

Wings

Newsletter for Alligator River and Pea Island National Wildlife Refuges

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Gateway Visitor Center Now Open VOLUNTEERS NEEDED

The United States Fish and Wildlife Service Gateway Visitor Center in Manteo opened on June 30. The title 'Gateway' announces the center's function as the entry portal to northeastern North Carolina's nine national wildlife refuges and national fish hatchery from the Outer Banks. The facility describes the purposes, habitats, and activities on all of the refuges and the hatchery. The center has exhibits in bird migration, red wolves, prescribed fire, water management, and climate change.

The visitor center requires a cadre of volunteers as dedicated as the volunteers who staff the visitor center at the Pea Island National Wildlife Refuge seven days a week. The large exhibit area and auditorium in the Gateway Center poses an opportunity for local residents interested in helping visitors learn about the refuges, their habitats, and wildlife. The Center also has a gift shop. People interested in volunteering may contact Abbey at 252-473-1131 x226, or abbey_reibel@fws.gov.



The Gateway Visitor Center and Headquarters of the Alligator National Wildlife Refuge
(Tracey Rock Photo)



Participants at the VIP Tour of the Gateway Visitor Center viewing the Red Wolf Exhibit
(Tracey Rock Photo)

The Coastal Wildlife Refuge Society financed the acquisition and establishment of the native plants used to landscape the visitor center.



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Butterflyweed, one of the wildflowers native to the Coastal Plain established at the Gateway Visitor Center and an important plant for Monarch Butterfly adults and larvae
(Eleanor Saulys Photo)

Hurricane Irene Damage to Pea Island

On August 27, 2011, storm surge from Hurricane Irene breached North Carolina Highway 12 in four places around the old refuge office, maintenance shop, and intern residence. The North Carolina Department of Transportation (NCDOT) installed a 650-foot temporary bridge across the breach and restored access to Hatteras Island on October 10. The metal bridge should last for 10 years.

On January 18, 2012, the NCDOT began a project to protect the southern end of the bridge with sheet piling and rip rap in January. The inlet had been migrating to the south ever since it had been formed and the erosion threatened the bridge. The migration of the inlet to the south is a geological phenomenon and is the same migration that Oregon Inlet exhibited before its southern shoreline was protected by rock riprap.

In April of 2012, the Fish and Wildlife Service demolished the intern residence and a storage building that survived the hurricane. The Service had decided in the spring of 2011 to demolish the buildings at Pea Island and relocate the office and intern residence off of the refuge.

The shed that housed the equipment and supplies for turtle patrol and turtle watch was destroyed in the hurricane. The Service has replaced it with two new sheds, one on either side of the new inlet.

The hurricane also breached the dike at North Pond damaging the pump that allows the refuge staff to manage the water levels in North Pond for waterfowl and shorebirds. The Service has secured funding to repair the dike and is soliciting bids for the repair.

Pea Island Staff, Interns, and Resident Volunteers Have Moved

The Fish and Wildlife Service had decided to relocate the Pea Island office, residence, and resident volunteer pad in 2011 before Hurricane Irene. The office and shop were damaged in 2010 by a storm, and the structure was undermined by erosion. The staff first relocated their office to the living room of the interns' residence. An inspection of the residence last spring had yielded problems that cannot be corrected economically.

Visitor Services Specialist Cindy Heffley has relocated to a trailer at the Hatteras National Seashore maintenance area in South Nags Head in March and will move to an office that is being renovated by the National Park Service near the Bodie Island Lighthouse north of Oregon Inlet in January of 2013. Visitor Services Specialist Abbey Reibel is now stationed in the new headquarters building in Manteo. The Fish and Wildlife Service has purchased a house in South Nags Head for intern housing. The resident volunteers have hookups for their recreational vehicles at the Alligator River National Wildlife Refuge.

The interns and resident volunteers moved into their new facilities in May. Abbey Reibel moved at the end of June.

