



the Swamp Scene

friends of great swamp national wildlife refuge

ISSUE SEVENTY
NOVEMBER 2022

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Lenape National Wildlife Refuge Complex
(Great Swamp NWR,
Wallkill River NWR,
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IT'S BEEN A BUSY FALL FOR FRIENDS—TAKE A LOOK!



Fall Festival is back! On a beautiful September 24, 544 visitors, volunteers and staff enjoyed the 21st annual Fall Festival—the first since Covid struck. There was hoverball and our hand-made Jenga game. Plus archery, river seining, Partner exhibits and, of course, free hot dogs on the grill with the first of the fall apples. *Photos by Dave Katz*



Volunteer Terry Kulmane reads to the youngest group of children at Josephine's Place.

Friends organized a nature book reading for families at the only women's shelter in Elizabeth, NJ—Josephine's Place. Twenty children, along with their parents, came to the book reading. The group was joined by staff from the Great Swamp NWR and the Groundwork Elizabeth Green Team youth. The event also included a guided bird walk at Phil Rizzuto Park in downtown Elizabeth. The weather and birds cooperated for this special family-friendly event.



Sanofi employees and refuge volunteers after completing the split rail project. Thank you!

We love corporate work groups! They are energetic, enthusiastic, and enjoy a day away from the office—and they get so much done! On October 19, 33 employees of Sanofi US from Bridgewater, were joined by Friends volunteers to tackle three projects—spreading stone dust, building a split rail fence, and sprucing up the Robbins Platform for fall visitors. All projects were completed and everyone enjoyed lunch provided by Sanofi. Their efforts resulted in significant improvements at Great Swamp.

FRIENDS PRESIDENT TOM GULA IS SELECTED TO ATTEND NATIONAL FRIENDS ACADEMY

By Tom Gula, President, Friends of Great Swamp National Wildlife Refuge

As the new president of our Friends group, I knew I had a lot to learn about the duties and responsibilities of the position. It certainly has been a sometimes challenging but always interesting experience, learning something new almost every week. This past summer a special opportunity arose to see just how much there was to learn. I was privileged to be selected as one of 24 Friends volunteers from across the country to attend the week-long Friends Academy training, held in late July at the National Conservation Training Center (NCTC) in Shepherdstown, West Virginia.

The Friends Academy had not been held since the beginning of the pandemic. Several other past and present members of our Board had attended the Academy or NCTC, and they all had one thing to say: wait until you see the place. They were not wrong. After a three hour drive from New Jersey, I arrived at NCTC, situated on the hills just west of the Potomac River, a beautiful natural setting, with a stunning campus. So began an intense week of exposure to new ideas, stimulating discussions, talks from a variety of presenters, and I haven't even mentioned the great food yet—I'd heard about that too before I left. No wonder the event had not been attempted on Zoom in 2020 and 2021.

The week began with introductions and an overview of the challenges and opportunities for learning that would fill seven hours a day for the next five days. Fortunately, there was time to walk the beautiful grounds that surround the cam-



Graduates of the 2022 Friends Academy.
Friends President Tom Gula is in the light blue shirt, far left.

pus (butterflies and bluebirds everywhere!), and relax at night with more discussions among the other Academy participants. Making connections with many of them, sharing ideas and best practices — even how to run good meetings (I'm still working on that one). Presentations on the Urban Wildlife Conservation Program, rebranding campaigns, using social media, even how the Federal budget process works—and that's not even half the topics covered. I certainly left with a better understanding of the important role that Friends groups have in the National Wildlife Refuge System. Going forward, I hope I can use that knowledge in positive ways here at our favorite National Wildlife Refuge, the Great Swamp.



ADVANCED VOLUNTEER TRAINING RESUMES



After several years of Covid restrictions, Friends are again offering in-depth training sessions for volunteers. This year, Complex Intern George Perez presented a comprehensive and fascinating workshop on reptiles & amphibians for 15 volunteers. Attendees learned about turtles, snakes, frogs and salamanders that may be found on the refuge, as well as many interesting facts and life cycle information.

