



Letter From the Director

The goal of the LowCountry Institute is simple to explain – to help the residents of Beaufort and Jasper Counties act in ways that protect the region's natural resources and special places. Making this happen, however, is much more challenging. It requires changing public opinion, educating policy makers about the local environment and making sure the scientific information necessary to make informed decisions is available.

From the beginning, partnerships were recognized as being essential to the LCI's success. For more than a decade, we have focused on partnerships which address two issues: improving public understanding about the local environment and protecting water quality. Today, LCI partners include the Beaufort County Channel, Beaufort County's Planning Department and Stormwater Utility, Beaufort County Open Land Trust, Beaufort County School District's Curriculum Team, the Town of Bluffton's Planning Department, Clemson University's Youth Learning Institute, Coastal Conservation League, Jasper County Planning Department, NOAA's research facility in Charleston, Port Royal Sound Foundation (formerly Friends of the Rivers), SC Department of Natural Resources and SC Sea Grant Consortium.

The foundation of LCI's efforts to improve public understanding about the local environment began eight years ago when I recognized that, in order for a community to rally to protect its environment, members must have a shared understanding of what is special about the area - sparked by an enthusiasm to learn about the place in which they live. This body of knowledge became the curriculum for the Master Naturalist class that to date has over 500 graduates. Upon completing the course these graduates are eligible to join the Lowcountry Master Naturalist Association, which coordinates volunteer opportunities and provides continuing education so



Photo by Eric Horan

that people who take the Master Naturalist program can stay involved and network with each other.

Like all good programs the Master Naturalist class continues to evolve. The addition of Tony Mills and Kristen Mattson to the staff has improved and expanded the program significantly. In addition, our TV series *Coastal Kingdom*, done in partnership with the Beaufort County Channel, shares the lessons of Master Naturalist with thousands of residents in the Lowcountry from Beaufort to Charleston. I am beginning my fourth year teaching a Master Naturalist class for teachers, which meets one Saturday a month throughout the year. Training the teachers has led to solid partnerships with the Beaufort County School District and Clemson University's Youth Learning Institute, which helps schools take students outside to learn.

With our partners, we are able to overcome the challenges of educating the community about our unique environment. With the support of our loyal donors, we spur action and protection of these special places and valuable natural resources.

Chris Marsh



Coastal Kingdom Website Launches

The LowCountry Institute and Beaufort County continue to produce new episodes of *Coastal Kingdom* - including "Finding a Mate" and "Survival Strategies" - which are full of Tony's adventures with different creatures of the Lowcountry. The program

was honored this past spring with an Emmy nomination in the informative nature program category. We are excited to announce the launch of our very own *Coastal Kingdom* website! The website features a video player where full episodes of the show can be

watched in HD, curriculum guides for teachers to utilize the videos in their classrooms and a nature notebook with blogs about outdoor expeditions and creatures seen on the show. Spread the word that *Coastal Kingdom* can now be seen online!



watch on the web: www.coastalkingdom.com

LCMNA Members Share Enthusiasm for the Environment

The Master Naturalist class, LCI's "flagship" education program, trains local community volunteers, naturalists and teachers about the ecology of the Lowcountry which, in turn, helps them become better stewards of our local natural resources. Three years ago, LCI worked with graduates of the program to create the Lowcountry Master Naturalist Association (LCMNA) for the purpose of helping Master Naturalist graduates to continue their environmental education

and become active as volunteers in the community.

The current LCMNA Board, elected in February, recently developed a strategic plan for the organization, adopting goals and objectives they plan to accomplish. LCMNA president Dr. John Fisk, a Harbor Island resident says, "I could not be more proud of the energy and enthusiasm of our board for insuring that the membership realize the goals and benefits of the Lowcountry

Master Naturalist Association." They plan to increase the connectivity of Master Naturalists with schools, conservation groups, and local communities; create a curriculum of advanced training classes available to program graduates throughout the state; enhance field experiences; implement a recognition program for volunteers; and support three community environmental projects created by Master Naturalists.