Alligator River Office and Visitor Center

At the end of June, the staff of the U.S. Fish and Wildlife Service moved into its new 18,000 - square foot office for the Alligator River and Pea Island National Wildlife Refuges and Red Wolf Recovery Program on U.S. Route 64 in Manteo across from the Fort Raleigh National Historic Site. The new shipping address is 100 Conservation Way. Construction began in 2010

An open house will be held in the October during National Wildlife Refuge Week.



Participants in the Bear Necessities Program on June 13 check out a bear pelt. (Tracey Rock Photo)

Environmental Education Programs

Visitor Services Specialists Cindy Heffley and Abbey Reibel conduct programs to local schools. Volunteers from the community and college interns assist them with the programs. Transportation grants provided by the Coastal Wildlife Refuge Society help bring many students to the refuges that might not otherwise be able to visit.

Cindy brings lessons to Dare County's middle school-aged children in Junior Naturalists Clubs at Manteo and First Flight Middle Schools, and Cape Hatteras Secondary School. Cindy can always use more volunteers to assist her. In the fall, she will be forming an after-school middle-school club and pre-school program at the new visitor center. Interested parties can contact Cindy at 252-475-4180 or Cindy_Heffley@fws.gov.

Abbey teaches kindergarten students in wildlife clubs at elementary schools in Manteo, Kitty Hawk, and Nags Head. Abbey expanded her program to first grades in September. She needs volunteers to assist with planning and conducting programs. Interested parties may contact Abbey at 252-473-1131 x226, or abbey_reibel@fws.gov.

Climate Change Project

The Nature Conservancy's Climate Change Adaptation Project on the Alligator River National Wildlife Refuge continues along eastern shoreline of the refuge between Manns Harbor and Stumpy Point.

This spring, The Nature Conservancy continued to work on restoring the hydrology of drained wetlands impacted by the effects of saltwater intrusion. Three ditch plugs were installed in marsh drainage ditches to encourage sheet flow of storm water, increasing water quality in Pamlico Sound, and prevent saltwater intrusion into the pocosin. These ditch plugs were protected from erosive wave action by constructing a total of 400 linear feet of oyster reefs waterward of the plugs. The reefs break up wave energy and create productive habitat for oysters and numerous species of fish, shrimp, and crabs. An additional four ditch plugs are planned to be installed by September 2012, restoring the hydrology of wetlands along 11 miles of shoreline.

Staff and volunteers also monitored the impacts of our efforts, looking at changes in water quality, water flow, soil accretion and subsidence, shoreline erosion rates, estuarine fauna species richness, and seedling growth and survival after restoration.

Volunteers for any and all aspects of our projects are always needed. Interested parties should contact Kate Murray at kmurray@tnc.org.

Additional regional work included the construction of 600 linear feet of oyster reefs in the vicinity of Bell Island fishing pier in Swanquarter National Wildlife Refuge. These reefs replace a dilapidated vinyl breakwater and should both reduce shoreline erosion and provide the public with fishing opportunities. Unfortunately, disaster relief funding has yet to be released to the refuge, necessitating a continuation of the pier closure due to damages incurred by Hurricane Irene.

The results of the project will guide efforts in other areas of the coast to mitigate the effects of climate change. Information on the project can be found by going to The Nature Conservancy's web site at www.nature.org and following the links to the North Carolina Chapter home page.

Coastal Wildlife Refuge Society

The Coastal Wildlife Refuge Society is a non-profit organization established and incorporated in 1989 by a group of local citizens to provide support for Alligator River, Pea Island, and other national wildlife refuges in eastern North Carolina.

The Society has three purposes: generate funds to support programs and activities, assist in the recruitment of volunteers, and provide a voice for the members of the Society at a local, state, and national level.

