



# FRIENDS OF GREAT SWAMP NATIONAL WILDLIFE REFUGE

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## VOLUNTEER HOURS UP 20% OVER LAST YEAR

*By Tom McFadden, Refuge Outdoor Recreation Planner*

During 2004 volunteers donated 6,286 hours of service. This was an increase of 20% from last year. Since the volunteer program's reorganization in 1982, a total of 64,080 hours have been contributed by 2,314 volunteers who have ranged in age from Tiger Cub Scouts to senior citizens. This effort is equivalent to \$807,789 worth of donated time. You are closing in on a million dollars of donated service! Your continued contributions are greatly appreciated. Keep up the good work!



Volunteers Pete Axelrod, Judy Schmidt, Willard Shearin, Laurel Gould, Steve Byland (kneeling)

Great Swamp takes much pride in its Volunteer Program and the volunteers take that same pride in their contributions. Some of the activities that you were involved in included: surveys and censuses, water level management, pest plant control, deer hunt assistance, habitat management, visitor services, trail patrol, annual clean-up, trail maintenance and facility maintenance, advocacy, youth fishing derby, mowing, interpretive walks, fall festival, administration support, photography, and bluebird box and wood duck box checks—to name a few!

A well-deserved round of "thanks" again to all those volunteers who were active in Fiscal Year 2004 (October 2003–September 2004). Cumulative volunteer hours are listed on page 10.

## FRIENDS ARTIST, RON ORLANDO, WINS NATIONAL AWARD

*By Kathy Woodward*

For all of you who have the Friends' Centennial Poster hanging in your den or wear one of the Friends' tee shirts graced by the barred owl, kestrel, hooded "merg", or the great blue heron, please be aware our artist just became more famous. Ron Orlando, a major contributor to the art in our refuge store, was recently awarded the Grand Prize in the Arts for the Parks competition. This prestigious contest focuses on paintings which capture the nature of the 385 U.S. National Parks. Ron's acrylic picture of two bears clinging to a moss covered evergreen, set in Olympic National Park in the state of Washington, won the hearts of the judges and the patrons who attended the awards ceremony.

This competition is intense and complex. Initially, artists submit slides of their works. This year there were over 2,300 entries from all 50 states and 5 foreign countries. The top 200 actual paintings are then requested, from which 100 winners are chosen. These 100 paintings are displayed at the "by invitation only" awards ceremony held at Jackson Lake Lodge, Jackson Hole, Wyoming.

*Continued on page 10*



## ANNUAL MEETING HIGHLIGHTS

By Lisa Molinari, Secretary

A record 34 members attended the Friends annual member meeting on December 5, 2004. A pot luck dinner preceded the business meeting and included a great variety of terrific dishes—no one went away hungry—and a few recipes were exchanged. The treasurer presented the annual Financial Report followed by committee reports: Education—Judy Schmidt, Membership—John Wilmot who thanked Nancy Schenck for managing renewals and the membership list, Bookstore—Laurel Gould, Discovery Den—Dorothy Smullen. Kathy Woodward updated the group on the new Visitor Facility. Board members Roger Donat, John Wilmot, and Louise Jensen were reelected for two-year terms. New director Laura Nally was also voted into office for a two-year term. The proposed changes to the Bylaws were unanimously approved.

Following the business meeting, members were invited to watch the video *Pale Male*, the story of the Central Park red-tailed hawk (or is it the story of the Central park hawk watchers?) — or to continue shopping taking advantage of *double discount day*. At the next Board of Directors meeting, John Wilmot was elected Vice President replacing Neil Borman. Neil, long-time board member and refuge volunteer, and his wife Cathy, also a Friends volunteer, have relocated to the state of Washington. Their dedication and contributions to the Friends and the Refuge will be missed. We wish them all the best on their new adventure.

## INTRODUCING NEW BOARD MEMBER—LAURA NALLY

By Laura Nally

My first exposure to the refuge was walking on some of the trails in the wilderness area. I became aware of the boardwalk areas at about the same time I was developing an interest in learning more about birds. My husband and I became members of the Friends and participated in various clean ups, Fall festivals and volunteering at the Wildlife Observation Center (WOC). Last year, after 33 years, I retired from Novartis Pharmaceuticals where I had worked primarily in QA/Compliance areas. With a little "free time" on my hands, I felt that joining the board of the Friends would be a great way to contribute to the Refuge as well as expand my knowledge of the Great Swamp.

## THANKS TO...

...Brian Engel for donating a laptop computer. ...ExxonMobil for their recognition of volunteer Jack Higgins through their Volunteer Involvement Program. ...Holly Dunbar and the Somerset County United Way for the bookstore shopping bags decorated at this year's National Family Volunteer Day. ...Wild Birds Unlimited (Scotch Plains) for donating a new bird ID poster at WOC.

## IN MEMORIAM—CHARLIE RISBERG

Longtime Friends volunteer Charlie Risberg died on December 14, 2004. Charlie and his wife Edythe were regular volunteers at the Bookstore where Charlie was always fixing things, making repairs, offering suggestions for improvements, and helping out with whatever needed doing. He will be greatly missed.

