



# ReClam The Bay 2023 Year End Review



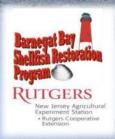
# Spellifish Restoration Program RUTGERS New Jersey Agricultural Experiment Station • Rutgers Cooperative Extension.

# ReClam the Bay 2023 by the Numbers



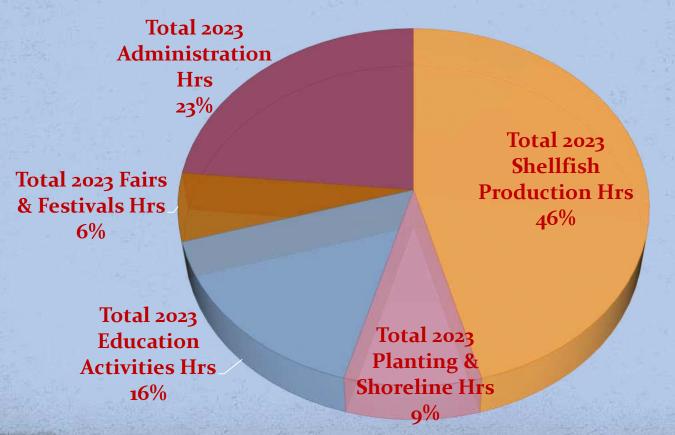




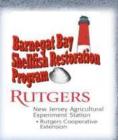


## Volunteer Hours - 2023

Total Volunteer Hours (10 MO) 8643.2







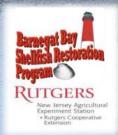
#### Value of RCTB Volunteer Activities

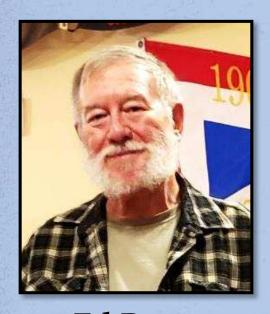
- Dollar value of Volunteer Hours for 2023
  - **\$292,313**
- Value of Miles Driven by Volunteers in 2023
  - \$29,278

In Total, RCTB's 2023 Volunteer Work Hours are valued at an estimated \$321,591

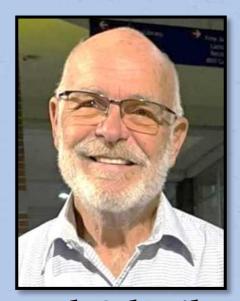


### Volunteers We've Lost in 2023 You will be missed





Ed Barry
Shellfish Gardener
& Coastal Steward;
Volunteer at
multiple upwellers

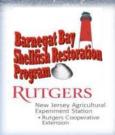


Mark Schreiber
IBSP upweller
volunteer, master
craftsman &
humorist



Hardeski
Master fisherman
& clammer, RCTB
volunteer





## Just a Reminder ... Our Mission

- Involve volunteers in the revitalization of the clam and oyster populations in Barnegat Bay and ...
- Educate the citizens of the Barnegat Bay Watershed and beyond about the importance of shellfish in the bay and how they, as citizens, can work to improve the bay's ecology through their actions.

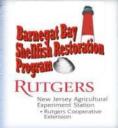












# It Was Another Busy Year













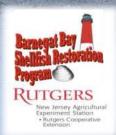


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## It was a great year for raising shellfish

- 130,000 clams over-wintered in our "FLUPSY"
- Our 12 upwellers opened up earlier than usual
- RCTB took delivery of 400,000 (year-old) clams purchased by NJDEP from Parsons Seafood
- 200,000 seed clams were bought for RCTB in late July
- Over 20,000 oysters raised in Upwellers returned to growers or to Living Shoreline projects!





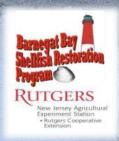
## Disposition of Clams

- 105K Clams were planted at Sedge this summer
- 15-20K Clams, raked up in September, were broadcast in the bay
- The remaining 400K (est.) of upweller Clam output were broadcast into the Bay per DEP instructions
- 200K seed Clams delivered in July will over-winter in the Beach Haven FLUPSY









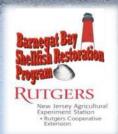
# RCTB's Profile is rising. . .

