



National Park Service
U.S. Department of the Interior

Cumberland Island National Seashore
101 Wheeler Street
St. Marys, GA 31558



EXPERIENCE YOUR AMERICA

Going Green

By LISA NIELSEN



We need your help! We'd like to go "green" with the Mullet Wrapper. And here is how you can participate. With an e-mail address, the park can electronically e-mail you the Mullet Wrapper or you can go to the park's website www.nps.gov/cuis and read the Mullet Wrapper under the Park News section. Either call Justin at 912-882-4336 extension 226 or e-mail Justin at justin_helton@nps.gov to add you to the electronic Mullet Wrapper mailing list and/or to have your name removed from the current mailing list. It's quite simple! And it saves time, money, and valuable resources by participating in the park's "going green" campaign. Of course, if you would still like to receive the Mullet Wrapper in its paper form, you will continue to do so. Thank you for your consideration!

Park News

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The Mullet Wrapper



The official newsletter of
Cumberland Island National Seashore
October through November 2011

The Eastern Wild Turkey, *Meleagris gallopavo* is one of the many wild animals that roam free on Cumberland Island. (NPS Photo)

Letter From The Superintendent

By FRED BOYLES

A popular phrase nowadays is, "Giving back to the community." Usually that means some sort of community service. In our agency, that often means serving the larger National Park Service. Many of us at Cumberland Island serve in various capacities on boards, committees and other assignments that do not specifically serve Cumberland Island but rather the Bureau – the NPS. Let me mention just a few. Facility Manager Carl David was elected by his peers to serve on the Southeast Regional Maintenance Advisory Group. In that capacity he reviews project proposals and advises the Regional Chief of Facility Management from a field perspective. Resource Manager John Fry served on a review panel to rank funding proposals for Natural Resource proposals. Fire Management Officer Ody Anderson taught fire fighting skills at Timucuan National Preserve where our staff and other park staff were in attendance. Curator John Mitchell assisted the Harpers Ferry Center with a preservation project on the historic gates at the Castillo De San Marcos. Maggie Tyler assisted her former park Cape Hatteras after they were hit with Hurricane Irene. Brian Wentworth has taught the Boat Operators course in several parks and is scheduled to teach it again at Chickamauga. Rick Hagford has been sought out by several other parks for his masonry and tabby skills. Mickey Bosworth spent time at Carlsbad Caverns last year assisting that park with road maintenance. I really appreciate these and other employees who take time out from their regular

duties to serve in these capacities. I too have enjoyed several opportunities to serve. Several years ago I was appointed to serve as the NPS representative on the US Veterans Affairs Advisory Committee on National Cemeteries. This year marks the end of a three year term on the National Park Foundation's Superintendent's Advisory Committee. In that capacity I learned so much about philanthropy and the special role the Foundation has played in supporting the parks. I have just been appointed to the Wilderness Leadership Council of the NPS. Because I am a newbie to the wilderness field, I see this as another great opportunity to learn. I especially hope to learn from other parks and the wilderness issues they face and how they have successfully managed them.



Fred Boyles
Superintendent

Safety Corner

By JAMES OWENS

The Southeast Region began conducting onsite safety and health reviews in FY'2011 in order to meet the NPS 50B requirement that each park receive an occupational safety and health (OSH) evaluation every three years and a Public Risk Management evaluation every five for the safety of the public. To date, 27 SER locations have been reviewed with 13 new SER sites scheduled for FY 2012. Cumberland Island National Seashore is currently scheduled to conduct their review in August of this year. No specific date has been set yet. This provides ample time and opportunity for the park to get its Safety Programs updated.

Additionally, during this fiscal year, the Risk Management office will be working on the following Safety and Health program initiatives:

- More comprehensive injury/illness data analysis;
- Establishing safety and health networking capabilities between the parks and the Regional Risk Management office;
- Increased safety education programs for the safety officers, Superintendents, Deputy Superintendents and supervisors;
- Establishment of a SER Risk Management SHARE point site; and
- Performing Occupational Health Risk Assessments at selected Parks to begin establishing baseline noise measurements for the Region.