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Summer Learning For Community Children

This summer, the LCI was able to provide fun, educational ecocamp experiences for over 250 Beaufort County children. With various partners – the Coastal Discovery Museum, Beaufort County Schools, the Beaufort County Soil and Water Conservation District, and the Environmental Education Association of South Carolina – we provided hands on learning experiences, live animal presentations, and field excursions for camp participants. Students were especially excited to see baby American alligators and a diamondback terrapin up-close.



Who's the herp? Top left: Campers learn how to identify local reptiles and amphibians. Top right: Tony teaches the students about common snapping turtles. (Photos by Amy Tressler, Coastal Discovery Museum) Bottom right: EcoCamp participants learn about the American Alligator. (Photo by Shelby Berry, BCSWCD)



Learning Expeditions Schools Program Expands

In August, rising sixth graders at Robert Smalls Middle School were greeted with a pleasant surprise their first week of class. They would continue to be immersed in outdoor education experiences through the Learning Expeditions Schools program that had followed them from ele-

mentary to middle school! Through a partnership with Clemson's Youth Learning Institute (YLI) LCI's Executive Director Chris Marsh has worked closely with Beaufort County School District to increase experiential learning opportunities in local schools.



Stream Science: 8th graders from Robert Smalls Middle make a contour map of a mountain stream.

During the first week of classes, YLI trainers took students through a series of activities designed to help improve the students' ability to work together effectively as a team. These team skills will then be put to use as each grade attends one of the YLI 3-day, 2-night science camps during the first 8 weeks of school. The sixth graders attended Camp Bob Co-

per, located on Lake Marion, where they studied soil, water and forestry. The eighth grade attended Camp Hannon, located near Table Rock Mountain, where they explored mountain habitats and geology using a curriculum developed by LCI's Executive Director Chris Marsh. The seventh graders will attend CSI Camp in Pickens, SC where they will study forensic science. Student participation in these field trips is being funded by Title I funds, which are given to schools with over 50% of students on free or reduced lunch so that all students at the school have the opportunity to participate in these unique experiences.

During the 2011-2012 school
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Partners for Port Royal Sound

Is it possible to have healthy marine environments adjacent to coastal development? New information from the scientific and engineering communities suggests this is possible if the development is done in ways that minimize storm water runoff. The LCI is working with the Coastal Conservation League and with Dr. Geoff Scott at NOAA's research lab in Charleston to ensure that policymakers, local environmental activists, and local businesses have the desire and knowledge to take the necessary steps to direct development activities so that they do not impact water quality. This is a monumental task that currently is not receiving sufficient attention and resources to be effective.

To address this shortcoming, LCI has partnered with the Port Royal Sound Fund, started by Spring Island residents Sharon and Dick Stewart, and the board of the Friends of the Rivers (FoR) to transform FoR, a 501(c)(3) organization, into the Port Royal Sound Foundation. (LCI partnered with former executive di-

rector Nancy Schilling to help start the FoR organization 10 years ago.) The goal of the PRSF is to engage all residents of the region to do their part in protecting Port Royal Sound water quality. This will be done by creating positive partnerships with government, business partners and local communities.

The future home of the Foundation will be the building formerly known as the Lemon Island Marina, located next to the Chessee River bridge on Highway 170. This \$1.2 million gift donated by the Stewarts will provide an ideal location for an interpretive center and attract thousands of residents and tourists. Future plans include purchasing the adjacent property so that a classroom and kayaking facility can be constructed.

A successful organization requires a successful leader. Fortunately, just such a person moved to the region four years ago and was available to fill this role this past summer. Kathryn Madden accepted the position as

Executive Director of the PRSF and began working full-time on September 1st. Kathryn brings over 20 years as a research scientist and six years as a public school teacher to the position. Her outgoing and pleasant personality, combined with her strong organizational skills and science background, make her an ideal leader for the fledgling organization.

LCI will partner with the Foundation by supporting research that provides new information about the Port Royal Sound system and presenting this information in a format that is easily understood by the public. PRSF will educate the public through media and education centers, develop business partnerships that promote practices that protect our waters and help local governments leverage tax dollars to support projects that protect the Port Royal Sound. Most importantly, the Foundation provides an opportunity for all residents of the region to financially support efforts to protect the water quality of Port Royal Sound and its tributaries.

