

ISSUE THIRTY FIVE JANUARY 2011

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HELEN C. FENSKE VISITOR CENTER DEDICATED OCTOBER 2, 2010



Pictured from left to right: Bill Koch, Refuge Manager; Art Fenske, Helen's husband; Mark Fenske, Helen's son; Susan Fenske McDonough, Helen's daughter; Karl Fenske, Helen's son; Tony Leger, Chief of Refuges, U.S. Fish & Wildlife Service, Region 5; Photograph by Michael Stadelmeier

ver 100 visitors attended the Dedication Ceremony on October 2 including Fish & Wildlife Service officials, the Fenske family, former colleagues of Helen Fenske including Governor Tom Kean, Refuge volunteers, and the Friends of Great Swamp who co-hosted the event.

The late Helen Fenske helped lead a grass-roots effort to save the Great Swamp from becoming a jetport in the 1960s. She and other activists were instrumental in raising more than one million dollars to purchase and donate nearly 3,000 acres of land to the U.S. Department of the Interior for what would become Great Swamp National Wildlife Refuge. Several years after the refuge's establishment, she played a major role in the creation of the Great Swamp Wilderness Area, the first wilderness area designated on Department of Interior lands. Helen Fenske

went on to become a statewide environmental advocate in New Jersey and received many awards including the Department of the Interior's Conservation Service Award. She died on January 19, 2007 at the age of 84. Her story is an inspiration and a model for the importance and power of citizen action

The keynote address was given by Congressman Rodney Frelinghuysen, a long-time advocate for the Refuge, who challenged refuge staff and the Friends to reach out to young people, commenting: "we need to make sure that when a child visits, we imbue them with a love of nature in a relatively short period of time—that visit may be their only visit". Helen's daughter Susan McDonough characterized her mother as a "fierce and passionate crusader who never took no for an answer".

FRIENDS NEWS & UPDATES

THE WILDLIFE OBSERVATION CENTER—A BUSY PLACE

During the busy spring and fall migration seasons, volunteers staff the Wildlife Observation Center five days a week from 10:00 am to 4:00 pm. This year, from August through October, volunteers welcomed 5,891 visitors answering questions, providing directions, sharing sightings and stories.

The season started off, as usual, with numerous frogs, turtles, snakes, and other fall sightings, but as the weather cooled most disappeared from sight to prepare themselves for the coming winter season. By then the swamp maples were turning a brilliant red to be followed by fabulous fall color on all the trees.

Forty-seven volunteers donated 518 hours this fall—and thank you all. We can always use more volunteers, especially on week-



Photo by Kathy Woodward

ends. It's fun, you learn a lot, and new volunteers are always teamed with more experienced ones for on-the-job training. And there's always the excitement of unexpected sightings—like the snapping turtle making its way quickly (for a turtle) across the path, then disappearing behind the information shed to take cover. By Pat Giaimo, Friends Volunteer Coordinator

CCP PROCESS BEGINS AT GREAT SWAMP NWR

The Comprehensive Conservation Plan (CCP) for Great Swamp National Wildlife Refuge will establish management goals and objectives for refuge programs over the next 15 years. Although Refuge staff have been involved in pre-planning for over a year, the CCP public process for Great Swamp officially began with two public scoping meetings held on July 28, 2010 at the Chatham municipal building. At these meetings Refuge manager Bill Koch and Planner Bill Perry from the Northeast Regional Office described the purpose of the CCP and the process for completing this plan.

The Refuge staff and representatives from the State of New Jersey are developing the plan with assistance from the U.S. Fish & Wildlife Service's Northeast Regional Office. The Friends have contributed by assisting at the public scoping meetings, providing written comments, and enlisting visitors to complete a survey about this refuge and the refuge system. Feedback from the surveys will be incorporated into the CCP for improving the visitor services program at Great Swamp.

The CCP is very important to Great Swamp as it will set the refuge's management direction for the next 15 years. The plan is tentatively scheduled to go out in draft form for public review in early 2012. This draft will present management alternatives for public review and comment. It is planned that it will be finalized in 2012. Anyone interested in staying up to date on the CCP process should contact refuge headquarters and ask to be added to the mailing list; current information on the CCP can also be found on the refuge's website at [http://greatswamp.fws.gov]. The next CCP newsletter is scheduled to be published in January 2011. It is important for anyone interested to offer comments on how the Refuge should be used or managed since it is, in fact, your National Wildlife Refuge. By Laura Nally, President

THE FRIENDS' NEW FACEBOOK PAGE



There are now over 500 million active users on Facebook (per its fact sheet), and other sources say that only about 40% of them are under 25, and nearly 10% are over 55, although the younger group is growing more quickly. In other words, Facebook reaches a lot of people and they are a diverse group. So when Friends member Gail Petrillo offered to start a Facebook page for the Friends group—we jumped at the chance.

