



Daphne, Alabama, Ecological Services Field Office develops SHC plan tailored to its mission

In the quaint little town of Daphne, Alabama, you'll find a little field office located in the heart of the downtown area. Surrounded by glorious oaks, and just down the street from City Hall, the Alabama Field Office is sometimes easy to miss. But without it, Alabama's most imperiled fish and wildlife would be in big trouble.

The only Ecological Services office in the state, the Alabama Field Office is responsible for more than 133 candidate, threatened and endangered species, a number that keeps biologists here very busy. Since 2006, we have reviewed at least 1400 new federal activities for effects to wetlands and aquatic habitats. We've also provided endangered species consultations for more than 3800 new projects. Throw in contaminants issues, several dozen Habitat Conservation Plans for beach homes, designation of critical habitat for several species, a busy Partners for Wildlife program, GIS data management and analyses, relicensing of fifteen hydroelectric dams, and coastal outreach, and you'll find thirteen biologists who are overwhelmed with work.



Map shows critical habitat units for threatened and endangered mussel in the Mobile River Basin. Map courtesy of Geological Survey of Alabama and FWS.

"It's easy to get bogged down in paperwork, and lose sight of what we're doing. If we're not careful, the natural resources we strive to protect may suffer in the process," said Field Supervisor Bill Pearson.

That's where a little acronym known as SHC comes in.....Strategic Habitat Conservation. In Alabama, that means prioritizing our tasks to create the best results for wildlife, as well as for the American people. But with so many projects, where do we begin?

"We needed a strategic plan that would focus our efforts," explained biologist Dan Everson. "We had to decide what was most important and why."

Biologists also wanted to figure out a way to efficiently handle paperwork, and still make time for their first love.....working in the field. The first step was deciding which areas should be our primary focus. Using GIS, biologists mapped out hot spots for imperiled species across the state. We compared these hot spots to a map of recently completed projects by the Alabama Field Office; the realization that these datasets only partially overlapped was an enlightening and thought-provoking result.

"After reviewing the data, we had to make a strategic decision as to which areas should be our top priority," said Pearson.

One method we are developing is prioritizing the state by watersheds. Rich in diversity, Alabama watersheds provide habitats that are critical to the survival of hundreds of aquatic species. Besides priority watersheds, other regions of focus include coastal Alabama, longleaf pine habitats, Karst areas, and the Bibb County glades. Recognizing these priority areas gives biologists a roadmap to smart conservation.

“We literally receive thousands of requests for project reviews each year. By knowing where our priority areas are, we can decide which activities we should work on aggressively, and which ones should get a more streamlined response,” said Pearson. “We want to ensure that we maximize our results for the species by putting our efforts in the right place on the ground.”



Biologists conduct fish surveys in Big Cane Creek, an area within a priority watershed. Photo by Marty Kodis, FWS.

But what about all of those endangered species? Behind Hawaii and California, Alabama is number three in the nation when it comes to the number of imperiled species. So, how do we decide which species are our top priority? After careful thought and consideration, our office biologists identified a list of ten species: the Alabama red-bellied turtle, Red Hills salamander, gopher tortoise, tulotoma snail, fine-lined pocketbook, Alabama sturgeon, red-cockaded woodpecker, Mohr's Barbara's button, Alabama beach mouse, and the slabside pearl mussel. We tried to choose species that were representative of a region or habitat type, and also considered their recovery potential. In a few cases we simply chose species that we knew were going to require a considerable amount of work in the foreseeable future.

Next, it was time to identify our population and habitat objectives for our priority species. This part of the SHC model requires identifying measureable conservation units for us to track, keeping up with population trends, and identifying where we should protect habitat. By design, this will continually force us to consider how to align our office's daily activities in order to meet these objectives.

“We have to dust off those old recovery plans, and begin to identify and implement the most important recovery actions,” said Everson. “We can't just sit back and respond to the mail that comes in the door to effectively protect our trust species.”

Another crucial part of SHC was identifying our limiting factors, such as species threats, data gaps, habitat quality, or lack of money.

“Pointing out the speed bumps ahead of time allows us to step up our game,” explained Pearson.

“Also, we have to remember that a limiting factor shouldn't be our own institutional process,” points out Everson.

So, how do you take SHC and actually put it into action? After identifying our priorities, population objectives, and strategies, it was time to bring SHC to life. That meant doing efficient paperwork at the desk, while doing sensible and strategic work in the field...in other words...integrating the SHC model of biological planning, conservation design and delivery, and monitoring into the daily grind of a biologist.

“Long before the end of the fiscal year, I gave the biologists some homework,” said Supervisor Bill Pearson. “I wanted them to identify field projects they thought represented the greatest resource challenges, needs, threats, or opportunities for our office”

“I wanted them to be realistic in what they wanted to accomplish in the field while keeping the SHC model in mind. We had to be strategic in choosing our field projects, because we still have to review technical assistance requests, Corps permits, Section 6 grants, and other paperwork,” said Pearson.

After weeks of planning, the biologists became authors of their very own office SHC project chart for 2010. The chart contains thirteen major projects...from Alabama sturgeon sampling to reintroduction of the Alabama Beach mouse to Gulf State Park; from developing a sea turtle lighting retrofit program to understanding land ownership within the range of the Red Hills salamander. Each project has a contact biologist who builds a team comprised of office staff, or other interested partners, to make it happen and are held responsible for completing their annual projects.

Biologist Jeff Powell has already started on one of his SHC projects. With priority watersheds in mind, Powell, along with his partners from the Geological Survey of Alabama and the Alabama Division of Wildlife and Freshwater Fisheries, is conducting a

variety of fish and mussel assessments, including a spatial analysis of priority watersheds in the Mobile River Basin. Powell wants to start out by establishing solid baseline conditions before moving into the restoration phase. He also knows that public awareness is critical for success.