More information about the Society is on its web site at: <http://www.coastalwildliferefuge.com/>

Coastal Wildlife Refuge Society Officers

President: Stanley Oliver
Vice President: Joyce Bornfriend
Secretary: Martha Howell
Treasurer: Warren Davis

Directors: Gail Dreis, Ann Groves, Tracey Rock,
Bob Glennon



A White Ibis Roosting in a Tree at the Alligator River National Wildlife Refuge (Tracey Rock Photo)

Tram Tours

The U.S. Fish and Wildlife purchased an open air tram in 2010 with which to conduct tours of the refuges.

The theme of the tram tour held on Saturday, April 14 from 9AM until noon was “Let’s Get Outside”. Twenty-one participants went on the tram tour. International Migratory Bird Day was celebrated during the May 12 tour with eighteen visitors.

From July through August, staff and volunteers will lead Alligator River tram tours on Tuesday mornings from 8:30 to 10:30. Reservations and a fee are required for the Tuesday tram tours. Call 252-475-4180 to make reservations.

They will depart from the Creef Cut Trail parking lot at Alligator River National Wildlife Refuge on U.S. Route 64.

Butterfly Survey Results

The refuge staff and volunteers celebrated National Pollinator Week by conducting a butterfly survey of the Alligator River National Wildlife Refuge. Fish and Wildlife Service ecologist Becky Bartel led thirteen observers in visiting 3 different areas on the refuge and all of the refuge roadways over 3 hours. They observed 89 butterflies of 17 different species. Everyone felt really well netting their first butterflies. These results are very encouraging and show that, even on the roadsides, there is a lot of diversity.

Becky will be planning to also have a seasonal inventory in the fall to capture migrants and some more of the butterfly species that live in forested habitats. Contact Becky at Rebecca_Bartel@fws.gov if you're interested in the fall inventory and look for details in September or October.

<u>Species</u>	<u>Number Observed</u>
Pearl Crescent	19
Common Buckeye	18
Variegated Fritillary	12
Least Skipper	7
Palamades Swallowtail	7
Little Sulphur	6
Cloudless Sulphur	6
Eastern Tiger Swallowtail	3
Sachem Skipper	2
Sleppy Orange	2
Clouded Sulphur	1
Viceroy	1
Eastern Tailed-Blue	1
Fiery Skipper	1
Summer Azure	1
Painted Lady	1
Silver-spotted Skipper	1

Spring and Summer Program Schedule

The Fish and Wildlife Service has set the program schedule for the third quarter of 2012.

The staff has posted the schedule at:

<http://www.fws.gov/alligatorriver/Images/InterpretivePrograms.pdf>

Bird walks will be conducted at the Pea Island National Wildlife Refuge on Wednesday, Thursday, and Friday mornings July through October. The walks take place from 8:00 to 9:30. Participants meet at the Pea Island Visitor Center.

The Pea Island Canoe Tours will be held from July through September on Thursday mornings from 9 to noon. Family canoe tours designed for children will occur from June through August on Wednesday and Friday mornings from 10 to noon.

The Alligator River canoe tours will be conducted from July through August on Wednesday and Friday mornings from 9 to noon and a new two-hour family tour on Thursday mornings from 10 to noon.

Reservations and a fee are required for the canoe tours. Call 252-475-4180 to make reservations.

From June through August, the Pea Island schedule also features: Turtle Talk on Tuesdays from 2:30 to 3:30, Birds and Their Adaptations on Wednesdays from 2:30 to 3:30, and Soundside Adventure on Thursdays from 2:30 to 3:30. Turtle Talk and Birds and Their Adaptation meet at the Pea Island Visitor Center. Soundside Adventure meets at New Inlet 3 miles south of the Visitor Center.

From July through August, staff and volunteers will lead Alligator River tram tours on Tuesday mornings from 8:30 to 10:30. Alligator River will host two wildlife programs on Wednesday evenings: Bear Necessities from 5:30 to 7:00 and Red Wolf Howling from 7:30 to 9:00. The tram tours and wildlife programs will depart from the Creef Cut Trail Parking Lot at the intersection of Milltail Road and U.S. Route 64.