Gail has quickly set up a great page with information on upcoming events and photos taken all around the Refuge. She thought it was important to reach out to people who might not be current Friends members and tell these new people what the Refuge, the Friends, and the Swamp have to offer. So far, it has been a success and we want to keep it growing.

So if you are a Facebook user, we invite you to visit and "like" us. Or join Facebook to see what we are up to and connect with like-minded Friends "friends". Post your photos of the Swamp and share stories or information on what you've seen. We want to make this as informative and interesting as possible. We're [www.facebook.com/pages/Friends-of-Great-Swamp-NWR/142739895763647] or go to www.facebook.com and search for Friends of Great Swamp NWR. Hope to see you there! By Susan Garretson Friedman, Vice President

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AROUND THE REFUGE.. WITH DEPUTY REFUGE MANAGER STEVE HENRY

ADMINISTRATION & PERSONNEL

In late August, Great Swamp, which had been complexed with Wallkill River and Shawangunk Grasslands National Wildlife Refuges for over five years, was decomplexed and returns to being a standalone refuge. A new complex was formed among Wallkill, Shawangunk, and the new Cherry Valley NWR.

It's been an active few months for personnel changes. In August, Mike Horne transferred to Wallkill River as manager of the new Wallkill River complex. Rob Allen joined our staff in November with a focus on contaminants issues, such as the Rolling Knolls landfill; he will be spending 25% of his time working for John Heinz NWR in Philadelphia, Marilyn Kitchell transferred to Wallkill River in August as their new biologist. David Sagan will be replacing Marilyn as a Visitor Services Specialist. David started as a student with the Fish & Wildlife Service and comes from the Silvio O. Conte NWR in Massachusetts. Jonathan Rosenberg has been hired to replace Tom McFadden as Visitor Services Manager, Jonathan brings a wealth of relevant experience to the position. Jonathan and David will both be starting in January. Jerfelis Pimentel has replaced Lee Bessler as our Administrative Assistant; he comes from the Air Force where he served for four years. Mike Johnson has taken a job with the Department of Defense and will be leaving early in 2011. Tony Cullen recently graduated from college and his position has been converted from parttime to full-time.

2011 INTERNS

Advertisements are out for two summer biological interns and the Friends will fund at least one of these positions. Due to lack of funding, we will not have a crew doing bat research this year; however we have applied for four intern positions through the Conservation Internship Program. Interns are important to assist staff, and internships provide valuable field experience for students.

COMPREHENSIVE CONSERVATION PLAN (CCP)

Two CCP public scoping meetings were held in July; both meetings were well attended with valuable discussion. The next CCP newsletter will be published in January with a summary of the public

comments received and a timetable for upcoming tasks including: Wilderness Review, an assessment of lands for their potential to be added to the refuge's Wilderness Area; revision of the Habitat Management Plan; development of management alternatives and corresponding experts workshops on important topics like biology and public use. The draft CCP and additional public meetings are tentatively scheduled for early 2012 with completion targeted for spring 2012. Anyone interested in staying informed should contact refuge Headquarters and ask to be added to the CCP mailing list. Current information may also be found from the CCP link on the refuge's website.

BUDGET

The Federal matching grant program has been terminated. In the past this has been a reliable source of funding for many types of projects including bat surveys, Fall Festival, the Junior Refuge Manager Program, and the ongoing research on turtles. Hopefully it will be reinstated in the future. The Friends have stepped in to fill the gap in turtle research by agreeing to provide \$15,000 to fund the continuation of this valuable research in 2011. The Department of the Interior FY2011 budget has not been approved by Congress, consequently we are currently operating under a continuing resolution-which means the same funding level as last year.

INFRASTRUCTURE

A vault toilet has been installed at the site of the old Friends gift shop. The Friends have funded a kiosk for that site which will be installed in the near future. South Gate has been replaced with a new gate that completely crosses the road. The center island and stop spikes have been removed. The gate is programmed to open at dawn and close at dusk as before. If you are leaving the refuge and the gate is closed, approach slowly to within a few feet of the gate. Inground sensors will detect your vehicle and the gate will open automatically.

PUBLIC USE

The first round of sampling for a national Visitor Service Survey was completed in late fall with Friends and staff recruiting 179 visitors to complete the survey. The U.S. Geological Survey will contact these

visitors with survey forms and perform the analysis. The final round of sampling will be done in the spring. This national survey will provide data about national wildlife refuge visitors and will allow for a better understanding of visitors' recreational, educational, and informational experiences and will measure satisfaction with current services, access, and facilities. This data will provide important input to the CCP planning process. The refuge held another safe and successful deer hunt in early November with hunters harvesting 121 animals. Volunteers installed railings on several bridges in the Wilderness Area this summer as a safety precaution. Railings will be installed on two more bridges by spring.