## VOLUNTEERS COMPLETE TRAIL TO NEW BLIND

By Judy Schmidt

In October of 2003, the Friends were approached by the Refuge about an extension of the Wildlife Observation Center boardwalk trail to Pool 1. The Refuge could fund the construction of the bridge, but that was all. Could the Friends help?

During the winter the bridge was completed and In April a platform blind was built with funds provided by the Friends. In October, volunteers stained the new blind. On November 6, the job was finished when 11 volunteers and 2 Refuge staff spread woodchips on the trail leading from the bridge to the new blind. Covering the 800 feet of trail took 24 trips for each of 5 wheelbarrows (a combined total of 125 trips!). Meanwhile Tom McFadden made 26 trips with an ATV and trailer while Refuge staff Mel Smith worked the loader. At the end of five hours—the job was done.

If you haven't already, visit the new trail and see what the Friends of Great Swamp can accomplish!



Tom "drives" friends crazy as they chip the new trail in record time!

(L-R) Mike Hiotis, Rich Cummings, Chuck Whitmore, Bill Ayres, Tommy Freeman, Tom McFadden, Carlos Jaramillo, Mel Smith, Judy Schmidt, (behind the camera, Laurel Gould)



## THE 2004 GREAT SWAMP / WATCHUNG RIDGES CHRISTMAS BIRD COUNT

By Pete Axelrod, Christmas Count Coordinator, Greater Watchung Nature Club

Can we count the golden eagle that was seen by volunteers during the 2004 Christmas Count? It certainly was a free-flying bird, searching for its next meal in the Swamp. This eagle was released the day before the count, after its health was restored by The Raptor Trust.

The Christmas Bird Count (CBC), sponsored by the National Audubon Society for the past 105 years, was the 59<sup>th</sup> conducted in this region. Sixty three participants spent the better part of the day hearing, sighting, and recording every bird they saw on December 18, 2004. The Count is conducted in an area defined as a circle of 15 miles in diameter, centered at Springfield Avenue and South Street, New Providence. Included in the area are the Great Swamp, Watchung Reservation, Lord Stirling Park, South Mountain Reservation and Lenape Park.

The golden eagle was one of the 81 species recorded during the Count held in the region this year. Our Count data indicates the golden eagle was recorded only once before, in 1995. Other highlights included 3 red-shouldered hawks, 2 northern goshawks (seen only 8 times previously), and a bald eagle (9 times). On the other extreme, for the first time in our 59-year records, no field sparrows were found. This miss does not definitely state the species is gone from this circle, but it may raise a flag as a species to watch in the future.

Locally, we have all noted the scarcity of American kestrel. This observation is supported by the 59-year history of this count, as well as the 105-year history of regional counts. Red-headed woodpecker had been recorded only 23 times and was missed as recently as 2002. This year 46 individuals were seen, all in the Great Swamp western management area. Is this a fluke? Are they returning in substantial num-

bers? Was the food crop particularly good this year, resulting in more young fledged? Past and future CBC data can answer these kinds of questions. Additional citizen science might determine if these red-headed woodpeckers were born here, or are they winter migrants. If migratory, will they stay and nest?

*The Golden Eagle —  
one of 81 species recorded  
during the 2004  
Christmas Bird Count.*

*The eagle's health  
was restored by the  
Raptor Trust and it was  
released a day earlier...*

*Can it be counted?*

friends introduced to the warm camaraderie of Christmas Counts, and all for the benefit of our birds. Thank you participants, old and new, past and future. Thanks to the participating organizations and B. J. Fields Restaurant. Thank you from the birds we protect.

After a long and tiring day in the field, filled with amazing sightings like eastern bluebirds in the setting sun picking bugs off a frozen pond, or 4 flying squirrels gliding out of a stump, counters met for a wrap-up dinner at B.J. Fields restaurant in Westfield. Along with food and drink, the evening included swapping tales of the day's encounters with great birding friends, habitats lost to new housing, and the coyote near the Friends headquarters.

It was a good Count in beautiful weather, with great old friends, new



Eastern bluebird. Photo—Bill Bell

## 2004 ANNUAL REFUGE DEER HUNT HELD IN NOVEMBER

By Craig Bitler, Refuge Wildlife Biologist

Great Swamp National Wildlife Refuge conducted another successful deer hunt for five days in November 2004. On November 13, the refuge conducted its first hunt for youths only. To qualify, youths had to be between 10 and 15 years of age and had to have successfully completed the state's hunter safety course. In addition, they had to be accompanied in the field by a non-hunting supervisor who was a licensed hunter and was at least 21 years old. Sixteen youths participated in the hunt and they harvested four antlerless deer.

The regular refuge deer season was from November 17–20. In order to obtain a buck permit, hunters must first bring in an adult doe to the refuge deer check station. This rule, which was instituted in 1999, continues to produce record adult doe harvests and also significantly reduces the harvest of bucks. The increased doe harvest will help the habitat since it results in fewer fawns being born the following year and the reduced buck harvest improves the buck age structure by allowing more bucks to survive and advance in age. The hunters harvested a total of 187 deer, up slightly from 178 last year.