Osprey Project

A big "thank you!" goes out to the 40 volunteers who participated in the joint LCI/Sea Island Fly Fishers citizen science osprey survey this summer. Fisherman, Master Naturalists, Audubon club members and Parris Island Natural Resources contributed observations. Preliminary results show that of the 137 nests observed,

72% were active. Of the nests that had osprey activity, 67% produced at least one chick during nesting season. A full report is available on the LCI website. We hope through this study to establish baseline data about osprey populations to monitor the health of the Port Royal Sound system over time.



Osprey Observation: A SIFF member looks for osprey on a nesting platform.



(Learning Expeditions, continued from page 3)

year, Dr. Martha McIlveene has joined the LCI team to administer the Learning Expeditions Schools program to our pilot schools: Shell Point Elementary, Shanklin Elementary and Robert Smalls Middle School. Dr. McIlveene brings over 30 years of experience as a science educator to the program. She has served as a science classroom teacher, Science Director for Savannah-Chatham Public Schools and Director of Oatland Island Education Center. She was also the Science Coordinator for Beaufort County Schools. Dr. McIlveene will coordinate in-classroom learning experiences, administer hands-on lessons as part of the Learning Expeditions curriculum and support teachers as they incorporate activities into their existing curricula.



Board members Kay Grinnell and Diane Fisk help Audubon's Beidler Forest personnel install nesting boxes for prothonotary warblers.

Photo by John Fisk

(LCMNA, continued from page 2)

One such project was started by Master Naturalists Pete Richards, Marian & Ray Rollings, Wendy Wilson and Anne Kennedy. Over the past few years, they have worked tirelessly to develop the Fort Fremont Historic Site on St. Helena (owned by Beaufort County Rural and Critical Lands Program) into a nature and historical park. The LCMNA supported the project by providing funding to label native plants and install signage along the nature trail that has been created on the beautiful 15 acre property overlooking Port Royal Sound.



Fort Fremont

The board has also developed a website where Master Naturalists can track volunteer projects, find information about activities, and communicate with other members. This fall, Master Naturalists will teach local students about Port Royal Sound at the Waddell Mariculture Center. Students will learn about fisheries, tour the Center and have hands-on lessons about creatures found in local waters on the DNR's Discovery Educational Vessel. The work of the LCMNA is another example of how LCI leverages its resources to have a dramatic impact on the region.



Master Naturalists assist SCDNR veterinarian Dr. Al Segars with tagging horseshoe crabs for research.

Photo by John Fisk

Welcome Lisa Olenderski!



Lisa Olenderski is LCI's new education intern. She is a 2010 graduate of Coastal Carolina University with a degree in marine science and spent the past year as an intern at the UGA Marine Education Center and Aquarium on Skidaway Island where she taught youth education programs and cared for the center's aquaria. Her duties at LCI will be to care for the

live animal collection in the Nature Center, assist with education programs and work with Tony on *Coastal Kingdom*. Lisa hails from Manheim, PA and in her spare time enjoys playing tennis and doing anything that gets her outdoors. Her favorite creatures are sharks and rays!

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.



The LowCountry Institute
40 Mobley Oaks Lane
Okatie, SC 29909
(843) 987-7008

LowCountry Institute Trustees

Larry Fuller, Chairman
Ann Baruch Jack MacNeish
Dan Boone Ginger Mitchell
Jim Chaffin Ed Pappas
Rick DeVoe Al Stokes
Mary Jane Hender Joe Williams

Staff

Chris Marsh, Ph.D.—Executive Director
cmash@lowcountryinstitute.org

Lisa Gravil—Administrative Assistant
lgravil@lowcountryinstitute.org

Kristen Marshall Mattson—
Environmental Educator
kmattson@lowcountryinstitute.org

Martha McIlveene—Curriculum
Martha.mcilveene@beaufort.k12.sc.us

Tony Mills—Education Director
tmills@lowcountryinstitute.org

Lisa Olenderski—Education Intern
lolenderski@lowcountryinstitute.org



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