HABITAT MANAGEMENT

Great Swamp has been selected as one of six refuges in the Northeast region to participate in a pilot Early Detection/Rapid Response (EDRR) program. EDRR is a strategy to stop new invaders before they become established. About 220 acres of grasslands were cut during another successful fall mowing season. This improves early successional habitat for many grassland dependent species.

POPULATION MANAGEMENT

Dr Kurt Buhlmann was back this summer assisting with turtle research. Intensive monitoring of the artificial turtle nest mound took place during nesting and hatching periods. Radio tracking of wood and bog turtles continues to provide valuable insights in habitat use and movement patterns. Indiana bat research was completed for the fifth summer; results show little brown bat and Indiana bat numbers continue to be low. likely due to the impact of White-Nose Syndrome. Volunteers continue to do an excellent job overseeing the refuge's wood duck and bluebird nest box programs. Screech owls found in wood duck boxes during winter maintenance are banded. We are participating in a statewide program to assess the population status of mourning doves; 148 doves were banded this summer, up from 100 in 2009. Waterfowl banding was disappointing this summer. Raptor presence in the vicinity may be keeping ducks from entering the traps.

BLUEBIRDS 2010—A LONG AND PRODUCTIVE SEASON!

Charts & story by Leo Hollein; photo by Steve Byland

rot the fourth time in five years more than 200 bluebirds fledged from the refuge's bluebird nest box trail. This season, 254 bluebirds fledged eclipsing the previous record of 249 that fledged in 2008. For the second time in three years there were more bluebird nestings and fledglings than for tree swallows. Chart 1 presents comparison data for the past 10 years.

The bluebird nesting season was longer in 2010. The first bluebird egg was laid on March 28, the first time in at least 10 years that a bluebird egg was laid in March in the

refuge. The last bluebird nesting was started on July 21, the same date as the previous record in 2009. One bluebird pair fledged three clutches of bluebirds-also a first. It's not unusual for a bluebird pair to lay three clutches but in all previous cases one or both of the first two nesting attempts had failed. The window for multiple bluebird nestings is limited due to the bluebird practice of feeding their young for several weeks after they fledge before attempting to raise a second clutch.

The mean temperature in April was 54.3 degrees F. versus the average of 51.3 de-



grees for the previous six years. The unusually high temperatures at the end of March and in April spurred early spring growth. Bluebirds started a record 37 nestings

> in April. Eventually 73% of the 45 bluebird pairs attempted a second nesting versus an average of 57% in prior years. Twenty bluebird pairs fledged two clutches.

Bluebird nest failure in 2010 was slightly above the 19% average. However, nest predation (7% of total nestings) was low. Conical predator guards placed on posts in areas subject to raccoon predation were evidently effective, or perhaps the raccoons had other food sources to exploit this season.

In 2010, both fledgling starvation and nest abandonment were high due to weather related events. In May there was a 3-day period of persistently high daytime winds in the 20 and 30 miles per hour range. This severely hampered adult bluebirds in their foraging, resulting in some hatchling starvation. In July there was a 4-day period with daytime highs ranging from 94 to 101

degrees F.: the temperature inside the nest boxes in open fields was no doubt higher. Bluebirds can warm their eggs to maintain them at the desired incubation temperature in the 95-100 degrees F. range. However, keeping them below the upper temperature target is a problem. Four clutches of bluebird eggs laid in late June failed to hatch as high ambient temperatures overheated the eggs. The number of bluebird fledglings would have been significantly higher without the periods of high winds and very high temperatures.

Chart 2 presents bluebird nesting data for the last nine years. In 2010, bluebirds laid more eggs, had more hatchlings, and fledged more young than in any previous season. Seventy one percent of the nest box pairs had nesting bluebirds during the season.

Many thanks to volunteers Nancy Felicito, Roz Mytelka and Lou Pisane who monitored nest boxes and reported their findings on a weekly basis during the 2010 nesting season. Thanks to Lou Pisane for his help in maintaining and modifying the nest box trail during the off season. Thanks to volunteer Paul Ford for building new boxes and repairing others for the trail.