## VOLUNTEER VIGNETTES FROM WOC

*By Kathy Woodward, Friends Volunteer Coordinator*

Refuge volunteers have wonderful experiences while welcoming visitors to Great Swamp NWR. Several volunteers who staffed the “shed” at the Wildlife Observation Center (WOC) shared their impressions from fall migration, 2004.

- ★ **Ann and Don McCord** were at WOC several Sunday afternoons. They remember the weekend a visitor discovered the web of an *Argiope* spider, just off the boardwalk. The web is as distinctive as the black and yellow spider. The male spider builds a smaller web next to the main web and then weaves a white, zigzag path across the center of the female’s web. The McCords were delighted to share their find with lucky visitors.
- ★ **Sandy Pruzansky and Greg Henderson** enjoyed getting the children involved in learning about Great Swamp. Sandy said, “The boardwalk bingo game Judy Schmidt made was great! It was fun going over the answers when the kids came back. They were so excited to tell us about what they saw.” Volunteers will be pleased to know there are now spring and fall boardwalk bingo versions and more reference books for identifying species.
- ★ When there were more than two volunteers, **Teri Catalano** walked out to the blinds and talked to people along the way. She remembered one woman knitting as she was walking along. One Saturday, a group of wedding guests, in suits and fancy dresses, stopped by for a quick walk between the ceremony and reception.
- ★ **Laura Nally** also enjoys introducing young children to the refuge. “The excitement that they demonstrate when they have seen snakes, turtles and frogs is very rewarding. One young child ran up to me to tell me about a dead duck that he had seen and he continued to explain how wrong it was to kill the duck.”

We will begin spring migration staffing at WOC and the Heron Rookery Overlook on Saturday, March 19—and two volunteer training sessions, led by Refuge staff and Friends, are scheduled for Wednesday, March 9 and Saturday, March 19, 2005. Current volunteers will receive a sign-up schedule for migration staffing and the volunteer training sessions—watch for this mailing in February. If you are a new volunteer and are interested in getting involved, call Kathy Woodward, volunteer coordinator, 973-635-1083.

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## VOLUNTEERS LEARN MORE ABOUT REFUGE AT FIRST JOINT VOLUNTEER TRAINING SESSION

*By Laura Nally*

I had the opportunity to attend the first volunteer training session co-sponsored by the Friends and the Refuge held on September 15, 2004. Most of us had or would volunteer at the Wildlife Observation Center (WOC) or the Bookstore & Gift Shop and this training was intended to give us information about the Refuge that might be useful when greeting visitors.

Tom McFadden, Outdoor Recreation Planner for the Refuge, began the day by explaining how important the Friends are in supporting the activities at the refuge such as the homestead cleanups and trail maintenance, as well as the “PR” work we do by staffing the WOC and sponsoring the Fall festival. In addition, he stressed the importance that the government places on having volunteers that support the Refuge.

Friends’ board members Judy Schmidt, Dorothy Smullen and Laurel Gould described how the Friends began and our mission. It was interesting to learn what went into establishing the Friends group for Great Swamp. We learned that there are Friends groups for many of the Refuges across the country. They described the organization and the number of volunteer opportunities that exist like the Bookstore, cleanups, annual fishing event, National Wildlife Refuge Week, and various walks.

The remainder of the morning was spent viewing a video on the National Wildlife Refuge System, followed by a slide show narrated by Tom McFadden. We learned specifics about the history of the Great Swamp and the features that are unique to this Refuge. The criteria for establishing the “wilderness area” and the “managed area” of the Refuge were explained and what can and cannot be done in these areas. This overview was especially valuable. In addition, the various management techniques used by Refuge personnel to provide habitat to support a variety of migratory wildlife as well as techniques to manage invasive plants (and animals) were explained. Tom described other ways that volunteers could work with refuge personnel such as cleaning wood duck boxes.

It was an information-packed, yet fun, morning with opportunities to ask questions throughout the session. During lunch we got to chat with the other volunteers participating in the training and do a little shopping in the bookstore. The afternoon was spent out of doors. We visited an impoundment area in the Refuge management area, not normally open to the public, the trail head for the Orange trail in the wilderness area, and finished up with a tour at WOC.

At the end of the session we were better prepared to represent the Friends and the Refuge as volunteers and we knew a lot more about the refuge and how it is managed.



# REMEDICATION AND RESTORATION OF CONTAMINATED WETLAND HABITATS BENEFITS REPTILES AND AMPHIBIANS AT GREAT SWAMP NWR

By Michael Horne, Craig Moore, and Carol Pollio

The wetlands bordering the former Harding Landfill and adjacent to a large waterfowl management pool at the Great Swamp National Wildlife Refuge were once an inhospitable place, especially for reptiles and amphibians. High concentrations of cadmium, lead, and zinc were leaching from the landfill and sludge pits that were once part of a municipal disposal operation. Just a few yards away, a larger emergent wetland was in jeopardy – if something didn't happen soon, it too would be contaminated.

