# SEWEE Association

Friends Group to the National Wildlife Refuges and Forest of Coastal South Carolina

#### Fall 2013

- Sea Turtle Conservation at Cape Romain
- Planning for the Future of the Francis Marion National Forest
- Environmental Education: New Programs and Partnerships





#### **SEWEE Association**

Staff Executive Director Grace Lynch Gasper Education Coordinator Allison Kreutzer

> **Board of Directors** Virginia Prevost, Chair

> > Sarah Hartman, Vice Chair William H. Jarrard, Treasurer Diane Krishon, Secretary Tom Badgett Chris Crolley Edward Graham Bob Raynor Eddie White

PO Box 1131 Mount Pleasant, SC 29465 (843) 697-7535

sewee.association@earthlink.net seweeassociation.org facebook.com/seweeassociation

#### **Connecting Local Communities with** Nature:

The Sewee Association was proud to partner with Cape Romain, the Francis Marion National Forest and many others from the community to make the first annual Bulls Bay Nature Festival a reality. Despite a rainy March day the Festival brought hundreds of local residents to the refuge and forest to discover the amazing habitats, wildlife and recreational opportunities on our public lands. Kids had an opportunity to attend, among other things, fishing and archery workshops. Plans are already well underway for next year, and the most exciting news so far is that naturalist Rudy Mancke will be our guest speaker.

#### **Second Annual Bulls Bay Nature Festival** Saturday May 17, 2014



Our thanks to AccuPrint of Mount Pleasant for their assistance with production of this newsletter.



#### From the Director

#### Dear Members,

1

In this edition you will read about some of the amazing work you have made possible, like over 13,000 interactions a year with students along the South Carolina coast through our environmental education programs (at no charge to schools), and sea turtle conservation efforts at Cape Romain National Wildlife Refuge. Your financial support is what makes this all possible, and we are grateful for the opportunity you give us to continue this important work. It absolutely would not happen without you! I also want to extend an additional thank you to our founding members (page 9) for their generous and ongoing support.

From environmental education to the important wildlife management projects we support, the overall goal of all of our programs is to encourage citizen stewardship of our natural resources. Whether it's helping kids discover how they can contribute to restoration of a salt marsh or connecting adults to the many ways our public lands contribute to our quality of life here in the Lowcountry we are all about getting people involved. The idea of citizen stewardship of our nation's wildlife and habitats is not new; it has its roots in President Theodore Roosevelt's establishing Pelican Island, Florida as the first National Wildlife Refuge in 1903. Lacking federal funds for staff, the warden at this very first refuge started as a volunteer, laying the foundation for citizen commitment to our public lands. Today across the country over 400,000 volunteers contribute 1.3 million hours a year to our wildlife refuges.

As important as your financial gift is to our work, your gift of time means just as much. There are countless opportunities for you to volunteer with the Association and on our refuges and forest, including working with our education programs, being a docent at the Waccamaw or Sewee visitor centers, helping with special events like Music and Oysters for Wildlife and the Bulls Bay Nature Festival, and public facilities maintenance (skilled tradespeople are in high demand!). With the federal budget sequester inflicting severe staff and funding losses on our refuges and forest there is no better time to get involved. We need you now more than ever. If you would like more information about volunteer opportunities please drop us a note at sewee.association@earthlink.net

Sincere thanks for all you make possible,

are listed as an endangered species in South Carolina.



#### Loggerhead Sea Turtle Conservation at Cape Romain: 35 years of work paying off!

Carl Safina wrote the following about species going extinct... "when a species crashes (it leaves) more of the world like all of the rest of the world as the whole world grows increasingly the same."

Our national wildlife refuges are dedicated to preserving the diversity of species that makes our world and our lives rich and interesting. With your generosity we are proudly supporting their efforts. For ten years the Association has been supporting loggerhead sea turtle recovery efforts on Cape Romain National Wildlife Refuge by funding field technician positions during the nesting season, supporting predator control efforts and providing needed supplies and materials.

The work at Cape Romain is so important because while the refuge has only about 10% of the suitable nesting beaches in South Carolina it is home to about 35% of the nests laid in the state; making the refuge the most important breeding ground for loggerheads north of Florida.

As many of you well know, during the 50 plus days of incubation turtle eggs are vulnerable to predators (like raccoons) and, because of beach erosion, to being washed over by high tides. So sea turtle conservation must begin with protecting nests.



Predator guards being installed to protect relocated nests on Cape Island.