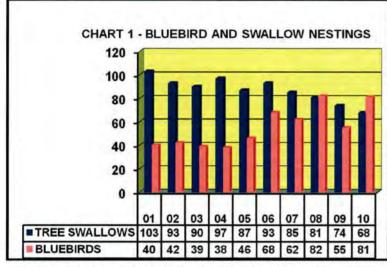
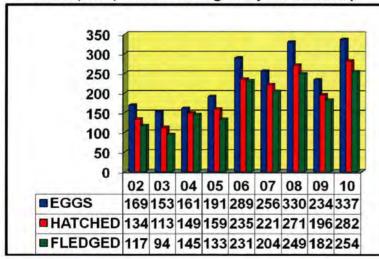


Chart 2 (below)-Bluebird Nesting History at Great Swamp



INTERNS MAKE A BIG DIFFERENCE AT GREAT SWAMP

By Kathy Woodward

I used to be that things slowed down a bit at Great Swamp in the summer, but summer interns helped change that. For the past seven years, the Friends of Great Swamp and the Mushett Family Foundation have each funded a summer internship at the Refuge. Interns provide significant support for Refuge staff during the spring and summer seasons. This summer, with two additional interns assigned to visitor services, Friends' volunteers had even more opportunities to work with the students.

Partnering with Refuge staff, the Friends and interns presented a Meet the Interns program on July 25 where the seven summer interns shared their interests and experiences. The three Indiana bat research interns, Paula O'Briant, Alex Schaich Borg and Emily Thornton, working with Lindsey Wight, graduate student, gave an overview of the multi-year studies of bats at the refuge and the serious impact of White Nose Syndrome. They also demonstrated the process of tracking and mist netting bats. Their enthusiasm for bats had eve-

ryone eager to try their hand at tracking the animated "bat" in the field.



2010 GSNWR Interns (left to right, back to front): Paula O'Briant, Alex Schaich Borg, DeAndre Augustus, Andrew Ferreira, Kim Barrett, Tony Henehan, Emily Thornton

The visitor services interns, working though the Student Conservation Association, presented seldom considered information about the refuge. DeAndre Augustus demonstrated river seining as part of his program *Fish in the Swamp*. Participants had up-close looks at catch-

and-release large mouthed bass and redbreast sunfish. Kim Barrett demon-

strated *Nature Patterns* through photographs and diagrams highlighting the four common patterns of mammal footprints found at the refuge.

Biological science interns focused on their areas of expertise and interest. Andrew Ferreira, sponsored by the Mushett Family Foundation, taught participants what to look for during his presentation Identifying Amphibians of Great Swamp. Everyone had a chance to test their new skills on the live frogs

and salamanders. Tony Henehan, sponsored by Friends of Great Swamp NWR, had the group "singing" bird calls as part of his program, Common Songbirds of Great Swamp. Audience member and volunteer, Ruth Lloyd, said, as the demonstrations ended, "We should do this every summer!"

IN THEIR OWN WORDS... EXCERPTS FROM INTERN LETTERS

Dear Friends of Great Swamp

I would like to thank you for the amazing opportunity that your organization afforded me this summer. Thanks to you, I have been able to better myself both personally and professionally. Due to your generosity, I have become more competitive in the job market while working at an amazing place: Great Swamp National Wildlife Refuge.

This summer, I have had the immense pleasure to participate in many different projects. Within the biological aspect of duties I have helped radio track bog turtles and wood turtles, mark and release bog, box, and wood turtles, restore bog turtle habitat, sample local frog populations for deformities, assist with bat surveys on the refuge, remove invasive plants throughout the refuge, protect Atlantic white cedar trees from white-tailed deer browse, and band ducks, geese, and doves.

I have also been involved with many different surveys... I have also had the opportunity to visit other refuges in New Jersey due to your group's funding. In between these duties, I helped construct the bridge on the Orange Trail, I attended CCP meetings, a Friends board meeting, and presented on common songbirds of the Great Swamp.

Again, I would like to thank you for your contribution to my ever growing interest in this great field. The summer has been of immense value to me, and I will never forget it.

Sincerely, Anthony Henehan, Biological Science Intern

To Whom It May Concern,

I wish to thank the Mushett Family Foundation for financially supporting my position as a biological intern for the Great Swamp National Wildlife Refuge during the summer of 2010. I was able to broaden my biological field experience in several areas and I experienced conservation and management practices which I had not been exposed to previously.

As a biological intern, the great majority of my duties were to assist the refuge staff and volunteers in wildlife habitat restoration and wildlife monitoring. Wildlife habitat restoration typically consisted of removing exotic, invasive plants from various habitats for the benefit of native wildlife and removing trees from bog sites in order to sustain bog turtle habitat. Wildlife monitoring included surveying, radio tracking, and protecting nest sites of bog turtles, wood turtles, and box turtles; monitoring bluebird boxes; banding Canada geese, ducks, and mourning doves; assisting with frog-call, bat, and white-tailed deer surveys; electro-fishing for survey purposes; and collecting metamorphosed frogs for federal research. When volunteers were in short supply, I contributed to maintenance projects throughout the Refuge, including rebuilding a boardwalk bridge.

