PLANET | Living Green

Handerland

Habitat Club enlists CCISD students as environmental stewards

By Katherine Adams

coast what the mighty, majestic redwoods are to northern California—a regional resource with an impact that reaches far beyond the local community. Unfortunately, wetlands aren't nearly as noticeable as the towering redwoods. People can zoom right past our wetlands, completely unaware they exist.

Emily Morris, a master naturalist who teaches Career Technology Education at CCISD's Clear Falls High School in League City, understands the importance of our region's wetlands. "I work it into everything I teach," she says. "That's why I'm the sponsor of the Habitat Club, whose goal is to create habitat for animals, plants, and people. I have about 20 enthusiastic kids from all areas of interest in the school. We started the club this school year with a great project to help protect our local environment."

The City of Dickinson contacted CCISD about the detention pond located behind Education Village. "They





Habitat Club sponsor and teacher Emily Morris ready to work at the detention pond site behind CCISD's Education Village. Morris, students, and volunteers transformed the pond into a wetlands habitat.

wanted to see if there might be a way to change that area from a detention pond to a wetland," Morris says. The Habitat Club decided to take on the project."

A detention pond, Morris explains, slows rainwater and lets it flow out to the Bay. "It should be dry most of the time. (A retention pond is different—it holds water.) We think creating wetlands is the best solution for filtering

storm water in an area like ours. Wetlands still allow the water to drain, but we place certain plants there to pick up sediment, filter out toxins, bacteria, and heavy metals

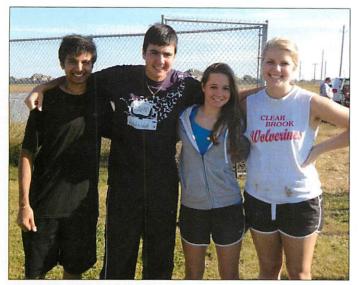
from storm water runoff, and keep them from going into the Bay. Wetlands also provide habitat for all kinds of species. The water is much cleaner when it goes through the wetlands and gets to the bayous and the Bay."

With assistance from Texas Sea Grant and guidance from Mary Carol Edwards, a storm water wetlands specialist at the Texas Coastal Watershed Program/Texas A&M Morris' club enlisted helping hands from other CCISD schools and transformed the space into a unique combination classroom and environmental project—the first of its kind in any Texas public school.

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"In addition to providing a great learning experience for the kids, we are demonstrating how water quality improvements with wetlands can integrate with flood →





Manaan Mehta, Carson Barker, Noelle Richards, Madeline Schaefer all students at Clear Brook High School, helped to turn an outdoor space into a classroom education on creating wetland habitats.

control," Edwards says. "Wetlands are an endangered habitat, and bringing them back is a way for students to connect to our natural heritage."

Over 100 students from Mossman Elementary, Seabrook Intermediate, and Clear Brook High School helped pot plants that they'd first put in greenhouses to grow root systems. Older students showed younger ones how to separate the plants. Career and Technical Education students at Clear Falls made concrete anchors that were attached to small islands of buoyant rafts made from recycled plastic fibers upon which the plants could grow. The anchors allow the rafts to rise and fall along with water levels.

"The wetlands also provide hands-on opportunity to study root systems," says Morris. "Roots work their way through the mesh of the small islands and into the water, where they filter out all the contaminants that wash into the pond along with the storm water." Students get great lessons about plant and animal life, as well as how communities of wetland microorganisms break down pollutants that are filtered through.

Through their research, students are learning which plants are not tempting to local invasive wildlife. They also hope to add a pavilion so that bird watching enthusiasts can study the many feathered species that inhabit this area.

The Texas Coastal Watershed Program provides education, public outreach, and demonstration projects on the Texas Gulf Coast to show the impacts of land use on watershed health and water quality.

Projects range from demonstrating how to manage rainwater in the home garden, to wetland restoration at local state parks, to computer modeling of disaster resilience on the Texas Gulf Coast. See more about projects, upcoming events, and volunteer opportunities at http://tcwp.tamu.edu.