The US Fish and Wildlife Service (FWS), as landowner, had to take action. Great Swamp National Wildlife Refuge, along with other FWS staff worked with Harding Township, the Environmental Protection Agency, and NJ Department of Environmental Protection to develop a multi-agency clean-up plan for the site. The Harding Township Landfill site had been transferred to the FWS as part of a larger parcel of land purchased in 1969, years before concerns over pollution had reached the public's awareness. It wasn't until 1991 that sampling conducted by FWS Environmental Contaminants Program biologists indicated that contamination was present. A follow-up ecological risk assessment conducted in 1999 showed that conditions had worsened and that the contamination was spreading. Clean-up would be costly and complex, requiring the highest level of cooperation and collaboration if it were to be a success. With the support of all involved an innovative and cost effective clean-up effort was planned.



"Clear shimmering vernal pools..."

Once the clean-up plan was finished, it was time to begin moving dirt. The transformation from potential Superfund site to restored wetland took only 4 months—and was truly remarkable! Contaminated sediments were removed from the wetlands and sludge pits, and amended with lime kiln dust. Lime kiln dust is very basic (i.e. not acidic). When mixed with the contaminated sediments, it immobilized the metals that were leaching from the landfill and sludge pits. This leaching was due to the natural acidity that is found in most freshwater wetlands. The amended material was then placed on the landfill, and the landfill was capped with a 2 foot layer of highly impermeable clay that was native to the refuge. The clay stops all water from percolating through the amended material virtually eliminating the potential for contamination to be dispersed ever again. The clay was covered over with topsoil and the area seeded with a mixture of native warm season grasses, to provide a small pocket of grassland habitat and to prevent erosion. The remediation was complete.

In place of toxic sludge pits were clear, shimmering vernal pools; in place of the landfill, a thriving grassland. Then, an unusual discovery was made—New Jersey Endangered Blue-spotted salamander larvae (*Ambystoma laterale*) were found in one of the newly established pools. Blue-spotted salamanders are a secretive species, rare in northern New Jersey (NJDEP 2001) and not often seen throughout the rest of their range. Spotted turtles, (*Clemmys guttata*), a species of special concern in New York, began to frequent the clean tussock sedge marsh that regenerated in the remediated wetland. Habitat management measures are being implemented to restore a historical population of New Jersey Threatened Wood turtles (*Clemmys insculpta*) to the formerly contaminated site.

Continued on page 9



"Time to begin moving dirt..."



## 2004 – A YEAR OF ACCOMPLISHMENTS FOR THE FRIENDS

When you're caught up in all the day-to-day activities during the year, it's hard to fully appreciate the cumulative results of those activities. That's why it's so important to take time to step back, take stock, and celebrate our accomplishments. Here's a look back over the past year – it's an impressive record.

### DISCOVERY DEN BECOMES A REALITY

The Refuge offered space upstairs in the Bookstore and last January we painted, cleared out two rooms, and moved our office upstairs. The space downstairs became our Discovery Den. New carpet was funded by Lucent Technologies and with a grant from the National Fish and Wildlife Foundation furniture and display panels were purchased. Dorothy Smullen and her Discovery Den committee (Deb Scala, Gail Rapaport, and Judy Schmidt) create seasonal displays as well as a variety of games, puzzles and hands-on learning activities for kids. It is frequently a very noisy and active place – just as you'd expect!

### INFORMATION CENTER AT WOC COMPLETED

The shed which serves as an information center at the Wildlife Observation Center (WOC) during the busy spring and fall migration seasons was finished and furnished. With funds from the Mushett Family Foundation, Lucent Technologies, and the Friends – and a lot of help from our volunteers, we purchased and installed: lights and heat, paneling and flooring, storage cabinets, front steps and an outside ramp for handicap access, a brochure box, and a set of reference books to provide a resource for volunteers to answer visitor questions. It's come a long way in just a year!

### CELEBRATING WILDERNESS

2004 marked the 40<sup>th</sup> anniversary of the signing of the Wilderness Act. The Friends supported this celebration by sponsoring a Walk for Wilderness. More than 60 people participated and money was raised to fund interpretive kiosks at the Refuge wilderness areas. We also created a video to tell the Great Swamp wilderness story.

### YOUR \$\$\$ AT WORK

Money comes to the Friends in a variety of ways including membership dollars, bookstore sales, donations, and of course grants. We are proud of the level of support we provide to fund Refuge projects, most of which would not otherwise be possible. Just look at what we did.

- Funded construction of a new blind at WOC.
- Co-sponsored the Volunteer Recognition Dinner.
- Purchased name-tags for volunteers with 100 hours.
- Provided lunch at the annual Fishing Derby.
- Funded one of the Refuge's summer intern positions.
- Hosted lunch at the refuge event to transfer Nature Preserve land and at the Remediation & Restoration event.
- Printed three newsletters and the Refuge's Swamp Talk.
- Funded the Friends web site.
- Purchased plants and materials for the native plant garden at Refuge Headquarters.
- Re-printed (again!) the Tree & Shrub Guide to the Boardwalk Trail.
- Purchased supplies for the Refuge bluebird trail.