"An important aspect of SHC is gaining landowner trust. That's why I'm working with our state partners to develop an outreach package for each of the priority basins," explained Powell.

Pearson looks forward to seeing more projects on the SHC chart turn into action in the field.

"These projects represent resource goals that we wouldn't have tackled had we not altered the way we work within the office by empowering our biologists with the freedom to think beyond their inbox. We will look back at the end of 2010 and recognize that our strategic thinking at the beginning of the year paid off, and the critters in the field benefitted from our process," said Pearson. So, as a new year kicks off, so does a brand new vision for the Alabama Field Office. How successful we are is entirely up to us.

Submitted by Denise Rowell, Daphne, Alabama, Ecological Services Field Office

Behind the Scenes--



Children look into the touch tank.
FWS Photo.

Help the Hooch and Chattahoochee River Watershed Festival successful

Staff from the Warm Springs Fish Technology Center and the Fort Benning Ecological Services Office manned a booth at the Chattahoochee Watershed Festival in Columbus, Georgia, on October 16, 2009. The most popular attractions at the booth were a turtle and crayfish touch tank, a face painting table, and of course, the two baby American alligators. Several thousand children filtered through the booth and got a chance to touch or pick up crayfish and turtles and to pet an alligator. The watershed festival is the finale to the city's annual Help the Hooch day. Despite the cold weather and recent flooding, over 10,000 volunteers came together to help clean up trash along the banks of the Chattahoochee River and some of its tributaries. Last year volunteers removed more than 150,000 pounds of litter. This year that record should be broken due the amount of trash brought into the river and its tributaries due the recent flooding.



Getting a close look at an alligator.
FWS Photo.

Submitted by Bill Bouthillier, Warm Springs Fish Technology Center, Warm Springs, Georgia

Bragging Rights --



One month after a controlled burn at Pea Island National Wildlife Refuge, white birds look for insects in a burned area. FWS Photo.

Prescribed fire season at the Alligator River National Wildlife Refuge Complex

Tom Crews, a fire management officer for the U.S. Fish and Wildlife Service, announced that November 9, 2009, marked the beginning of the 2009-2010 season for prescribed burning on Alligator River and Pea Island National Wildlife Refuges in North Carolina. Many national wildlife refuges and other conservation lands use controlled burns to manage wildlife habitat and reduce natural fuels - the plant material on the ground and available to burn.

“Burning under controlled conditions allows us to better manage smoke and fire intensity,” explained Crews. “Our goals are to improve wildlife habitat and reduce danger from wildfires. Some people don't realize that plants and wildlife are actually helped by fire. If we just wait for a lightning strike, we can't choose the conditions or location. That situation often puts people and habitat at risk.”

Controlled or prescribed burns are fires intentionally ignited under specific conditions to achieve management objectives. Under normal circumstances, the prescribed fire season begins in the fall and runs through mid-spring. But, sometimes units may be burned outside this time period to accomplish particular objectives. A map in Photo Album shows the areas slated for prescribed burning this season on Alligator River National Wildlife Refuge. These areas include eight different fire compartments spread across the refuge. The northern end of Pea Island National Wildlife Refuge also is scheduled to be burned this season.

Submitted by Bonnie Strawser, Alligator River National Wildlife Refuge, Manteo, North Carolina



Map of upcoming burns planned at Alligator River NWR. Map courtesy of Alligator River NWR, FWS.



The smoke column from the burn borders downtown NASA. Photo by Glen Stratton, FWS.

Fire in the intergalactic interface

The fire crew at Merritt Island National Wildlife Refuge in Florida faces the challenge of fire management in a highly industrialized urban environment on a daily basis. Achieving the goals of hazardous fuel reduction and habitat management while coordinating with NASA, Cape Canaveral Air Force Station, and the public can be a challenging proposition. On October 18, 2009, the Merritt Island fire crew burned 1,658 acres in downtown NASA. In this extremely sensitive area smoke management is crucial for a burn to be successful.

The prescribed burn helped restore scrub and scrubby flatwoods for species such as the Florida scrub jay, eastern indigo snake, and the gopher tortoise.

This year, firefighters from the Merritt Island Complex and sister refuges Loxahatchee, and Okefenokee burned this critical unit safely, effectively, and efficiently while guiding the smoke column around delicate structures and areas. The firefighters' success was due to good prep work in advance of the burn and the excellent leadership of trainee Rob Vernachio, and Holding Boss Michael Good. Vernachio and Good superbly coordinated their operations on the ground with aerial ignition from Fish and Wildlife helicopter Interior 18. Completing this burn without incident strengthens the relationship between Merritt Island NWR and its neighbors. This trust allows the refuge fire crew to burn more easily, and helps to complete the refuge mission of creating habitat for wildlife.



Smoke is directed around the sensitive clean building using firing techniques and wind direction. Photo by Glen Stratton, FWS.

Submitted by Joseph Sharbaugh, Merritt Island National Wildlife Refuge, Titusville, Florida



Students learn to identify aquatic macroinvertebrates as part of the Biologist-in-Training (BIT) training at Wolf Creek National Fish Hatchery. Photo by Amanda Patrick, FWS.

Russell County fourth graders experience Outdoor Eco Adventure at Wolf Creek National Fish Hatchery

Tuesday, October 20, 2009 was truly a great day of engaging environmental education as Wolf Creek National Fish Hatchery served as co-organizer and host for the third Annual Outdoor Eco Adventure. The event, planned and implemented through a partnership with the Russell County Soil Conservation District and the Friends of Wolf Creek National Fish Hatchery, is an annual endeavor designed to bring all fourth grade students from Russell County, Kentucky, to the hatchery to learn about a variety of nature related topics, ranging from gardening and healthy forests to recycling and air quality. All presenters are encouraged to center their activities on environmental education topics, to make their stations as fun and hands-on as possible and to correlate their activities to state teaching standards. More than 250 students participated in the event.

