

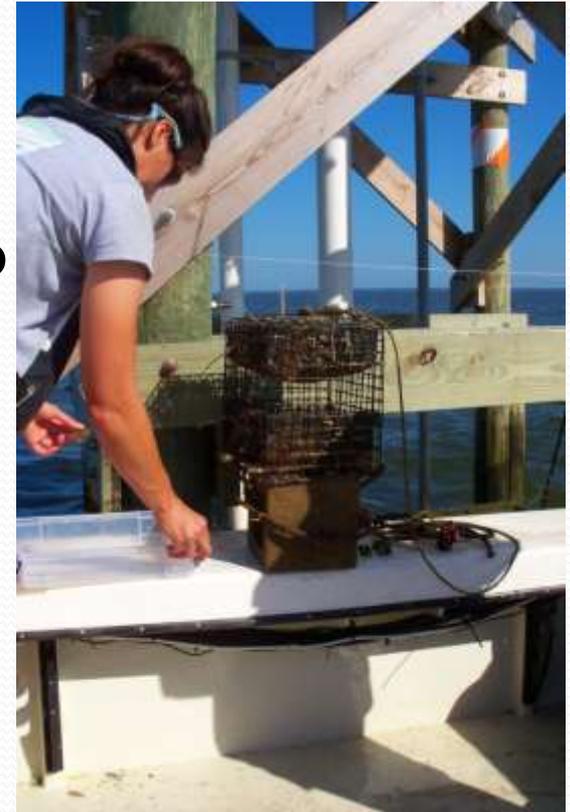
Oyster Substrate Study

by Max Davis

Apalachicola National Estuarine Research Reserve

Jenna

- ANERR monitors the growth of oysters and the organisms growing around them in different areas of Apalachicola Bay.
- For this study they wanted to compare how many oyster spat (babies) will grow on two different types of oyster shells.
- Also of interest are the other organisms living on and among the cages.

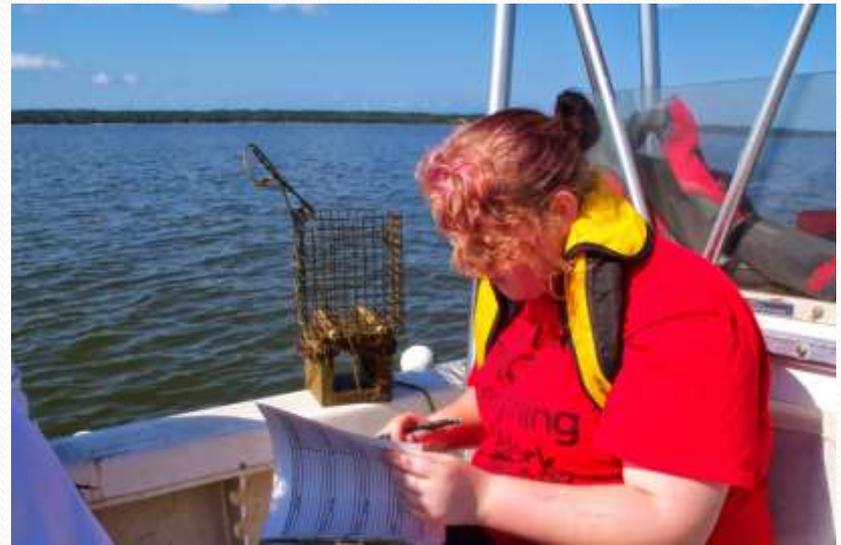


- The experiment is comparing what “grows” oysters best; fossilized shell or regular processed shell.
- Research staff regularly monitor the number and growth of oysters and other organisms.
- There are eight cages at each of the 6 sites.
- Some of the most common “critters” we found were blue crabs, toad fish, feather blenny, silver perch, and mud crabs.

Hannah with an oyster cage

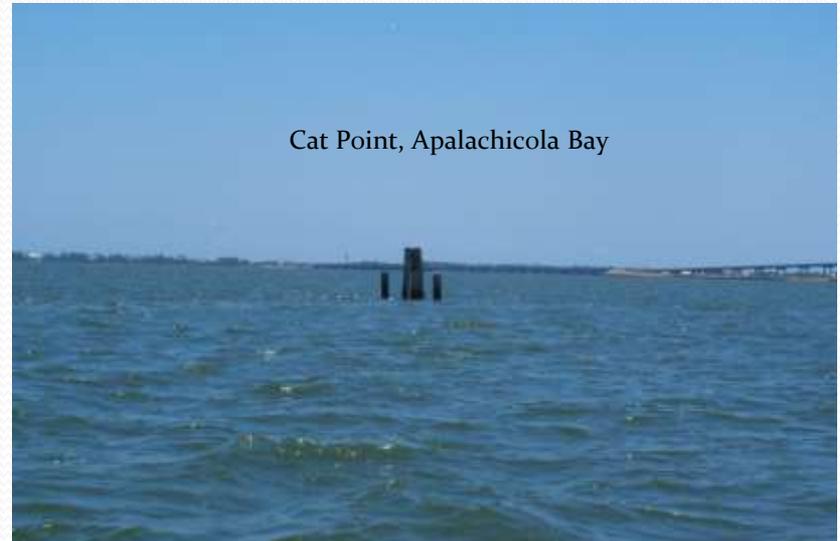


Amanda taking data down



- We checked 38 cages (2 had been lost due to the buoys getting stolen).
- The locations of each set of cages were West Pass, Cat Point, East Bay, and Twelve Mile (2 locations).
- The trays were filled with either of the two types of oyster shell, fossilized or processed
- We took the cages out of the water and counted all of the spat and other species in with the oysters.

oyster spat at tip of pen



- **Kevin Ward, a local business owner, dumped large amounts of fossilized oysters into the river in hopes that it will grow larger oyster populations**
- **We checked the water immediately after for sediment from the calcium carbonate using the vandoren.**



Dataloggers

water quality monitoring

- In addition to checking the oyster cages we swapped out some of the data loggers.
- “Staff have maintained four dataloggers in the bay on a continuous basis since 1995, measuring temperature, specific conductivity, salinity, dissolved oxygen, pH, water level and turbidity every 15 minutes.”
- “They are located at Dry Bar, East Bay and Cat Point approximately one foot off of the bottom with a second datalogger on the surface at the East Bay site.”
- <http://www.dep.state.fl.us/coastal/sites/apalachicola/science/>



East Bay datalogger

Thanks ANERR Staff! We had an amazing time.



Some of the other organisms found with oysters



- This experience taught me about the importance of the estuary and about what a marine biologist does.