I wish to obtain a job in a wildlife-related field, and this internship has given me the experience necessary to be competitive against other applicants. Thank you so much for your support and the opportunity to work, at such a wonderful place!

Sincerely, Andrew Ferreira

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FROM THE ARCHIVES—"VOLUNTEERS BUILD OBSERVATION BLIND"

For many years now-retired Outdoor Recreation Planner Tom McFadden issued an annual newsletter for Great Swamp volunteers. In 1995, the following article appeared—a little history you may not have known.

n September 23, 1995, National Hunting and Fishing Day, Great Swamp National Wildlife Refuge hosted the rededication of the Lou Picone Memorial Wildlife Observation Blind at the Wildlife Observation Center.

The original blind, a remodeled chicken coop dedicated 22 years ago in memory of the late Lou Picone, who was the president of the Morris County Farmer Sportsman Federation, had deteriorated to the point it should be replaced. Outdoor Recreation Planner McFadden worked with the Morris County Farmer Sportsman Federation who led a fundraising campaign. Approximately \$6,300 in donations were received and used for construction materials.

Refuge volunteer Russ Hamilton of Hamilton Remodeling in Meyersville volunteered to construct the blind with

the assistance of Refuge volunteers Tom Cutshaw and Herb Hamilton, Russ has received many compliments for such a superb job. The quality and craftsmanship shows the time and expertise that went into this blind. The new blind incorporates designs which provide greater leg room for visitors in wheelchairs, thus enhancing their views. "We are very proud of the new observation blind and thankful for all the generous donations that made it possible. We encourage everyone to visit the refuge and observe its many wonders," stated Refuge Manager William Koch.



Lou Picone Memorial Wildlife Observation Blind at the Wildlife Observation Center (December 2010)

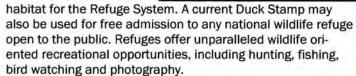
2010 FEDERAL DUCK STAMP WINNER ANNOUNCED - NEW STAMP AVAILABLE JUNE 2011

From U.S. Fish & Wildlife Service Press Release, October 2010

ames Hautman, an artist from Chaska, Minnesota, has been named the winner of the 2010 Federal Duck Stamp Art Contest. Hautman has previously won the Duck Stamp three times, in 1989, 1994 and 1998. His acrylic painting of a pair of white-fronted geese will be made into the 2011-2012 Federal Duck Stamp, which will go on sale in late June 2011. The U.S. Fish & Wildlife Service produces the Federal Duck Stamp, which sells for \$15 and raises about \$25 million each year to provide critical funds for conserving wetlands for the benefit of wildlife and the enjoyment of people.

The Federal Duck Stamp Contest is the nation's oldest and most prestigious federal wildlife art competition. Waterfowl hunters age 16 and older are required to purchase and carry the stamp when they are hunting. Conservationists, stamp collectors and birders also purchase the stamp in support of habitat for birds and other wildlife. Ninety-eight percent of the proceeds from the \$15 Duck Stamp go to the Migratory Bird

Conservation Fund which supports the purchase of acres of wetlands for inclusion into the National Wildlife Refuge System. Since 1934, sales of Federal Duck Stamps have helped to purchase nearly six million acres of wildlife



bird watching and photography.

Note: Duck stamps are sold at Refuge Headquarters and the Friends Nature Shop. Do your part—buy a duck stamp today!

2010 LAND ACQUISITION UPDATE

The National Wildlife Refuge System grew by about 12,000 acres of quality waterfowl habitat this past year with the approval of more than \$21 million in land acquisitions at 12 refuges across the country. The funding comes from the Migratory Bird Conservation Fund which includes proceeds from sales of duck stamps. Refuges which benefited include Wallkill River in northern New Jersey. Duck stamp purchases do make a difference-every year!



"Some of nature's most exquisite handiwork is on a miniature scale, as anyone knows who has applied a magnifying glass to a snowflake."

Rachel Carson

553 For those who keep track... Cherry Valley National Wildlife Refuge in Pennsylvania is the 553rd national wildlife refuge!

INVASIVE PLANT REMOVAL PROJECT AT THE REFUGE VISITOR CENTER

By Kathy Woodward

n 2008, two Friends volunteers. Rich Dufort and Kathy Woodward. enrolled in the Rutgers Cooperative Extension Environmental Steward Training Program. Twenty weeks of class work included lectures and lessons on geology, land preservation, soil and plants, renewable energy, wildlife, invasive species, recycling, water quality and effective leadership, Following "graduation", the Stewards Certificate Program requires completion of a volunteer project of at least 60 hours.