In addition to all of the great learning that took place, students and teachers received goodie bags before heading home for the day. This was made possible by donations from all participating station presenters and their respective agencies along with funding from the local conservation district board. More than 45 teachers, volunteers, presenters and hatchery staff helped make the day a resounding success, and with such positive feedback from all teachers, the event will continue to be an annual one. More photos in [Photo Album](#).

Submitted by Amanda Patrick, Wolf Creek National Fish Hatchery, Jamestown, Kentucky

Kentucky questing workshop a success at Wolf Creek National Fish Hatchery

Wolf Creek National Fish Hatchery recently hosted a one-day questing workshop for the Lake Cumberland Area Health District (LCAHD) health education staff. Representatives from ten counties, along with local community members and supporters, attended the event to learn the “how to” of developing a quest. Questing is a place-based education model of creating and exchanging treasure hunts in order to collect and share a community’s distinct natural and cultural heritage, special places, and stories.

Quests are unique in that the information found in each can easily be correlated to core content used by teachers across the state. Quests can be key conduits for a bevy of possibilities, including tourism, helping to increase health and wellness in local communities, and helping to better connect people with the outdoors. In addition, multiple quests can link various sites together.

Because of the incorporation of movement and physical activity, along with the myriad of benefits in being outdoors, Tracy Aaron, LCAHD supervisor for health education, saw the workshop as a wonderful new resource for her ten-county health education team. Following the training, each member of Aaron’s team will be responsible for working with their local health and wellness coalitions to develop a quest in their county.



Environmental Education/Outreach Intern Katrina Kerr leads participants from the Lake Cumberland Area Health District in a discussion of questing materials. Photo by Amanda Patrick, FWS.

Submitted by Amanda Patrick, Wolf Creek National Fish Hatchery, Jamestown, Kentucky



Wando High School students Mike Krupinski and Alec Robinson dig up netting. Photo by Dianne Girardeau, Wando High School.

Local students sweep Bulls Island Beach

Coastal Expeditions and the Bulls Island Ferry encourage environmental stewardship and an enhanced appreciation of the outdoors. There is no better way to achieve that mission than involving local youth in service projects like the Bulls Island Beach Sweep Day, held on September 19, 2009. Through the support of local educators like Mike Cline of Pinckney Elementary School and Dianne Girardeau of Wando High School, Coastal Expeditions reached out and connected with their students in hopes of a brighter future in environmental stewardship.

The idea that “You can make a difference” is so often lost and overlooked in today’s complicated and technological world. It is our hope that the message of stewardship through service is received and spread through the efforts of these students and teachers. Coastal Expeditions thanks those who gave their time and energy to participate in what proved to be a very successful adventure. More photos in [Photo Album](#).

Submitted by Captain Chris Crolley, Coastal Expeditions, Concessionaire for Cape Romain NWR, South Carolina

Mind mapping as a tool for implementing SHC

An underground Strategic Habitat Conservation (SHC) movement is afoot in the South Florida Ecological Services Office (SFESO).

Members of that “underground” staged a mind mapping exercise for about 25 of their fellow staff members and a few guests on October 8, 2009.

The exercise was designed as the next step in the SFESO’s understanding and implementation of SHC - - an adaptive management framework integrating planning, design, delivery and evaluation.



Members of the South Florida Ecological Services Office staff map ideas related to Florida panther corridors. Photo by Ken Warren, FWS.

“SHC is all about trying to move that conservation needle and trying to get the most out of what we do,” said Laura Brandt, a U.S. Fish and Wildlife Service biologist based in Davie, Florida, who serves as one of the Service’s SHC coordinators. Laura helped facilitate the exercise along with Nikki Lamp from the Regional Office in Atlanta.

Mind mapping is a form of brainstorming that uses a graphical method for taking notes, usually taking a hierarchical or tree branch format, with ideas branching into subsections.

In this case, four teams mind mapped two topics: Florida panther corridors and scrub jay habitats. “We chose those subjects because we believe everyone can identify with them,” said Connie Cassler, one of the session’s organizers, along with fellow underground team members Al Begazo, Chuck Kelso, Trish Adams, Marilyn Knight and Daryl Thomas.

Over the course of about three hours, the teams discussed and mapped out how to apply the five elements of SHC. Ultimately, the teams compared notes and talked about what the next steps should be. Those steps included: (1) Compiling information, identifying action items and communicating to the office at large; (2) Better integrating SHC into the office’s strategic plan; (3) Utilizing software to help finalize and digitize maps from this exercise; and, (4) Engaging the management team to determine best

ways to implement action items.

"The mind mapping exercise was part of a continuous effort. Embracing the SHC as a working framework for our office and the Service is a long-term process," said Al Begazo. Our team will continue to look ahead and plan for the future, hoping to maintain momentum and keep everyone on our staff engaged."

Field Supervisor Paul Souza added, "SHC will be a guiding framework for our agency. Today's exercise marks a major milestone on our SHC journey. Our underground team took the initiative to put this on. This took a huge amount of their time, and we greatly appreciate their efforts."

Submitted by Ken Warren, South Florida Ecological Services Field Office, Vero Beach, Florida



Pushing glochidia from a mussel.
FWS Photo.

Cryopreservation aids recovery of freshwater mussels

Staff members of the Warm Springs Fish Technology Center are continuing a study using cryopreservation techniques to assist in the recovery of freshwater mussels. Last year, the toxicity of several cryoprotectants, at three concentrations, was tested on glochidia to determine percent survival for use in future cryopreservation experiments. This year, two cryoprotectants are being evaluated for their effectiveness in freezing protocols. Glochidia were mixed with cryoprotectants, loaded into 0.5-ml straws, and frozen in liquid nitrogen. After 72 hours, glochidia were thawed and checked to determine survival. Unfortunately during the freezing process, many glochidia closed, and therefore, survival rates were unable to be determined. Further studies will be conducted to assess viability and survivorship using in-vitro culture techniques.