Posts mark relocated nests on Lighthouse Island.

On Cape Romain this effort is nothing short Today's breeding adults may well be some of of heroic. From late April to late August over the first hatchlings to have benefited from 80 volunteers donate over 6,000 hours to the population recovery efforts that began 35 refuge's nest protection and monitoring years ago. Refuge manager Sarah Dawsey is efforts. They are led by two full time field quick to remind that many factors are at play technicians and Cape Romain's biologist Dan and that although it seems likely that nest Ashworth. Seven days a week the work protection efforts are paying off only time will begins at dawn before most of us have even tell. She also adds that public education and hit the snooze button for the first time. Crews work tirelessly to ensure every nest on the refuge has the best possible chance of producing hatchlings.

new nests. Each new nest, and there can be with the University of Georgia will allow up to 45 a day, is assessed and either researchers to track the nesting patterns of protected in place with predator guards or relocated to a hatchery. Field techniques have been carefully developed over the years and they work. 75 to 80 out of every 100 eggs survive to hatch. Studies have shown that without this work only about 23 out of every 100 eggs would survive to hatch.

The nests that are being protected today are producing the turtles that will return as breeding adults in 30 to 35 years. Because turtles mature so slowly, assessing population trends is a long term commitment. Loggerhead sea turtles were initially protected in 1978 and the efforts since that time seem to be paying off. Nesting numbers have steadily increased at Cape Romain over the last several years, peaking at a record 1,906 nests this year. Florida, Georgia and North Carolina are also reporting record high numbers of nests.

protecting turtles while they are at sea are also critical components of the conservation effort.

Other important work is also taking place on Cape Romain's beaches. Genetics research Each day every nesting beach is surveyed for being conducted on the refuge in conjunction individual females and their offspring. Researchers will be able to identify a given female's offspring and determine how close to her actual hatching site a daughter returns to lay her eggs. This is all accomplished by analyzing the DNA signature in the shell of a turtle's egg, and will give valuable information as to how many turtles are actually nesting as well as where and when individual turtles are nesting. As sea levels rise and current nesting beaches continue to be lost to erosion, biologists will be faced with new and greater management challenges. The information gathered from this study will be critical in guiding their future efforts and assessing population trends. For more information on this important genetics research and more nesting statistics check out www.seaturtle.org.

#### The *future is up to us* ...



Sea turtles are indeed ancient ocean dwellers. Predating dinosaurs they have been called the "great-grandparents of the world". Of the seven species of sea turtles on earth, all are either threatened or endangered.

It is a perilous journey from egg to breeding adult. Although nests are being protected and much has been done to make the open waters safer for turtles, boat traffic and commercial fishing are still threats. Pollutants in our waters, like plastic shopping bags which turtles and other wildlife mistake for food cause fatalities.

directly on the beach that disorients, the glow possible. from nearby cities and towns can be just as disruptive. As development moves north along Highway 17, Cape Romain will be impacted. It is up to us as citizens who value our natural resources to make our voices heard when development is discussed.

in supporting the critical work at Cape public on sea turtle research and conservation Romain National Wildlife Refuge. Indeed efforts along the South Carolina coast. many of you already have and are recognized Presentations were followed by lunch and on our donor thank you pages. We set an ongoing discussion with our presenters. ambitious goal of raising \$30,000 to support Despite a rainy March day members from as the refuge's conservation efforts through the far away as Myrtle Beach attended. 2014 nesting season, and thanks to your Presenters included Jeff Schwenter, SCDNR; generous support we are halfway there. This Sarah Dawsey, USFWS Cape Romain year's fundraising efforts were kicked off National Wildlife Refuge; Kelly Thorvalson, with a \$2,500 gift from Loggerhead Apparel. Turtle Rescue Program Manager, South In addition Coastal Expeditions and naturalist Carolina Aquarium and Dubose Griffin, Patrick McMillan teamed up with us to raise

Turtles are also threatened by coastal lighting, another \$7,350 through the Bulls Island Safari which disorients hatchlings, drawing them trip in May. We are incredibly grateful to inland instead of toward the ocean. Those Patrick and his wife Chris, and Coastal working on beaches around the world are Expeditions for giving so generously of their learning that it is not only a single light time and resources to make that event

Connecting citizens to the science... Fundraising is only part of the conservation story for the Association. Public education is the other part. In March the Association's Annual Membership Meeting, at the Sewee Visitor and Environmental Education Center, You can also make a difference by joining us featured a scientific conference for the general SCDNR.



