

Layer Elementary Goes Native to Help Restore Our Wetland Backyard: The Spring Hammock Preserve

by Linda Lyster

At Layer Elementary, we can boast about our wondrous wetland backyard, but without the support of community partners and generous organizations we would never have accomplished our goal of making the most of our natural environment. The “Kathy Craddock Burks Education and Outreach Grant” from FLEPPC provided the funding to restore and enhance our school backyard. We would like to share how our outdoor classroom has developed over the past few years and provides a rich project-based curriculum for all students.

Background

Layer Elementary was constructed in 2004 on property which backs up to the Spring Hammock Preserve, a well-known landmark in Seminole County, Florida. The Spring Hammock Preserve is Layer Elementary’s backyard. It includes Lake Jesup and is surrounded by 1,500 surrounding acres of wetlands made up of hardwood swamps and hydric hammocks. The wetlands

of the school in 2004 resulted in a disruption of the natural ecosystem and the invasion of non-native plant species including ludwigia, skunk vine, air potato, cogongrass, and Chinese tallow.

Vision, Plan, and Action

Within our first year, we realized what a great resource we had in our backyard. Our staff began brainstorming on how we could use the environment for teaching and learning. We needed to make the grounds safe and accessible. We also needed advice on trail construction, plant and animal species, and curriculum. We partnered with several environmental consultants and teachers, the Florida Fish and Wildlife Conservation Commission, St. Johns River Water Management District, and Winter Springs Rotary Club. All parties were invited to take part in our vision and provide advice for our action plan.

Our partners dedicated many hours to assist us with planning. It was strongly suggested that the invasive plants be removed and replaced with native plants, and that plants should be added to barren areas for shade and soil stabilization. It was at this time we learned about the FLEPPC Education and Outreach grant. We sent in our application and were thrilled to be selected to receive funding.

We realized that this FLEPPC grant project could be a rich learning opportunity for students. We decided to have the students identify the invasive non-native plants and decide which tree would benefit the environment as a replacement. We enlisted the help of Biosphere, a native tree nursery and consulting firm specializing in the restoration and creation of natural systems. They helped us narrow down the trees and shrubs best-suited for our wetland backyard. Rotary Club of Winter Springs was quick to volunteer, too. They provided us with the manpower to remove many of the larger and widespread invasive trees and plants, such as Chinese tallow, ludwigia, and cogongrass. This opened the area for trees provided by FLEPPC funding to be planted.

Funding helped to provide gardening tools, plant identification guides, and native trees and shrubs. Students researched the trees recommended by Biosphere. They compared sunlight and moisture needs to determine the most suitable location for planting. Other considerations included rate of growth, size, and maintenance over time. The students also created a wiki at <http://layerwetlandwiki.pbworks.com>. Clicking on Student Projects and 4th grade Habitat Restoration will take you to several videos highlighting what they learned during this project, as well as other grade level projects utilizing our backyard.



Community volunteers remove invasives.

are truly a gem in the middle of a rapidly growing urban region. One must see the land to fully realize its beauty and biodiversity. This wetland community is abundant with a variety of plants and animals, making it a wonderful opportunity to develop an outdoor classroom and to teach students the importance of being good stewards of our environment and planet. Unfortunately, construc-

A Place of Learning

What began as a project for fourth graders has slowly grown to incorporate every grade. All Layer Elementary students enjoy a rich curriculum that incorporates field studies in the school backyard and targets Sunshine State Standards. Teachers facilitate project-based and inquiry-based projects and students learn the nature of science as they put their observation skills to work. Kindergarteners enjoy discovering the likenesses and differences of plants and animals in the backyard wetland habitat. First grade students use their five senses to experience living things in their environment and understand the basic parts of a plant. Second graders learn about the life cycle and survival needs of plants and animals. Third grade students study structures of plants and animals and their responses to the seasons. Fourth grade students explore the food chain and energy flow of plants and animals. Fifth graders discover adaptations and interactions of plants and animals.

The Future

Our goal has always been for our students to become problem-solvers in their community and to develop global awareness. They learn that people can impact their environment both positively and negatively. In the past few years, we have seen our vision become a reality. Our backyard has become a place where students can experience authentic learning. Layer Elementary School continues to take on challenges and explore ways to enrich learning, such as utilizing a GPS to create school tours and using handheld devices to investigate water and soil quality. We also continue to seek grant funding and partners to assist us with creating new trails and boardwalks to make even more areas accessible. Currently the Rotary Club and Home Depot are assisting us with constructing a



Students measure depth for the root ball.

bridge over a spring-fed pond and signage to help identify plant species. Boy Scouts have helped build observational bench seating among the newly planted trees. Lowes provided field guides and classroom resources as well as a covered area for an entire class to be shaded from the sun. Developing our backyard classroom has been a multi-year process and each year we see growth, with students and teachers embracing this learning and teaching experience. We estimate no less than 1,000 people have been impacted by this project and, since we have many of our projects posted to our wiki, a global audience is able to learn about plants and animals in the Spring Hammock Preserve. Our wetland backyard learning experiences for students have become embedded in the curriculum. Students look forward to the unique experience planned for their grade level. We are thankful for opportunities from generous partners and sources such as the “Kathy Craddock Burks Education and Outreach Grant” from FLEPPC to help make our dream a reality.

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State Day at National Invasive Species Awareness Week

by Chuck Barger, NA-EPPC Chair

National Invasive Species Awareness Week in Washington, DC included a State Day this year. As part of State Day, a panel discussion was held on “Strengthening Grassroots Partnerships — CISMA/PRISM/CWMA — What are our next steps?”

There were many participants in the audience and many of those who were not able to travel to Washington, DC, joined online through the national Webcast. For more information about the NISAW panel discussion in March — including the archived webinar — go to <http://www.nisaw.org/2011/webinar.cfm>.

There was a lot of great information and discussion during the session and we would like to keep the ball rolling. We have created a short survey to gather responses from people all over the nation who are participating, or interested in, these types of invasive species partnerships.

The survey can be found at <http://www.surveymonkey.com/s/BSJFCPL>

It should take about 10-15 minutes to complete. Please respond by June 3, 2011.