

# FRIENDS OF GREAT SWAMP NATIONAL WILDLIFE REFUGE

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## THE YEAR OF THE RED-HEADED WOODPECKER

*Story and photos by Blaine Rothaus, Natural Eyes, Wildlife and Landscape Photography*

I officially proclaim the winter of 2005 in this **greatest of swamps** the year of the red-headed woodpecker (*Melanerpes erythrocephalus*). These winged patriots, a state-threatened species, graced our refuge in abundance this winter. I make this statement with present day accounts in mind for this species was noticeably more prevalent at the turn of the 20<sup>th</sup> century.



Red-headed woodpecker with nictitating membrane

That was a time when hundreds of birds could be seen in large flocks during southern migrations. What a sight that must have been—a virtual panoply of flying colors!

The refuge has been graced with a red-headed woodpecker that has hung out since last November just a “qweer”<sup>1</sup> call away from the Friends Bookstore. You could find him or her (virtually no sexual dimorphism is noted in this species) in a row of oaks on Pleasant Plains road, making its daily bread from stored nuts it has cached in the dead wood. Others have been sighted all winter in the flooded timber throughout the heron rookery marsh. I have seen birds (juvenile and adults) foraging along Meyersville, Woodland, Long Hill and White Bridge roads, all taking advantage of what must have been a great mast producing year.

*Continued on page 10*

## Cool red-head factoids

- In late summer red-heads set up individual territories to protect stores of acorns that they collect during the fall. They vigorously defend their acorn stores against members of the same species, and other species that eat acorns such as chickadees, titmice, and other woodpeckers.
- Red headed woodpecker pairs may use the same nest cavity for many years.
- Red-heads are commonly seen catching insects in the air “flycatcher” style.
- Red-heads have been known to steal other bird’s eggs and nestlings!



## VOLUNTEER TRAINING PROGRAM—A GREAT SUCCESS

By Judy Schmidt



Volunteers bundle up at the March 9 Volunteer Training Session  
(l-r) Judy Schmidt, Deb Scala, Chris Hildebrand, Joe Scala, Lillian O'Brien, Don McCord, Pat Giaimo, Ann McCord, Rich Dufort, Emily McQueen, Dorothy Smullen, George Helmke

This past March, two volunteer training sessions were presented by the Friends of Great Swamp and the U.S. Fish & Wildlife Service.

These programs were first offered last fall in an effort to help volunteers better understand the National Wildlife Refuge System and our own Great Swamp refuge. A total of 21 volunteers have attended the training and are now more knowledgeable and better equipped to answer visitor questions.

The training day begins with coffee and introductions. Volunteers work in many areas of the refuge and while some of the volunteers have become acquainted while staffing the Bookstore or Wildlife Observation Center, there are always new faces in the group. Refuge staff present a slide program about the refuge and provide updates on refuge happenings and volunteer opportunities. Members of the Friends' Board tell about the history, mission, and many accomplishments of the Friends organization and explain how critical volunteers are to the Refuge, especially in these days of tight budgets. Following an inspiring video on the National Wildlife Refuge System, it's time for the field trip! The group caravans to Pools 1 & 2 to see water management techniques first-hand and to better understand the reasons why access is restricted in the management area of the Refuge. During these spring volunteer sessions, we spotted muskrat, common snipe, kingfisher, great blue herons, and lots of ducks flying in and out of the impoundments—and, to top it off, the wood frogs were beginning their mating calls. Following the field trip, questions and ideas are tossed around during the brown bag lunch. This year, the volunteers came up with the idea of developing a coupon that could be handed out to visitors at the Wildlife Observation Center; this discount coupon would encourage a visit to the Friends Bookstore & Gift Shop. (Note: We have since developed and instituted the Blue Goose Dollar as a result of that suggestion!) A stop at Refuge Headquarters and a drive to the Wilderness Area and to the Wildlife Observation Center complete the day.

Feedback from the participants has been enthusiastic. Attendees have learned a lot and enjoyed the day. Think about joining us for the Fall training sessions.