Association members Nell and Ken Daniels and Nancy Osguthorp at a reception the Association hosted in March honoring Patrick McMillan for his contribution to conservation efforts at Cape Romain. The event also raised funds for sea turtle work at Cape Romain.





**Loggerhead Apparel** American-grown. American-made.



Patrick McMillan, Director of Clemson University's Museum of Natural Sciences and host of the award-winning PBS nature program "Expeditions with Patrick McMillan", led a Bull island Safari in May (above with wife Chris). Photo by Bob Raynor



#### Ed Graham Testifies Before House Subcommittee

Sewee Association board member Ed Graham traveled to Washington this spring to testify before the House Natural Resources Subcommittee on Oceans, Wildlife and Insular Affairs on the National Wildlife Refuge Review Act of 2013 (H.R. 638), which would revoke authority from the FWS to establish new refuges administratively, even though they must go through a rigorous public process to do so. Ninety percent of all refuges have been created using administrative authority-a number that includes action by every President since Theodore Roosevelt. The bill will be considered by the House in October. Read Ed Graham's testimony in support of administrative establishment of new refuges at:

http://refugeassociation.org/2013/04/2013refugebills/

Ed Graham (L) and Mary Harper ( of the Friends of Forsythe NWR in New Jersey), stand with Jim Kurth, Chief of the National Wildlife Refuge System, after testifying before the House Natural Resources Subcommittee on Oceans, Wildlife and Insular Affairs.

#### Waccamaw National Wildlife Refuge: Protecting lands for wildlife and for people...

Our refuges add value to our communities in countless ways. Waccamaw National Wildlife Refuge protects one of the most extensive intact wetland complexes in the Southeastern United States and some of the most diverse freshwater wetland systems found in North America today. The lands the refuge protects provide habitats for hundreds of wildlife species. These wetlands also play a critical role in the filtration and storm water retention of the primary drinking water resource for the greater Grand Strand region, a vital component of the region's economy. In addition the refuge protects traditional uses of these lands for people, ensuring they will always be places to hunt, fish, boat and enjoy our amazing wildlife; all things that make the North Coast such a desirable place to live and work.



## New ferry service from the Yauhannah visitor center makes the refuge accessible to residents...



One of the biggest challenges for the visiting public at Waccamaw is gaining access to the refuge's remote properties that offer some of the more remarkable sites to experience. One of those sites is the 10,915-acre Sandy Island. Now managed by the refuge and The Nature Conservancy, Sandy Island was formed thousands of years ago when glaciers melted and the waters flowed into the Atlantic Ocean. The amazing habitats you can experience there include an old growth longleaf pine forest, maritime upland and wetland forests, and tidal wetlands.

The refuge has teamed up with Coastal Expeditions and The Nature Conservancy to begin a pilot project providing limited access to Sandy Island. A limited schedule of ferry trips now depart from the Refuge Visitor Center located at Yauhannah Bluff, and can be booked through Coastal Expeditions: info@coastalexpeditions.com or (843) 884-7684

#### Cox Ferry Lake dock and fishing pier now open...

This spring the refuge was given funding through the deferred maintenance program to replace an old dilapidated dock at the Cox Ferry Lake Recreation Area. The refuge inherited the dock when it acquired the property and it has never been opened due to safety concerns. R.L. Morrison & Sons of McClellanville was awarded the contract to build the new dock and work began mid-summer. It was completed on September 6<sup>th</sup> and is now open to the public. Visitors can now safely dock their boats and get out and use the picnic shelter and hiking trails. Kayakers can also use the dock to launch kayaks safely and it serves as a great stopping/resting point along the Waccamaw River National Water Trail.



#### Citizen Stewardship: SEWEE Association partners with Waccamaw to address invasive species...

This summer the Association and Waccamaw NWR were awarded grant funding through US Fish and Wildlife Service to address management of invasive species on the refuge. The goal of the grant program is not only to manage invasive species, but to actively engage volunteers and 'Friends' groups in the process. The funding will be used to determine the most cost efficient and effective population control measures for feral hogs and to allow the refuge to become a demonstration management site for other refuges and neighboring landowners. Feral hogs not only destroy critical habitat for hundreds of species the refuge was established to protect, but also cause extensive damage to surrounding farmlands. They also spread several diseases that can be transmitted to domestic hog populations, causing serious harm to human health and economic losses to the farmers. We are proud to partner in a program that will not only benefit the refuge but also surrounding landowners.