### VOLUNTEERS MAKE A DIFFERENCE

Sometimes Refuge projects require something money can't buy – volunteer resources! Our volunteers are a dedicated group, ranging in age from the young to the young at heart; they are energetic, enthusiastic, hard-working, (and they love chocolate chip cookies!) They also accomplish a great deal:

- Two homestead cleanups.
- The annual spring roadside cleanup.
- Trail marking and clearing for the new trail at WOC.
- Trail maintenance of wilderness area trails.
- Maintaining the bluebird trail, over 140 nest boxes.
- Filling the bird feeders at the Wildlife Observation Center.
- Leading walks and giving talks.
- Writing articles and editing the Friends newsletter.
- Assisting at the annual deer hunt.
- Providing administrative support at Refuge headquarters.
- Wood duck box cleaning, repair, and data collection.
- Frog call surveys and data collection.
- Planting and maintaining the native plant gardens.
- Serving as a Friends Board member or on committees.
- Creating Discovery Den displays, activities, and games.
- Mowing the grass and maintenance of various facilities.
- Staffing the Wildlife Observation Center and Overlook.
- Maintaining the Friends web site.
- Participating in public hearings, events and meetings associated with the new Refuge Visitor Facility.

### FOSTERING PUBLIC UNDERSTANDING AND APPRECIATION...

This is a key component of our mission statement and is supported through interaction with Refuge visitors, guided walks for school groups and other organizations, developing interpretive publications, and hosting events for the public. These activities require a considerable amount of volunteer time and resources. Thanks to all of you, we have:

- Led 33 educational walks for 679 visitors from school and other groups.
- Led Sunset Walks during National Wildlife Refuge Week.
- Launched a series of Second Sunday programs – a different topic each month followed by an interpretive walk.
- Developed a guide (still draft) to the Wildlife Tour Route to help visitors understand Refuge management practices.
- Staffed our Refuge / Friends exhibit at off-refuge events.
- Staffed the Bookstore & Gift Shop on weekends from September through June, welcoming 3,315 visitors and providing visitor information when Refuge offices are closed.
- Sponsored a Photo Contest; the 250+ photos received form the basis of our digital library.
- Led the Refuge Rovers on the World Series of Birding to increase appreciation for the Refuge.
- Compiled a monthly calendar of weekend events including those sponsored by our environmental partners.

As you can see, it's been quite a year. Thanks to every one of you, we again have an impressive list of achievements.



# One Picture is Worth A Thousand Words...

## 2004 Accomplishments



It's Official! New Visitor Facility purchased

Friends sponsor Jen Murphy, Refuge intern



Information Center at WOC stands ready for the upcoming migration season



Fall Festival is always fun but this year's Frog Jumping contest was a surefire winner!



Walk for Wilderness raises money for interpretive kiosks



The new Discovery Den has been discovered!



Volunteers receive 500 hour pins at Annual Volunteer Recognition Event



Volunteers spiff up new information center at WOC



## LIFE ON THE EDGE

By Blaine Rothhauser, *Natural Eyes, Wildlife and Landscape Photography*

There are those who believe that the life they live is rife with problems—mortgage payments, work deadlines, running ragged with the kids, another bill, maybe even illness—you know life's intense gravitational pull. While all these plagues can be reality for many of us, they can't compare to the trials and tribulations posted up daily for all to see—reminders that maybe your first world existence isn't so bad after all.

I dare all of you who read this to take a time out from the daily grind this winter and spend a morning with some of the co-inhabitants that grace our world. Here's what you do—throw some wild bird seed out the back door, brew up some hot cocoa, get comfortable and watch. Songbirds, particularly the *Emberizid*<sup>1</sup> sparrows, exemplify what it means to eke out a living while our toasty guild of bipeds snipe and grouse about rising gas prices. If you would, grant me a moment's time to make my case.

Imagine a bird with a caloric budget of "x". In order to hit that mark you can't exceed "x" in regards to the calories that you burn. If you do you'll be stiffer than the frozen ground that surrounds you. Of course if you're the lucky bird (scientists might say genetically superior) that has banked enough body fat during your daily forays you might just be able to beat the odds. Those odds of course are heavily weighed on the side of the Grim Reaper.



Severe winters combined with heavy food-masking snows will surely write the epitaph for millions of songbirds before the season closes. Single-digit nights force these birds to burn precious fat reserves as the need to forage longer and harder drive their will to survive. Of course this can all be a windfall to the out-of-control feral cat population that waits in ambush to feast on all those weakened songbirds. Add to the equation native land-based mammalian predators and dive-bombing raptors, and an all too stressed existence gets worse. What's even more frightening, if you're a migrating songbird, is that the na-

tive fruits and berries have been out-competed by the non-native, invasive species whose nutritional content, especially fat content, is less. I hate to tell you this but it gets worse. Diseases such as botulism, avian cholera, salmonellosis, and the emerging West Nile virus can also have significant population impacts. Disease can sometimes be a welcome euthanasia for birds that just don't have the stomach for all these obstacles.