I will continue to keep you updated as information is made available.



Clemson Conducts NPS Class @ CUIS

By FRED BOYLES

Clemson University and George Washington University jointly conducted a class for future NPS managers titled Human Dimension of Outdoor Recreation and Public Land Visitation. The class was aimed at NPS staff who seek to gain more exposure to land management issues and problems associated with public visitation. Much of the student learning was done in the



fall via virtual meetings, readings and exams. The culmination of the class was a four day camping on Cumberland Island followed up with a similar experience at Congaree Swamp National Park near Columbia, South Carolina. At both parks, the students looked at management issues from resource protection to visitor access in a setting of diverse natural and cultural resources and designated wilderness. The 14 students and supporting faculty camped for three nights and were immersed into a number of Cumberland Island's complex issues. Their trip to Cumberland ended on Monday, December 5th with a series of presentations made to the park's management.



Armadillos?

By DOUG HOFFMAN

A common question lately on CUIS has been "where are all the armadillos?" Indeed there are considerably fewer armadillos on the island than previously. The most likely reason for the decline can be found in the last two winters. Armadillos have a low metabolic rate, meaning they don't produce much body heat. They also do not maintain much body fat and must forage for food on a daily basis. These factors limit their ability to survive prolonged periods of cold weather with temperatures below freezing. The winters of 2010 and 2011 were some of the coldest on record in Jacksonville, with some areas recording over 40 days of below-freezing temperatures in a year. December 2010 was the coldest on record for several local cities.

The CUIS armadillo has been hit with a double dose of bad luck, the second dose coming in the form of no water. Drought conditions have persisted on the island since May of 2010, making it even more difficult for the animals. Evaluation of armadillo ranges suggests that they can survive in areas that receive at least 15 inches of rainfall annually. Based on the armadillo's reproductive capability of 4 young per birth, they should rebound if we have several winters with average temperatures and return to an overall weather pattern of consistent rainfall.



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The Travel Channel Visits Cumberland Island

By MAGGIE TYLER



Park Guide Alexander Altwater gives an interview in front of the First African Baptist Church in the Settlement.

Stay tuned to the Travel Channel. A new show called "Park Secrets" that is scheduled to air in February will feature Cumberland Island. "Park Secrets" is part of the new series of shows that the Travel Channel will feature in their 2012 lineup. The 30 minute show will be about Georgia's Golden Isles and have one segment about Cumberland Island. The film crew visited the Island on December 9th and spent the day seeing the main features of the park. Their main interest was the newly established Lands and Legacies tours. The show was drawn to the park via the Georgia Department of Tourism Coastal Regional Representative Carey Ferrara. This level of national exposure should help to promote visitation to the park and its programs long into the future.

THANKSGIVING Luncheon



Thanks to everyone who attended our annual Thanksgiving Luncheon. Fun times were had by all! For those who were unable to attend, you were missed and we hope to see you next year!

Interns Abound

By MAGGIE TYLER



Intern Maika Kondo

As 2011 draws to a close, the Interpretation and Education division pauses for a few moments to reflect on our accomplishments. While the Seashore has always depended on interns and volunteers in various capacities, the Ranger division greatly expanded its use of interns over fiscal year 2011. We expanded our program to include international and long term interns through our partnership with the Student Conservation Association (SCA). Audrey Bohl arrived in May to fulfill a year long position in our Ranger Division which focuses on visitor services, including Sea Camp visitor programs, volunteer logistics, and all around island support. Maika Kondo an intern from Japan spent two months this summer working with visitor services and resource management monitoring sea turtles. In addition, two other interns Maria Huffne and Lindsey Heathcote supported visitor services for eight weeks. All of the positive work with the SCA and the interns led the park to seek additional project funds for FY 2012. We are very happy to announce that for FY 2012 our proposal was accepted and we will have up to four interns funded from the regional intern project funds. We look forward to another year of success with interns and the SCA.