#### Planning for the future of the Francis Marion National Forest



Longleaf pine (Pinus palustris)

Decisions as to how the resources of the Francis Marion National Forest will be conserved are guided by a comprehensive management plan. The current management plan was written in 1996 and focused mainly on post Hurricane Hugo recovery. Since that time forest managers have been faced with many new challenges.

In 2012 the US Forest Service began the task of revising the management plan for the Forest. The resulting plan will direct the management of critical ecosystems for the next 10 to 15 years. Through the past year the Forest Service has been conducting extensive surveys of existing conditions on the Forest, including species of conservation concern, hydrology and wetland ecosystems. Other significant issues being addressed in the current planning process include prescribed burning in an increasingly urban environment, climate change, longleaf pine ecosystem restoration, and invasive species.



Kayakers enjoy Wambaw Creek on the Francis Marion National Forest

On August 6th many of these issues were four wilderness areas, rich Revolutionary and held at the Sewee Visitor and Environmental 4,000-year-old shell ring near the salt marsh public but also biologists who have been protecting for generations to come. conducting ongoing, independent research on the Forest.



The Forest provides critical nesting habitat for state endangered swallow-tailed kites.

There is a lot at stake in this process. In addition to being critical to longleaf pine restoration efforts in the Southeast our 259,000 acre Forest is home to nearly 300 species of migratory and non-migratory birds and has This is where citizens come in. The Forest been designated as an Important Birding Area American Bird Conservancy. Species found on the Forest include the state endangered swallow-tailed kite, and the federally endangered red-cockaded woodpecker and wood stork. More than 1,600 species of plants have been documented on the Forest, including 32 species of orchids and 12 carnivorous species like the trumpet pitcher plant. Twenty-five of South Carolina's last remaining 200 Carolina Bays can be found on the Forest. Dozens of species of reptiles and amphibians call the Forest's 153,000 acres of wetlands and streams home.

On top of all this add the incredible recreational opportunities the Forest provides,

presented and discussed at a public meeting Civil War history, and cultural treasures like a

Education Center. Researchers who have been that remains as a monument to Native collecting baseline data on the Forest's American culture, and you have a resource ecosystems presented their findings and which adds tremendous value to our received feedback from not only the general community on countless levels, and is worth

> The Forest's current biodiversity is the result of a landscape recovering from the alterations of rice plantations, intense logging of the late 1800s, the building of roads, and in 1989 Hurricane Hugo, which leveled a third of the Forest. Ensuring the continued recovery and future health of a landscape that has seen so much devastation will require careful planning.

#### Restoring longleaf pine ecosystems:

- Longleaf pine ecosystems are among the most species rich ecosystems in North America. They are also among the most endangered. Only three percent of the 90 million acres of longleaf pine that once dominated the Southeast remains today.
- Modeling conducted in 2013 indicates that longleaf pine ecosystems once dominated 56% of our Forest. Today only 19% of the Forest is dominated by longleaf pine. Lack of prescribed fire is a significant part of this decline. Today the Forest Service is partnering with organizations like The Nature Conservancy to enhance longleaf restoration efforts. The revised management plan will set critical goals for future longleaf restoration efforts.

Unlike our wildlife refuges, which are managed first and foremost for the benefit of wildlife, the forest is managed for a variety of uses, including watershed protection and improvement, habitat for wildlife (including threatened and endangered species), wilderness areas, timber production, education and recreation. It is not an easy task to find a balance between all these uses.

Service needs to hear from you. This is an by both National Audubon Society and the opportunity to support our local biologists and managers in their efforts to protect and enhance critical watersheds and longleaf pine ecosystems for all the species that depend on these habitats, and for the surrounding communities that benefit from them.

> There are additional public meetings planned through the fall and the Forest Service has established a planning website where public comments can be posted. This website will also have dates for upcoming public meetings as they are announced. Participate and encourage others to do the same!

> http://www.fs.usda.gov/detail/scnfs/ landmanagement/planning/? cid=stelprdb5393142

#### The Wildland-Urban Interface. Prescribed Fire in an Increasingly Urban Environment



Prescribed fire not only benefits ecosystems, it makes the Forest and surrounding areas safer by reducing the risk of severe wildfires. Wildfires can burn very hot, putting people in harm's way, destroying property, and destroying wildlife and plant habitat.