I'm sorry to report, if it hasn't become intuitively clear, that man is the cause for most of the above. One out of four birds protected under the Migratory Bird Treaty Act are in trouble. In the majority of cases bipedal primate cancer cells<sup>2</sup> is the causative agent that has metastasized throughout its host—planet earth.



The greatest threat our species has inflicted on songbirds deals with habitat fragmentation and all too often complete habitat destruction. With development has come a tidal wave of secondary impacts, e.g., pesticide poisoning, toxic contamination, mortality in response to collisions with human structures (cars, buildings, homes, cell towers, tension wires, etc.) and close-phased wires which have alone caused 174 million deaths annually via electrocution.

After that litany of gloom and doom how would you like to play a game of "Be the Songbird" – doesn't sound that fun right about now does it? Let's try anyway. You ready – here we go.

Try and digest this analogy – here you are on a cold winter's morn hankering for a Starbucks Caramel Macchiato. So you get up from the sofa, put on your winter coat and head out for a java fix. Of course if you're a songbird like a junco, you'd be emerging from underneath a pine tree without the luxury of forced hot air and four walls. That's okay because it was only 4 degrees last night threatening your internal thermostat's ability to maintain metabolic requirements (in many species of songbirds this is 0 (zero) degrees Fahrenheit).





You and your fifteen or so buddies were spending a sleepless rest taking turns huddled together vying for the middle position—one eye open for that damn fox who comes by every once and awhile looking to make you late night finger food. But back to you: You're leaving your house, walking towards your car. As you're fumbling through your pockets for keys, suddenly you feel a set of razor-sharp talons rip into your jugular while hoisting you away to some undisclosed roost to be quietly dismembered by a Pterodactyl-like raptor<sup>3</sup>.

Sorry about that graphic representation but reality is reality, and that's pretty much what it's like for a white-throated sparrow whose daily bread is earned each and every day in our backyards. The day before I wrote this piece I witnessed a Cooper's hawk swoop from the heavens and clip the fleeing wing of a tree sparrow. He missed his mark by two inches. This gave the recipient a vital second chance to escape. The hawk pounced from a standing position back

towards its prey, again hitting it but not square. When the feathers lifted, a lonely hawk stood rejected while all too many vitally wasted calories burned out through the Krebs cycle<sup>4</sup> – just another day at the office for these two. To some, this may seem like a chance encounter for me to have bore witness. Let me assure you it is not. This is a daily occurrence in my backyard. The duration between attacks may be hours, but if I'm photographing and watching for any period of time this scenario is commonplace.

The advantage that white-throated sparrows, juncos, and tree sparrows have that my comparison didn't accurately portray is that they forage in flocks. Interspecific<sup>5</sup> flocks can be an effective anti-raptor tool that protects the individual. Many eyes make for a relatively safe breakfast but you never know when your lottery ticket is going to be called.

Chickadees and titmice will often be seen at the same time picking seeds off hanging feeders as long as they're placed in the protective cover of trees or adjacent to them. You rarely see them foraging naturally in the open country. The birdseed I've spread out on the lawn does well to attract sparrows, cardinals and jays but rare is the sight of a chickadee or titmouse. Woodpeckers feel the same way. I can put suet out against a tree, and within hours I'll have red-bellied, downy and hairy woodpeckers feasting away. If I place the same suet on a log out in the open they almost never return. Access to sufficient food and cover is no doubt essential in permitting songbirds to survive extended periods of cold weather. Birds are endothermic, (warm blooded like us), and the ones that exist in colder climates have the ability to drop their body temperatures 3 to 6 degrees Fahrenheit as a means of energy conservation. Fluffing up feathers as temperatures decline and changing patterns of blood flow, directing blood away from the body surface, is another efficiency measure deployed by wintering songbirds.

Regardless of the method used to survive, songbirds always gain my respect whenever I chance upon them in winter. Their arduous lives provide a constant reminder to shut my mouth when I think life is tough.

Footnotes: 1: Emberizid—the family of birds that includes sparrows, juncos, and towhees. 2: Bipedal primatic cancer cells—Blaine's term for human beings. 3: Raptor—referring to birds of prey: hawks, owls, eagles and kin. 4: Krebs cycle—biology term referring to a stage of cellular respiration in which pyruvate fragments are completely broken down into carbon dioxide; molecules in the process can be used in ATP formation—simply stated the process by which energy is transferred at the cellular level. 5: Interspecific—ecological term referring to interactions between two different species.

## REMEDIATION AND RESTORATION *(continued from page 5)*

Wood turtles once used the unconsolidated waste piles that were present on the landfill for egg-laying. Green frogs (*Rana clamitans*), southern leopard frogs (*Rana spenocephala*), and wood frogs (*Rana sylvatica*) quickly started utilizing the new wetland habitats that were created. Best of all, land preserved as a result of the project is being evaluated for restoration potential for waning populations of federally Threatened Bog turtles, (*Clemmys muhlenbergii*).