This is a great learning opportunity for volunteers and helps in their interactions with our visitors. Each attendee received a "Reptiles & Amphibians bar" for their Swamp Nature Guide pin. Here George Perez presents volunteer Judi DiMaio with her bar. (Photo by Robert Lin)



RESIDENTS AND MIGRANTS—SAFETY FOR ALL BIRDS AT GREAT SWAMP NWR

By George Perez, *Lenape Complex Intern*

The environment's best interest has always taken a backseat to the aesthetically pleasing views or ease of projects that humans have conducted over the last hundred plus years. Whether it be building new apartment complexes, shopping malls or airports, the nature that is living in that specific area has usually not been placed ahead of our "needs". Not until some scientists started realizing the impacts caused by humans did laws start to form and be put in place to allow species to have rights of their own.

Besides trees, probably the most overburdened group of organisms that have been affected by human interaction has been birds. There are many threats—habitat destruction, pesticides killing their main food sources, and cats, but collisions with windows is a hugely significant threat, with millions of birds dying each year as a result of crashing into windows. With the most recent spotted lanternfly infestation, birds now have to deal with sticky traps stuck to trees as well.

With all of the bad things happening to birds, there are still some good people out there trying to make a difference. At Great Swamp National Wildlife Refuge, we are starting a bird safety initiative. It began with a survey conducted in 2021 on the seven buildings owned by the refuge, including maintenance shops, offices, dormitories and the busy visitor center. There is a lot of human and bird traffic in these areas. The survey focused on the hazards presented by the buildings to the hundreds of bird species we have at the refuge.

The amount of window coverage on buildings was the main focus of the survey. The visitor center was the most dangerous for birds, with windows mak-

ing up over 50% of the building. Large and small windows reflect the habitat outside causing birds to crash into the glass, breaking wings and sometimes causing death on impact. Volunteers have seen birds crash into the windows, from small birds like finches to large birds like hawks.

To address this problem, refuge staff have been applying Feather Friendly bird collision prevention materials to the windows of refuge buildings. Feather Friendly is a pattern of markings spaced two inches apart applied to the exterior of the windows. This reduces surface reflections that are so dangerous to birds yet has minimal impact on the view—the windows just appear to have a lot of dots.

The project started with the dormitory building on New Vernon Road, then moved to the visitor center where all of the windows were treated, utilizing some heavy-duty equipment to reach the upper windows. Plans include completing installation at Great Swamp and then moving to buildings in the other refuges in the Lenape Complex.

Feather Friendly is also available for residential buildings. More information may be found at <featherfriendly.com>.



Photo top: Jason Vassallo and George Perez installing Feather Friendly at the dorms.

Photo bottom: Heavy duty lift equipment helped staff reach the upper windows at the visitor center



LET'S WELCOME NEW STAFF TO THE LENAPE NATIONAL WILDLIFE REFUGE COMPLEX

There are a lot of new faces around Great Swamp NWR. US Fish & Wildlife Services employees are generally stationed at a specific refuge within the Lenape Complex but are often found working at any of the refuges where they are needed. So, these days, you are likely to see these new employees at Great Swamp NWR. Here they are introducing themselves.

Jared Green is the new Visitor Services Manager for the U.S. Fish & Wildlife Service at the Lenape National Wildlife Refuge Complex. A native of Nazareth, PA, he pursued undergraduate and graduate degrees in wildlife management at the University of Connecticut and the University of Georgia, respectively.

Jared's past work experience includes several seasonal positions with the National Park Service in California and Wyoming, as well as a Wildlife Refuge Specialist the last six years with the U.S. Fish & Wildlife Service at the Eastern Massachusetts National Wildlife Refuge Complex and the Lenape National Wildlife Refuge Complex.



