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Education

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‘Citizen scientists’ to deploy for Peconic Estuary testing

by Julie Lane
Featured Story

SHARON GIBBS PHOTO | Preparing with Mashomack Preserve’s environmental educator Cindy Belt for their participation in the ‘Day in the Life of the Peconic Estuary’ are Shelter Island students (from left) Theo Olinkiewicz, Bradley Batten and Tyler Gulluscio.

On Friday, 20 young Shelter Island "citizen scientists" will be deployed at North Ferry and Bass Creek at Mashomack Preserve taking samples that in time will reveal important information about water quality.

Of the 20 students, 10 are 7th graders in Sharon Gibbs' science class and 10 from Dan Williams' marine science class.

The program is a continuation of the "Day in the Life of the Peconic Estuary" sponsored by Brookhaven National Laboratory in cooperation with several groups, including the state Department of Environmental Conservation, Cornell Cooperative Extension, the Central Pine Barrens Joint Planning and Policy Commission, the Peconic Estuary Program, the Suffolk County Parks Department and Long Island Aquarium.

Students in other school districts — a total of 1,700 from 29 school districts — will be involved in similar testing at Carmans, Nissequogue and Connetquot rivers.

The program began last year for the Shelter Island students with Ms. Gibbs and Mashomack Preserve's environmental educator Cindy Belt working with the youngsters at Bass Creek and Mr. Williams working with students at West Neck Bay.

"We're kind of in the middle so we have a unique perspective," Ms. Gibbs said about the choice of Shelter Island students participating with those from 16 other districts engaged in testing at various sites along the Peconic Estuary, Ms. Gibbs said.

The opportunity for Shelter Island students to participate also came about because of Ms. Gibbs' involvement in other programs with Julie Nace of the New York State Department of Environmental Conservation and Irene Fisher of the United States Geological Survey.

"It all ties in with what we do in the classroom," Mr. Williams said.

Prior to taking samples, students have been working on developing their own hypotheses that they will put to the test on Friday.

The students will be collecting fauna, flora and various other biotic factors that give an indication of how water quality is affecting marine life. Another factor students will test for is the interface between fresh and salt water.

Around Shelter Island, there has been concern about salting of wells and some of the students' work may be a precursor to what professional testing by the USGS will reveal after a three-year study begins here in 2016.

At some sites, students will don waders to enter the water and work to restore migratory fish species to their historic seasonal spawning environments, according to BNL Education Manager Mel Morris.

Data collected will be posted on a BNL website at *portaltodiscovery.org/aday*.
Students will also be gathering soil samples that can reveal the effects of weather and temperature changes, Ms. Gibbs said.

She predicted that the students' work will provide "a true snapshot of what is going on that day," while giving them "real world experience."

The sample gathering also will provide another valuable lesson for students. "Real science doesn't happen overnight," Ms. Gibbs said. "Some things take years,"