

Island Heritage Trust News

Island Heritage Trust partnership with DISES has visible results

By ELKE DORR

Take two ardent and creative educators, an idea for a hands-on science project, and a group of energetic students and you just might end up with a result that has the potential for positively changing an endangered environment while simultaneously benefiting a local community. Far from hypothetical, this just happens to describe the components of a project involving Hancock County's 2015 Teacher of the Year and DISES science teacher Mickie Flores and Island Heritage Trust's education coordinator Martha Bell. When Flores was putting ideas together last year for a new project for her 6th-8th grade students, she emailed Ms. Bell for help with developing what, in her words, would be one "where we could make a difference" to both the community and the environment.

Flores was inspired by Coastal Maine Botanical Gardens' Lunder New Naturalists program, an educational approach that combines Place-based Education (PBE) with Challenge-based Learning (CBL) and the "Flat Classroom" concept developed by Vicki Davis and Julie Lindsay. Place-based Education is a philosophy which focuses on "the local community and environment ... to teach concepts in language arts, mathematics ... science ... and other subjects." In Challenge-based Learning, real-world problems are identified, solutions proposed, and action taken. The Flat Classroom concept utilizes web-based technology for collaboration among students and educators across a "dispersed geographic area, for a common curricular purpose." (see *lnn.maine gardens.*

org/content/about-lunder-new-naturalists.)

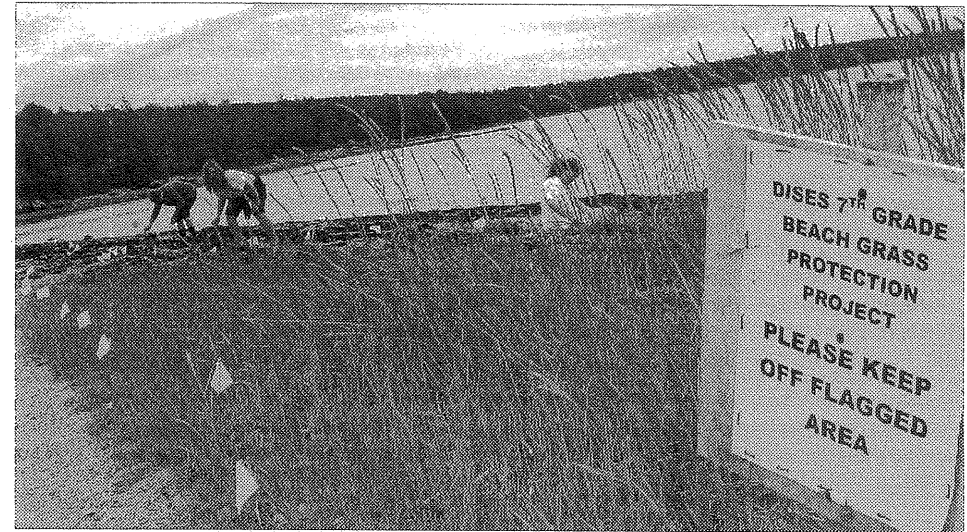
Excited about implementing the educational approach promoted by the Lunder program, Flores was searching for a project that would allow her to implement all three components. Bell suggested a multi-faceted idea that would involve three different student groups. One would identify and work to eradicate invasive species, another would plant pollinators (plants that attract bees, butterflies and other beneficial insects), while a third group would plant native grass on the Causeway Beach to restore what vehicles driving on the beach had eradicated over time.

The technological component of the project involved identifying the problem, researching what could be done about it, reporting to other schools on the website, posting photos, publishing progress and problems, and writing about plant habits and characteristics. For the Causeway Beach project, the students interviewed Ms. Bell, who accompanied them to the site, helped them make signs and install the flags that mark the plantings. Over time, the students will also take elevation measurements with a surveyor's scope to measure any changes in the level of the sand, Bell said, and then document their findings.

In addition to Bell's involvement, local naturalists and longtime IHT members, Marnie Reed Crowell and Diane Walker, visited the students to discuss the importance of pollinators to our environment. Students then planted milkweed in front of the school last fall, while at Mariner's Park, invasive bitersweet was identified and pulled. The 7th graders took to the Causeway Beach, where

they planted *Ammophila breviligulata*, or American beach grass. To the students' shock and dismay, however, vandals soon destroyed the hand-made signs they had erected at the planting site. Determined to respond actively to the vandalism, the students publicly expressed their disappointment by writing a letter to the editor in *Island Ad-Vantages*. Jake Sadler spoke for many of his fellow students when he declared that he was "outraged" by the vandalism. It seemed nearly the entire community shared his reaction, said Flores, as she described how folks approached her after the letter to the editor appeared in the paper to voice their enthusiastic support of the students' efforts and their own shock at the vandalism.

Refusing to be daunted, the students and their teachers carried on. Testimony to their ongoing efforts to restore the beach grass is now highly visible. Indeed, when you cross the causeway, it's hard to miss the thick stands of healthy grass swaying in the wind and marked by small white flags. An essential component in preventing erosion of the beach, the grass helps to retain the sand. Bell stressed that neither the students nor IHT wants to convey a "prohibitive" approach to the beach. "In fact," she said, "we want everyone to know this is their beach." But care must be taken, she added, to help keep grass growing there to protect the beach. Marissa Judkins summed up what all the students observed as they worked on their respective projects when she remarked, "Sometimes plants need our help to grow."



DISES students planting beach grass at Causeway Beach, from left, Mason Plummer, Rachel Shepard and Sailor Eaton.

Photo by IHT Education Coordinator Martha Bell