Rich and Kathy researched and discussed options with refuge staff and agreed to implement a program to remove invasive plants at Great Swamp NWR using volunteers. Focusing on woody invasives, primarily multi-flora rose, Japanese barberry, and autumn olive, the cut-stem process was selected. As part of the project, Rich stud-

ied for and passed the exam as a NJ Certified Pesticide Applicator, Working under Rich's supervision, volunteers can use glyphosate, an effective herbicide, to paint the cut stems to kill the plants and prevent regrowth.

Starting in June 2009, Kathy and Rich organized twice a month invasives sessions. Volunteers learned how to recognize, cut and apply herbicide to the target plants. Most of the work was done around the new visitor center in areas that could not be mowed, including the woodland path, the river banks and

fence rows. During the 20 sessions over two summers. 50 volunteers donated over 500 hours and eliminated over 7,000 plants. Preparation for sessions included recruiting volunteers, publicity, having working tools, filled herbicide bottles, and snacks.

In August, 2010, Rich and Kathy joined three summer interns from the Central Jersey Invasive Species Strike Team in a four-day comprehensive survey of the refuge searching out "emerging" invasives. Of the priority

plants, buckthorn was the most pervasive. Individual wisteria were located around the in-holdings and one large patch on an old homestead site in the Wilderness Area of the Refuge. Also



Left to right: Steve Henry, Kathy Woodward, Rich Dufort

On October 20, 2010, Rich and Kathy presented their project to new graduates and alumni of the Environmental Stewards Program. Deputy Refuge Manager Steve Henry was present to see

> Rich and Kathy receive their certification "of having successfully completed training and service which has provided substantial and measurable benefit to the people and environ-

ment of New Jersey." Rich and Kathy, in their presentation, thanked the refuge staff, the Friends, and the loyal volunteers for all of their support and assistance throughout the

project. And, rest assured, invasive

work days will continue next summer!

'Kathy and Rich are truly 'Environmental Stewards'. Through their leadership, the volunteer invasive control program has already significantly improved wildlife habitat around the refuge's new visitor center."

Steve Henry

found were porcelain berry, miscanthus, and one fruiting winter creeper. A map of the newly identified plants will be used by refuge staff to prioritize control of species before they spread. As a change of pace, a volunteer work day in September targeted the large stand of wisteria in the Wilderness Area.

THE BIG SIT! - A RECORD 80 SPECIES RECORDED AND \$815 DOLLARS RAISED

On October 10, 2010 the Swamp Sitters led by Karen English, Nancy Felicito, and Teri Catalano drew their 17' diameter circle at the Overlook Parking Lot and at midnight began their count. Karen reported: "A great day for all. We surpassed our previous years with a species count of 80. Highlights: Fantastic view of Saturn and her moons, Venus, a show of meteorites, the howl of coyotes and a thrilling serenade of great horned, screech and barred owls as they tried to outdo one another."

The Big Sit! is an annual non-competitive event hosted by Bird Watcher's Digest. The objective is to count all species heard or seen while remaining within the "circle". It's a fun event and a good way to

help engage the public in birding and at the same time reinforce the image of the refuge as a rewardomg birding destination.

The first bird recorded at 12:05 a.m. was a Canada goose, followed by the owls and rails. As it started to get light, other birders, volunteers, and visitors stopped by to join the circle and help out, adding numerous other species including a redbreasted nuthatch, yellow-bellied sapsucker, some late warblers, and a migrating hermit thrush. This year, the event was also a fund-raiser for the Friends. Thank you to all of the generous donors who supported the Swamp Sitters and the Friends of Great Swamp. Join us on October 9, 2011 for the next Big Sit!

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THE WETLANDS WREN

Story and photos by Leo Hollein

he two most common wren species in the Great Swamp National Wildlife Refuge are the house wren and the marsh wren. Both are present in the refuge only during the breeding season. Marsh wrens arrive in mid-April and have departed by the end of October. They feed primarily on aquatic insects (dragonflies, mosquito larvae and caterpillars) as well as spiders and snails. They migrate to the southern United States or Mexico for the winter to have access to an adequate food supply.



The house wren inhabits open shrubby areas as well as farmland and suburban areas. It frequently nests in the bluebird nest boxes in the refuge. It will readily use nest boxes in suburban yards. The marsh wren prefers fresh and brackish marshes that have abundant stands of reeds (cattails and phragmites). Two other wrens also frequent the refuge. The Carolina wren is a year-round resident. Their population declines during severe winters as the Great Swamp is at the northern part of its range. Their habitat is similar to that of the house wren. The winter wren migrates through the refuge in spring and fall as it breeds further north and winters to the south.