## VOLUNTEERS AND VISITORS PARTICIPATE IN GREAT BACKYARD BIRD COUNT

By Laurel Gould

On February 19 and 20, volunteers and visitors to the Friends Bookstore & Gift Shop counted birds—taking part in the 8<sup>th</sup> annual Great Backyard Bird Count sponsored by the National Audubon Society and the Cornell Lab of Ornithology. The objective was to count the birds seen from the Bookstore, recording the biggest number of individuals seen at any one time. Our results were reported to the birdsources web site where they were tallied with thousands of others from across the country, providing a snapshot of bird populations at this specific point in time. In all, 613 species and 6.5 million birds were tallied continent-wide during the four-day count. Our sightings included two black ducks, one Northern harrier, and five black vultures. The most numerous species we recorded was the red-winged blackbird with 37 individuals counted at one time. This was the first year we participated in the count and we're looking forward to February 17–20, 2006 for the 9<sup>th</sup> Annual Great Backyard Bird Count. For more information, visit [www.birdsources.org](http://www.birdsources.org).



## UPDATE ON THE NEW REFUGE VISITOR FACILITY—THERE'S PROGRESS TO REPORT

By Laurel Gould



On March 5, at a members-only event, the Friends were invited to tour Weatherlea Farm, the property purchased by the U.S. Fish & Wildlife Service last August for a new Refuge visitor center. Sharon Marino, deputy refuge manager, was on hand to answer questions and listen to ideas. By the end of the afternoon, the walls in the spacious, sunny kitchen were covered with flip chart sheets filled with questions, ideas, concerns and comments, all of which will be reviewed by refuge management.

The 15-acre property includes a house and several outbuildings. The original homestead was farmed by the Bockoven family for 200 years until G. Mills Bockoven, the last in the direct line of six generations of the family, died in 1986. The property was purchased by horse farmer Lynn Kurdzialek who renovated and expanded the original farmhouse.

Now the challenge is to transform this farmhouse and property into a welcoming and functional visitor center for the Refuge. Refuge staff prepared a Project Identification Document which is in the final stages of approval. This document outlines the vision and defines the requirements for a new visitor facility and includes input from public hearings as well as input from the Friends and other environmental partners. Some of the requirements identified in this document are offices for refuge staff and the Friends, retail space for the Friends Bookstore, exhibit space for watershed conservation partners, a large multi-purpose room, a wet lab/classroom, and a trail system outside. A new access road leading directly to the facility from Lee's Hill Road is planned and a Federal road improvement bill, supported by Congressman Rodney Frelinghuysen, is moving through Congress with \$250,000 earmarked for this road construction.

The next major step is the hiring of an architectural consulting firm to create a design for the new visitor facility based on requirements identified in the Project Identification Document. The Friends of Great Swamp have provided \$2,000 to help fund this professional design work which may begin as early as June of this year. *Stay tuned...*

## GETTING TO KNOW THE U.S. FISH & WILDLIFE SERVICE

By Judy Schmidt



The annual National Refuge Friends Conference is a great place to learn about the refuge system and other refuges as well attending workshops on a host of different topics. Last year when I attended the Conference, I picked up a few facts that I thought would be interesting to share.

The U.S. Fish & Wildlife Service is part of the U.S. Department of the Interior. Gail Norton is the Secretary of the Interior, the first woman to hold that position. The mission of the Department of the Interior is "working with others to conserve, protect and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people." The Department manages one out of every five acres of federally owned land and includes the National Park System as well as the National Wildlife Refuge System.

The U.S. Fish and Wildlife Service began in 1871 as the Bureau of Fisheries, changing to the Bureau of Biological Survey in 1885. The first refuge was established March 14, 1903 at Pelican Island, Florida by President Theodore Roosevelt. The mission of the National Wildlife Refuge System is "to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife and plant resources and their habitats within the United States for the benefit of present and future generations of Americans". It is a system managed for wildlife but with many opportunities for the visiting public. During 2003, 39.6 million visitors enjoyed activities on national wildlife refuges. The U.S. Fish & Wildlife Service has designated six activities which are given priority on refuge lands—hunting, fishing, wildlife observation, wildlife photography, interpretation, and environmental education.

The country is divided into seven regions; Great Swamp is in Region 5, the northeast region. Region 5 contains one half of one percent of all the land in the national wildlife refuge system but hosts nearly one quarter of all the use! There are 71 refuges in Region 5 comprising 495,000 acres. These refuges hosted 6.1 million visitors in 2003. There were 5,210 volunteers who donated 208,623 hours. There are 37 Friends groups, 21 cooperative sales outlets, 87 facilities, 19 fee collection sites which collected \$950,000 in fees. Five of these refuges are in New Jersey.



