

Stewards of the Pamlico Sound

Constructing An Artificial Reef
To Recruit Oysters

Decreasing Oyster Population

The oyster population in the Pamlico Sound is decreasing as demand continues to rise.



Why this matters...

Oysters are a vital part of our coastal economy. Although we aren't as economically dependent on oysters as we are on things such as tourism, oysters still provide income for many island families.



In Addition...

Oysters also keep our water clean. They are filter feeders, which aids in keeping the water quality within healthy ranges, ultimately helping the fishing industry.



What we did to help

Last year we tried many times to strip spawn oysters. If we had been successful we would have raised the oyster larvae until they reached spat size and placed them in the sound. Unfortunately we were unable to succeed in the spawning process. BUT...We are going to try again.



Helping..



We weren't about to give up the hope of restoring oyster populations. Instead we took a new approach to this dilemma. We decided to build our very own research oyster reef behind our school.

Building our Reef

Several students with their teacher and some employees of the Coastal Studies Institute worked together to bag over 1,000 oyster shells.



When school ended, we had to work overtime. We loaded these bags into a skiff and placed them strategically into the sound.



We then left them there for the summer to accumulate spat.

Back To School...

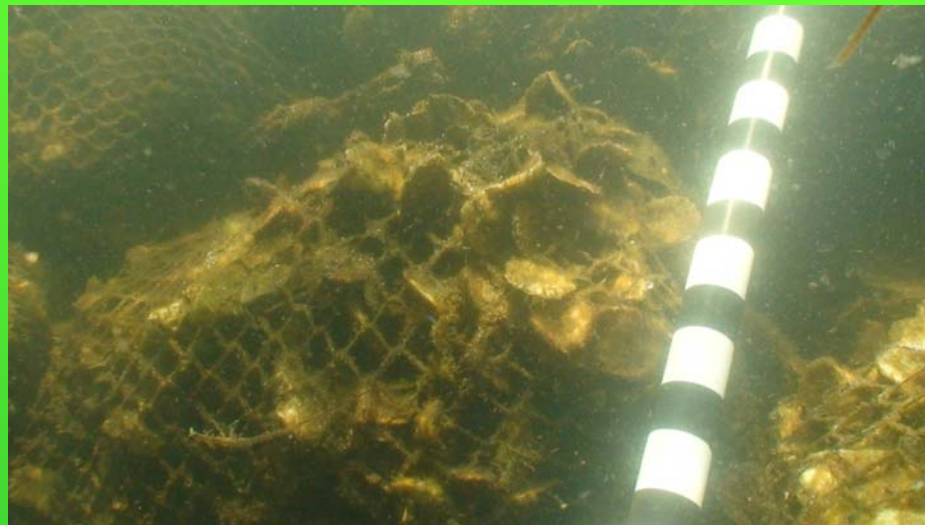
Several eighth grade students suited up to take their first look at the reef since it was built.



We were amazed at what we found next. We laid half meter quadrats down along a transect that ran the length of the reef. We then recorded our findings and came back inside to crunch the numbers.

Our findings...

- Approximately 43 percent sampled showed signs of spat recruitment
- That means that there are approximately 1,275 oysters growing on our reef.



Benefits

- Oysters filter about 5 liters of water every hour
- Oysters filter 120 liters of water per day.
- This improves water quality for all organisms.



A healthier sound will be more productive and commercial fishing could once again be a viable industry.

What YOU Can Do!

If communities worked together to create community reefs, we could dramatically change the sound.



The Benefits Of Working Together

- If we all work together to build several different reefs
- Our waters would benefit tremendously
- The waters of our sound and beach would be much cleaner
- Provides an improved environment for fish and other organisms

One Step at a Time

We have brought along a sample of the materials that we used to create our oyster reef.

Step 1- We cut and knotted one end of the bags

Step 2- We slid the bags over a tube of PVC pipe

Step 3- We loaded the bags with oysters and sealed them

Step 4- We placed our bags in the sound

Please watch this footage of what we have accomplished so far on the oyster reef we built.