Submitted by Bill Bouthillier, Warm Springs Fish Technology Center, Warm Springs, Georgia

New expanded red wolf facility opens in Asheville, North Carolina

The Western North Carolina Nature Center in Asheville recently opened its new red wolf facility. Diane Hendry, outreach coordinator for the red wolf recovery project, and Gary Peeples from the Asheville, North Carolina, Ecological Services Field Office were on hand and provided a brief presentation about red wolves. The nature center is home to three wolves, including a pup born just before the new facility's official opening. The new space provides visitors with an uninterrupted view of the wolves through glass panels. The nature center is one of a handful of places across the nation involved in the captive breeding of the red wolves in an effort to maintain genetic diversity for the incredibly rare species and support the reintroduction effort in eastern North Carolina.



Keith Martin of the Western North Carolina Nature Center and Diane Hendry of FWS talk with a red wolf.
Photo by Gary Peeples, FWS.

Submitted by Gary Peeples, Asheville, North Carolina, Ecological Services Field Office



Henderson County students explore the North Mills River. Photo by Gary Peeples, FWS.

Eighth grade students get their feet wet learning about rivers

More than 200 students from North Carolina's Henderson County recently explored one of the most pristine rivers in their community at a Kids in the Creek field day. The event, organized by the Henderson County Cooperative Extension Service, brought every eighth grader from Rugby Middle School to the North Mills River, a tributary to a stream that is home to the endangered Appalachian elktoe mussel. The area is a priority for the Asheville, North Carolina, Ecological Services Field Office, which led students in collecting and identifying macro-invertebrates in the river. The students also collected and identified fish, learned about water chemistry, and tested the water quality.

Submitted by Gary Peeples, Asheville, North Carolina, Ecological Services Field Office

Educator workshops target priority watersheds

Educators from some of the most biologically important watersheds in Western North Carolina recently learned how to lead their students in stream monitoring at a series of workshops hosted by the Asheville, North Carolina, Ecological Services Field Office. The workshops were held in the Toe, Tuckasegee, and Little Tennessee watersheds – all priority areas outlined in the Asheville Field Office strategic plan. After covering classroom activities, teachers got their feet wet in the river learning about water chemistry, measured and calculated basic hydrology like velocity and discharge, and collected and identified aquatic macro-invertebrates.



Teachers identify macro-invertebrates in the Tuckasegee River. Photo by Gary Peeples, FWS.

Submitted by Gary Peeples, Asheville, North Carolina, Ecological Services Field Office



An example of a bad stream crossing. Several culverts at this crossing are perched and may prevent aquatic organisms from traveling freely. FWS Photo.

A new partnership in the valley

Aquatic organisms of the Paint Rock River have some new crusaders working on their behalf, the Paint Rock River Fish Passage Working Group (PPRWG). The group consists of partners working together to identify and prioritize barriers to fish passage in the Paint Rock River in northern Alabama. Five state agencies from Alabama, several non-governmental organizations, and four federal agencies: U.S. Army Corps of Engineers, Natural Resource Conservation Service, Tennessee Valley Authority, and the U. S. Fish and Wildlife Service (Wheeler NWR in Decatur, Alabama, the Alabama Ecological Services Field Office in Daphne, and the Warm Springs Fish Technology Center) met and formed a working group to help in the recovery of nine federally-listed species (two fish and seven mussels): palezone shiner, snail darter, shiny pigtoe, rough pigtoe, fine-rayed pigtoe, pale liliput, Alabama lampmussel, pink mucket, and the slabside pearly mussel. The working group's goal is to remove barriers to fish passage and connect aquatic habitats. The PPRWG is another example of Fisheries, Refuges, Ecological Services, and other partners working together for the recovery of aquatic resources.

Submitted by Bill Bouthillier, Warm Springs Fish Technology Center, Warm Springs, Georgia

Lake Harding mussel survey uncovers more than 500 mussels

Staff from the Warm Springs Fish Technology Center and the Fort Benning Ecological Services Field Office assisted Georgia Power Company (GPC) representatives in a mussel fauna survey at Lake Harding during a planned maintenance drawdown on October 15 and 16, 2009. The survey was conducted during this drawdown with the hopes of temporarily uncovering mussels and potential mussel habitat in tributaries and other shoreline areas that are typically inundated by the normal operating pool. Despite the rainy mornings, cold water temperatures, and recent flooding, surveyors found more than



An eastern floater. FWS Photo.

500 mussels (eastern floaters, giant floaters, and paper pointshell species) in the lake during two days of surveying. Staff members from the Service, the Alabama Department of Conservation and Natural Resources, and Columbus State University participated in the survey. This combined effort was a great success and resulted in further partnership building and inter-agency cooperation.



Survey participants count mussels. FWS Photo.

Submitted by Bill Bouthillier, Warm Springs Fish Technology Center, Warm Springs, Georgia

National Fish Strain Registry has moved

As of October 16, 2009, the National Fish Strain Registry (NFSR) database is available on a new server at <https://systems.fws.gov/nfsr>. The graphical user interface and database functionality have remained the same, but the initial log-in screen has changed. Registered users can visit the NFSR website and log-in using their active directory username and password. To request access to the NFSR, please e-mail Chester Figiel (chester_figiel@fws.gov) and Nicole Rankin (nicole_rankin@fws.gov). The National Fish Strain Registry is an internet-based program that assembles information on the life history, genetics, reproduction, and behavior of wild populations and domestic broodstock strains. This management tool is available for use by federal and state governments, private producers, and tribal entities.

