



From the Director: Excellence in Environmental Education

The Master Naturalist program for teachers is designed to help teachers incorporate experiential environmental learning into their classrooms as well as integrate math, science, and natural history into cohesive lessons. Teacher Allie Eckman did just



Left: Allie points out a bald eagle to a student. Right: Students learn how to use binoculars.

this when she implemented a week-long field study this spring for her gifted and talented students from Robert Smalls Middle School. In 2010, during her first year of teaching, Allie joined the Master Naturalist class for teachers and became a star student.

She then applied what she had learned in the class and worked with LCI staff to provide her students with four of the same field experiences that she had while in the Master Naturalist class. During the special course held over spring break, students learned first-hand about this region's habitats and how humans have been interconnected with them during the past three centuries.

Allie's story is an example of why LCI's "training the trainer" approach to environmental education has been so successful. Attracting the right

people to the Master Naturalist classes results in high returns from the investment that LCI puts into the program. Participants in LCI's Master Naturalist programs continue to spread the word that the course is a life-changing experience that should not be missed. This word-of-mouth promotion is attracting those people who are already active in their communities – either through their professions or as retirees – and the training they receive in the Master Naturalist class improves their effectiveness as stewards of the environment and nature enthusiasts.

LCI will continue to seek ways to leverage our resources that help consolidate and focus the resources of others so that a shared goal will be accomplished – ensuring that the Lowcountry is a special place to live.

Chris Marsh

The Gator Guys

by Tony Mills

When Ann Westerlund drove up to the Nature Center, she was obviously very excited about something. Apparently, the "gator guys" had just trapped an enormous alligator in her back yard and needed a hand working it up. Now you guys know me, I love

wild animals, and I knew that if they wanted a hand with this one it must be a pretty impressive size.

I leaped into the truck and followed her to her house where I found Tom Murphy and George Rock holding the end of a rope that disappeared into the pond.

As I grabbed the rope to help, I noticed it was as taught as piano wire and swaying slightly from side to side. As we pulled on the line, an enormous head finally emerged, followed by an equally impressive body. We managed to drag the beast up onto the grass,

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Master Naturalists Lead Habitat Restoration Project

One of the main objectives of the Master Naturalist program is to create a group of volunteers who are enthusiastic and knowledgeable about the Port Royal Sound ecosystem. The erosion control project initiated by Master Naturalists at SCDNR's Waddell Mariculture Center is a perfect example of how the volunteer service of Master Naturalists has benefited our local environment.

In January of 2012, Waddell Mariculture Center director Al Stokes approached the Low-Country Master Naturalist Association about working on a project at the facility. A small group, coordinated by Master Naturalist Rick Kurz, gathered and devel-

oped a plan to minimize the severe erosion that was occurring at the top of the bluff where a building is located and along the shoreline. Many groups collaborated to achieve this objective including the LCMNA, Low Country Master Gardeners (LCMG), SCDNR, Clemson Extension, and Friends of Waddell. To stabilize the shoreline, the group coordinated with SCORE (South Carolina Oyster Restoration and Enhancement) to install 600 bags of oyster shells, creating a reef that slows wave action and provides new habitat for baby oysters. On the bluff, volunteers planted hundreds of native plants to stabilize the soil and minimize rainwater washout.

More than 100 individuals have volunteered time to the project providing over 600 hours of service to the environment. The project has been a great success! Erosion has been halted at the site. Along the shoreline, new oyster spat are colonizing the reef and *Spartina* grass has become established in an area that was previously just mud. The buffer of native plants along the bluff has filled in and is attracting a variety of butterflies, other insects, and birds.

Funding for the project came from the LCMNA and LCMG, while many of the native plants were provided to the group as a grant from LCI through the Spring Island Trust's Native Plant Project. The project will be incorporated into educational programs for students held at the Mariculture Center and will also be used by Clemson Extension as an example of best practices for marsh buffer restoration.

Many thanks to the volunteers who put so much time and energy into making this project a success!



