



the Swamp Scene

friends of great swamp national wildlife refuge

ISSUE THIRTY EIGHT
JANUARY 2012

Highlights

Atlantic White Cedar Update	4
Bears and Bats	5
Friends Accomplishments	6
Put Your Stamp on the Future	8
Refuge Mammal List Updated	9

Board of Directors

Susan Garretson Friedman

President

Karen English

Vice-President

Laura Nally

Secretary

Laurel Gould

Treasurer

Terry Carruthers

Rich Dufort

Jack Higgins

Judy Schmidt

Elaine Seckler

Dorothy Smullen

Kathy Woodward

Jonathan Rosenberg

GSNWR Liaison

Laurel Gould

Editor

241 Pleasant Plains Road
Basking Ridge, N.J. 07920

FRIENDS FUND TURTLE RESEARCH AT GREAT SWAMP NWR

By Laurel Gould

It's hard to imagine a swamp without turtles. And even though it's a common sight, it's still thrilling to view a string of painted turtles basking on a log, or catch sight of the smaller spotted turtles as they emerge from winter hibernation at the Wildlife Observation Center, or watch a female snapping turtle as she lays her eggs.

Turtles are synonymous with Great Swamp National Wildlife Refuge and it's no wonder that they have been the subject of a significant amount of research over the years. For the past eight years, there has been a long-term turtle research project that has focused on two particular species of turtles—the wood turtle and the bog turtle.

Last year, Federal funding sources for the turtle research dried up, so the Friends agreed to spend \$15,000 to ensure that the turtle research project continued. This January, with Federal funding again non-existent, the Board approved another \$15,000 to fund the turtle research project for 2012. Colin Osborn, who has been the lead on this project for many years, summarized some of the 2011 accomplishments of the project for the Friends Board and presented the 2012 Turtle Project Proposal.



Photo by Ron Holmes

HIGHLIGHTS FROM THE 2011 TURTLE RESEARCH PROJECT *by Colin Osborn*

► New bog turtle individuals were found and six bog turtles were tracked using radio telemetry. Habitat restoration work was performed at active, historic, and potential bog turtle sites. The bog turtle is a Federally-threatened and State-endangered species.

► Wood turtles were also tracked with radio transmitters and individuals were located in new areas. Wood turtle nests were protected from predators on the artificial nest mound, and hatchlings captured and outfitted with micro-transmitters to determine their post-hatching behavior and habitat usage.

► Twenty-two of the forty-two wood turtle hatchlings were brought to Massachusetts for a "head-start" program. Instead of hibernating, the hatchlings will remain active and

be fed in the lab where they'll grow larger and stronger. The objective is to determine if this "head-start" increases the survival rate. Wood turtles are a State-threatened species.

Continued on page 9



Bog turtle, smallest turtle in North America

Photo US FWS



Printed on recycled
paper

FRIENDS ANNUAL MEMBER MEETING HELD DECEMBER 10, 2011



The Annual Member Meeting of Friends of Great Swamp National Wildlife Refuge was held at the Helen C. Fenske Visitor Center on Saturday, December 10, 2011 with 55 members in attendance. Following a fabulous pot luck dinner, with an interesting and varied assortment of excellent food,

President Laura Nally called the meeting to order. Treasurer Laurel Gould presented a financial overview for FY2011 and board members reviewed projects, new initiatives, and accomplishments of the past year. The following Directors were re-elected to the Friends Board: Karen English, Susan Garretson Friedman, Laurel Gould, Judy Schmidt, Dorothy Smullen, Kathy Woodward; new board member Elaine Seckler was elected for her first term.

At the Board meeting held December 14, 2011, the following officers were elected by the Board:

- President: Susan Garretson Friedman
- Vice President: Karen English
- Secretary: Laura Nally
- Treasurer: Laurel Gould

At the Board meeting held January 11, 2012, Board Standing Committees were reviewed and, where required by the By-laws, Chairs and committee members approved. A new Habitat & Wildlife Committee was proposed and approved with Terry Carruthers as Chair. The new committee will have over-

all responsibility for turtle research, biological interns, invasive species projects, and other areas yet to be determined. The Friends budget was also reviewed and will be finalized at the next meeting.