Butterfly Survey

By SARAH CORBETT

The ongoing volunteer butterfly survey being conducted by Dr. Marc Minno and Maria Minno has some exciting results! Since the project began in June 2010, 49 species of butterflies have been verified and recorded (Table 1). Also, 8 plant species that have been observed and photographed by the Minno's are new to the park's species list (Table 2)!



Viceroy butterfly, *Limenitis archippus floridaensis*, Photo by Sarah Corbett

Table 2. New plant records.

Common Name	Scientific Name
Thicket bean	<i>Phaseolus polystachios</i> var. <i>polystachios</i>
Erect prickly-pear	<i>Opuntia stricta</i>
Giant Cane	<i>Arundinaria gigantea</i>
Moundlily yucca	<i>Yucca gloriosa</i>
Snakeroot	<i>Aristolochia serpentaria</i>
Hogwort	<i>Croton capitatus</i>
Smallflower morning-glory	<i>Jacquemontia tamnifolia</i>
Wisk fern	<i>Psilotum nudum</i>

Table 1. New butterfly records. Asterisk (*) indicates tentatively confirmed records.

Common Name	Scientific Name
American Lady	<i>Vanessa virginiensis</i>
Barred Yellow	<i>Eurema daira</i>
Carolina Satyr	<i>Hermeuptychia sosybius</i>
Cassius Blue	<i>Leptotes cassius</i>
Ceraunus Blue	<i>Hemiargus ceraunus</i>
Clouded Skipper	<i>Lerema accius</i>
Cloudless Sulphur	<i>Phoebis sennae</i>
Common Buckeye	<i>Junonia coenia</i>
Dun Skipper	<i>Euphyes vestris</i>
Eastern Black Swallowtail	<i>Papilio polyxenes</i>
Eastern Pygmy Blue	<i>Brephidium pseudofea</i>
Eastern Tiger Swallowtail	<i>Pterourus glaucus australis</i>
Eufala Skipper	<i>Lerodea eufala</i>
Fiery Skipper	<i>Hylephila phyleus</i>
Giant Swallowtail	<i>Heracles crespontes</i>
Gray Hairstreak	<i>Strymon melinus</i>
Gulf Fritillary	<i>Agraulis vanillae nigrior</i>
Hackberry Emperor*	<i>Asterocampa celtis</i>
Henry's Elfin	<i>Incisalia henrici</i>
Horace's Duskywing	<i>Erynnis horatius</i>
Long-tailed Skipper	<i>Urbanus proteus</i>
Monarch	<i>Danaus plexippus</i>
Mourning Cloak*	<i>Nymphalis antiopa</i>
Northern Broken-dash	<i>Wallengrenia egeremet</i>
Ocala Skipper	<i>Panoquina ocola</i>
Palamedes Swallowtail	<i>Pterourus palamedes</i>
Phaon Crescent	<i>Phyciodes phaon</i>
Pipevine Swallowtail	<i>Battus philenor philenor</i>
Queen	<i>Danaus gilippus</i>
Red Admiral	<i>Vanessa atalanta</i>
Red-banded Hairstreak	<i>Calycopis cecrops</i>
Red-spotted Purple	<i>Limenitis arthemis astyanax</i>
Sachem	<i>Atalopedes campestris</i>
Salt Marsh Skipper	<i>Panoquina panoquin</i>
Silver-spotted Skipper	<i>Epargyreus clarus</i>
Sleepy Orange	<i>Eurema nicippe</i>
Southern Broken-dash	<i>Wallengrenia otho</i>
Spicebush Swallowtail	<i>Pterourus troilus troilus</i>
Tawny Emperor	<i>Asterocampa clyton clyton</i>
Tawny-Edged Skipper	<i>Polites themistocles</i>
Tropical Checkered-Skipper	<i>Pyrgus oileus</i>
Viceroy	<i>Limenitis archippus floridaensis</i>
Weadner's Juniper Hairstreak	<i>Mitoura gryneus weadneri</i>
Whirlabout	<i>Polites vibex</i>
White Checkered-skipper	<i>Pyrgus albescens</i>
White M Hairstreak	<i>Parthasius m-album</i>
Yucca Giant-Skipper	<i>Megathymus yuccae yuccae</i>
Zarucco Duskywing	<i>Erynnis zarucco</i>
Zebra Swallowtail	<i>Eurytides marcellus floridaensis</i>