Jared releasing a head-start Blanding's Turtle at Assabet River National Wildlife Refuge, MA



Daniel Zabransky is the new Administrative Officer-Budget Tracker stationed at Great Swamp NWR and serving all of the Lenape Complex refuges as well as John Heinz NWR at Tinicum (PA).

"I was born and raised in a tight knit family in Rockland County, NY. We didn't have a lot of money, but we did have each other. After high school, I wanted to look smart in dress blues, so I knocked on the Marine recruiter's

door and the rest was history. It was the best decision of my life. The Marine Corps made me who I am. I did four years active duty, serving in Hawaii, Japan, and South Korea among other places. I was an Aviation Supply Specialist, and I served in units MALS-24 and HMH-463.

After my service, I went to Rockland Community College. I decided to transfer to Penn State, and I graduated in 2013 with a BA in History. I am a firm believer in education, and I feel it's never too late to learn something new. I moved to Denver, Colorado, where I would begin my federal service at the Veteran's Administration where I adjudicated claims for veterans and distributed medical supplies. I also served in the acquisition office of the Bureau of Reclamation.

Colorado was a great experience, but Covid changed everything. I wanted to be a little closer to home and learn new skills, so I accepted a position as

a procurement specialist at Edwin B. Forsythe NWR in South Jersey. I learned what the U.S. Fish & Wildlife Service is all about. I greatly appreciate what our mission encompasses, including conservation and community outreach.

Now I am stationed at Great Swamp as your new Administrative Officer. I am very appreciative of everyone's support while transitioning to my new role managing the budget of the Lenape Complex.

I am passionate about public service and the study of history. I am interested in our former President Theodore Roosevelt (he created the refuge system), and I also have interests in foreign policy, European and East Asian history. I would love to learn more about the refuges that make up the Lenape Complex and to help contribute to our mission.

Please feel free to stop by my desk and say hello."

WELCOME NEW STAFF *(continued)*

Biotechs Landon (left) and Summer (right)

Hello! My name is Landon Lewis, and I am one of two Invasive Species Biological Technicians for the Lenape Refuge Complex, stationed at Cherry Valley NWR. I started working for the complex in 2020 as a seasonal Biotech. After two successful seasons, I was rehired at the start of 2022 as a term employee. Throughout this year, I have been able to expand my role in the Complex, meet and work with more of our great staff members and volunteers, and continue to learn about how the Service manages land to accomplish our goals. Before working for U.S. Fish & Wildlife Service, I spent one season right after college with a local non-profit, Wildlands Conservancy, and then about a year working for the National Park Service at Valley Forge National Historical Park.

If you see me around the Great Swamp, I'll most likely be working with my Biotech counterpart, Summer Malone, and the Strike Team doing our best to control invasive plants on the refuge.

In my free time, I like to stay active as much as possible. It might be at the gym, on a hiking trail with my dog, or on a local basketball court—it all depends on the day. While relaxing at home, I enjoy spending time with my fiancée, reading, watching movies, and (very poorly) playing my bass guitar.

Hey everyone! I'm Summer Malone, one of the Biological Technicians in the Lenape Complex. I graduated from The State University of New York, College of Agriculture and Technology at Cobleskill in 2021 with a B.S. in Wildlife Management. I studied an array of species and learned different management tools that I get to implement at work every day. As part of my undergrad, I was the intern for the complex during the summer of 2021, where I surveyed native pollinators here on our refuges. You most likely bumped into me a time or two. Now as an employee, I am stationed at Wallkill River NWR but I work throughout the complex. My primary job is controlling invasive plant species in order to give native plants a chance to thrive. But I also assist our Biologist in different types of studies on our refuges. Outside of work, I enjoy taking my dog on little adventures and admiring the beauty that New Jersey has to offer!