Board Standing Committees

- Development: Jane Kendall, Chair
- Education: Judy Schmidt and Dorothy Smullen, Co-Chair
- Finance: Rich Dufort, Chair
- GardenKeepers: Karen English, Chair
- Habitat & Wildlife: Terry Carruthers, Chair
- Membership: Kathy Woodward, Chair
- Nominating: Dorothy Smullen, Chair
- Outreach: Jack Higgins, Chair
- Partnership & Government Relations: Susan Garretson Friedman, Chair
- Public Relations: Laura Nally, Chair
- Visitor Services: Laurel Gould, Chair
- Volunteers: Kathy Woodward, Laurel Gould, Co-Chair

The Board is actively seeking new members for these standing committees—and for the Board of Directors as well. If you are interested in getting involved in any of these committees or would like to learn more about becoming a member of the Board, contact the Committee Chair, or any board member—or send an e-mail to: info@friendsofgreatswamp.org.

Members are always welcome to attend the Board meetings which are held on the second Wednesday of each month at 7:00 pm at the Visitor Center.

PAT GIAIMO—SAYING GOODBYE TO A GOOD FRIEND

This past fall, our good friend Pat Giaimo passed away. Pat was the Friends friend and all of us will miss her smile and the countless volunteer hours she donated to the Refuge and the Friends. Everyone who worked with Pat knew from the moment they met her how dedicated she was to Great Swamp.

Pat spent many hours birding at the Refuge, but one day in 2004, while birding on Pleasant Plains Road, she stopped in at the old Friends Bookstore and asked if we needed volunteers! By 2006, she had joined the Friends Board and was actively involved in many different areas. She headed up the Bylaws revision committee in 2009, helped

plan and organize the annual Volunteer Recognition Event for many years, kept track of all Refuge bird sightings, and was responsible for the volunteer staffing at the Wildlife Observation Center. She had a friendly way about her that got you to say "yes—I'll volunteer" each time she asked.

Pat was awarded her 2,000 hour volunteer pin at the June 4, 2011 Volunteer Recognition Event—which she helped to plan and organize.

When Pat volunteered to do something, it always got done—and done well. She was quiet and unassuming but had a quick wit and a dry sense of humor. She made many improvements at the Wildlife Observation Center, one of her favorite spots, including installation of a bird sightings log which is heavily used by visitors.

Pat died on October 30, 2011 the last day of Fall migration staffing at the Wildlife Observation Center.

In her memory, a bench will be purchased. Donations are welcome and may be dropped off during Visitor Center hours or mailed to Friends of Great Swamp. The bench will be placed where it will be used by children, families, birders, trail walkers—all enjoying nature at Great Swamp National Wildlife Refuge as Pat did.



AROUND THE REFUGE... WITH DEPUTY REFUGE MANAGER STEVE HENRY

PERSONNEL—COMINGS AND GOINGS

Mike McMenamin will report at the end of January as the new Refuge Law Enforcement Officer. Mike comes to Great Swamp from Patuxent Research Refuge in Maryland. The refuge's **Maintenance Worker** vacancy is currently being advertised and we hope to have it filled within the next couple of months.

The Friends and the Mushett Family Foundation have generously agreed to fund **interns** again this summer. We also hope to re-establish the refuge's Youth Conservation Corps (YCC) program targeting urban youth for summer employment. A decision on whether or not to fund the program should be made by the Regional Office shortly. The YCC program was active back in the 1980s and the young people who worked in the program accomplished many important projects for the refuge while learning wildlife conservation in the process. It will be good to be able to reinstate this worthwhile program.

COMPREHENSIVE CONSERVATION PLAN (CCP)

In early January, refuge management briefed the Regional Senior Leadership Team (SLT) on the CCP draft alternatives. The SLT was supportive of the alternatives which are being finalized for release to the public this spring. Another Core Team meeting is planned for late January followed by briefings for significant partners such as the Friends. As always, anyone interested in staying informed on the CCP should contact Headquarters and ask to be added to the mailing list (973-425-1222). Current information may also be found under the CCP link on the refuge's website.