## WILDERNESS TRAILS—THE ORANGE TRAIL

By Tom McFadden, *Outdoor Recreation Planner*

It had been quite a while since I walked the trails in the Wilderness Area but I promised myself that I would this year if things froze up enough to make the trek. It's the time of year when exploring the Wilderness is easy if all is frozen. I decided to walk and re-mark the Orange Trail and all of the trails leading off of it. What I found and experienced was delightful!

Upon entering the trail I saw that someone with good intentions had marked the trails with diamond-shaped plastic markers. I'm sure these markers definitely help many hikers find their way, but unfortunately they were not the circular markers that are approved and noted on our maps. I began re-marking all of the trails and correcting some of the trails as to where they were supposed to go. I spent approximately a week doing this and met some very nice people along the way. I came across quite a few cross country skiers; in fact I spoke to 12 in one day! Some were dressed in fashionable cross-country skiing clothes while some just wore a jacket with no hat or gloves! They were very glad to see someone from the refuge out on the trails and they received a bit of information on the Great Swamp Wilderness Area as well!

While walking the Beige Trail (which is my favorite trail) I noticed just how beautiful and quiet it is in winter. I began to identify all of the creatures that inhabit the area by the all-telling footprints that they left in the snow. I reached the last knoll of the Beige Trail where there is a stand of the largest beech trees in the swamp. These magnificent trees, some measuring 4 to 5 feet in diameter, somehow escaped the lumbering activities of long ago, possibly because of inaccessibility. One tree had a date carved in it—1921! This type of activity is not approved of today but was interesting nevertheless.

It always amazes me that one can experience solitude so close to New York City. It had been quite a while but for a short time I stopped and listened to the birds and nothing else! It has been a long time since I felt and enjoyed such peacefulness. I realized how we all get caught up in our stressful lives and forget about the simple pleasures one needs to take time out to enjoy. The Great Swamp Wilderness is indeed the place to experience that. I am looking forward to next winter when I will get out and re-mark the Blue, Yellow and Red trails! I also often wondered how great it would be if all of these trails could be connected! I guess anything is possible with Friends and volunteers!



Orange Trail—visible signs of man—a reminder that this used to be part of Meyersville Road.

Photo by Jerry Quinlan

## TRAIL MAINTENANCE IN THE WILDERNESS AREA

Wilderness trails are maintained by volunteers who periodically walk the trails, pick up litter, replace markers, clip and prune as necessary, and report major problems to the Refuge staff. George Solovay coordinates this volunteer activity for the Refuge. Volunteer Chris Hildebrand is the trail maintenance volunteer for the Orange and Green trails. On one of her recent trail maintenance walks, she had some help from a few of her young neighbors, who wrote about their experience.

### HELPING OUT

By Corey Johnson, Ruben Owens, Tyler Bynum, Vauxhall, NJ

On Friday, February 18th, we did not have school, so Chris Hildebrand brought the three of us to the Great Swamp. We went to clean up part of the Orange Trail, and all of the Green Trail. It was really cold and there was a lot of water on the trail. Luckily, we wore high boots.

We saw a lot of birds, like blue jays, white-throated sparrows, red-bellied woodpeckers, Canada geese, and red-tailed hawks. We cut back some brush and checked the trail markers. We were not able to do the Beige Trail because it was under a lot of water, too much even for our boots. Later, we went to the heron rookery and saw hawks, vultures and ducks, but no herons. Chris said she will bring us to do trail maintenance again in the spring.

*Note: Corey is a student at Burnett Middle School and Ruben and Tyler are in the 4th grade at Connecticut Farms Elementary.*



## VERNAL POOL RESTORATION: HELPING OUT OUR AMPHIBIAN FRIENDS

By Colin Osborn, Biological Technician, Great Swamp National Wildlife Refuge

In the early spring each year here at Great Swamp, an incredible phenomenon takes place. As the leftover snow melts and the rains start to fall, the water table rises and vernal pools begin to fill in. Shortly after these unique wetlands form, many amphibians awake from hibernation and migrate to them to breed. Females lay their eggs there and the larvae that hatch develop over the next few months and eventually leave the pool in the summer to begin the terrestrial phase of their lives. This is not always the case though, as vernal pools do not have any permanent in-flow of water and therefore will usually dry up in the summer. If the larvae in the pool have not completed metamorphosis, thus lacking developed lungs, when the pool dries up they will either migrate to another wet pool, provided there is one close enough, or they will die. In terms of survival, it may seem like a disadvantage that vernal pools are temporary; however it is just as much of an advantage to these amphibians. The wet-dry cycle of vernal pools prevents fish populations from becoming established and thus eliminates the threat that these predators would pose.