Both house and marsh wrens have bubbling, gurgling songs that they sing enthusiastically. The song of the marsh wren is more mechanical sounding than that of the house wren. Marsh wrens sing often in their reed habitat both day and night.

Approach the area where they are singing and wait patiently as they

dart around their territory. Eventually, you will be rewarded with a close up view. The marsh wren, or as it was once called the long-billed marsh wren, has a distinct white eye line, a slender slightly down-curved bill and the typical wren barred tail. It is brown above and pale below with a patch of black streaked with white on its back as shown in the photo above.

The marsh wren stakes out a territory and typically builds 5 or 6 globular nests of grass and reeds that are attached to and supported by reeds as shown at right. The nest has an entrance on the side. The female wren selects one of these nests to lay a clutch of 4 to 6 dull brown eggs speckled with dark brown. Males are polygamous and may support two or more females in their territory. Unused or dummy nests may be used for roosting. The number of nests makes it



more difficult for a predator or person to find their eggs. Female marsh wrens raise two clutches of young per season. Marsh wrens are aggressive and very intolerant of other birds nesting in or near their territory. They will destroy the eggs of other wetlands birds including red-winged blackbirds and other marsh wrens. Source: Eastman, J. Birds of Lake, Pond and Marsh.

THE "BEAR" THAT TURNS INTO A "TIGER"

By Laurel Gould



he woolly bear is a familiar little fuzzy caterpillar with black ends and a russet band around the middle that curls into a tight ball when picked up—one of the few caterpillars that most people can identify. The woolly bear is the larval form of a small pinkish moth called the Isabella tiger moth

(Pyrrharctia Isabella) and although it is common throughout much of North America, this nocturnal moth is not so easily seen or recognized.

The woolly bear has the reputation of being able to forecast the severity of the winter —the wider the russet-colored middle section, the milder the coming win-

ter. Apparently, it is more likely that the color pattern is an indicator of age—the wider the central reddish band, the more mature the caterpillar. Still, the legend persists and has not yet been disproven.



The woolly bear overwinters in caterpillar form seeking shelter in a leaf pile, rock cavities, or under tree bark. It produces its own "antifreeze" which protects the cells from freezing. Emerging in the spring, the woolly bear feeds on low herbaceous plants such as grass, clover, or dandelion, seldom attacking crops or ornamentals, before spinning a fuzzy cocoon. Actually there are two generations of woolly bears born each year, in May and August, but the ones we see are those most active in late fall, hurrying across a road or pathway seeking shelter from the coming winter weather.

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THE VISITOR CENTER HAS BEEN TRANSFORMED—NEW EXHIBITS INSTALLED

Story by Laurel Gould; photos by Michael Stadelmeier

This summer, the refuge visitor center was transformed with the installation of eye-catching, exciting, and informative permanent exhibits. The exhibits were designed, fabricated, and installed by Taylor Studios, with input from refuge staff and Friends' board members. It's a learning adventure from the moment you enter the front door with a tremendous amount of information creatively displayed in ways that make the visit a fun and exciting experience.

The highlight is the Exhibit Room with bay windows overlooking the Friends' native plant bird feeding garden-a busy place in all seasons. The centerpiece of the exhibit room is a huge graphic table map of the refuge which provides visitor orientation. Two interactive touch screens offer interactivity and in-depth orientation-about habitats, watersheds, and wildlife. There are quizzes, matching games, and an overview of places to visit on the refuge. A stunningly realistic diorama runs along one entire wall showing the progression of seasons at Great Swamp from spring to winter. Lifelike models of plants and animals which are likely to be seen at the refuge populate the diorama-a wood duck with ducklings, a great blue heron about to spear a mud minnow, a cardinal flower so real you would swear it was growing there. Along the edge flip doors and pull-out drawers are just the right height for young hands to pull open and inspect for an added sense of discovery. A realistic dead tree model dominates the far wall. Upon closer inspection, the tree is teeming with life-a red-tailed hawk suspended in mid-air, Indiana bats roosting under the bark, a redbellied woodpecker exploring for insects. Flip doors reveal decomposition in progress, tiny insects, and hidden animal homes. It's a fun way to learn about the ecological function served by dead trees.

Additional exhibits are spread out throughout the building and cover habitat management, the National Wildlife Refuge System, major bird migration routes, the Federal Duck Stamp story, the changing landscape of the swamp from farmland to refuge, and, of course, the story of the jetport threat, the grassroots campaign to save the swamp, and the role of Helen Fenske, and hundreds of others, in that successful battle in the 1960s. Spectacular images from refuges across the country are shown on four photo frames. Additional photo frames display fabulous pictures of Great Swamp habitat, wildlife and visitors, most of which were photographed and donated by local photographers.