Reservations and a fee are required for the Tuesday tram tours. Reservations are no longer taken for the

Howlings, but the fee is still in effect. Call 252-475-4180 to make reservations.



Portable Photo Blind Donated by the Coastal Wildlife Refuge Society (Tracey Rock Photo)

Thank You, Volunteers

Volunteers continue to make a significant contribution to the administration of Alligator River and Pea Island National Wildlife Refuges. Volunteers from the local community staff the visitor center at Pea Island and maintain the refuge's visibility seven days a week. Resident volunteers staff the visitor center, perform maintenance on the refuges, and assist with education and interpretation programs. College interns rotate through the biology, interpretation, and maintenance program areas from May through November. They perform biological surveys, conduct programs for the public, maintain the buildings and grounds, and assist at special events such as Wings over Water and Wildfest.



Completed Dock at the Buffalo City Canoe Launch Built by Volunteers from the Outer Banks Paddling Club (Tracey Rock Photo)

Staff Profiles – Becky Bartel



Terrestrial Ecologist Becky Bartel
(U.S. Fish and Wildlife Service Photo)

Becky Bartel is the new Terrestrial Ecologist for the Inventory and Monitoring Network in the Southeast Region of the Fish and Wildlife Service. Becky's primary responsibilities are to develop and evaluate inventory and monitoring protocols and assemble, analyze, and evaluate data, and prepare reports and publications related to ecological objectives.

She assists more than 25 refuges in the South Atlantic area with inventory and monitoring needs and coordinates and implements various biological surveys. Her current projects include bat acoustical monitoring surveys, gopher tortoise protocol development, amphibian monitoring, assisting in the coordination of seabird mortality monitoring, and integrating citizen science efforts into phenology surveys.

In addition to working on local biological projects, Becky also serves as the Southeast Regional Pollinator Coordinator for 10 southeastern states and the Caribbean. Working with Service staff around the region, she assesses pollinator needs and coordinates monitoring and outreach efforts for pollinator conservation and education events. She's

currently working on establishing butterfly inventories at Alligator River National Wildlife Refuge and other nearby refuges.

Becky received her Bachelor of Science degree in Neurobiology and Animal Behavior from Michigan State University in 1999. After a year of traveling and a short residency in the Pacific Northwest, she moved to Logan, Utah to research coyote population dynamics in the Great Basin. She received her Master of Science degree in Wildlife Biology from Utah State University in 2003.

Since 2003, she's been a resident of North Carolina living in the Triangle and later on the coast in Beaufort, where she completed her Ph.D. in Biology in 2008. Her doctoral work focused on population dynamics and recovery efforts of the federally endangered St. Francis satyr butterfly, which is only found on Fort Bragg.

From 2008-2011, she studied animal migration and infectious disease as a postdoctoral researcher at the University of Georgia, sampling populations of monarch butterflies all over the world including places like Hawai'i, Costa Rica, Australia, New Zealand, and Puerto Rico as well as both the east and west coasts of the United States.

Becky joined the Fish and Wildlife Service in September 2011. She currently lives in Nags Head with her partner Brett and their two cats. Her hobbies include photography, gardening, and running.

Intern Profiles

The Alligator River and Pea Island National Wildlife Refuges have hired eight interns to conduct education and interpretation programs and assist the staff with refuge maintenance and biological monitoring.

Two of the interns will serve specific program areas. Kyla Brick will be the red wolf caretaker and will care for the captive red wolves, conduct the red wolf howlings, and assist the red wolf recovery biologists with monitoring. Heather Breakiron is the climate change intern and will assist the staff of The Nature Conservancy monitor the climate change adaptation project.

Kyla Brick – Red Wolf Caretaker



Kyla is a junior at the State University of New York College of Environmental Science and Forestry, majoring in wildlife science. Her dream is to become a wildlife biologist with a focus in canine behavior. She is a firm believer that the future of wildlife conservation and management has to be through public outreach and education coupled with good science that helps people understand the species around us. In her free time, Kyla enjoys singing, culinary arts, and hunting.