The cleanup on Great Swamp National Wildlife Refuge was a resounding success. Partnering with federal, state, and local agencies, the FWS was able to remediate a toxic waste site, restore functional vernal pool habitat, and create a reptile and amphibian success story!

The Friends of Great Swamp NWR helped the Refuge highlight these accomplishments as part of the May 18, 2004 Restoration and Remediation Event. The event was well attended by private citizens, local, State, and Federal representatives. Many thanks go to the Friends for their help and support.



**RON ORLANDO** *(continued from page 1)*

Ron has entered the Arts for the Parks contest before and has had pictures in the select top 100 winners twice previously. Ron, a high school art teacher, with a daughter in college, has declined attending the awards. This year, the committee personally called Ron and told him it would be worth his while to come. The evening of the dinner, Ron and his wife, Deb, were overwhelmed to see his painting with the other winners displayed against the backdrop of the Grand Tetons. After a very nice cocktail time and dinner, the awards began with the \$1,000 prizes. Ron could relax for a bit. One hour passed and the judges were down to announcing the winners represented in 3 regions of the U.S., East, Central and West, and the Grand prize. When the regional winners were announced and Ron had not yet been called front, Ron knew he had won the \$25,000 grand prize. His painting was projected onto a huge screen behind the podium as Ron received an enlarged copy of his check and a standing ovation.

Nature, in its various forms, has always been an important part of Ron's art. He is pleased when his paintings tell a story. With "Olympic Twins", Ron conveys the majesty of the old growth forests and the bears which make their home in the wild cathedral. It is a story of hope and concern, of history and future.

The Friends applaud Ron on his recent award. A picture of "Olympic Twins" can be seen at the Friends Bookstore & Gift Shop or at <[www.artsfortheparks.com](http://www.artsfortheparks.com)>. A limited edition print of his companion work, "Olympic Portrait" Spotted Owl, is available for sale at the Friends Bookstore & Gift Shop.

**VOLUNTEER HOURS** *continued from page 1*

The hours listed are the total number of volunteer hours you have contributed to the Great Swamp NWR since you first became a volunteer and include hours through the end of fiscal year 2004 (September 30, 2004).

|                               |                        |                        |                       |                           |
|-------------------------------|------------------------|------------------------|-----------------------|---------------------------|
| James Ahlstrom-19.5           | Michael Dillon-36      | Harold Justness, Sr.-4 | George Mironchik-321  | David Schultz-4           |
| Gunnar Anderson-4             | Roger Donat-132        | Ken Kappy-4.5          | Lisa Molinari-536.5   | Jean Sebesta-4,064.5      |
| Joann Apgar-10                | Bill Donnerstag-4      | Pam Kappy-4.5          | Alberta Mount-326     | Marvin Sebesta-858        |
| Assumption School teachers-45 | Rich Dufort-18         | Bob Kastner-78.5       | Kevin Mulvaney-109    | Mark Serafin-4            |
| AT&T-45                       | Frank Duneczky-4       | Cynthia Kastner-62     | Jennifer Murphy-482.5 | Jim Seward-12.5           |
| Pete Axelrod-49               | Joe Dziedzic-4         | Susan Katz-33.5        | Arnold Mytelka-6      | Willard Shearin-387       |
| Bill Ayres-216                | Bill Eckert-6.5        | Jane Kendall-28        | Roz Mytelka-72        | Robyn Sisolak-7           |
| Brenda Ayres-177              | Roger Edwards-165      | Lauretta Koch-90       | Laura Nally-44.5      | Sybil Skowronski-5        |
| Reggie Bateman-4.5            | John Engelhart-30      | Rachel Koch-14         | Carol Newlon-15       | David Smart-19.5          |
| Ken Bliss-11.5                | Joyce Ferris-344.5     | Ryan Koch-7            | Mike Newlon-85        | Gina Smith-33.5           |
| Matt Bocker-22                | Alan Finn-153          | Travis Koch-5          | Lillian O'Brian-5     | Jack Smith-124            |
| Sue Bohler-3                  | Susan Friedman-3       | Mike Korn-480          | Carrie O'Connell-4.5  | Bill Smullen-47           |
| Cathy Borman-165              | Larry Fuhro-14         | Walter Kudron-4        | Edward Ortiz-4        | Dorothy Smullen-276.5     |
| Neil Borman-535.5             | Laura Fuhro-14         | John Kunkel-579.5      | Colin Osborn-5        | Tim Snow-4                |
| Dennis Branden-18             | Robert Furstner-230.5  | Merris Larkin-103      | Rachel Ostrand-10     | Joey Sobers-5             |
| Robert Brandt-381             | Jane George-56.5       | John Leung-3           | Tom Ostrand-27.5      | George Solovay-793.5      |
| Emily Burnett-41              | Spencer George-25.5    | Catlin Liebel-5        | Marie Ozmon-3.5       | Christine Stadtmueller-31 |
| Linda Byland-88               | Patricia Giaimo-22     | Estelle Lord-6         | Dixon Peer-147.5      | Robert Stanton-284        |
| Steve Byland-622.5            | Todd Goodman-4.5       | Ray Lord-55            | Carl Pennella-4       | Eugenia Stefan-4          |
| Jim Caruso-4                  | Charlie Gould-100.5    | Joe Lynch-6            | Louis Pisane-161.5    | Matt Steffens-7           |
| Mike Caruso-4                 | Laurel Gould-1,293     | Diane MacRitchie-10    | Steve Pohling-8.5     | Frank Stillinger-41.5     |
| Joe Casperino-4               | Steve Gruber-102.5     | Neil MacRitchie-10     | Lori Prosser-79.5     | Andrea Strong-4           |
| Corinna Catalano-13.5         | Shirley Hamilton-89.5  | Nancy Maher-19         | Sandra Pruzansky-15   | David Strong-4            |
| Mark Catalano-24.5            | George Helmke-20       | Mark Malfatone-4       | Gail Rapaport-30.5    | Bob Thompson-321.5        |
| Teri Catalano-19.5            | Greg Henderson-15      | David Malinchak-4      | Hanina Rawnicki-14    | Elaine Weyuker-19.5       |
| Jack Clackworthy-18           | Jack Higgins-464       | Dennis Marchioni-4     | Mike Rich-4           | Joanne White-5            |
| Caroline Colton-5             | Chris Hildebrand-5     | Kevin Marino-5         | Charlie Risberg-102.5 | Chuck Whitmore-23         |
| Savannah Coules-5             | Mike Hiotis-24         | MaryAnn Marshall-5     | Edythe Risberg-114.5  | John Wilmot Jr-42         |
| Betsy Coyne-13.5              | Leo Hollein-710        | William Marshall-4     | Andrew Rivera-4       | John Wilmot Sr-307.5      |
| George Coyne-27               | Wayne Horner & sons-12 | Beth Matyas-4.5        | Kareen Rosenberg-25   | Pam Wilmot-56.5           |
| Jim Cullen-543                | Colleen Hurford-5      | Mitchell McCann-20     | Blaine Rothausen-69   | Barbara Wingel-235        |
| Jim Detizio-526.5             | Dorian Jakubek-5       | Ann McCord-16.5        | Mary Ann Sawyer-33    | Carl Woodward-108         |
| Betty Ann Dhein-10            | Stan Jakubek-26        | Don McCord-11.5        | Deb Scala-56.5        | Kathy Woodward-540.5      |
| Steve Dhein-20                | Louise Jensen-150.5    | Mark McGlynn-3         | Joe Scala-6.5         | Oliver Young-16           |
| David Dietz-9                 | Ken Johnson-15         | Alexis Meleo-5         | Nancy Schenck-204.5   |                           |
| Kathi Dillon-21               | Mary Johnson-8.5       | Frank Miller-4         | Judy Schmidt-1,647.5  |                           |
|                               | Harold Justness, Jr.-4 | Jay Mills-37.5         | Mary Ann Schmidt-5    |                           |