BUDGET

Congress reduced the Refuge System budget by \$6 million for FY2012. Due to rising costs, this effectively becomes a \$20 million national reduction. Refuges are being cautioned to plan for lean years for the foreseeable future.

ROADS AND INFRASTRUCTURE

Bluebird Parking Lot: The vault toilet remains out of service with plans to repair or replace it in the spring. In the meantime, a "port-a-potty" is available.

The split rail fence was replaced improving the lot's appearance.

Roadwork: Refuge and Regional Office staff worked together to spend \$124,000 in remaining transportation grant funds. The first phase of a larger road rehabilitation, the project was completed this fall when the parking lot at Headquarters, the southern Orange trailhead, and the entrance at South Gate were repaved. Surveyors were recently working on Pleasant Plains Road taking measurements for the next phase. The entrance apron at the Wildlife Observation Center was repaved following replacement of the drainage pipe to correct flooding problems.

Green Improvements: The heating-ventilating-air conditioning systems in Headquarters are being upgraded to improve energy efficiency. An emergency generator will also be installed behind the Headquarters building. This work should be completed within the next couple of months.

Storm Damage Repair: Volunteers did a great job repairing bridges and boardwalks at the Wildlife Observation Center and in the Wilderness Area following Hurricane Irene and October's freak snowstorm. They are also installing railings on the few remaining unguarded bridges in the Wilderness Area.

Visitor Center: A kiosk was installed at the entrance to the Visitor Center in time for last year's Fall Festival. The tenant house, near the Visitor Center, is being prepared for demolition, likely this summer once historical clearance is finalized. Mitigation will require the installation of an interpretive display in the Visitor Center. Options to replace Great Brook Bridge will require expensive historical study before anything can be done. The septic mound, which is currently being mowed as lawn, will be replanted with a native warm season grass and wildflower mix to complement the nearby Friends' butterfly garden.

PUBLIC USE

Annual deer hunt: This year's deer harvest of 41 animals was the lowest ever recorded for the refuge. We believe this

is due in large part to an outbreak of Epizootic Hemorrhagic Disease (EHD) in late summer which is known to have killed many deer in the area. The deer population on the refuge is down significantly and, at the present time, below management objectives.

Visitor Service Survey: The final round of sampling for the national Visitor Service Survey was conducted last spring. Results should be available within the next few weeks and will be used to inform CCP alternatives. Preliminary data indicates that the public greatly enjoys and appreciates all the refuge has to offer. Thank you to everyone who participated in the Survey.

Habitat Management: 135 acres of grassland were mowed this past fall and 25 acres of brushland are scheduled to be treated this winter. We will be experimenting with a new brush mower attachment. This winter, we will be meeting with volunteers to develop a refuge-specific **invasive species** "strike team" that will focus on identifying and eradicating new invasive infestations before they become established. (*See p. 10*)

POPULATION MANAGEMENT

The 22 "headstarted" **wood turtles** are enjoying their winter holiday in Massachusetts. So far the hatchlings have increased an amazing 500% in weight. They will be returned to the refuge this spring and released where they were captured. Some will be fitted with radios and we will monitor their movements in hopes of gaining valuable insights into the ecology of juvenile wood turtles. Our goal is to develop a head starting program with a local school in the near future. **Bat research** will be funded during the summer of 2012 after a lull in 2011. We are anxious to see if White-nose Syndrome continues to affect bat populations, especially the endangered Indiana Bat. Volunteers have done an excellent job preparing 200 **wood duck boxes** for the upcoming breeding season. Screech owls found roosting in the boxes are opportunistically banded. In partnership with N.J. Division of Fish and Wildlife, 123 **mourning doves** were banded at Great Swamp in 2011.

THE CEDARS OF GREAT SWAMP

Photos and Story by Leo Hollein

The Great Swamp National Wildlife Refuge has two cedar trees. The red cedar (*Juniperus virginiana*) is common and widely distributed throughout the Refuge. The Atlantic white cedar (*Chamaecyparis thyoides*) is native to the Great Swamp but had previously been extirpated by logging. In the summer of 2007, a number of volunteers cleared ground, planted, caged, and watered about 350 Atlantic white cedar seedlings. A recent inventory indicates about half of the original plantings have survived.