Urbanization of the areas surrounding our wildlands (the number of housing units in Berkeley County doubled between 1980 and 2010) is making prescribed fire operations more and more complex and restricted.

The cost we pay for development and lack of prescribed burns is high. Wildfires are expensive to suppress and control. Every year millions of taxpayers' dollars are spent to fight wildfires and to assist homeowners and landowners after wildfire strikes. In fact the majority of US Forest Service fire suppression costs nationally are related to protecting private property in the wildlandurban interface. US Forest Service managers say 50% to 95% of all firefighting costs nationally (up to \$1 billion) go to fighting large forest fires to protect private homes.

Lack of frequent prescribed fire is the primary threat to longleaf-associated ecosystems and at-risk species on the Forest.

Rare plant species on the Forest have decreased since 1996 due to the lack of prescribed fire, and those in greatest decline are at the wildland-urban interface where prescribed burning is most restricted.

**Remembering George Garris** (1932-2013) A Family Tradition of Connecting Kids with Nature



Photo courtesy of Cape Romain NWR

Throughout his celebrated career, George was a strong and passionate voice for natural resources. He faced difficult challenges and witnessed many important accomplishments. Although George served many field stations during the course of his career he managed Cape Romain National Wildlife Refuge from 1974 to 2003. During his tenure he advocated for the restoration of longleaf pine ecosystems travel across the United States visiting refuges, and was instrumental in the implementation parks, and wilderness areas.

at Cape Romain. He directed loggerhead sea programs in the country.

George believed passionately in educating citizens, especially children, about our natural resources, and in the aftermath of Hurricane Hugo in 1989 he forged the unique partnership with the Francis Marion National Forest that resulted in the construction of the Sewee Visitor and Environmental Education Center. Upon his retirement George was honored as the longest serving Refuge Manager in the history of the refuge system. His co-workers remember him as a strong leader who knew what it took to get the job done, and inspired a strong spirit of they do. The Bible says a man who loves his work cooperation within the refuge complex.

George's five children; Georgia Ann, Steve, Wayne, Clark and Jean were kind enough to share the following remembrance of their father and his work. We could not possibly have written a better tribute.

"Daddy's career encompassed a lifestyle for this family. We felt a big part of Dad's job, a unique experience most kids don't get to enjoy. We always knew what he did, where he did it, how he did it and we lived the why he did it. Through most of our formative years we were "raised in the woods" and we cherish the blessings this brought to our lives. Our summer vacations were extensions of Daddy's job. Instead of thousands of children each year overtime Daddy took comp time so that we could opportunity to experience our refuges and

of the endangered red wolf recovery program We were always participating in job activities such as patrolling the refuge, pelican banding and turtle recovery efforts which became one of loggerhead turtle nest counts. Refuge patrolling the most successful sea turtle recovery often led to lively story telling by Dad, illicit coffee drinking, great family discussions and if we were lucky Dad might even sing a verse or two of shotgun boogey. Our Dad was deeply devoted to his work, and thanks to our mom who was deeply devoted to him, he was able to devote so much time to the refuges he loved. Daddy was proud of the fact that two of his granddaughters had followed him into the field of Natural Sciences.

> Daddy was a man of integrity who would always do the right thing. He had an incredible work ethic and we knew he did what he did because he loved his work and not for any other reason. In today's society few men can say they love what is a man truly blessed. We know our dad was a blessed man and a man the Department of the Interior was blessed to have him for 44 years".

> We can assure you George's commitment to his work and passion for the wildlife and lands he worked to protect are carried on today by our amazing Lowcountry Refuge Complex staff. For our part the Association is proud to continue George's legacy of connecting kids with nature. Although few parents today have the opportunity to give their children the experience the Garris family had, our programs, which began under George's leadership, continue to give the forest, and the ecosystems they protect first hand.

#### Environmental Education: New Programs and New Partnerships

for strong environmental education in our projects on the refuges and forest) is used to schools, and that...

the future needs knowledgeable, engaged, and motivated citizens making decisions to continue to protect the valuable ecosystems of our national forest and wildlife refuges.

Environmental education was the primary collect data on freshwater wetlands. Then, in our first two years. Today we reach over give real world connections to the math, science, and critical thinking skills that they are learning in their classrooms.