Hello all. My name is Lachlin Robertson and I am the new Wildlife Refuge Specialist stationed at Wallkill River National Wildlife Refuge. My job consists of a mixture of visitor services, maintenance, and biological work. I previously worked with the U.S. Fish & Wildlife Service as a wildlife technician at Kofa NWR in Yuma, Arizona. There I participated in wildlife surveys, game camera monitoring, hauling water to wildlife tanks, as well as endangered Sonoran pronghorn recovery, working at the captive breeding pen within the refuge. Most recently I worked as a habitat technician with the U.S. Fish & Wildlife Service Partners Program in Vermont, where I worked on private lands to restore riparian habitat through tree planting, invasives removal, and habitat monitoring.

I enjoy hiking and observing the plants and wildlife found along the trail, particularly through bogs and swamps. I was born in New Jersey and fell in love with the field of natural resources while growing up by adventuring in the forests near my house. I am so glad to have the opportunity to come back and work for a great refuge. If you ever see me in the field don't be a stranger. Talking to volunteers and visitors is a perk of the job and I hope to meet you all!

THE GREAT SWAMP GHOST

Story by Jack Donohue; Photo by Robert Lin

"Tommie, this morning we're going to look for a ghost."

"But grandpa, I'm afraid of ghosts."

"Not a real ghost, Tommie. We're going to look for the *gray ghost*. It's the male northern harrier, one of the raptors found at the Great Swamp National Wildlife Refuge."



"Well, I guess that's OK, grandpa, but why is he called the gray ghost?"

"Because he is silver-gray in color, and he has a quiet, ghostly way of hunting very low to the ground."

"Wow, but how will we find him? Isn't the Great Swamp a big place?"

"Yes, the Great Swamp is about 8,000 acres in size, but the gray ghost hunts in open areas like marshes and fields. That's where we'll look for him."

They parked at the Helen C. Fenske Visitor Center in the early morning light.

"The best place to see a northern harrier is at the 'Overlook' on Pleasant Plains Road, Tommie, and the female and an immature harrier are much more common than the gray ghost. However, I'm going to take you to a place where I saw the gray ghost hunting earlier in the week."

Tommie and his grandfather walked to the edge of a large open marsh and waited.

"The northern harrier doesn't have a regular hunting pattern, Tommie, so we'll have to be very lucky today to see him."

It wasn't long before Tommie's sharp, young eyes spotted something.

"There's a large bird coming straight towards us, grandpa, but it's still a long way off and it's flying very low to the ground."

"You're right, Tommie," his grandfather said as he looked at the raptor through his binoculars, "but it's definitely a northern harrier."

"How can you be so sure, grandpa?"

"There is only one other raptor that hunts so low to the ground and that is the short-eared owl, but the short-eared owl has a bulky body and a big head, and this raptor is sleek with very long, narrow wings. Plus, this raptor is holding its wings in a shallow V-shape. That's a trademark of the northern harrier."

"And is it the gray ghost, grandpa?"

"Yes, it is because the female harrier is dark brown in color and this raptor is silver-gray. It's definitely the gray ghost."

They watched as the gray ghost glided toward them. He was about twelve feet above the ground and his flight appeared almost lazy to their eyes. Its wing-beat was loping and regular, and it had a unique cadence. The downward stroke was punctuated by a crisp emphatic snap.

"He rocks back and forth like a turkey vulture, grandpa."

"Absolutely correct, good eyes Tommie. You're getting to be a great birder."

When the gray ghost turned sideways, they got a good look at his white under-body, jet-black wingtips and long, narrow tail.

"He has a face like an owl, grandpa."

"Yes, he does Tommie. The northern harrier's facial disk directs sound to its ears, so in addition to his keen eyesight, he also hunts using his exceptional hearing."

(continued on page 8)

THE GREAT SWAMP GHOST *(continued from page 7)*

Tommie and his grandpa watched the gray ghost as he adjusted his flight with intervals of pull-ups, wing-overs, drop-pounces, abrupt turns and descents to within inches of the ground. He was constantly analyzing the ground for any movement or sound that might indicate an easy meal of a small mammal, reptile, amphibian or small bird.