Submitted by Nicole Rankin, Warm Springs Fish Technology Center, Warm Springs, Georgia

The power of partnerships

U.S. Fish and Wildlife Service staff members within the Partners for Fish and Wildlife, Coastal, and Fisheries programs collaborated with the Southeast Watershed Forum to produce a brochure that summarizes these conservation delivery programs and highlights several selected partnership initiatives within each program area. The document, entitled *The Power of Partnerships: Effective Approaches to Strategic Habitat Restoration in the Southeast*, is now available.

The partnerships highlighted in the document apply the Service's strategic habitat conservation model and strategic plans. They also are implementing a number of scientifically recognized strategies for addressing climate change impacts (i.e., restoring and

protecting key habitat areas, sequestering carbon, reducing threats to target species, and striving to connect priority habitats by expanding core habitat areas and reducing habitat fragmentation.)

Here is a digital copy ([PDF file](#)) of the document. For printed copies, please contact Ronnie Haynes, Regional PFW/CP coordinator, at Ronnie_Haynes@fws.gov or Judy Toppins in Fisheries at Judy_Toppins@fws.gov.

Submitted by Ronnie Haynes, Partners for Fish and Wildlife, Atlanta, Georgia

Kids enjoy fishing clinic

On Oct. 17, 2009, the staff of Ten Thousand Islands National Wildlife Refuge united with various businesses, education groups, and Port of the Islands (POI) Marina to educate 51 kids with a fishing clinic. The kids were from the Migrant Families Program. Boat tours were provided by two Port of the Islands Tour Companies. The children visited five skill stations manned by the Florida Fish and Wildlife Conservation Commission, the Marco Island Sportfishing Club, and refuge volunteers.



After fishing, the kids took a free boat tour to see manatees and other wildlife in the area. Photo by Takako Sato, FWS.

Each child received a fishing pole and a tackle box, provided by a grant from Fish Florida. The children fished from a seawall, and they caught a total of 10 to 15 fish. Volunteers helped with baiting hooks and fish handling. Participants were treated to free lunch provided by POI Marina and the Friends of the Florida Panther Refuge. Everyone enjoyed themselves. More photos in [Photo Album](#).

Submitted by Takako Sato, Florida Panther and Ten Thousand Islands National Wildlife Refuges, Naples Florida



Refuge volunteers walk the new boardwalk. Photo by Josh O'Donnell, FWS.

Ten Thousand Islands National Wildlife Refuge celebrates safe public access

On Saturday Oct. 10, 2009, Ten Thousand Islands National Wildlife Refuge celebrated the grand opening of a new parking lot and boardwalk at the Marsh Trail. Previously, the refuge was mainly accessible by water due to a lack of safe parking off of U.S. Highway 41. The new facilities include an 18-car parking lot, a kiosk, a boardwalk to the trail, and a small canoe launch.

More than 130 visitors attended the event including many local organizations and outdoor enthusiasts. Special guests included a local commissioner, aides of state and federal Representatives, and a local mayor. The day began with guided trail walks and kayak tours of new canoe trails, followed by a dedication and ribbon cutting ceremony. Visitors also learned fly fishing and received demonstrations on how to build a kayak,

Ten Thousand Islands thanks all partners who helped make the event successful. Partners included Friends of Florida Panther National Wildlife Refuge, J.N. Ding Darling National Wildlife Refuge, The Wildlife Society, Ducks Unlimited, Collier County Parks, and several kayak clubs and vendors. The Regional Refuge Roads Program and the Southwest Florida Gulf Coast Refuge Complex supported funding for new facilities by supplying the match for \$785,000 in Transportation Enhancement Program funds from the Florida Department of Transportation.

Submitted by Ashlee Coriell, Florida Panther National Wildlife Refuge, Naples, Florida

Celebrating National Disability Employment Awareness Month

On October 29, a special emphasis program was held in the Regional Office to celebrate Disability Employment Awareness Month and the contributions that individuals with disabilities have made to our workforce and to our society. Shari Brewer, assisted by Greg McGinty and Acquanetta Reese, coordinated the event.

The room was decorated in festive fall colors. On display for all to admire was a carved pumpkin provided by Kelly Bibb, the winner of Ecological Services' pumpkin carving contest.

Shari kicked off the event by citing some inspiring quotes regarding disabilities and read some excerpts from President Obama's 2009 National Disability Employment Awareness Month proclamation. The President's proclamation stressed that Federal agencies must lead the way in implementing effective employment policies and practices that increase opportunities and help all workers achieve their full potential, including Americans living with disabilities. An open discussion took place in which employees shared their thoughts on how they felt individuals with disabilities are treated in our society, especially in the work place. Participants were then shown a film on communication skills for interacting with individuals with specific disabilities, such as loss of hearing or sight. The event concluded with a fun game of trivia about famous people with disabilities.



Raffle winners: Kaman Nicholson and Regina Absham. Photo by Acquanetta Reese, FWS.

Managers who participated in the event had the opportunity to learn more about individuals living with disabilities and the valuable contributions many of them make to our society, and they also received 1.5 hours credit toward their annual diversity training requirements.

To learn more about diversity topics, such as employing individuals with disabilities, visit the DCR page on our Intranet.



Kelly Bibb's pumpkin: winner of Ecological Services' pumpkin carving contest. Photo by Acquanetta Reese, FWS.

