

SARA HALLAS, interviewed by Glenn Blackburn on January 6, 2011. Sara is Coastal Education Coordinator in the Manteo office of the Coastal Federation. In college, she took a biology major with a marine focus, because she wanted to work in a coastal environment. Then, in 2004 she came to the N. C. Aquarium on Roanoke Island to work as special activities instructor. She joined the Federation staff in 2008.

Sara said that her job is to educate elementary, middle school students, high school students, and adults about coastal environmental issues. Her education programs for students are usually tied in with a restoration project. The projects most often fit with the middle school curriculum, so she does a lot with eighth graders whose science curriculum includes water pollution issues. She works with high school students less often at this time.

Sara said that she always starts with a classroom presentation in a science course. She returns to the class several times for more instruction throughout a school year. Some of the schools she has worked with include Manteo Middle School, Kitty Hawk Middle School, First Flight Middle School in Kill Devil Hills, Columbia Middle School, and Ocracoke School.

The classroom instruction lays the scientific foundation for restoration work out in the field. Sara noted that Erin always works with them when they are in the field. Usually, there are 20-30 students at a time, or sometimes more, who will bag oyster shells or plant marsh grass or help restore a shoreline. The students are always interested in and excited by the outdoors projects, she said.

Some of the restoration projects Sara, Erin, and students have worked on include living shorelines at Jockey's Ridge, Hatteras village, and Ocracoke and rain gardens at Manteo, Columbia, and Kitty Hawk. Sara pointed out that rain gardens are particularly useful for educating students about stormwater runoff.

The living shoreline project at Jockey's Ridge State Park is a good example of the scale of the work Sara and Erin do with students. The first phase of the project took over a year from beginning to end, from the planning of the project to lining up grant money to pay for the restoration to teaching the students in class and then to actually carrying out the restoration in the field. The project involved over a thousand people – students, adult volunteers, Park Rangers, people who supplied trucks – at one time or another. The result was restoration and stabilization of over 400 feet of eroded shoreline; a continued expansion of the project will eventually lead to 700 feet of stabilized shoreline. In a sense, the project will never be absolutely finished, because Federation staff will continue to maintain it.

When asked if schools are generally receptive and cooperative in letting her work with students, Sara said that most teachers are glad to see her. Sometimes, she has to talk to a principal to get permission to do a project, but the fact that the Federation has grant money to pay for a project is a persuasive point with principals.

To help measure the success of the teaching and the projects, Sara said that when she begins with a class she gives a short quiz on pollution issues and then gives the same quiz again at the end of the school year. The scores always improve, she said. Also, either she or Erin always keeps track of how well a rain garden performs or a living shoreline endures by carefully watching the survival rate of the plants. But, these things are sometimes hard to evaluate. Sometimes, a restored shoreline gets torn up by a storm, but according to Sara they have never had one completely destroyed.

Another point is that in Sara's view students usually come to understand the importance of the restoration projects. Many of the students come from fishing families or from families in the tourism/recreation business. They understand the importance of clean water and also greatly enjoy the recreational aspects of it.

Asked if she ever talks about sea level rise with students, she said "not yet," but she may do so in the future. Sea level rise is more of a high school topic, she said. Middle school students don't understand much about sea level rise. Also, she has to be careful about getting into advocacy in the classroom. She has to be unbiased, and sea level rise is a controversial topic.

With regard to marshlands, Sara said that students understand that swamps and wetlands are "important" and "essential," but they do not think of them as "beautiful." They know that filling in marshes is not a good idea, because marshlands act to clean water and they provide nutrients for fish. On the other hand, Sara said that the idea of marshlands acting as carbon sinks is too advanced for her students, because they don't know the chemistry involved.

Turning to adult education, Sara said that she sometimes does workshops on low-impact development for decision-makers. And, she did a workshop in Columbia on issues concerning the Scuppernong River. Also, she or Jan sometimes speaks to adult book clubs or Kiwanis and Rotary Clubs. In Ocracoke, Federation staff sometimes lead seminars for the N. C. School for the Advancement of Teaching. The seminar in 2010 was called "Planet Wetlands," a program on the importance of marshlands and estuaries. In the summer, she sometimes partners with the Park Service on education programs for the general public. Sara noted that adult education has always been an important component of her job.

On the question of the attitude of Outer Banks residents toward the Coastal Federation, Sara said that Jan sometimes gets involved in controversy because she is the Advocate. In Sara's view, working in the schools and doing restoration projects helps to counteract the controversies because they present the Federation in a positive light. Many people on the Banks are suspicious of environmental groups, she said, and they fear that Federation activities will hurt tourism or the commercial fishing business. But, Federation membership on the Banks is growing.

Finally, when asked why people value the coast and will work to protect it, Sara said that people want to protect their own backyard. She added that some people on the Banks used to work in the environmental field and still want to help. In other cases, people who have attended one of Sara's programs for adults will then volunteer to help in some way. First comes the education, she said, then some people are willing to work to protect the coast once they understand it better.