Silver Box on the Dock

By M. BRIAN GREGORY

The National Park Service's Southeast Coastal Network has recently funded the installation and operation of a water-quality and weather monitoring station at Cumberland Island National Seashore. The monitoring station was funded through a cooperative agreement with the U.S. Geological Survey, a sister agency within the Department of Interior with a long history of monitoring the quality and amount of water in our nation's rivers and streams. The station will make around the clock measurements of weather conditions such as wind speed and direction, tidal height, rainfall amounts and temperature as well as conditions below the surface of the water in Cumberland Sound such as dissolved oxygen, water clarity and water temperature. Information collected by this new station will be transmitted via satellite to USGS and NPS servers which will data collected every 30 minutes and post it every few hours on USGS and NPS websites which can be accessed by the general public as well as NPS and USGS staff.

One of the unique aspects of the partnership is the arrangement for Southeast Coastal Network staff to jointly maintain the monitoring station as part of ongoing sample collection trips. The Network staff is already there once a month collecting water samples so taking over part of the routine servicing procedures just made sense. It saves both agencies time and money by allowing cutting down on routine trip by USGS staff and it allows Park Service staff to remotely monitor the stations output and schedule visits on an as needed basis. If the data collection equipment goes down then our staff knows immediately and can fix the problem sooner resulting in better quality data sets. Currently the weather data can currently be viewed at the following web address: http://waterdata.usgs.gov/ga/nwis/uv?site_no=02228295. The water quality data will be online soon and will be available on the NPS web site.

RESOURCE MANAGEMENT

Researchers to Study CUIS Bobcat Population

By DOUG HOFFMAN

Many island visitors and park employees have taken delight in catching a rare glimpse of a bobcat on Cumberland Island. Actually, there was a period when bobcats were absent from the island. Historical accounts suggest that cats were present naturally on Cumberland up until around 1907, when it is thought the population was extirpated either by man's activities or from natural causes. NPS helped fund a project beginning in 1988 to reintroduce bobcats on Cumberland. During 1988 and 1989, researchers from the University of Georgia released 15 males and 15 females on the island.

Since the initial release, little monitoring of the population has been conducted until now. This winter, researchers will scour the island looking for bobcat scat (droppings). The modern marvels of genetic research techniques will enable the evaluation of individual cats and the population as a whole by analysis of scat material, negating the need to actually capture and sample live cats. There is a "bank" of genetic samples from the original founder population which was taken prior to their release on Cumberland in the 1980's. This information can be used to evaluate the current genetic make-up and fitness of the island's cats. A general estimate of the current population will also be generated from the study.



Cumberland Island Bobcat

Two of the researchers leading the project are no strangers to the island. In fact, they obtained their graduate degrees working on the initial release project. Although they have since moved far from the south, Cumberland's bobcats have remained in their minds. Duane Diefenbach is leader of the Pennsylvania Cooperative Fish & Wildlife Research Unit and adjunct professor of wildlife ecology in the School of Forest Resources at Pennsylvania State University. Leslie Hansen (née Baker) is the leader of the Biological and Cultural Resources Management Team at Los Alamos National Laboratory in New Mexico.