Submitted by Shari Brewer, Diversity and Civil Rights, Atlanta, Georgia

Vieques NWR still going batty

Bats, bats, bats are everywhere on Vieques. So, why not learn more about them through an interpretive program? On November 13, 2009, more than 50 excited kids and adults filled the U.S. Fish and Wildlife Service building all eager to see and learn about their backyard bats. Visitors learned cool stuff, such as how bats are able to catch insects with their tail membrane and eat while still in flight. Kids also had the opportunity to decorate bat masks with glitter and paint. We also had live bats to show the audience such as the Fishing bat, Fruit bat, and the Free-tailed bat. Some of the folks were curious; others just viewed these creatures from afar. After the bat interpretive program, the audience was invited for the more scientific part of the program which included bat mist netting, weighing bats and measuring its wing hands. As refuge personnel continues spreading the good news about bats, many people are beginning to understand the stunning diversity of bats with which we share our island and to appreciate the great benefits we receive from them. More photos in [Photo Album](#).



Battyl with decorated mask. FWS Photo.

Submitted by Gisella Burgos, Caribbean Islands National Wildlife Refuge, Boqueron, Puerto Rico

Friends Group --



Miss Farni, a representative of the Kappa Alpha Order at Mississippi State University, gives a check to Dr. Larry Bon, President of Friends of Noxubee Refuge. Photo by Kimberly Syles, FWS.

Kappa Alpha Fraternity a new Friend and volunteer

On October 17, twenty-six members of Kappa Alpha Order at Mississippi State University, Starkville, Mississippi, volunteered their services on a variety of Noxubee Refuge projects. These details included picking up litter along eight miles of road, weeding native plant and bird gardens, installing two 16-foot-long foot bridges on the Craig Pond Trail and clearing 1.25 miles of trail. The KA Order became a Friends of Noxubee Refuge Corporate Sponsor and hopes to make this an annual service project. We really appreciate all the help and look forward to working with them in the future.

Submitted by Andrea Dunstan, Noxubee National Wildlife Refuge, Brooksville, Mississippi



Bridge under construction on Craig Pond Trail. Photo by Henry Sarang, FWS.



Finished Bridge on Craig Pond Trail. Photo by Henry Sarang, FWS.

Hats Off -



Undersecretary of the Interior Tom Strickland (right) pats Rick Fike on the back for a job well done on the overall C-111 project. Photo by Ken Warren, FWG.

Spreader Canal project a big step toward Everglades restoration

Biologist Rick Fike of the South Florida Ecological Services Office loves the Boston Celtics, but these days you get the feeling he's rooting harder for the completion of the C-111 Spreader Canal project than for his Celtics to win another NBA championship.

Rick has been working on this project for about seven years. Upon completion, this project -- to be accomplished in phases -- will help restore the Everglades by sending freshwater flows to Florida Bay, preserving clean water for Everglades National Park and providing flood control for communities east of Miami.

The various ups and downs related to this seven-year-effort have given Rick a fair share of frustration.

"There have been so many twists and turns...as well as some controversy. But, the big steps are pretty much done. We're at the point of turning dirt and doing construction," Rick said wistfully.

"A lot of effort has been put into this by our office, Pam Repp, Todd Hopkins, and Paul Souza, Trust Resources people, and our Endangered Species program. It is way more than just me," Rick added.

For Rick, those efforts have included serving as part of the Project Delivery Team, providing Section 7 consultations under the Endangered Species Act, ensuring adherence to provisions of the National Environmental Policy Act, and finalizing the Fish and Wildlife Coordination Act report. In addition, once the U.S. Army Corps of Engineers completed the environmental assessment, Rick was the primary author of the biological opinion (BO).

"I tried to write a BO that avoided environmental degradation and maximized environmental protection for the listed species and their habitats," Rick said. "A fair number of critters were taken into consideration including Florida panthers, Cape Sable seaside sparrows, snail kites, and wood storks."

Under the terms of the BO, about 1,600 acres of sparrow habitat will be identified as land to be set aside as a habitat improvement project. "I believe it's one of the first of its kind," Rick said.

On Sept. 30, Rick toured the C-111 area with Assistant Secretary of the Interior Tom Strickland and other members of the South Florida Ecosystem Restoration Task Force. The tour concluded with Mr. Strickland chairing a consultation regarding the C-111 Spreader Canal Western Project near a pump station on the canal.

"I really wanted Rick to attend because he's earned the right to be there to claim some ownership as this project heads toward the finish line," said Todd Hopkins, Rick's boss.

About two weeks later on Oct. 15, the South Florida Water Management District, a major partner in the project, announced it had awarded contracts to begin construction on the first phase of the overall project.

"It was very nice to see this approved. This is a significant step forward in Everglades restoration," Rick said. "We'll monitor as the

project proceeds incrementally to make sure conditions of the BO are met. I'm happy to say we're to the point of less meetings and more monitoring and compliance assurance."

Todd said, "This is a very complex project, involving one of our most endangered species -- the Cape Sable seaside sparrow, which means doing some very careful analyses. While walking a fine line trying to get things done for the species and the project, Rick brings the right demeanor and work ethic to the table. He's done a tremendous job of handling some very difficult technical issues."

Construction is expected to begin before the end of calendar year 2009. The C-111 Canal was built in the 1960s to allow barges to transport rocket components to Cape Canaveral. The canal was later used for flood control.

Submitted by Ken Warren, South Florida Ecological Services Field Office, Vero Beach, Florida

Paul Goudy Alligator River National Wildlife Refuge Complex's volunteer of the year

Volunteers make a wide-range of contributions to Alligator River and Pea Island National Wildlife Refuges each year. Those volunteers and their work on these Outer Banks refuges were celebrated at an annual dinner held at Pamlico Jack's on Saturday, Nov. 21. Among the hundreds of volunteers helping the refuges, 18 received special awards this year. Recognized as Volunteer of the Year was Paul Goudy, a talented mechanic who has donated 280 hours of volunteer time since August 2009. Goudy was praised for his diagnostic skills and ability to fix equipment and vehicles rather than just replacing parts.



