

This is for personal, noncommercial use only.

pressofAtlanticCity.com

MATES students help design clam-growing program

By DANIEL NEE For The Press | Posted: Saturday, February 20, 2010 | [0 comments](#)



Marine Academy of Technology and Environmental Science teacher Jason Kelsey, 28, of Toms River, checks out a tank containing 1-year-old oysters. 'What we're doing here is creating a test system so other schools throughout the state can eventually raise oysters in their own classrooms,' Kelsey says

Photo by: Bill Gross

The results of Rick Bushnell's work have been lying on the floor of Barnegat Bay for the past five years but may soon be more visible due to a program designed by students from the Marine Academy of Technology and Environmental Science.

Bushnell, of Surf City, is president of ReClam the Bay, an organization he started in 2005. The group's members have deposited more than 5 million baby clams and 600,000 oysters into the bay that runs nearly the entire length of Ocean County.

The students from MATES in Stafford Township are helping to design the classroom program that ReClam the Bay hopes will expand to more schools next year.

"What we're doing here is creating a test system so other schools throughout the state can eventually raise oysters in their own classrooms," said Jason Kelsey, a biology teacher at MATES. "Hopefully, we'll be able to create a model for other schools to use. It's something to get the kids involved in a project a little more hands-on, and to show them a significant piece of Barnegat Bay right in the classroom."

The MATES project has juniors and seniors in Kelsey's class caring for several oyster tanks in their classroom and measuring salinity and other variables to determine the best environment in which to raise shellfish in a school setting. At the end of the school year, the oysters will be released near the sedge islands west of Barnegat Inlet.

"The project is great," said Brennan Batalla, 17, of Lacey Township. "We learn about the bay, how to clean it up and make it a better place for all the animals that live there."

Spreading the message ReClam the Bay sees the partnership as a chance to spread its message. While the group maintains its original mission of restoring the bay's shellfish population, members have started visiting Ocean County schools to teach them about the importance of the Barnegat Bay estuary and how it affects people across the state.

“My dream has always been that schools close to the bay would have an opportunity to go to the bay and do something where they could learn about the environment in their own backyard,” said Jim Merritt, program director at the Sedge Island Natural Resource Education Center at Island Beach State Park. “Shellfish, for some reason, were of great interest to kids of all ages. They really appeal to people, and that became the hook.”

As part of the program, students learn about the importance of the bay estuary and the science of shellfish. They also learn about the problems the bay’s shellfish population faces, including increased nitrogen levels due to runoff from fertilizer. After that, the students begin raising their own shellfish in tanks.

“The key is getting the kids physically involved in everything,” said Merritt. “This isn’t a school assembly program. It’s hands-on, and these kids are monitoring the watershed with their teachers and are staying involved long-term.”

Armed with seven upwellers — underwater tanks that keep baby clams safe from the elements and predators — scattered across the bay from Beach Haven to Brick Township, ReClam the Bay members solicit donations each year to purchase millions of clam larvae from hatcheries. They grow them until the clams are ready to be deposited into the open bay.

“Clams are a broad-scale indicator of water quality in the bay as a whole,” said Bushnell, whose organization partners with Rutgers biologists each year to plant the baby clams, known as seed clams. Each fall, new seed clams are placed in the upwellers, and the previous year’s seed clams — which will have grown to about the size of a fingernail — are deposited at strategic points across the bay.

“We grow them from the top of the bay all the way down to the southern mouth of the bay,” said Bushnell. “In the old days, people really knew the ebb and flow of the bay, and now we’re in the process of redeveloping that knowledge.”

Beyond Ocean County

This year, ReClam the Bay has extended its educational program beyond Ocean County, using Web conferencing software to connect local students with their inland counterparts, many of whom may visit areas within the bay’s watershed each summer.

The first link was between students at G. Harold Antrim Elementary School in Point Pleasant Beach and students in Holland Township, Hunterdon County. The goal of the program is to engage students statewide on the importance of maintaining clean water.

“As much as it’s about growing shellfish, there’s a bigger picture,” said Bushnell. “The hope is that people will continue to be fascinated with the environment and how to improve it. Things are changing for the better, and we need to keep them on that track.”