More recently, eBird Trail Tracker was installed in the visitor center lobby. This is an online bird sighting tracking and reporting system with added benefits of bird pictures, distribution maps, bird calls, and informative life history information. This exhibit was funded by the Friends of Great Swamp through a generous donation by The Wildwood Foundation. Visitor feedback has been enthusiastic. One visitor stopped





at the visitor center at the start of his refuge birding visit; he was looking for an owl for his 2010 birding list. Using eBird Trail Tracker he found that a barred owl had been reported; the refuge mapping feature showed where the sighting had occurred. Off he went, returning some time later with a successful report of his owl sighting. "Am I ever glad I stopped in here," he said.

The Friends' Discovery Den has moved to the auditorium where fun (and funny) educational displays can be found. Displays are changed seasonally so there's always something new and different for the young visitor. The Friends' Nature Shop offers natural history books for kids and adults and nature-themed gifts. All proceeds help fund refuge projects.

The visitor center is not a large public space, yet the exhibits present a great deal of information succinctly and creatively making the visitor center a great launching point for a refuge visit—whether it's your first, or one of many.

ONE BRICK AT A TIME—A PERFECT GIFT ANYTIME

By Mary Jane Walsh

¬he patio at the entrance to the Helen C. Fenske Visitor Center at Great Swamp National Wildlife Refuge is now a place of love. Donated bricks, engraved with sentiments of love for family members and friends who enjoy the great outdoors, and in memory of dear ones who have died, remind visitors how deeply Great Swamp itself is

Thanks to the in-kind contribution of John Cortese Mason Contractors of Morris Plains the dedicated bricks are in place displaying their donor's messages for all to appreciate.

Friends of Great Swamp's ongoing "buy a brick" campaign offers the opportunity to order custom-engraved bricks to those who missed the first chance. Costs per brick range from \$150 to \$300 depending upon size and design. An updated brick order form is available

at the visitor center and on the Friends website [www.friendsofgreatswamp.org]. All brick purchases help the Friends fund projects for the refuge including environmental education, trail maintenance, interpretive programs and signs, native plant gardens, exhibits, summer interns, research projects, and more. Brick purchases are tax-deductible, which is noted in each order confirmation.

Orders of 100 bricks or more qualify for free shipping, which for a load of bricks can be a considerable savings. We are cumulating orders to try to reach that number before placing our next engraved brick order. The brick "count" and the messages from new brick orders are on display inside the visitor center. Won't you consider helping out with your engraved commemorative brick? Don't miss this opportunity.



THANK YOU FOR YOUR DONATIONS

onations made to Friends of Great Swamp National Wildlife Refuge make up a significant portion of our annual income and provide funding for a variety of projects and programs which benefit the Great Swamp National Wildlife Refuge, its wild- • Carl & Kathy Woodward life, and its visitors. Thank you.

FOUNDATIONS

- The Wildwood Foundation
- ExxonMobil Foundation: In recognition of volunteer hours contributed by Leo Hollein and Jack Higgins

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FRIENDS OF GREAT SWAMP NATIONAL WILDLIFE REFUGE MEMBERSHIP APPLICATION

The Friends of Great Swamp is an independent, non-profit organization organized in 1999. Our operations and activities are managed by an all-volunteer Board of Directors. As our mission statement indicates, our focus is Refuge-centric — we support the goals, projects, and mission of the Great Swamp National Wildlife Refuge.

To become a member of the Friends of Great Swamp, fill out the information on this form, and mail with your check to: Friends of Great Swamp National Wildlife Refuge

241 Pleasant Plains Road, Basking Ridge, New Jersey 07920 Ask about our school or group memberships.

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(If this is a gift, please include your full name on the line above so we may notify the recipient)

We need more friends . . .



Members are important! Give a gift of membership to a friend.



Memberships help support the mission and projects at Great Swamp.

Members also receive the following benefits:

- Swamp Scene Newsletter
- 10% discount in Friends Nature Shop
- Notification of coming events
- Feeling of accomplishment in supporting the Great Swamp National Wildlife Refuge.

Gift Memberships will include a coupon redeemable at the Friends Nature Shop for a free Great Swamp pin or Great Swamp patch.



THE SWAMP SCENE JANUARY 2011

Friends of Great Swamp National Wildlife Refuge Is an independent, volunteer, non-profit organization dedicated to

Promoting stewardship of the natural resources of the Refuge,
Inspiring an appreciation of nature through education and outreach,
Engaging in partnership activities that support and enhance the Great Swamp National
Wildlife Refuge and the National Wildlife Refuge System.