Heather Breakiron – Climate Change Intern



Heather graduated from Northern Arizona University, with a bachelor's degree in Environmental Science (emphasis in Biology) in May 2012. She is a travel enthusiast and just traveled to the Galapagos Islands. She has been to six continents. She loves animals, and hopes to have a future career as a wildlife biologist. In her spare time, she loves sports, especially tennis, basketball, and skiing. She also enjoys anything that gets her out of the house such as hiking, going to the movies, or bowling. She hopes to go to graduate school in the next few years.

Jonathan Cooley



Jonathan is a rising senior at Catawba College, a small school in near Charlotte, North Carolina, where he is majoring in Environmental Science and Biology. After he graduates, he plans on enrolling in graduate school for wildlife management. He plans on pursuing a career in wildlife management with the United States Fish and Wildlife Service or the North Carolina Wildlife Resource commission. In his free time he enjoys working out, fishing, hiking, kayaking, birding, cycling, and almost any other outdoor activity.

Inez Hein



Inez is a junior at University of Georgia majoring in Wildlife. Her family is from Argentina, but they live in Marietta, Georgia. She hopes to work with endangered species when she graduates. She is excited to learn more about wildlife and work with animals as well as expand her views and experience with environmental education

Pilar Lopez-Gomez



Pilar is a junior at Virginia Tech majoring in Environmental Policy & Planning and Spanish, and she is both really excited and sad for her last Hokie football season. She grew up in Fairfax, Virginia and has three younger brothers. She plays club field hockey at Tech but also love running, swimming and baking. She hopes that, with this internship she will be able to refine what type of career she wants to pursue after she graduates — definitely in the environmental field!

Alden Early



Alden is a rising senior at North Carolina State University with a Natural Resources concentration in Parks, Recreation, and Tourism Management. His hometown is Aulander, North Carolina, which is located approximately an hour and a half northwest of Alligator River in Bertie County. He has previously worked as a seasonal assistant for Town of Ahoskie, North Carolina Parks and Recreation Department. His hobbies cover a wide range of outdoor recreation experiences including fishing, canoeing, backpacking, camping, and cycling. When he graduates from college, he hopes to find employment somewhere that fits his passion of connecting people and the outdoors; Alden believes that it is an important asset for anyone working in the profession. He is very excited to have the opportunity to work as an intern this summer at Alligator River and Pea Island National Wildlife Refuges.

Sarah Gutman



Sarah is currently a Masters student at Indiana University in Bloomington working on joint degrees in Public Affairs and Environmental Science. She is primarily interested in wildlife conservation and management, applied ecology, and natural resource management. Last year, she received her undergraduate degree from Tulane University in Ecology, and she cannot wait to get back to the South and spend the summer outdoors. Sarah loves hiking, biking, canoeing, has a little bit of a birding background, and I has a deeply rooted love for the city of New Orleans although she am originally from Northville, Michigan. She has a lot of experience doing ecological research both at Tulane and abroad. She spent a summer researching the effects of rising elephant populations in South Africa, which was the most incredible experience she's had up to now. She is incredibly excited to work at Alligator River and Pea Island this summer.

Cody Stone



Cody is from Kill Devil Hills, North Carolina and graduated this spring from North Carolina State University with a degree in Fisheries and Wildlife Sciences.

He's lived on the Outer Banks for most of his life and enjoys the atmosphere and everything that comes with living here. Some activities that he enjoys are hunting, fishing, surfing, spear fishing, ocean kayaking, SCUBA diving, basketball, and disc golf. Cody is looking forward to this position at Alligator River and Pea Island and the experience that he will gain during this summer. His concentration at school was in wildlife, and he's not sure where I'll be going after this internship, but he would like to work with some agency or organization in the field of wildlife management.