> Overall, we strive to provide students an experience that will not only reinforce understanding of their science and math of our lessons: adding new student-led requirements, but also stimulate their



Students collect water quality data from the salt marsh near the Shell Ring Trail on the Francis Marion National Forest.

myriad of programs including one-day excursions and a variety of scientific investigation lessons covering topics ranging from reptiles, red wolves, and swallow-tailed kites to water quality and climate change, for 16 years our Earth Stewards program has been the cornerstone of our environmental education efforts.

conjunction with US Fish & Wildlife Service, is a ten week, standards-based curriculum which utilizes the plethora of natural resources provided by our national wildlife refuges and national forest to engage elementary and middle school students in Romain National Wildlife Refuge and the real outdoor science investigations. Students Francis Marion National Forest at the Sewee begin by getting out of the classroom and Visitor and Environmental Education Center onto the refuges and forest to investigate and in 1997 we reached about 75 students a year

Where we've been ... Although we offer a curiosity and inspire them to ask questions about the world and its inhabitants.

In a time when we, as a society, are increasingly disconnected from our natural resources, the experiences our programs provide may be one of the only opportunities many of our kids have to make a meaningful connection with nature. Moreover, with an increased emphasis on math and science Earth Stewards, initially developed in education our programs provide teachers with a host of important tools to augment students' "textbook learning" of math and science.

> When we began providing education programs about the ecosystems of Cape

motivation for founding the SEWEE throughout the year we build on the 13,000 students a year all along the South Association in 1997. Although we have come knowledge gained from the Carolina coast and have added Waccamaw to support other important projects for our initial investigation with field trips and in- and E.F. Hollings ACE Basin National partners, like loggerhead sea turtle recovery class lessons about the flora and fauna of our Wildlife Refuges as partners. Our growth efforts and shorebird conservation, our board local ecosystems. The data students collect has been due to one teacher telling another has always understood the value of and need (along with data from ongoing research about our programs. We think this is the best testament to the value of our offerings.

> Where we're going ... As with nature we are always striving to adapt; always working to keep our curricula timely and improve our teaching techniques. Throughout this past year I have been adapting and updating many investigations, service learning projects and field excursions, incorporating more technology (blogs, apps, and tablets, Oh my?), and integrating the new Common Core standards introduced this school year and the South Carolina science standards to be implemented next year.

> Because our programs are already focused on hands-on investigation, something the new standards emphasize, we will be a great resource for teachers looking for tools to implement the new standards. We also plan to offer workshops for teachers to aid them in implementing the new science standards. Many of these updates are reflected in what I'm calling Earth Stewards 2.0 which we will be piloting this year.

> Arguably the most exciting change this year will be our partnership with Coastal Expedition's South Carolina Outdoors Education Program (SCOEP) that will give all of our Earth Stewards students the chance to investigate Bulls Island as a conclusion to their field studies program! As a result of this tremendous opportunity our main theme this year will shift to comparing the biodiversity of the freshwater wetlands of the Francis Marion National Forest and rivers of Waccamaw National Wildlife Refuge to the maritime habitats of Cape Romain.



Students from Georgetown County traveled south to explore the salt marsh of Cape Romain.

Throughout the program students will be using all sorts of scientific field sampling techniques to investigate water quality and document the organisms in these distinct habitats. Students will make food webs out of the photographs we take in the field, learn to calculate the biodiversity (yes, math is actually useful in the real world!), and discover how scientists use biodiversity to assess the health of an ecosystem. Students will also be updating our new Earth Stewards blog throughout the year with pictures of the cool stuff they encounter, interesting facts they've uncovered, and reflections on their experiences (it will be linked on Facebook so please check it out and see what we're up to!).

Our mission at the Sewee Association has always been to bring science out of the classroom and awaken the innate curiosity for the natural world that we believe exists in all people!

Thank you for making this important work possible,

Allie Kreutzer Environmental Education Coordinator

> Minnie Hughes students build bluebird boxes which they installed on the refuge and at their school as a habitat enhancement project.



This Plantersville Elementary student shows off her drawing of some of the organisms we caught in the ponds and the Pee Dee River of Waccamaw National Wildlife Refuge. Students sketched the organisms and then assigned them to fitting habitat.



#### Reaching the local kids...

At ACE Basin and Waccamaw National Wildlife Refuges we work with students from schools adjacent to the refuges, like Plantersville and Minnie Hughes Elementary Schools, providing these students the opportunity learn about the importance of the protected lands around them and giving them the chance to become stewards of the amazing ecosystems right in their own back yards. We also work with CREECS, Lincoln Middle-High School and Saint James Santee Elementary, all bordering Cape Romain and the Francis Marion National Forest.