Although both trees are commonly known as cedars, they are not related species. Red cedars are actually members of the juniper family. Atlantic white cedars are true cedars and the only cedar native to the Eastern United States. While both are evergreens, they employ different strategies for distributing their seeds.

Red cedars are a hardy slow growing plant that colonizes cut or burnt out areas. Unlike other pioneer species they can be very long lived. The Refuge staff avoids cutting red cedars



when they mow fields or clear areas. There are both male and female red cedars. The male has tiny cones that release pollen in late winter. Female red cedars produce abundant small blue berries (shown left). Each berry typically contains 1 to 4 seeds. These berries are eagerly consumed by wildlife in the fall and

winter. Cedar waxwings, robins and starlings come in flocks to red cedars to consume the berries. Eastern bluebirds and yellow-rumped warblers are among other birds that also feast on the berries. The seeds pass through the birds and are distributed widely. Deer occasionally nibble on the red cedars but evidently they are not a favorite snack. White tailed deer do not over browse red cedars.

Atlantic white cedars require specific conditions to survive. They need an acid, wet soil and protected lowland area. They have shallow roots and are susceptible to being blown over in storms. These cedars grow small round cones that contain lots of seeds (shown right). Many of the Atlantic white cedars are now mature enough to produce cones. When the cones open, the seeds are distributed by the wind. Atlantic white cedars have soft,



flat, fern-like leaves that white tailed deer relish. In the fall of 2010, a cage was removed from one Atlantic white cedar as a test. This cedar was denuded of greenery by spring.

Browsing deer may prevent Atlantic white cedars from naturally reseeding in the Refuge. An area protected with deer fencing would enable them to successfully recolonize.

TRANSITION UNDERWAY TO NEW PROTECTIVE CAGES

The foster parent of the Refuge Atlantic white cedar population (aka Lou Pisane) has been leading the installation of the new protective cages to deter hungry deer. The existing cages are constraining the faster growing cedars. The new system should facilitate healthier growth and will remain in place until the cedars are about 15 to 20 feet tall. The surviving cedars vary in size from 3 to 11 feet. The variation in size may be due to soil conditions or to poor planting techniques that left some trees root bound.

The green plastic protective cages, readily visible along Pleasant Plains Road, are being replaced. The new system (shown below) consists of four green metal fence posts that support metal fencing that is four feet high. The fencing starts about a foot off the ground. This provides access to trim vegetation from around the trunk in the future. The trunks are protected with plastic tubing to prevent girdling by rodents. In the fall of 2011 the new system was installed on 20 of the largest cedars. The Friends have funded an additional 20 cages that will be installed as weather permits.



COMING UP! REFUGE STAFF PRESENT TWO SECOND SUNDAY PROGRAMS ON MAMMALS

SECOND SUNDAY, MARCH 11—LIVING WITH BEARS

By Jonathan Rosenberg, Visitor Services Manager, GSNWR

Each year, more people use or move into bear habitat for living, recreation, agriculture, and development. The possibilities for conflict between bears and people increase as their habitat is reduced or the contacts multiply. Such conflicts can be reduced if both the bears and the people learn how to live together. How we live, travel, recreate, conduct ourselves and spend our leisure time in bear habitat, whether prime or marginal, can greatly influence the rate of encounters and conflict.



Bears have evolved to live with other species, other bears, and people with a minimum of conflict. When people change the land, new relationships and behaviors must be developed by both the bears and the people to coexist. Given time, the bears can adapt and learn new ways to relate to people, but often they are not given that time.

Come join us on Sunday, March 11th at 1:30 pm at the Helen C. Fenske Visitor Center and learn what we can do to better coexist with bears!

Photo at left: Black bear near North Gate bridge, Summer 2011. Photo by Tom Gorman.

SECOND SUNDAY, MAY 13—LEARN MORE ABOUT BATS

By Dorothy Fecske, Refuge Wildlife Biologist, GSNWR

Mark your calendars for Sunday, May 13th at 1:30 pm in the Helen C. Fenske Visitor Center at the Great Swamp National Wildlife Refuge. Dorothy Fecske, the Refuge Wildlife Biologist, will present a program on the Federally endangered Indiana bat population here at the Great Swamp.