The Refuge is a virtual haven for vernal pools due to its extensive mixture of wetland and upland habitats. The pools here thrive in uplands that lie within close proximity to wetlands, the majority of which are found in our vast red maple swamps and hardwood forests. Vernal pools are very unique ecosystems that support complex animal communities—from amphibians and reptiles to insects, crustaceans, and mollusks. The focus of our vernal pool studies here are two species of amphibians that rely exclusively on vernal pools for breeding: the wood frog (*Rana sylvatica*) and the state-endangered blue-spotted salamander (*Ambystoma laterale*).

Last spring I had the opportunity to work on the refuge vernal pool study which was an incredible success. We were able to locate and survey 62 vernal pools throughout the refuge. Of those 62 pools, 33 were found to contain eggs from either wood frogs or blue-spotted salamanders, and in a few cases both. The 29 pools that did not contain any eggs were mostly small, shallow pools which were deemed unsuitable—at least by the wood frogs which are generally not too picky. These are smart frogs though, as they knew that the pools could not hold enough water to last well into the summer. Blue-spotted salamanders are another story as they faithfully return to their natal pools (the pools in which they were born) to breed. Several previously unknown blue-spotted salamander breeding pools were discovered during the survey. Great Swamp is one of the few places in New Jersey where the blue-spotted salamander still exists, which is why it is our goal to find as many of their vernal pools as possible on the refuge.

Unlike other areas of the state, blue-spotted salamanders and wood frogs do not have to worry about losing their breeding pools at Great Swamp to development, pollution, or draining. The only threat to their vernal pools here is through the slow, natural process of succession. Succession is basically the gradual and orderly process of ecosystem change, or in this case, the transformation of wetland to upland over time. Although succession is not an immediate threat, it is important because if we lose the vernal pools, we lose the blue-spotted salamander and the wood frog with them.



Refuge staff restoring vernal pools

This past winter we took action restoring a total of 28 of our vernal pools by setting back succession. We did so by physically removing the shrubs and small trees that were crowding the edges of the pools as well as growing within them. Limbless fallen trees that were clogging up pools were also removed. In contrast, limbed trees are important in vernal pools because they provide branches which are preferred for egg attachment purposes. Limbed trees were placed in pools lacking any or enough attachment sites.

This spring, restored pools will be surveyed to determine if quantities of egg masses have increased from last year as a result of our actions. These pools will also be monitored in years to come to assess the long-term effects of restoration. Ultimately, we hope to increase the populations of wood frogs and especially blue-spotted salamanders on the refuge so they may become yet another success story of Great Swamp.

Restoring the Refuge's vernal pools is going to be a major endeavor and we will undoubtedly be looking for volunteer assistance. Please keep us in mind if you have some free time and would like to help out.



## SECOND SUNDAY... WITH FRIENDS—CELEBRATING A YEAR OF PROGRAMS

By Judy Schmidt

You can count on it! On the second Sunday of every month, from September through June, the Friends sponsor a program which we call—*Second Sunday... with Friends*. We have a talk... followed by a walk into the management area, which is normally closed to the public. The topics change each month, to correspond with what we'll see, or hear, on our walk.

We've

- explored first hand what's inside a wood duck box
- taken a closer look at ferns and learned how to identify different species found on the Refuge
- seen the largest—and smallest—moths found in the swamp
- learned about invasive plants and identified various plants in winter
- found out who makes those tracks in the snow and what happens to frogs when ponds freeze in winter
- shared some of our favorite signs of spring—and gone looking for them

Upcoming spring programs include bluebirds, learning how to use binoculars, and insects as pollinators. In the fall, we'll start a whole new series. If there is something you'd like to learn more about, let us know and we'll see if we can do a program.

The Second Sundays are always fun. There's lots to do in the Discovery Den where displays and hands-on kids activities reinforce the seasonal themes. Refreshments are always on hand and there are usually special sale items related to the topic in the Bookstore & Gift Shop.

These programs are good for families and curious adults. Come join us on any second Sunday... and bring a friend.



