



Friends of Coastal South Carolina

Supporting our National Forest and Wildlife Refuges

Education Updates... This is no ordinary science class!

Summer 2016

It's all about the next generation!

We know it is indeed all about the next generation. The future needs knowledgeable, engaged, and motivated citizens making decisions to continue to protect the valuable ecosystems of our coast. For 20 years we have been teaching students about the importance of our coastal ecosystems. For all of those years our programs have provided not only a unique learning experience but also the only opportunity many of our students have to actually get outside, explore wild places and make a real connection with the natural world. The world has changed dramatically in those 20 years and so have our children. Studies indicate that compared to children of 20 years ago, today's kids spend half as much time outside. In addition, it has been estimated kids are now spending as much as 53 hours a week using electronic devices for entertainment. We know that without the opportunity to make a lasting connection with nature there is little chance this generation will grow up to be the next generation that protects and conserves our natural resources. Through Earth Stewards career day our kids even have the opportunity to spend a day with natural resource professionals and learn about conservation careers.

Grace Gasper
Executive Director



Above: A Browns Ferry Elementary student learns about the magic of spotting scopes from South Carolina Audubon staff at our natural resource career day, and checks out a heron perched across the Pee Dee River. Below: Browns Ferry and Plantersville Elementary Students on Yauhannah Bluff after a day of learning about natural resource careers.



The next generation of conservation professionals



Top right and above: Yauhannah Bluff was the perfect spot for students to learn about different soil types and layers.



Above: Craig Sasser, Refuge Manager at Waccamaw National Wildlife Refuge, talked about his career as a refuge manager and a biologist. Right: Waccamaw Riverkeeper, Emma Boyer, brought a great hands-on demonstration to show how pollutants find their way into our rivers and oceans.



What do you want to be when you grow up? We are delighted to give our Earth Stewards students some possible answers to this age old question they may not have thought of before. Each spring we offer a natural resource career day where students have the opportunity to get to know a variety of natural resource professionals. Students learn about what the presenters do every day, and what education and experience their careers require. Along with some great presentations, professionals like Waccamaw Riverkeeper Emma Boyer and DNR soil scientist Debbie Mann brought some of their hands-on tools. The Waccamaw Riverkeeper took us through how she uses “model communities” to teach about how rain washes pollutants into our rivers and oceans. Debbie Mann showed us

some hands-on soil sampling techniques and taught us about the different soil types found on Yauhannah Bluff.

Our Earth Stewards students learn about the relationship between producers and consumers in an ecosystem. Debbie took the lesson one step further reminding us of the importance of soil in an ecosystem. How important is soil? Just think of all the things we depend on every day, like food, clothing, and wood that we would not have without soil.

Did you know only a fraction of the earth’s soil can grow crops and most of it is already under cultivation, and that it can take thousands of years to build up just one inch of topsoil ?

Earth Stewards grows to include fourth graders



Fourth grade students from Minnie Hughes Elementary School in the ACE Basin got to visit Bulls Island in Cape Romain National Wildlife Refuge as part of our new “Introduction to Earth Stewards” program this year. They found some really cool stuff to examine on the beach (left) and on the Coastal Expeditions Ferry (above). We are looking forward to having these kids back in the full Earth Stewards program as fifth graders to continue exploring and learning.

Through a generous grant from the National Parks Foundation’s “*Every Kid in a Park*” program last year we were able to introduce 750 fourth graders from Charleston and Georgetown Counties to Waccamaw and Cape Romain National Wildlife Refuges. The program was designed to encourage fourth grade students to visit our public lands and was a natural introduction to our existing fifth grade Earth Stewards program. Fourth graders from nine of our Earth Stewards schools participated. We have always known one of the greatest strengths of our Earth Stewards program was the multi-lesson design and this project gave us the opportunity to build on that model, beginning the learning experience a year earlier.

The fourth grade program focused on the adaptations of animals and plants to their environments; a key fourth grade science standard. Charleston area students learned about the adaptations

of animals to the marine environment of Cape Romain National Wildlife Refuge while students visiting Waccamaw National Wildlife Refuge learned how many native birds are especially adapted to their environments. Our favorite lesson explores how birds’ beaks are adapted to their food source.

The exploration will continue this fall as these students return as fifth grade Earth Stewards and more fully explore our coastal salt and freshwater ecosystems.



Earth Stewards: Twenty years of bringing classroom science lessons to into the real world

We have always been about teaching our kids the techniques scientists use in the field every day and about giving them practice with some of the tools and techniques scientists use. Whether it's using microscopes, refractometers, dichotomous keys or transect techniques for estimating populations in large areas; our lessons continue to focus not only on learning the facts, like how many gallons of water an oyster filters a day, but also the importance of something as small as an oyster to an entire ecosystem.



Above right: Waccamaw Intermediate students do an oyster reef dissection lesson in class prior to going out into the field to explore the marine ecosystem of Cape Romain National Wildlife Refuge and Bulls Island (above left). Learning about the anatomy of an oyster and knowing an adult oyster can filter 50 gallons of water a day is one thing. Actually seeing the miles and miles of oyster beds in Bulls Bay gives a whole new perspective to the lesson, and a whole new meaning to the role of oysters in this ecosystem.



Saint James Santee students learn to use a dichotomous key to identify skulls of mammals who are part of the salt marsh habitat (above). They also learned that by using transects and just a little math (yes, math is really useful in the real world!) they could estimate the number of fiddler crabs in a much larger area (right). We love real world problem solving!



PO Box 1131
Mt. Pleasant, SC 29465
(843) 697-7535
www.sccoastalfriends.org
[Facebook.com/sccoastalfriends](https://www.facebook.com/sccoastalfriends)

Dedicated to preserving the ecosystems and wildlife of the South Carolina coast for future generations; we support our national forest and wildlife refuges through our education programs, advocacy work and by engaging citizens in stewardship of these critical resources.

Staff

Executive Director Grace Lynch Gasper
Education Coordinator Andy Thompson

Board of Directors

Virginia Prevost, Chair
Alyssondra Campaigne, Vice Chair
William H. Jarrard, Treasurer
Diane Krishon, Secretary
Chris Crolley
George Geer
Edward Graham
Sarah Hartman
Bob Raynor

Friends of Coastal South Carolina was founded in 1996 as the SEWEE Association.

Donate Now

www.sccoastalfriends.org