Great Swamp NWR biologists are looking forward to the upcoming summer field season when important information will be collected on the refuge's Indiana bat population.

Female Indiana bats migrate to the refuge in April and form small maternity colonies, usually of less than one hundred individuals. These colonies will roost together to give birth and raise young; each female gives birth to just one pup. Bats remain on the refuge until



Photo: US FWS

September when they travel to caves or mines to mate and hibernate for the winter.

This summer a small number of females will be fitted with light-weight transmit-

ters to locate roost trees (usually shag-bark hickory and other dead and decaying trees), identify important feeding areas and travel pathways, and conduct evening roost emergence counts to estimate the size of the population. This work is especially important because at least some refuge bats are known to hibernate in caves where White-nose syndrome has been documented. White-nose syndrome is a fungus that is killing thousands of bats throughout the region. Surveys conducted this year will be compared to those in past years, before the onset of White-nose syndrome, to determine the current health of the refuge's Indiana bat population.

To learn more about the natural history and ecology of Indiana bats, their historical and current status on the refuge, and the upcoming telemetry study come join us on May 13.

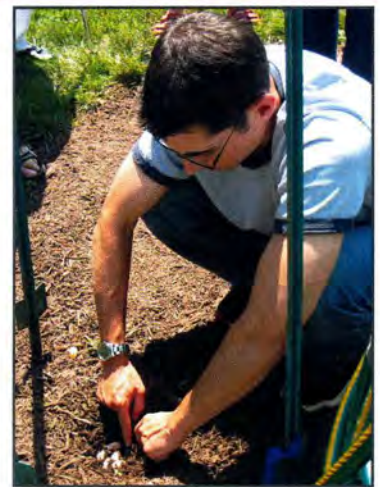
BAT FAST FACTS FROM THE ORGANIZATION FOR BAT CONSERVATION

- Bats are the only flying mammals.
- Most bats in North America eat insects.
- Bats live a very long time.
- The oldest bat fossil is estimated to be 52 million years old.
- Bats are not pests, they actually help control insect pests.
- Bats cannot stand upright due to a very small pelvic girdle. They hang upside down nearly all the time. Blood does not rush to their head because they do not weigh enough for gravity to affect their circulation.
- Very few bats contract rabies.

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.

Promoting stewardship of the natural resources of the Refuge



- Restore vernal pool for amphibians—and visitors!
- Plan and plant a native plant butterfly garden.
- Fund Turtle Research Project for 2011—and for 2012!
- Assist with semi-annual roadside cleanups.
- Fund two summer interns and hold semi-monthly invasive species control work days from May through September.

Engaging in partnership activities that support and enhance the Great Swamp National Wildlife Refuge and the National Wildlife Refuge System



- Co-host Dedication of Helen C. Fenske Visitor Center, October 2011.
- Participate in National Wildlife Refuge System Visioning Conference in Wisconsin.
- Attend and support New Jersey / Pennsylvania Friends Groups Meeting.
- Assist with Refuge Comprehensive Conservation Plan—15 year plan for Great Swamp NWR.
- Actively work with Congressional representatives and the National Wildlife Refuge Association to gain support for Refuges.

Inspiring an appreciation of nature through education and outreach



- Purchase eBird Trail Tracker exhibit—an electronic bird sightings log and digital reference tool.
- Purchase Kiosk, Refuge map, and Memorial bench at Bluebird Parking Lot.
- Create Nature Detective Trail—volunteers clear the trail, spread wood chips, and build bridges; fund 11 kid-friendly interpretive signs along the trail.
- Purchase nest box cameras which stream live video of baby tree swallows and bluebirds to enthralled visitors and volunteers inside the Visitor Center.
- Lead walks, staff the Visitor Center four days a week, greet 11,600 visitors at the Wildlife Observation Center during busy Fall and Spring migration seasons.
- Revise and fund printing of 3rd edition of Tree & Shrub Guide.
- Co-sponsor annual Volunteer Recognition Event.
- Host 12th Annual Fall Festival for 600 visitors.
- Maintain seasonal Discovery Den exhibits and activities for children at the Visitor Center.
- Host regular events—like Second Sundays, Refuge Readers Book Group, Nature on Film series, Sunset Walks, reaching new and different audiences.
- Sponsor Junior Refuge Manager program for children ages 5 to 13.
- Assist with visiting school classes and other group tours.
- Staff Refuge exhibit at ten Outreach events and set up displays at six local libraries.