Ken Bliss displays his moth collection at February's Second Sunday program

## MOTHS OF GREAT SWAMP — POLYPHEMUS MOTH (*ANTHRAEA POLYPHEMUS*)

By Ken Bliss



Named after the one-eyed Cyclops in Homer's *Odyssey*, this is one of the largest moths found in the refuge. With a single large eyespot on each wing and a wingspan of four to six inches across, it is not hard to imagine how this enormous moth attained its name.

Of all the giant silkmoths, the polyphemus is the most widely distributed, having been found coast to coast across Canada, the U.S. and into Mexico. It is seldom seen, however, as it flies only at night, and only a handful have been spotted here at the Great Swamp.

This moth can be found flying from May through early August. It is attracted to light, so keep an eye out (no Cyclops humor intended) for it around lighted porches, or fluttering around an isolated street light. Just when you think you've spotted a bat, take a good second look. It may actually be a polyphemus moth, or one of its relatives in the silkmoth family.



## YOUR \$15 INVESTMENT IN THE FUTURE

By Laurel Gould

How would you like to purchase a work of art, obtain an annual entry pass to every national wildlife refuge, and support one of the most successful, and long-running, conservation programs ever initiated – all in one fell swoop? Well, you can—with a \$15 purchase of the new 2005 Federal Duck Stamp. Read on...

Wildlife artist Mark Anderson from South Dakota is the winner of last year's Federal Duck Stamp Art Contest and his painting depicting two male hooded mergansers will appear on the 2005-2006 Federal Duck Stamp. *"I took a chance painting two male ducks as you usually see the male and female on the stamps, but it paid off"* he said at the Easton Waterfowl Festival, where the winning painting is displayed each year. Mark has been submitting entries since 1985, but this is the first time he's won.



Here are three good reasons to buy a federal duck stamp.

1. For \$15, you have purchased an annual entry pass to every national wildlife refuge that charges a fee.
2. Start a collection for the young naturalist. There's a new design every year – it makes deciding on that birthday present a no-brainer!
3. You are making a direct contribution to the purchase of waterfowl habitat. With the continuing decline in the number of hunters, it's up to conservationists, including the birdwatching community, to help fill the gap.

The 2005 Federal Duck Stamp goes on sale July 1, 2005. You can buy federal duck stamps at the Friends Bookstore & Gift Shop and also at the Great Swamp National Wildlife Refuge Headquarters.

Your \$15 purchase is an investment in the future of America's unique refuge system. Don't forget to buy your Federal Duck Stamp this year.

### Here are some Federal Duck Stamp facts...

- The program was started in 1934 by President Franklin Roosevelt.
- The first federal duck stamp portrays two mallard ducks, a male and a female; the stamp was designed by J.N. "Ding" Darling, a popular cartoonist of the time and the first director of the Bureau of Biological Survey, the predecessor to the U.S. Fish and Wildlife Service.
- The cost of that first duck stamp was \$1.00.
- Each year the U.S. Fish & Wildlife Service sponsors this wildlife art competition where amateur and professional artists submit their paintings of waterfowl.
- Winning artists receive only fame—no cash prize is awarded to the winning design.
- 98 cents of every dollar collected from the sale of duck stamps goes directly into the Migratory Bird Conservation Fund to purchase wetlands and wildlife habitat for inclusion in the National Wildlife Refuge System.
- Since 1934, the Fund has been used to purchase more than 5 million acres of habitat.
- Over 3,000 acres of land in the Great Swamp National Wildlife Refuge were purchased using federal duck stamp dollars.

## WHAT'S NEW IN THE FRIENDS BOOKSTORE

By Laurel Gould

Be sure and stop by the Friends Bookstore & Gift Shop next time you're visiting the Refuge. In addition to the free coffee and cookies, check out the sightings board to see what you should be looking (or listening) for!

There are lots of new books in stock for children and adults and we have a wide variety of field guides and audio CDs for those wanting to brush up on their bird song ID. We also have a new DVD which pairs the bird songs with great photos of the calling bird. For those who are interested in amphibians, we have books on vernal pools, a frog call CD, and our own "pocket pal" laminated card which describes the frog calls you will hear on the Refuge.

There's a wide selection of puzzles for kids as well as the 1,000 piece wildlife puzzle for the jigsaw fanatic—along with a new roll-up mat (so you don't have to finish the whole thing in one night or eat your dinner balanced on top of it).