Current Status of the CUIS Hog Population

By DOUG HOFFMAN

We have published exactly 2 years of Mullet Wrappers since the last update on the island's hog population. Currently, the population appears to be significantly reduced to numbers comparable with 2005 and the mid 1980's. The prolonged drought conditions we have experienced since May of 2010 combined with continuous harvest pressure by NPS are responsible for the current lack of hogs on Cumberland. There are still isolated groups scattered throughout the island, but the lack of evidence (rooting, tracks, markings) and reported sightings suggests that numbers are very low. Harvest numbers for the last three years are as follows: FY2009 - 465 hogs (336 NPS, 129 public hunters); FY2010 - 356 hogs (216 NPS, 89 USDA, 51 public hunters); FY2011 - 233 hogs (137 NPS, 37 USDA, 59 public hunters). This fall's acorn crop can best be described as "phenomenal," with extremely heavy acorn production throughout the island. The volume of production is such that acorns should be available as a food source into April of 2012. It is likely that the hog population will exhibit higher reproductive success over the next year, but current NPS control strategies should be able to account for any increase in numbers while maintaining the overall population at an acceptable level. Additionally, our agreement is still active with United States Department of Agriculture Wildlife Services to provide assistance with ongoing management efforts.

Maintenance Division

By CARL DAVID

Sea Camp Campground Boardwalk



On October 17th, students from Warren Wilson College, near Asheville, NC came to Cumberland Island on their annual trip to assist the park with various projects. They performed some trail work at Duckhouse Trail, clearing vegetation on each side of the trail and removing a few fairly large trees that had fallen across the trail. The group also built picnic tables that are compliant with the Americans with Disability Act (ADA). These tables will be placed in the Sea Camp Campground and other locations around the Dungeness Historic district. The biggest project that the students worked on was the construction of a new ramp at the Seacamp Campground Boardwalk entrance. They worked with the maintenance staff to remove some vegetation and small trees to clear a line for the ramp. The new ramp is approximately 100 feet long and meets the ADA standards. It is a nice addition and improvement to the boardwalk. Great job to all involved, THANKS for your efforts.

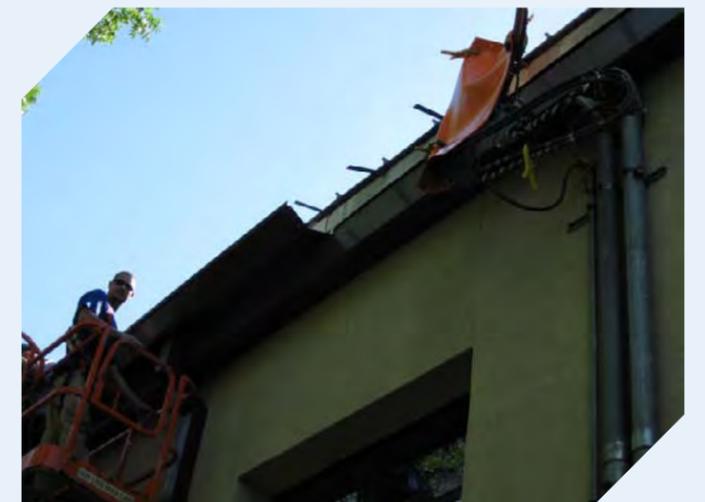
Water! Water!

I'm sure you all have heard about the problem that we have had with storm water entering the Mainland Museum building and flooding the first floor. We are in the process of trying to figure out the best way to divert the rain water coming off of the roof and to get it to the west side of the retaining wall. We have decided that the easiest thing now is to re-route a few of the downspouts and have them empty on the west side of the retaining wall. This, along with the installation of another "Sump" pump, should give us the added protection from further flooding.

Quote Corner

"We live in a state with a wonderful climate and plenty of natural beauty, from the shores of Cumberland Island to the Chattahoochee River to the Blue Ridge Mountains."

-Roy Barnes, 80th Governor of Georgia



Some of the new gutters installed at the Museum Building.