2011 was a busy, productive, rewarding, and fun year!

2012 is shaping up to be even better!

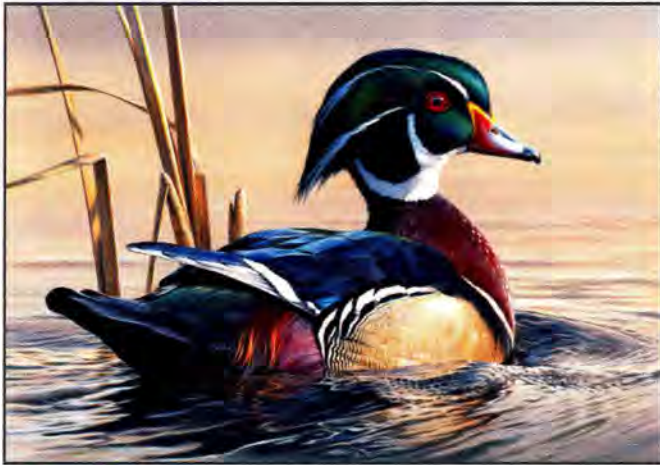
You are the Friends.

Thank you for your support, your time, your dollars.

It truly does make a difference!

TWO WAYS TO PUT YOUR STAMP ON THE FUTURE

MINNESOTA ARTIST JOSEPH HAUTMAN WINS 2011 FEDERAL DUCK STAMP CONTEST



Joseph Hautman of Plymouth, Minnesota, won the 2011 Federal Duck Stamp Contest with his painting of a single male wood duck. Hautman has previously won the contest three times. His art will be made into the 2012-2013 Federal Duck Stamp, which will go on sale July 1, 2012.

The Federal Duck Stamp program is widely known as one of this nation's most successful and effective conservation programs. Since 1934, sales of Federal Duck Stamps to hunters, stamp collectors, and other conservationists have helped to purchase nearly six million acres of habitat for the National Wildlife Refuge System. Ninety-eight percent of the proceeds from Duck Stamp sales go to the Migratory Bird Conservation Fund, which supports the purchase of wetlands for inclusion into the National Wildlife Refuge System.

The first duck stamp (1934-1935) was a brush and ink drawing of mallards created by Jay N. "Ding" Darling, a famous cartoonist and noted conservationist. He was Chief of the Biological Survey, a precursor of the U.S. Fish and Wildlife Service, from 1934 to 1936. "Ding" conceived the idea of using duck stamps to raise money for the purchase of wetlands—it was a federal license required for hunting migratory waterfowl. Even today, waterfowl hunters must purchase and carry the stamp, but more and more birders and other conservationists also buy stamps in support of habitat conservation.

You can help purchase land for National Wildlife Refuges by buying a Federal Duck Stamp. A current duck stamp may also be used for free admission to refuges.



*Duck stamps are sold at Refuge Headquarters and at the Friends Nature Shop.
Support your National Wildlife Refuges—buy your duck stamp now!*

HELP STAMP OUT EXTINCTION—SAVE VANISHING SPECIES



If you have renewed your membership recently, you probably noticed this striking tiger stamp on your envelope. And if you personally purchased these stamps at the post office, you are aware that they are semipostal stamps and cost 11 cents more than the regular first-class rate. The additional 11 cents on each stamp sold will directly benefit the Multinational Species Conservation Funds administered by the U.S. Fish and Wildlife Service. In October, the Friends Board authorized the purchase of these special stamps to be used on membership renewals and other correspondence for one year in order to support these important conservation funds.

Generally, when we think of the U.S. Fish and Wildlife Service, National Wildlife Refuges are what comes to mind. But there is an international arm of the Service which administers the Wildlife Without Borders, Multinational Species Conservation Funds. According to their website: "In recognition of an unprecedented international decline of certain charismatic species, the U.S. Congress established the Multinational Species Conservation Funds, which are dedicated to saving some of

the world's fastest disappearing and most treasured animals in their natural habitats." These targeted species, authorized by Congress, are African Elephant, Rhinoceros, Tiger, Asian Elephant, Great Apes, and Marine Turtles.