Friends' artist Ron Orlando has brought us some new open-edition prints—fabulous artwork that is very affordable. Check out his common loon and a new print of the great blue heron.

Remember all proceeds from the Bookstore & Gift Shop are used to support Refuge projects!



## A TALE OF TWO SWALLOWS

Story and photos by Leo Hollein

Up to six different swallow species can be observed at the Great Swamp National Wildlife Refuge (GSNWR) in a given year. These are the bank, barn, cliff, northern rough-winged and tree swallows as well as the purple martin. All except the bank and cliff swallows have been known to nest in or around the GSNWR. However, the most common and easily observable breeders are the tree swallows and the barn swallows. There are similarities but also significant differences in the life styles of these two swallows.



**Both Tree and Barn Swallows Nest In Manmade Structures**  
Both the tree and the barn swallows take advantage of man-made structures to facilitate their nesting. Tree swallows are cavity nesters. They will nest in trees using holes that have been previously excavated by woodpeckers. Tree swallows in the GSNWR have opportunistically taken advantage of the nest boxes provided to help bluebirds reproduce. Tree swallows have become the most common occupant of the boxes and nest in over 50% of the boxes during a given nesting season.

Barn swallows are not cavity nesters. They attach their mud and straw nests to walls close to overhangs for protection. Their nests are lined with feathers or other soft material. Historically, barn swallows nested under protected cliffs. They have adapted almost exclusively to using a variety of protected sites created by man such as their namesake—

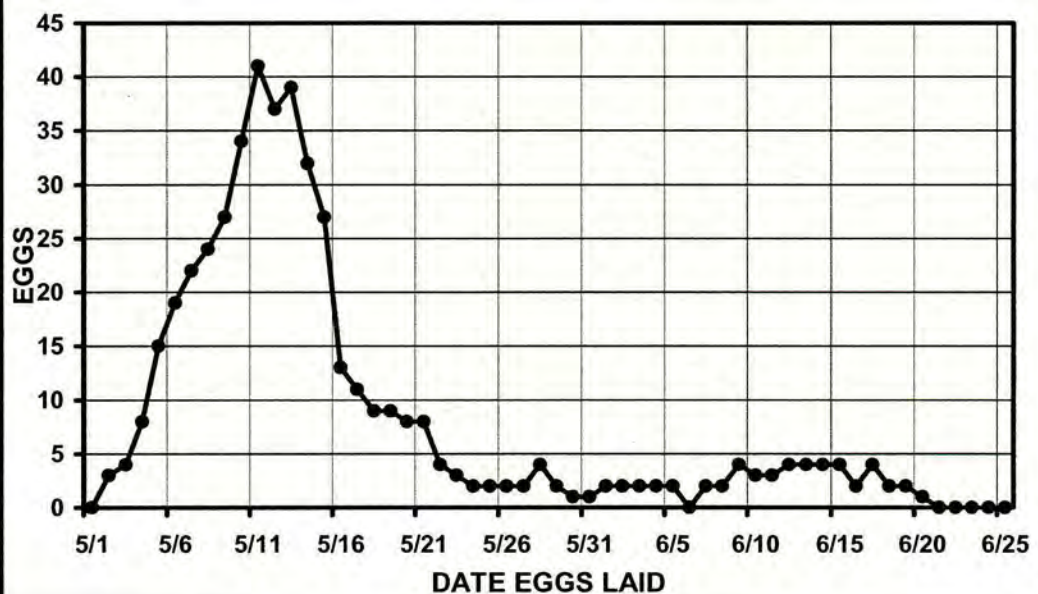
barns. In the GSNWR a pair of barn swallows usually nests on the underside of the kiosk at the Overlook as shown in the photo above. They also nest under the closed bridge on Pleasant Plains Road or under the eaves of other buildings. Barn swallows may reuse a nest from the previous season after some refurbishment. Eastern phoebes like sheltered nest sites and may also use old barn swallow nests.

### Tree Swallows Arrive At GSNWR In Mid-March

Tree swallows arrive en masse at the GSNWR in mid to late March well in advance of the other swallow species. Most tree swallows winter in the Southern states. They are the only swallows that, when necessary, can make seeds and berries a substantial part of their diet. This enables tree swallows to survive the bad weather that they will likely encounter in March and early April.

Tree swallows are completely white underneath and bluish on top. At the right angle to the sun they appear to have a metallic sheen. Their tails are only slightly indented. They tend to forage in groups seeking to capture prey on the wing.