"The gray ghost looks like he is dancing in the sky the way he stalls in the air, drops down and raises up effortlessly, grandpa. He is so acrobatic; he belongs in a circus."

"Funny you should say that, Tommie. *Circus hudsonius* is the northern harrier's scientific name."

The gray ghost made one final sharp turn away from them displaying a large white patch on his rump, a definitive feature of the northern harrier. Then he cruised past the edge of a nearby woods and was gone from sight.

"Well, he's gone to hunt in another part of the Great Swamp, Tommie. So, let's go home and have a late breakfast."

"OK grandpa, but can we come back tomorrow?"

"We can come back this evening, Tommie."

"Why this evening?"

"The best time to see a northern harrier is at dusk. He loves to hunt at dusk."

"Great grandpa. We'll come back after dinner. The gray ghost is the kind of ghost I'd love to see again!"



*Nature has not only given us life, but can also give us reasons for living positively:
Curiosity, wonderment, imagination, and knowledge are just a few of the ways
Nature can beckon us.*

~Mike McDowell

DUCK TRAPPING AND BANDING ARE CANCELLED IN 2022

By *Leo Hollein, Volunteer*

For the second consecutive year, duck trapping and banding during the summer were cancelled at the refuge. Beginning in the summer of 1969, trapping and banding of ducks that nest in the refuge (wood ducks and mallards) became an annual event. This year's cancellation is the first known multiyear break in trapping.

In 2021, Pool 1, the largest impoundment in the refuge, was drawn down to permit seasonal grasses to grow and provide food for migrating ducks in the fall. Beginning in 1969, five impoundments with low level dikes and water control structures were constructed to provide wildlife habitat. Only Pool 1 has had sufficient open water for trapping ducks since 2001. The lack of water in 2021 eliminated duck trapping completely.

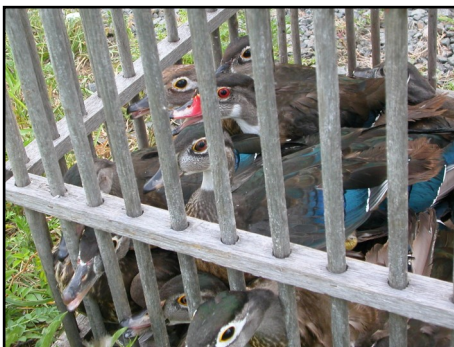
Avian viruses also contributed to the cancellation of the 2022 banding season. Low pathogenic avian viruses are known to exist in wild bird populations across the globe, including America. In 2009 refuge staff member Tony Cullen led the effort to swab trapped ducks to test for various avian influenzas. Samples were taken from the throats and bottoms of 30 ducks. The samples were refrigerated and sent for analysis. None of the samples contained the target H5N1 virus. The analyses, however, found some less harmful avian viruses.

In the past, highly pathogenic avian viruses were considered the primary concern for domestic poultry. Tens of millions of domestic poultry, raised in crowded conditions that aided the spread of the virus, have been culled. In 2022 a highly pathogenic virus variant HPAI (H5N1) was affecting both wild birds and domestic flocks. The virus evidently can be transmitted between domestic flocks and wild birds. Waterfowl such as ducks and geese as well as gulls are considered primary hosts

for the virus. Raptors and vultures that feed on waterfowl are often infected.

Over 100 species of wild birds have tested positive for the virus and many have died. In June three bluebird clutches of young died in their nest. Usually, death from starvation or cold occurs in April or May. These late season deaths may have been the result of avian flu. No samples were sent for analysis. The current avian flu variant poses a very low risk to humans.

The photo below shows the wooden holding pen for wood ducks awaiting banding. These ducks were trapped and transferred from the trap to a pen for easier access. The crowding of ducks in the pen increases the risk of



Wood ducks (eclipse plumage)

transmitting the virus from one duck to the entire group.