Only the fourth of its kind, this special semipostal stamp is now available in post offices nationwide and will remain on sale for at least two years offering the American public an opportunity to make a difference for conservation and help wildlife around the globe. "By purchasing this stamp, you are contributing funds that support efforts to create a future in which threatened animal species can once again thrive." For more information, visit: fws.gov/international/semipostal.

REFUGE MAMMAL BROCHURE SPORTS TWO NEW SPECIES

By Dave Sagan, Visitor Services Specialist, GSNWR

The Mammals brochure has been updated for the New Year! In the 2012 version of the brochure the Bobcat (*Lynx rufus*) and the Fisher (*Martes pennanti*) also known as Fisher Cat have been added to the Refuge mammal list. These animals have been seen and heard around the Refuge.

The Bobcat is about twice the size of the average domestic cat with brown or brownish-red fur, a white underbelly and a short, black-tipped tail. These animals are rarely seen by humans but survive in forests, swamps, and even suburban areas.

The Bobcat diet normally consists of rabbits, birds, mice, squirrels, and other smaller game but they are opportunistic and can take down prey larger than themselves.



John James Audubon

The Fisher Cat, which is not a cat at all but is in the weasel family, is the other new addition to the list. Their fur is a dark glossy brown and they can weigh anywhere from four to thirteen pounds. They spend most of their time on the forest floor but are proficient at climbing trees. Fishers are omnivores and eat anything from mushrooms to rabbits. They are nocturnal, so not readily observed even when present. Fishers were hunted in the 1800s for their fur at the same time that their forest habitat was destroyed. Now they are making a comeback in New Jersey and neighboring states.

Keep a lookout for these two new mammals and please report any sightings to staff.

"The best description of a fisher would be to imagine a cross between a cat and a fox with the attitude of a wolverine."

—Conserve Wildlife New Jersey

2012 TURTLE RESEARCH PROJECT PROPOSAL by Colin Osborn (continued from page 1)

Work will continue as usual on all species of turtles found in the Refuge with an emphasis on our species of special concern, the spotted and box turtles, and especially our threatened and endangered species, the wood and bog turtles.

As always, data will be collected on new individuals and they will be marked as part of our refuge long-term mark-recapture study. Nests will continue to be protected in late spring and early summer to reduce predation and increase hatching success. Radio telemetry will continue on bog and wood turtles.

Several new potential bog turtle sites will be surveyed and traps set to at-

tempt to determine their presence in these areas. Any new turtles found will be radio-tracked to help determine their behavior and usage of these new areas.

We hope to set up a few of our head-started wood turtle hatchlings, which will be released in the spring, with small radio transmitters so we can track their movements and compare them to that of our radioed adults. Determining the behavior and needs of young turtles is extremely important because they are the future of their respective populations.

With this knowledge, we will be able to better manage for these young turtles and ensure that they have the best chances of surviving to adulthood.



Wood turtle hatchlings

SHARING RESULTS: The research data collected here at Great Swamp is shared with the turtle conservation community worldwide through presentations at conferences and the recent publication in the scientific journal *Northeastern Naturalist* of an article by Dr. Kurt Buhlmann and Colin Osborn titled "Use of an Artificial Nesting Mound by Wood Turtles (*Glyptemys insculpta*): A Tool for Turtle Conservation".

It's nice to know that turtle research will continue here at Great Swamp and that the Friends, through the generosity of our members and donors, were able to help support this important initiative. Thank you. Laurel Gould

GREAT SWAMP NWR EVENTS *By the Numbers...*

Based on our highly successful Second Sunday series of programs, the Friends and the Refuge have expanded the number of regularly scheduled programs available at the Refuge. Be sure to mark your calendars!



1st Thursdays—Nature on Film, 12:30–1:30 pm. Noontime movies every month—biographies, wildlife spectacles, environmental success stories, current conservation issues. Visitors may bring their lunch; Friends provide beverages and cookies.