*Minnie Hughes students at ACE Basin NWR after a pond ecology lesson.* 

#### Our Summer Interns: Our work would not be possible without them!



#### Sewee Visitor and Environmental Education Center

DJenny Pierre is a junior at Spelman College in Atlanta, Georgia and joined us through the Student Conservation Association internship program as an environmental education and visitor services intern at the Sewee Visitor and Environmental Education Center.

"The one MAJOR goal I wanted to accomplish before the end of my internship was to overcome my fear of reptiles and I definitely became a lot more comfortable with them" Djenny also taught the kids in our programs that reptiles are an important part of our ecosystem and should be respected but not feared.

"Overall, my internship was a great experience which pulled me out of my comfort zone and helped me figure out exactly what I want my future to entail".

#### Waccamaw National Wildlife Refuge

Park Recreation and Tourism Management in May. A generous grant from the Frances P. Bunnelle Foundation made it possible for Josh to join us at the Waccamaw Visitor and Environmental Education Center as an environmental education intern.

"My entire life I have dreamed of working with wildlife, and helping educate the community about what we can do to protect our wildlife. Clemson University encouraged me to keep my dreams alive and pushed me to do my very best. This summer I have been able to incorporate everything I learned over the past four years into my day to day life. I have seen the smiles of all the children I have worked with and I know I have made a difference. From working with the boys at Tara Hall to the Cub Scouts of Georgetown County, I have been able to help them better understand why it is so important to protect our environment".







#### Founding Members

Giff and Connie Beaton Ms. Karen Beshears Jerry Burgdofer Joe Calandra Noreen Clough Ms. Holly Dawson Larry and Mary Davis Ms. Susan L. Drew Macy and Greg Frampton Henry and Harriet Futch Richard and Neva Gadsden Mary Lou Garris Kim Grzybala and Family Nedra and Bruce Hecker Ed Holcomb Dr. and Mrs. John Horres Mr. Fred W. Kinard Jr. Ms. Lynn E. Kress Dr. Charles W. McRae Ben and Ann Moise Jackie and Lee Morrison Mr. and Mrs. Michael Prevost John and Lori Rector Sam and Nancy Welsh Eddie White Ruth C. Witte Ellen Tisdale Nature Adventures Outfitters, Inc. Rudolph G. Johnstone Jr. Douglas and Pam Van Scov Carey Causby Pat Votava and Jackie Shedrow Nancy Chiles Iune Bradham Sarah Hartman Brent Hill Bob and Susan Raynor Julie and Henry Burroughs Bennett L. Helms Ms. Robin W Edwards James and Rhonda Ewing Charleston Natural History Society Frank and Renee Heindel Becki McSwain Cindy Steffen Chris Crolley Kent Wagner Dan Henderson CCBG Real Estate Group Drs. Edward and Betty Farnworth David Pate Tim and Joanie Teel Shane and Morgan Ziegler David and Deborah Oyster Barry and Beverly Gumb Glenn and Natasha Bagley Catherine B. Gramatzki David Shuckstes Pat and Ginny Provost Bill Gurney Dr. Thomas M. Badgett Capt. Russell Mitchum Jr. Patrick Smith Norman and Marcy Walsh Michelle Lynch Loggerhead Apparel

Foundations

The Frances P. Bunnelle Foundation Funds of the Coastal Community Foundation of South Carolina: Bakker Family Fund Lothmann Family Fund National Fish and Wildlife Foundation ERM North American Foundation Lowcountry RC&D National Environmental Education Foundation The Post and Courier Foundation Kinder Morgan Foundation

Sponsors

*Corporate (3,000)* Loggerhead Apparel

Corporate (\$1,000)

Jarrard, Nowell & Russell Graham Law Firm J. Marshall Allen and Dr. and Mrs. Robert Allen

(Snall Business (\$500)

Dr. Jason Cohen 17 North Roadside Kitchen Ben Bryson Properties Law Offices of Daniel Hunnicut

#### Small Business (\$250)

Sewee Outpost Coastal Expeditions Nature Adventures Outfitters Guy C. Lee Building Material Wells Fargo Barry Gumb Berkeley Electric Cooperative Sun Store Solar Bulls Bay Historic Passage Chamber of Commerce