CHART 1 - TIMING OF TREE SWALLOW EGG LAYING IN 2004





Soon after arriving at the GSNWR they begin dueling other tree swallows and bluebirds for the rights to nest in the bird boxes that are located throughout the management section of the GSNWR. Most of the nest boxes in the GSNWR are now paired—two boxes on separate posts about 30 feet from each other. Tree swallows are territorial nesters and will not permit another tree swallow pair to nest in an adjacent bird box until they have completed their clutch and begun brooding. While they begin constructing their nests in mid to late April, tree swallows do not begin laying eggs until the first two weeks in May. The exact timing is impacted by the weather. Tree swallows synchronize their egg laying and most eggs are laid in a 10-14 day period as shown in Chart 1. Tree swallows lay one egg per day until their clutch is complete.

As suggested by Chart 1, tree swallows only raise a single clutch per season in the GSNWR. The relatively few eggs laid after the peak period are mostly from swallows that have lost their first clutch due to predation. Like most birds, tree swallows will nest again if they fail to fledge their initial clutch.

#### **Tree Swallows Are Reluctant To Leave Nest While Brooding**

Below is a picture of a tree swallow brooding eggs or young in a nest box. These swallows build nests of straw that incorporate as many feathers as they can find. As indicated by this photo, tree swallows are reluctant to leave their nests once they begin brooding. It may be necessary to gently lift the adult in order to count the eggs in the nest. When the adult is then returned to its original position, it will usually remain on the nest and continue brooding. Tree swallows typically lay 5-6 white oval eggs. While tree swallows are passive in the nest box, they attempt to intimidate anyone approaching their nest boxes by aggressively dive bombing. This is a group effort as there are usually more than two adult swallows participating. The swallows come very close but rarely hit the intruder.



In a manner similar to their arrival, the bulk of the tree swallows leave the GSNWR in the second half of July. They move to the shore where they feed on insects over the coastal salt marshes. The swallows that have attempted second nestings will stay around until their clutches have fledged.

#### **Barn Swallows Arrive In Mid-April**

Barn swallows begin arriving in the GSNWR in mid-April. They winter in South America ranging from Panama to Argentina. By traveling such great distances they are always in climates that have a supply of flying prey. They are swift and graceful fliers. Barn Swallows are not as abundant or as widespread as tree swallows in the GSNWR during the breeding season. They are usually present at the closed bridge on Pleasant Plains Road. In early August, after the mass of tree swallows have departed, there is a large influx of barn swallows that gather to feed on the way south. Most of the barn swallows have left by early September.

Unlike the other swallows present in the GSNWR, barn swallows have a deeply forked tail that is the manifestation of the term—swallow tail. When perched, their tail extends well beyond their wings. Barn swallows have white spots on the ends of their wispy tails. As indicated in the photo to right, they have buffy undersides with a rusty throat and forehead. Their upper parts are a dark blue. Barn swallows lay 4-6 brown-spotted white eggs. They are likely to raise two broods in a season. Unlike the tree swallows, they are not territorial nesters and will nest in colonies under favorable conditions.





## RED-HEADED WOODPECKER

(continued from page 1)

During a four-hour stint this winter I personally watched and photographed that red-headed woodpecker hanging out in those four oaks along Pleasant Plains Road. Like a hermit in a cabin this woodpecker had everything it needed right there—water to drink in a cup-like broken branch knot, acorns hidden underneath bark, and roosting cavities. Like other wintering woodpeckers it would forage every nook and cranny for wintering grub but more often than not came up with a stored nut with which to break its fast. The red-headed woodpecker is one of only 4 of 198 woodpecker species that commonly store food, and the only woodpecker to cover its food with bark. Red-heads are known to store insects in dead trees under bark, especially grasshoppers, probably just to break up the monotony of all those starchy acorns.

To bear witness to this bird is to feel, first hand, nature's pulse and wonder in saddened reflection what it must have been like to see hundreds of these birds stop over in an old farm field in the 1930's. That's about the time our ignorant species wrongly accused and actively persecuted them with gun and fire for the perceived notion they were a threat to fruit and berry crops. We even subjected this species to the thwarting indignation of de-feathering for the millinery trade in which populations of many avian species were greatly reduced for the sole purpose of adorning women's hats.