- ReClam the Bay has developed an outsized reputation based upon programs driven by its dedicated corps of volunteers!
- ReClam the Bay is now recognized by NJDEP and similar agencies as an organization focused on science-based protections of the Barnegat Bay region.
- The number of charitable foundations seeking to support our endeavors has also expanded, from as far away as California.









## Living Shoreline Installations

#### On going and completed projects

- Mordecai Island,
- Green Street
- Iowa Court



# In 2023 - Two new shoreline expansion projects

- Parkertown Beach Completed in October
- Mystic Island On going









# Parkertown – July & September Installations



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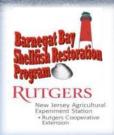












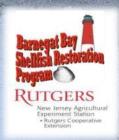
#### Focus on Education:



2023 was a year in which (after a COVID pause) our team of educators greatly expanded outreach into classrooms (Shellfish in the Classroom), libraries, and other public forums to inform the general public about Shellfish and the Bay.

We reached approximately 800 students and hundreds of adults during the year with these presentations.





#### Shellfish in the Classroom

- Barnegat Twp HS
- Beach Haven School
- Bradley Beach Elementary School
- Champion Baptist Academy
- Drum Point Elementary School/ Brick
- Frog Pond School/ Little Egg Harbor
- Lacey Twp HS
- Little Egg Harbor Elementary School
- Manchester Twp Elementary School
- Mill Pond Elementary School/ Lanoka Harbor

The program reached:
Approximately 700 students in the Spring and 100+ students in the Fall





# Focus on Education: RCTB in the General Community

- ReClam the Bay display at Jenkinson's Aquarium in Point Pleasant is up and running
  - Fully functional Upweller model
  - Provides a lesson in Shellfish and Aquaculture
  - RCTB volunteers often serve onsite, answering questions from aquarium patrons.

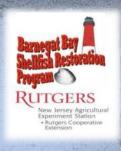




# Focus on Education: RCTB in the general community (Cont.)

- Public Speaking
   opportunities spread the
   critically important
   RCTB messages
  - Maritime museums
  - Jenkinson's Aquarium
  - Fairs and Festivals
  - Upwellers



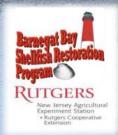












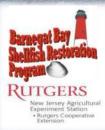
# Research to promote better shellfish growth

- RCTB sponsored intern Nick Guerriero conducted a pair of excellent studies in 2022-23 on the impact of the Bay's typical water variables on shellfish growth.
- Additionally, networking and other applied research, has been driving novel practices to optimize shellfish growth at our upwellers.









## Research and Networking







#### New Project Ideas

- Habitat suitability: Growing oysters in more areas will tell us which areas may be most suitable
- Natural recruitment: explore potential for natural recruitment, wild oyster populations resulting from this work
- Water quality: need better estimates of seston, chlorophyll, nitrogen removal



#### Monitoring for "Ecosystem Services"

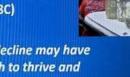
|           | Oyster Populations                                    | Habitat Value  | Water Quality   |
|-----------|---|--|---|
| OBJECTIVE | Increase syster population                            | Increase habitat for fish and invertebrates                            | Increase filtration capacity<br>and nitrogen removal  |
| METRICS   | Oyster density (> 10 m <sup>2</sup> ),<br>Oyster size | Species abundance and richness   | Temperature, Salinity, DO,<br>TSS with oyster metrics |
| METHODS   | Surveys, Counts,<br>Measurements (size,<br>biomass)   | Mesh traps, substrate baskets  | Water quality loggers<br>(HOBOs, YSI), TSS            |
| FREQUENCY | 2 x year (Spring and Fall)                            | 3 x year   | Seasonal – monthly<br>throughout May - Oct            |
| ANALYSIS  | Change in counts over time, histogram of sizes        | Compare abundances on<br>and off reef, or with<br>different substrates | Filtration rate calculations                          |