George Garris Memorial Fund

Noreen K. Clough McClellanville Seafood Fred Kinard Dana and Virginia Beach Thomas and Ann Anderson Earl and Patricia Roberts Randy and Ginger Keith Virgil and Sandra Harvey R.K. and M.B. Holder James and Patsy Howe William and Helen Julian Thomas and Linda Beroth Arlis and Sherry Ethridge Betty M. O'Donnell Robert and Francis Beach John and Becky Camara Douglas and Luanne Beach Clark and Kerry Garris Zane Kennedy Garris Sarah G. Arnold Tommy and Sharon Payne Paul L. and Ann L. Beach

2013 Seat Turtle Project Supporters

Coastal Expeditions Loggerhead Apparel James Wilson and Cynthia Murphy Dan Fifts Marjorie Rath Marvin and Marcia Rosenberg Lee and Jackie Morrison Fred Kinard Robert and Kay McCarley Richard Chaytor Bob and Cindy Steffen Edgar and Lucia Jaycocks Betty M. O'Donnell Noel Thorn Michael and Virginia Prevost Betty M. O'Donnell Tom and Melanie Mauldin

Special thanks to board member Bob Raynor who lead two trips to Bulls Island which raised \$1,300 for sea turtle conservation work.



All of you who attended on January 12th **(all 750 of you!)**, and our generous sponsors and contributors made 2013 our best year ever, raising \$30,000 to support the Association's work. We had an amazingly warm and sunny January day and plenty of Bulls Bay oysters, burgers , BBQ, drink, and great music for all ages. We can't thank you enough and we are already planning for another great year in 2014.

Hosted by Sewee Outpost Music by Awendaw Green and Stage Presence

Food and beverage provided by

Lowcountry Doors & Hardware, Inc., Ben Moise, Palmetto Brewing Company, Westbrook Brewery, Southern Wine and Spirits, A Southern Bartender, Carolina Seafood

Musicians

Lincoln Middle/High School Steel Band, Ed Hunnicutt, Red Dog Ramblers, Cravin' Melon and friends, Doug Jones, Charles Hedgepath, Tim White, Donnie Blackwell, Danielle Howle and Firework Show, and Maggie Rose

Silent Auction

Contributors:

Carolina Heritage Outfitters Nature Adventures Outfitters Coastal Expeditions Barrier Island Ecotours 17 North Roadside Kitchen TW Grahams Village Mercantile McClellanville Arts Council Boone Hall Plantation South Carolina Aquarium Christophe Artisan Chocolatier Middleton Place Edmonton-Alston House Charleston River Dogs Palmetto Carriage Company Andrew Pinckney Inn Mills House Southern Lady Mattress Co. The Original Hammock Shop

Dwell Smart Half Moon Outfitters Kreutzer and Dorl Florist Charleston Coffee Roasters Hidden Ponds Nursery Trader Joe's True Value Hardware - East Bay Seaside Vision Center Time Out Sport and Ski Charleston Green Taxi East Cooper Auto Pros Budget Rental Car A Southern Bartender Stella Nova Bottles Loggerhead Apparel Williams Knife Company Awendaw Green Backpacker Quality Gear The Bicycle Shoppe Dewee's Island

Sheraton Gateway - Atlanta Homewood Suites - Pinehurst Dunhill Hotel - Charlotte Holiday Inn - Historic Downtown Charleston Holiday Inn - Atlanta Myrtle Beach Resort Sheraton Suites - Tampa Hampton Inn - Miami Hyatt Hotel - Greenville Sewee Outpost Ginny Prevost Jan Kreutzer Pamela Corwin Tom Badgett Jody and Nicole Rankin Connie Leverett Dr. and Mrs. Dave Osguthorpe Dr. and Mrs. Robert Allen

Save the date! 9th Annual Music and Oysters for Wildlife January 11, 2014 Tickets go on sale November 2013 (check our website) and make great holiday gifts!



10

SEWEE Association PO Box 1131 Mt. Pleasant, SC 29465-1131



Friends Group to the National Wildlife Refuges and Forest of Coastal South Carolina Non-Profit Organization U.S. Postage **PAID** Permit #373 Mt. Pleasant, SC

**Or Current Resident** 

### Thank you for being a Friend !

... and helping us make a difference for kids and wildlife along the South Carolina coast. Our work is not possible without you. Please renew your membership today (expiration date on mailing label). If you have already renewed please consider making an additional gift to support our conservation efforts.

The SEWEE Association is a 501c(3) non-profit organization. Your gift is tax deductible to the fullest extent the law allows.