Left: The oyster reef (made from recycled oyster shells) that was installed along the shoreline. Right: Native plant buffer that was planted along the bluff. Photos courtesy of Rick Kurz.

New Addition to Learning Expeditions Schools Program!

During this school year, Kelly Skrabacz will be working with Chris Marsh in the Learning Expeditions Schools Program to develop field studies for local elementary and middle school students. Kelly moved to the Lowcountry about a year ago with her husband Jarret, who is a Navy Corpsman on Parris Island. They have three cats and a Chi-

huahua named Pebbles. Originally from Maryland, she received a B.A. in Biology from St. Mary's College of Maryland in 2010. During her senior year, she studied abroad in The Gambia, West Africa researching primate species. Kelly is looking forward to a great school year and getting more involved with the local community.



(The Gator Guys, continued from pg. 1)
 secure its mouth with jumbo rubber bands and climb on its back so we could start the workup. It was a big male that measured in at 11 feet 1 inch.



About three years ago, retired SC-DNR biologist

Tom Murphy and longtime SCDNR volunteer George Rock began an alligator study on Spring Island. The original plan was to understand the demographics of our alligators, including sex ratios, size distribution and total population numbers. Each summer, they have captured, measured, sexed and tagged many alligators before releasing them back into their habitat. Tom and George were also interested in whether alligator behavior could be modified during

Left: George Rock holds the rope taut as he pulls in the alligator. Right: Tony and Tom Murphy measuring, tagging, and sexing the animal.

the tagging process.

To date, they have captured about 150 animals and learned a great deal about the population (estimated at 300 animals over 2 feet) that lives on Spring Island. The guys have also determined that many of the animals they captured and tagged have demonstrated a dramatic change in behavior. Before the study started, certain alligators were unlikely to move even if approached very

closely by a person. After capture and tagging, the same individuals often fled or submerged before people came anywhere near them. The data show that these behavioral changes have lasted over two years and should continue for years to come. Minimizing human/gator interactions is a benefit to both parties and the two researchers will be expanding the study to new locations in the coming year.

Nature Fun at Summer Camp



Children learn about corn snakes at EcoCamp. Photo courtesy of BCSWCD.

This summer, almost 200 youth participated in programs given by LowCountry Institute staff during their summer camps. “Backyard Wildlife” and “Reptiles

& Amphibians” presentations were given for Laurel Bay, the Beaufort County Soil and Water Conservation District Eco Camp, and the Beaufort Yacht Club summer camp. With the help of the animals from the Mobley

Nature Center, campers were given a close look at some of the animal species found in the local area and conservation issues associated with them.

LCI also provided programs for the Coastal Discovery Museum’s summer ecological camp. The children participated in a habitat safari on Spring Island where they learned about the habitats and ecology of a sea island, and also completed an identification activity featuring 20 reptiles and amphibians that are found around the South Carolina low-country. They were very excited about the opportunity to interact with some of the larger animals from the Nature Center, like the yellow rat snake!

Osprey Observations

Once again, fly fisherman, Master Naturalists, and birders “hit the water” this summer to observe osprey nesting behavior. Their job was to determine if nests were active, map nest locations, and note whether or not a mating pair produced chicks. But the real fun was in watching the birds raise their families! As Betsy Richards commented, she “just loves this each season. Those fledglings are LOUD!” Similar to last year, 70% of the 143 nests observed were active but the number of nests that produced chicks was down from 67% to 56% (2011’s nesting success represents the highest production observed since the survey began in 2009; other years had nest success rates similar to 2012). We anticipate creating a five year summary of osprey nesting behavior following next year’s survey. A big “thank you” to the many volunteers who have contributed to the project including members of the Sea Island Fly Fishers, LowCountry Master Naturalist Association, Fripp Audubon Society, and Parris Island Natural Resources.

The mission of the LowCountry Institute is to provide responsible leadership in the conservation and use of Low-country natural resources – its biodiversity, pristine waters and ecological landscapes – by fostering learning opportunities and helping local policymakers, landowners and residents make informed decisions.

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