The Raptor Trust is an avian rehabilitation facility operated adjacent to the refuge. They receive many injured or juvenile wild birds requiring treatment before they can be self-sustaining and released. They also must monitor incoming patients for avian flu. If avian flu is detected at The Raptor Trust, the facility will be subject to quarantine and unable to receive new patients.

Discontinuing banding activities which involve capture and handling of birds provides the greatest mitigation against the spread of the highly pathogenic



Volunteer Tom Gula banding wood duck

virus. It avoids possible contamination of The Raptor Trust facility.

Banding data is very useful. Banding, and subsequent recovery of bands, provides data on lifespans, dispersion, population, reproductive success and migratory patterns. Banding data is used to estimate what portion of the duck population is harvested during hunting seasons. This in turn helps guide waterfowl management decisions as well as measuring their impact. Bands from wood ducks banded at the refuge have been recovered all along the Eastern seaboard from New Brunswick, Canada to Florida. However, most are recovered in New Jersey and adjacent states.

Hopefully the HPAI (H5N1) variant will decline in time so that important banding work can resume. However, there is uncertainty regarding its behavior. In some cases where the virus has been absent, banding could take place with proper PPE protection to avoid transmission. We'll have to wait and see if summer duck trapping resumes in 2023.



THE BOCKOVEN TRAIL—NAMED FOR FIVE GENERATIONS OF FARMERS

Compiled by Laurel Gould, Friends of Great Swamp NWR



Old photo (date unknown) of the Bockoven farmhouse on Pleasant Plains Road, now the Helen C. Fenske Visitor Center

The Bockoven Trail at the refuge's visitor center is a lovely half-mile walk through woods and fields, with a platform overlooking a vernal pool. This trail was named in honor of the Bockoven Family, early immigrants who settled here and farmed this land for over a century.

The history of the Bockoven family dates back to 1734 when, the story goes, three young brothers left Alsace-Lorraine for America, stowing away in a "bake-oven" on the ship. Not long after sailing, they were discovered in their hiding place and became known as the "bake oven boys". They chose the German equivalent "Bockoven" as their surname when they arrived in America.

The first six acres were purchased around 1800 by George Bockoven and his son Abraham. (We will see that "George" was a very popular family

name.) The nearby Passaic River was used as water power for their sawmill. As the demand for lumber increased, the Bockovens purchased more land to clear. In addition to lumber, they also burned knots and stumps to sell as charcoal. When the timber supply was exhausted, the family turned to farming. Over the years they grew a variety of grain crops and raised livestock

The farmhouse was built between 1887 and 1903, although there is some evidence that the house had originally been erected closer to the Passaic River and may have been moved to the present site.

In 1944, George Mills Bockoven (known as Mills) inherited the farm from his father George A. Bockoven. Mills married Edna Baird and together they farmed 235 acres raising sheep

and 100 rolling acres of corn, wheat, hay and oats. Edna died in 1983 and Mills continued farming the land until he died in 1986 at the age of 74, without family heirs.

Mills was very active in the farming community at the local and state level. In 1986, he received the Century Award, presented annually by the N.J. Agricultural Society to families that have successfully maintained the same farm for more than a century.

After Mills died in 1986, the house was sold to Lynn and Barry Jason and extensively renovated and expanded, while maintaining the historic feeling and appearance. The riding area was constructed during this time. In August of 2004, the U.S. Fish and Wildlife Service acquired the property from owner Lynn Kurdzialek, for the purpose of building a long-awaited visitor center.

The farmhouse has been transformed into a state-of-the-art facility to welcome the thousands of visitors who come to Great Swamp NWR each year.

So, as you walk the Bockoven Trail, think about the history of this land. How fitting that the Bockoven name remain associated with the property that they farmed for five generations.



There have been some changes, but basically today's visitor center still looks the same!

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
32 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

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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.

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THE SWAMP SCENE NOVEMBER 2022

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.