Paul Goudy Volunteer of the Year.
Photo by Bonnie Strawser, FWS

"He's a perfect fit for us," said Bruce Creef, Maintenance Supervisor who directs Paul's work.

Goudy helps maintain a fleet of 50 vehicles and 20 pieces of heavy equipment on both refuges. He's certified to work on diesel engines, is an experienced heavy equipment operator and knows the unique swamp and pocosin habitat in the Alligator River National Wildlife Refuge.

Volunteers at the refuges work in the Pea Island visitor center, patrol for turtles, watch turtle nests, help with Big Sit, Wings over Water and Howlings, lead weekly birding walks, sweep litter from beaches and roadsides, and so much more. In 2009, almost 300 volunteers donated more than 23,000 hours to the Alligator River National Wildlife Refuge Complex.

At the dinner, Mike Bryant, manager of the refuge complex, announced that the two national refuges will have a new visitor center and office space in two years. Groundbreaking for the new facility on Roanoke Island is expected in late spring 2010.

Submitted by Bonnie Strawser, Alligator River National Wildlife Refuge Complex, Manteo, North Carolina

I Gave '8' --



Jeff Howe, a biologist with the South Florida Ecological Services Office, picks up trash from Round Island Beach. Photo by Sandy Cardenas, FWS.

Community Corps cleans Round Island Beach

Thirteen staffers from the South Florida Ecological Services Office (SFESO) could boast: "We gave eight!" after they and about six of their family members, plus John Galvez, Project Leader, South Florida Fisheries Resource Office volunteered to pick up trash along a south Florida beach Sept. 19, in conjunction with the Ocean Conservancy's annual Coastal Cleanup Day.

The staffers' effort was the first of a new initiative at the SFESO called Community Corps, where volunteers perform community service activities as official representatives of the U.S. Fish and Wildlife Service.

"Our Community Corps hit the beach early that morning. It was hot and humid. We hauled a lot of trash," said Sandy Cardenas, office automation assistant. "Round Island Beach is a little cleaner today because of our efforts. It was our first community project since our group, including Sandra Sneckenberger, Steve Traxler, Miles Meyer, and me, came up with the idea of a Community Corps during a leadership training class in March."

The Ocean Conservancy's International Coastal Cleanup is a year-round program designed to keep the ocean and waterways free from trash and safer for people and wildlife. Its flagship event -- held on the third Saturday of every September -- is among the largest single-day volunteer efforts of its kind.

"There was a great turn-out -- not only from our office, but from the community as well," said Sandra. "It was nice to see our staff members out there with their kids making a difference by cleaning up the

environment."

SFESO staffers who participated in the cleanup included:

- Dave Bender
- Andy Caron
- Sandy Cardenas
- George Dennis
- Winston Hobgood
- Jeff Howe
- Chuck Kelso
- LeeAnn Kelso
- Marilyn Knight
- Patrick Pitts
- Liberta Scotto
- Sandra Sneckenberger
- Jane Tutton



From left, Joe Cardenas, LeeAnn Kelso, Sandra Sneckenberger, Marilyn Knight, John Galvez, Patrick Pitts and Andy Caron relax after removing several bags of trash from Round Island Beach. Photo by Sandy Cardenas, FWS.

Submitted by Ken Warren, South Florida Ecological Services Field Office, Vero Beach, Florida



Emma Blount explores a creek.
Photo by Theresa Blount.

I gave two hours and received tenfold in return

My brother's wedding facilitated the congregation of my extended family in a cabin in the North Carolina mountains this summer. The rains were non-stop. After two days of indoor sitting, cabin fever crept in. It did not take much prompting to get my son, two nieces, and two nephews (ages 4 to 8) to venture outside, weather be-darned! A brief stop on the hill-side rope swing, a dash through the open grassy field, a quick look at the zip-line (not so safe from young ones) lead us to the mountain creek. With the promise of five dollars to whoever finds the coolest object, the search was on. I heard the words: "look Aunt Patty at what I found," and "Mommy, what is this?" many times. We collected acorns, rocks, crayfish, a turtle shell, bones from something, leaves, saw fungi and poison ivy, bugs, and so on.

I spent two hours with these kids, but received something more in return. I received hope. Hope that with small investments of time spent taking children outside, that this generation of children will gladly carry the torch to assist the Service in achieving its mission. Not necessarily as biologists, but as voters and citizens who might remember those two fun hours in the woods long ago. They might understand the importance of protecting special areas so their children might ring out with the same tones of laughter and excitement as they did that one rainy summer day. Only my son asked for the five dollar payment!

Submitted by Patty Kelly, Panama City, Florida, Ecological Services Field Office



Matthew Blount and Ryan Furell in the woods. Photo by Theresa Blount.



Paula Sisson (middle) with several of the visitors at the Haulover Canal manatee viewing platform on Merritt Island NWR. Photo courtesy of Paula Sisson.

Educating people about gentle giants

Paula Sisson, a fish and wildlife biologist, with the North Florida Ecological Services Field Office in Jacksonville visited Merritt Island National Wildlife Refuge recently to volunteer as an interpreter on the manatee Haulover Canal viewing platform.

Manatees congregate in large numbers on Canal's north side in warmer months providing a wonderful opportunity for public observation. The platform is a great place to catch sight of them and to learn more about these gentle giants.

Although temperatures were high, many visitors showed up to watch the 1,200-pound endangered species lumber about in the cool waters.

At one point, there were 16 manatees counted including three juveniles.

While many visitors were frequent guests of the observation deck, many asked interesting questions giving Paula the opportunity to speak about the behavioral, physical, and social aspects of the animals, as well as human-related threats.

Submitted by Chuck Underwood, Jacksonville, Florida Ecological Services Field Office

Photo Album --

Russell County fourth graders experience Outdoor Eco Adventure at Wolf Creek National Fish Hatchery -- more photos



Sue Duncan, Park Ranger, NPS Big South Fork National Recreation Area, talks with students. Photo by Amanda Patrick.



