake, September 2, 2022

#### **OUR VIEW**

## Oysters take leading role in S.J. shore protection

Barnegat Bay is on the front lines of New Jersey's fight to counter the effects of rising seas. The combination of higher sea level and sinking land has increased the power of waves to erode the bay's shores.

Where there used to be beaches, now there's hardly any sand at all. One community has lost 150 feet of beach in less than 30 years.

To turn the bay beaches around, the state and the American Littoral Society have called in the Jersey Shore's powerful ally in nature, the oyster.

Using a \$1 million grant from the New Jersey Department of Environmental Protection, the society has been inviting oysters to move in and help reduce the power of the waves. Steel wire cages have been filled with rocks and whelk shells on which oyster offspring can attach and start their lives. Then the cages are placed in rows along the bay shoreline.

The humble oyster has proven to be a hard worker for coastal resiliency that needs little more than an introduction to the job.

Nearby to the south, oysters are creating an artificial reef to protect the shores of Beach Haven. The project by ReClam the Bay is deploying mesh bags filled with whelk shells already hosting millions of baby oysters. Since 2015, the group has placed 10,000 bags of oysters at the reef site a few hundred yards off-shore.



WAYNE PARRY, ASSOCIATED PRESS

Bags of whelk shells for oyster habitat are anchored by metal rods to control erosion on a strip of beach on Barnegat Bay in Lacey Township. In the distance a barge places cages of whelk shells and oysters in the bay to reduce the power of its waves.

Oysters have shown their mettle throughout the state. ReClam The Bay completed a similar reef in Tuckerton, and NY/NJ Baykeeper has been growing oysters along the secure Naval Weapons Station Earle in Raritan Bay and putting them to work protecting nearby shores heavily eroded by Sandy.

Since 2019, the DEP has been collecting oyster shells emptied by diners at South Jersey restaurants, and drying them for six months to ensure they're clean. Then they've been placed in the Maurice River and along Delaware Bay to promote shore-protecting colonies there. More than 65 tons of shells have been recycled and the DEP is seeking to increase the annual amount handled.

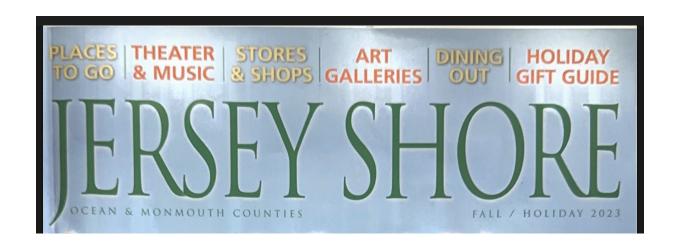
The American Littoral Society, based at Sandy Hook in Monmouth County, also has helped create oyster reefs at four locations along Delaware Bay in Cape May and Cumberland counties.

As a bonus, the oysters help improve water quality in the bay: A single oyster can filter up to 50 gallons of water a day.

Making shorelines more resilient is a wonderful addition to the oyster comeback story. South Jersey once had a thriving oyster industry, when Bivalve was a busy port and the N.J. tall ship A.J. Meerwald was among dozens of oyster schooners. That was nearly ended forever by water pollution, overfishing and devastating parasitic diseases such as Dermo and MSX. But with the help of Rutgers University scientists, the oysters returned to Delaware Bay, where they anchor a growing aquaculture industry.

They've always been delicious and nutritious, and helped keep salt water clean by filtering it as they feed. Now oysters are helping stabilize the shores after people treated them more poorly than Lewis Carroll's Walrus and Carpenter. Surely they're the greatest bivalves of all time.

#### Associated Press, September 28, 2022



# ReClam the Bay Nurturing the Present to Impact our Future



Bill Walsh, president of ReClam the Bay, with Jack Duggan, certified shellfish gardener and captain of ReClam the Bay's Beach Haven site. Bill is holding one year-old clams, and Jack is holding three month-old oysters.

Excerpt from a four page spread in the Jersey Shore Magazine, Fall 2023

### **ReClam the Bay Upwellers**

UPWELLER NAME	LOCATION	CAPTAIN/CO-CAPTAIN
Barnegat Light	W10th Ave & Bayview Ave	Steve Haviland
Beach Haven	Pelham Ave., Beach Haven	Jack Dugan/Dominic Tumas
Brant Beach	63rd St. & Bayview Ave	David Hanson
Cattus Island	1169 Bandon Rd., Toms River	Theresa Simon
Holiday Harbor	115 Admiral Way, Waretown	Rich Labor/Heather Butera
IBSP	24th Ave., S Seaside Park	Cheryl McCurry
Mantoloking	Bay Ave. & Downer	Frank Vives
Mariner's Marina	475 E. Bay Ave., Barnegat	Heather Butera/Cara Lordi
Normandy Beach	541 Broad Ave., Normandy Beach	Rick Kilcoyne
St. Francis	4600 Long Beach Blvd.	Jim Heimlich
Surf City Yacht Club	399 N 9th St., Surf City	Bill Walsh
Trader's Cove	40 Mantoloking Road	Kevin Stifler
Tuckerton	End of Green St. Tuckerton	Marty Volz/Dominic Tumas

A big thank-you to the towns that allow us to run our upwellers free of charge, without them our operations would not survive.









Thank you to the numerous dedicated volunteers who maintain our upwellers. You are the byssal threads that hold us together.

Some of the Surf City Upweller Crew Perfect place for a sunset!





Tuckerton Upweller: Ed P, Marty Volz, and Fred Orlandi





Beach Haven spat tank and upweller with bagged shell in background



Mariner's Marina Upweller in Barnegat attracts volunteers of all ages!









Mantoloking Upweller, 2017

Cattus Island Spat Tank, 2018



A peaceful evening at Island Beach State Park Upweller (IBSP)





Above-Field trip to the IBSP Upweller

Above right-IBSP Upweller 2019, hooking up pipes

Right-IBSP Volunteers, 2019







Volunteers at the Cattus Island Upweller and Spat Tank





Holiday Harbor Upweller Volunteers







**Volunteers at the Normandy Beach Upweller** 









Volunteers at the St. Francis Upweller





Brant Beach Yacht Club Upweller Volunteers: Steve 2020 and Zachary 2019 Below Volunteer in 2024







Barnegat Light upweller volunteers, 2021



Laying the footings for the new Traders Cove upweller, 2024

Captain Kevin Stiffler with Jenkinson's crew volunteers on installation day, 2024



### **History Book Committee**

Cheryl McCurry, the author: "Cheryl gathered information from early and current members by talking to them for many hours. Cheryl is a volunteer with uncommon dedication and drive. She, like many of



our members, loves to "show people new stuff." It is teaching but presented with a feeling of personal discovery. She shares the joy of discovery and celebrates curiosity. Her style is infectious to young and old. Cheryl is one of the best. She does this because she is so curious and willing to try things she has never done before....like write a book! You will feel her warmth and enthusiasm in her words." By Rick Bushnell

Contributors: Rick Bushnell, Jack
Duggan, Cheryl McCurry, Fran Sanchez

Thanks to other members who have contributed photos, clarifications and grammar checks.

### 2025 ReClam The Bay Officers and Board Members:

Rick Bushnell, Chairman
Bill Walsh, President
Max Lopp, Vice President
Cheryl McCurry, Secretary
Ed Pietrowicz, Treasurer
Heather Butera
Jack Duggan
Deb Licato-Meiman
John Meiman
Fran Sanchez
Teresa Simon
Frank Vives
Marty Volz