# 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 \_\_\_\_\_

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)*



### GREAT SWAMP NWR INTERNSHIP PROGRAM

#### SPONSORED BY FRIENDS OF GREAT SWAMP NATIONAL WILDLIFE REFUGE

|                             |  |
|-----------------------------|--|
| <b>Position Title:</b>      | Refuge Assistant Intern  |
| <b>Number of Positions:</b> | 1  |
| <b>Salary</b>               | \$200.00 per week stipend; dormitory housing available   |
| <b>Location:</b>            | Great Swamp National Wildlife Refuge, Harding Township, NJ   |
| <b>Dates of Employment:</b> | Starting dates: Summer - 2005  |
| <b>Qualifications:</b>      | Applicant must be at least eighteen years of age, have the ability to work with minimal supervision, possess a valid driver's license, and have good physical ability  |
| <b>Duties:</b>              | <b>Summer:</b> Assisting with refuge maintenance such as boundary inspection, lawn care, sign replacement and misc. other duties - 50 %, biological control of Purple Loosestrife & other invasive plant species, Great Blue Heron survey, duck banding, and Bluebird nest box checks - 25 %, office work such as assisting with visitors inquires, computer use and misc. duties - 25 % |
| <b>How to Apply:</b>        | Send letter of interest, resume, and 3 references with phone numbers or e-mail addresses   |
| <b>Closing Date:</b>        | March 1 (Or until filled)  |
| <b>Contact Person:</b>      | Tom McFadden   |
| <b>Address:</b>             | Great Swamp NWR, 241 Pleasant Plains Road, Basking Ridge, NJ 07920   |
| <b>Telephone:</b>           | 973-425-1222 Ext. 14   |
| <b>E-mail:</b>              | tom_mcfadden@fws.gov   |

#### STAFF NOTES from Tom McFadden

Larry Balsamo was promoted from Maintenance Worker to Engineering Equipment Operator on April 4, 2004. A long deserved promotion! Congratulations Larry!

Colin Osborn was hired on June 7, 2004 for a one-year appointment as a Biological Technician. Colin was one of our Interns in 2002 and has been waiting ever since to work for the U.S Fish & Wildlife Service!



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**

**JANUARY 2005**

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