Outdoor Eco Adventure Day participants learning about the lessons of fuel mileage in relation to conserving our resources. Photo by Amanda Patrick, FWS

Local students sweep Bulls Island Beach -- more photos



Molly Garrison and Alyssa Bowman, Pinckney Elementary Ecology Club members, display a collection of rubbish. Photo by Mike Cline, Pinckney Elementary School.



Wando High School students pick debris off the beach. Photo by Diane Girardeau, Wando High School.

Kids enjoy fishing clinic -- more photos



A successful catch! Photo by Takako Sato, FWS.



Layne Hamilton helps explain to the kids how fishing license fees help pay for programs like these. Photo by Takako Sato, FWS.

Vieques NWR still going batty -- more photos



Bat field work. FWS Photo.



A little girl shows her decorated masks. FWS Photo.



Jesus Rice, an Ecological Services employee, shows the audience a bat. FWS Photo.

Visitor Services --

Successful fall celebration at Reelfoot National Wildlife Refuge



David Haggard, Tennessee State Parks, releases a barred owl while participants enjoy the live animal presentation. Photo by Randy Cook, FWS.

Approximately 100 people gathered at Reelfoot National Wildlife Refuge to “Give Wing to their Wildside” on October 24, 2009. West Tennessee Complex Manager Randy Cook kicked off the event which featured educational hayrides, canoe trips, a live animal presentation, and a free chili lunch. The event brought together several stakeholders to help the refuge staff members educate participants about our mission, goals, conservation objectives, as well as habitat and wildlife management activities.

Participants were treated to hayrides around the Long Point Unit where they visited several educational stations. Complex Biologist Gary Pogue gave a presentation on moist soil resources and management and discussed and demonstrated the use of a net gun to capture and band wood ducks. Tennessee Wildlife Resources Agency Manager Patrick Lemons gave a presentation on identifying local waterfowl and had several wings and other mounts to help illustrate identification techniques. Dr. David Pitts, an Ornithology Professor with University of Tennessee at Martin, spoke about all the bird resources found on and near the refuge. He brought a collection of mounted specimens that he used during his presentation. Participants also enjoyed canoe trips guided by Kimberly Crews of the University of Tennessee at Martin Research Center.



Biologist Gary Pogue explains and demonstrates the use of a net gun to capture and band wood ducks. Photo by Deborah Pierce, FWS.



Participants prepare for the educational hayride. Photo by Randy Cook, FWS.

The refuge’s local Friends Group sponsored a delicious chili lunch and a local bluegrass band provided additional entertainment. During lunch, participants also had the opportunity to meet other refuge staff, Friends Group members, and other stakeholders including Richard Preston, President of the Memphis Ornithological Society, who set up a booth for visitors to learn about the size of bird eggs and their nests. David Haggard, the West Tennessee Interpretive Specialist for Tennessee State Parks performed a live snake and bird of prey presentation that featured a bald eagle and the release of a rehabilitated barred owl.

Wildlife abounded on the refuge throughout the beautiful fall day, and there were several sightings of white pelicans, hawks, snakes, and bald eagles. The event was a big success thanks in large part to the active participation of so many stakeholders. Visitors left the event with lasting memories and a little more informed about our natural resources, and our purpose as a National Wildlife Refuge.

Submitted by Tara Dowdy, and Deborah Pierce, West Tennessee National Wildlife Refuge Complex, Union City, Tennessee



Patrick Lemons, Tennessee Wildlife Resources Agency, gives tips to identifying waterfowl. Photo by Randy Cook, FWS.



Participants enjoy the live animal presentation. Photo by Randy Cook, FWS.



Biologist Gary Pogue discusses moist soil management. Photo by Randy Cook, FWS.

Wage Grade Profile --

Mike Gallagher and Steve Nelms, Florida Keys National Wildlife Refuges



Mike Gallagher and Steve Nelms preparing for a test firing of the trap. Photo by Tom Wilmers, FWS.

Mentioning that Mike Gallagher and Steve Nelms are incredibly versatile individuals able to accomplish a wide array of tasks is like saying that Julia Child can make corn dogs.

Recently, Mike and Steve completed a task that even for them was a bit daunting and out of the ordinary: constructing a trap to capture Reddish Egrets to enable attachment of satellite transmitters. Movement and dispersal patterns of Reddish Egrets, a species of Regional and Continental Management Concern, are poorly understood.

If building such a trap sounds easy, consider the designers' caveats: "Because of the technical aspects involved in the construction of the modified flip trap, we recommend consulting with a professional machinist to ensure proper construction of the trap and execution of the firing mechanism."

The complex design called for a radio-triggered, spring-powered apparatus that would fire a 30-foot-wide net able to travel rapidly and far enough to allow safe capture. Mike and Steve examined the intricate diagrams and, despite lacking a machine shop, believed they could construct the trap. They laboriously fabricated and welded the myriad parts; bit-by-bit the trap took shape. Upon completion, they made repeated test firings to synchronize the triggers for the twin throw arms and adjust fulcrum tension for the four garage-door springs.



A white-phase Reddish Egret fitted with a satellite transmitter. Photo by Tom Wilmers, FWS.

On October 15, their hard work bore fruit when a white-phase Reddish Egret was captured and fitted with a satellite transmitter. Upon release, the bird flew majestically to a remote part of an island. To date two adult and two juvenile birds - - a perfect complement for tracking - - have been fitted with transmitters. With a transmitter life of three years, for the first time, detailed information on intra- and inter-seasonal movements across years will become available on this species.

Submitted by Tom Wilmers, Florida Keys National Wildlife Refuges, Big Pine Key, Florida