We may see a few of our wintering red-headed woodpeckers hang around the refuge this upcoming spring in an attempt to find suitable nesting sites. They will assuredly have a tough go at it in response to competition with the European starling. Maybe if a pair can find its way deep into the penetralia of the refuge to breed and nest an outside chance of success may be granted. Unfortunately starlings, bluebirds and other woodpecker members in the family *Picidae* can also be found in the heart of the refuge all vying for the same nesting holes. One must remember that red-headed woodpeckers have evolved slowly and have had the luxury of a geologic time scale to adjust with the pace of landscape change, glaciations, and competitive relationships with other species. Through the clearing of forests and the introduction of European starlings our red-headed woodpecker has had one heck of a time maintaining stable populations throughout its range.

The Great Swamp, with its mosaic of habitat types, sizeable stands of dead wood, and a ready supply of beech and oak bodes well for this imperiled gem. The key to its long term survival lies in education. State agencies and non-profits must continue to work with large scale landholders and farmers to keep dead wood stands available for red-heads. A wildlife management practice of placing tall poles with the proper nest boxes could be implemented to level the playing field with the European starling.

With songbirds on the decline globally, one can only hope our species has the foresight to reverse past transgressions that we've imposed on these magnificent birds and snatch them away from the eternal emptiness we call extinction.

**Footnote:** 1. "qweer" call – one of the more distinct vocalizations that red-headed woodpeckers make, repeated in much the same fashion as its common cousin, the red-bellied woodpecker. The red-heads call is less rambunctious than the red-bellied woodpecker's.

## FEBRUARY BIRD SIGHTINGS—REPORTED BY THE PLEASANT PLAINS BIRDERS

It was an eventful winter for the birders who travel Pleasant Plains Road. Here are some of the sightings they recorded at the Friends Bookstore during February. (In March, the birders reported an American Bittern calling at the Overlook.)

|                     |                     |                        |                        |
|---------------------|---------------------|------------------------|------------------------|
| Great blue heron    | Northern harrier    | Long-eared owl         | Northern shrike        |
| Black vulture       | Red-shouldered hawk | Short-eared owl        | Eastern bluebird       |
| Turkey vulture      | Red-tailed hawk     | Belted kingfisher      | Eastern towhee         |
| Wood duck           | Rough-legged hawk   | Red-headed woodpecker  | American tree sparrow  |
| American black duck | Merlin              | Red-bellied woodpecker | White-throated sparrow |
| Ring-necked duck    | Eastern screech owl | Downy woodpecker       | Song sparrow           |
| Mallard             | Great horned owl    | Hairy woodpecker       |                        |
| Hooded merganser    | Barred owl          | Northern flicker       |                        |

## DON'T FORGET THE 2005 PHOTO CONTEST—DEADLINE IS JUNE 30, 2005

The Friends are again sponsoring an amateur Photo Contest. The categories are wildlife, landscape, and Friends choice. There are Youth and Adult sections for each category. The photos must be taken within the Refuge boundaries (publicly accessible areas). Again this year, digital entries are welcome as well as prints or slides. Entry forms are on our website.

Winners and entries from last year have been used in the newsletter, brochures, and in the video program being developed for the Swamp in a Box project. Thank you photographers!



## 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.*

### Annual Membership

|                 |  |  |
|-----------------|--|--|
| Membership Type | <input type="checkbox"/> Family - \$25 | <input type="checkbox"/> Individual—\$15 |
| Gift            | <input type="checkbox"/> Family - \$25 | <input type="checkbox"/> Individual—\$15 |
| Renewal?        | <input type="checkbox"/> Yes           | <input type="checkbox"/> No              |

Donation—Thank You! \$ \_\_\_\_\_

Name \_\_\_\_\_

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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 . . .



**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:

- Quarterly Newsletter
- 10% discount in Bookstore & Gift 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 Bookstore & Gift Shop for a Friends of Great Swamp Water Bottle -or- a Ron Orlando Great Swamp Centennial Poster.



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

Promoting the conservation of the natural  
resources of the Refuge

Fostering public understanding and  
appreciation of the Refuge, and

Engaging in activities that will support the mission of the Great Swamp National Wildlife Refuge.

*Friends of*  
**Great Swamp**  
**National Wildlife Refuge**

**APRIL 2005**

Friends of Great Swamp NWR  
241 Pleasant Plains Road  
Basking Ridge NJ 07920