1st Sundays—Refuge Rambles, 1:30–2:30 pm. The new visitor services staff have been at Great Swamp for a year now and are making their mark. One of the newest additions to Refuge events are informal guided walks each month with Ranger Dave Sagan. There is no planned agenda—we just take advantage of the season and seasonal sightings.



2nd Sundays—Don't forget our regular Second Sunday programs, 1:30–3:30 pm. Upcoming programs include bears and bats, a sensational movie about the disappearance of the American prairie, a special program on the future of the National Wildlife Refuge System... and more!



3rd Fridays—Refuge Readers, 2:00–3:30 pm. The Refuge Readers book discussion group has been meeting for over a year now and it's been a great opportunity to read some really interesting, inspiring, and informative environmental titles. The meetings are open to the public and copies of the upcoming book are generally available for loan at the visitor center. The list may be found on our web site. Stop by and join in the discussion.



4th Sundays—Let's Go Exploring with Ranger Dave, 1:30–3:30 pm. Just for kids! A new series of monthly programs led by Refuge Ranger Dave Sagan. Ages 6 to 12. Each program will include indoor and outdoor activities with a different topic each month. Upcoming topics include winter survival, tracks and scat, fish, frogs, turtles, and plants. For the very young, we'll have a story time starting at 1:30 with a topical story and related activities.

All programs are held at the Helen C. Fenske Visitor Center. Programs are free and no registration is required.

So circle the dates on your calendar—and come join us at Great Swamp National Wildlife Refuge.

NEW VOLUNTEER OPPORTUNITY

In order to identify and eradicate emerging invasive plants, there is a newly created Refuge-specific invasive species "strike team".

Volunteers are needed to search for and GPS map these emerging invasive plants.

New volunteers will work with Refuge staff and experienced volunteers to limit and prevent spread of non-native plants new to the area, such as mile-a-minute and porcelain-berry.

Training and tools will be provided.

TIME COMMITMENT

After training, at least four hours per month, preferably during the work week.

FOR MORE INFORMATION

Contact Kathy Woodward
973-635-1083.



BRICK CAMPAIGN CONTINUES

Engraved bricks from the 2011 order are now in place on the patio at the Helen C. Fenske Visitor Center. Inscriptions memorialize loved ones, honor friends and family, note donors' commitments to nature and the environment.

The Friends' Brick Campaign, which began in 2009, has raised \$28,500 for Friends of Great Swamp, with 144 bricks purchased to date. Amazingly enough, there is still plenty of room for more bricks! The proceeds from this campaign have been used to support a variety of projects at Great Swamp National Wildlife Refuge including the new Nature Detective Trail, additional exhibits in the Visitor Center, and new interpretive signs.

Pick up a copy of the order form at the Visitor Center and take a few minutes to peruse the bricks on the patio. They are inspiring. An order form may also be found on our website where you can place your order online.

A commemorative brick is your lasting legacy and a generous and meaningful donation. Don't miss this opportunity.

ORDER CUTOFF DATE JUNE 30, 2012

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

ANNUAL MEMBERSHIP APPLICATION

☐ **EASTERN BLUEBIRD—\$15-\$49**

☐ **PAINTED TURTLE—\$50-\$99**

☐ **RIVER OTTER—\$100-\$249**

☐ **MONARCH BUTTERFLY—\$250-\$499**

☐ **WOOD DUCK—\$500 +**

☐ **New Member?**

TOTAL ENCLOSED \$ _____

You may also join online at www.friendsofgreatswamp.org

Name _____
Address _____
City _____
State, Zip Code _____
Phone Number _____
E-Mail Address _____
Gift Membership From: _____

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

We need more Friends ...
Become a Friend Today—or,
Give a gift membership to a friend.

Thank you

Memberships help support the projects and programs at Great Swamp National Wildlife Refuge.

Membership Benefits

- The Swamp Scene Newsletter.
- A 10% discount in Friends Nature Shop .
- Notifications of upcoming events.
- Satisfaction in knowing you are helping protect wildlife and wild places while safeguarding a national treasure for future generations.

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





Friends of Great Swamp
National Wildlife Refuge

THE SWAMP SCENE JANUARY 2012

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.