Adapted from J. Moody, PDE Art from Integration and Application Network (ian.umces.edu/media-library)

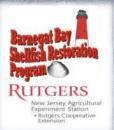


#### **Insights into Clingers**

- Major Expansion into Barnegat Bay
- · Confirmed stings near Tice's Shoal
- Hot Water kills them (28C)
- Bay Nettles LOVE them
- Post-Sandy Sea Nettle decline may have allowed clinging jellyfish to thrive and expand



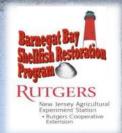




#### More Networking. . . (and Socializing)

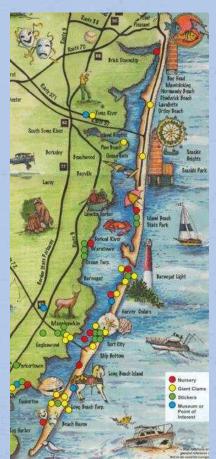






#### The Clam Trail finds new life!

- Linda Hochuli assumed the herculean task of updating locations and images of all Giant Clams throughout Ocean County.
- The "Clam Trail" map has been updated, along with links to supporting businesses in the area of each clam
- The Giant Clams provide additional financial support for RCTB programs!









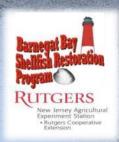






**Thank You Linda** 





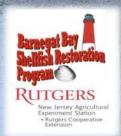
#### A new source for Giant Clams

- Al Fasano developed a relationship with Henriques Yachts, a Bayville company, which crafted the new mold for casting new Giant Clams
- The first new clam shell was donated by Henriques Yachts!



Thank you Al Fasano and Henriques Yachts





# Remote Setting Spat on Shell

#### **Beach Haven**

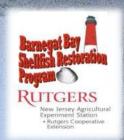




- Record Set of Spat on Shell:
  22%
- Resulted in Over 2 Million
   Spat
- All were used on Living Shoreline projects



## Fund Raising (Cont.)



# Merchandise, Swag, & "Must Haves" – Fran & Heather make it happen!

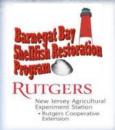
Fran Sanchez and Heather Butera have completely reenergized our merchandise for sale online and at events

Despite rained-out festivals, Covid, and raffle difficulties, these efforts have anchored RCTB's fundraising!





#### ReClam The Bay Continues to Make an Impact!







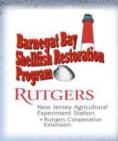


Estimated 10,000 people were reached through ReClam The Bay programs







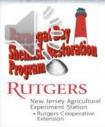


All these activities could not happen without...

You - Our Volunteers

So Thank You Once Again!



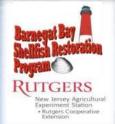


# And Once Again.... Some Irreverent (or is that Irrelevant?) Reflections on Our Volunteers at "Work"

(or What I Did Im My Retirement)









...and for only \$19.95 you too can own a bag of shells

I'm getting mine before they're sold out!



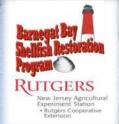
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# Who Cares! My Thermos is full of vodka



OK, now what?



I don't remember. I thought you knew





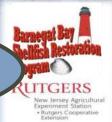
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#### Congratulations on winning the Publishers Clearing House Sweepstakes

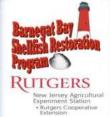




Unfortunately, due to economic conditions, the prize this year is a \$25 VISA gift card



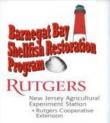
#### Oyster Smugglers caught in the act!







#### Go Forth and Reproduce







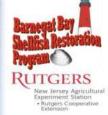
#### And that is a Blue Footed Booby - VERY RARE in this area!!













They scrub down the Upweller every week but don't do the dishes at home

