



the Swamp Scene

friends of great swamp national wildlife refuge

ISSUE FIFTY-SEVEN
JULY 2018

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BOG TURTLE RECOVERY EFFORTS AT LENAPE NWR COMPLEX

By Laurel Gould, Volunteer; Bog Turtle Photos by Colin Osborn, Fish and Wildlife Biologist



We see a lot of turtles at Great Swamp National Wildlife Refuge—painted, snapping, spotted and box are fairly common, but most of us have never seen a bog turtle—with good reason. It is among the smallest turtle in North America (3 to 4 inches full grown), secretive, and it spends much of its time concealed in the mud or hiding under wetland vegetation. Once common, it has been listed as endangered in New Jersey and Pennsylvania since 1974 and in 1997, it was Federally listed as threatened.

As is so often the case, habitat loss is the key reason why the bog turtle is endangered. This species is dependent on open, spring-fed wet meadows. Development and crop agriculture have been major factors in its decline, but the habitat is also degraded by the successional growth of trees and by the invasion of non-native plants. Bog turtles have many predators and they are also prized by the illegal pet trade.

One of the responsibilities of the U.S. Fish and Wildlife Service, in administering the Endangered Species Act, is to protect Federally threatened and endangered species and pursue their recovery. In the Lenape National Wildlife Refuge Complex, three of the four

refuges support bog turtle populations—Great Swamp and Wallkill River in NJ and Cherry Valley NWR in Pennsylvania.

Current conservation efforts in the Complex are focused on habitat management, population monitoring, protecting nest sites, acquiring land, and working with neighboring landowners.

Bog turtle recovery continues to be a primary focus within the Lenape NWR Complex. New property with potential bog turtle habitat has been acquired

at Cherry Valley NWR. Staff and volunteers remove invasive species from active, historic, and potential bog turtle sites as well as removing young red maples and sweet gums that threaten the open wetland habitat that bog turtles require. Today, the bog turtle populations in the Lenape NWR Complex are stable to increasing. With continued research, education, and habitat improvement, the goal is to bring back and secure a thriving population of these smallest of reptiles.



Bog turtle hatchlings

BOG TURTLE IS NJ STATE REPTILE

On June 18, thanks to the persistence of elementary school students, Governor Phil Murphy signed legislation designating the bog turtle as the state reptile. The students “*hope this designation will increase awareness to restore the habitat and help the species thrive.*”

We hope so too!

PRESIDENT'S CORNER

By Joe Balmierczak, President, Friends of Great Swamp National Wildlife Refuge



Summer is usually the busiest time of the year at Great Swamp NWR and this year has been no exception. Since around Memorial Day, six interns have joined the Friends volunteers and staff to work on many of the Refuge's summertime projects. One of these is the increased effort during the spring and summer months to control invasive plants. Our turtle intern, Kelsey Garner, is quite busy monitoring the progress of the wood turtle population and getting ready to collect newly hatched wood turtles to be part of the wood turtle head-start program.

It is always busy at the Wildlife Observation Center (WOC) this time of year as our herpetological inhabitants are

very active. Young children, many from urban areas, have been taking guided walks at the WOC and searching for frogs and turtles, while Friends volunteers point out all the wonders of nature. Also busy at the WOC have been the volunteers who are constructing a 600-foot boardwalk over the last unimproved section of the trail to the Friends blind. The cost of this construction (approx. \$12,000) is being fully funded by the Friends. This part of the trail has been closed to visitors during the construction period; please check the Friends website and Facebook for updates on the boardwalk status.

Probably the busiest of all of us this time of year are the nesting birds. As of July 6, the team of volunteers who monitor the 133 nest boxes in the Refuge have recorded 59 bluebird and 61 tree swallow nestings that have resulted in the fledging of 113 bluebirds and 218 tree swallows. Speaking of being busy, one tree swallow nest had nine eggs (a record for the Refuge) and all nine eggs hatched and all hatchlings fledged. Think about how busy that pair of tree swallows must have been to feed nine hatchlings for over two weeks in order for all to successfully fledge. In addition, volunteer Jim

Mulvey and two interns have been monitoring the purple martin gourds at the Visitor Center and so far have tallied 74 purple martin hatchlings. There is a nest cam in one of the gourds and visitors can watch the live action as the young birds grow and mature.

The volunteers slowed down to relax on the first Saturday of June at the annual outdoor Volunteer Recognition Event at the Helen C. Fenske Visitor Center. Mother Nature cooperated by serving up a lovely late spring evening. Jonathan Rosenberg and Deputy Refuge Manager Lia McLaughlin joined the Friends board in thanking the many volunteers for over 14,200 hours of service in Fiscal Year 2017. I wish to extend my thanks to all the volunteers who have donated their time and to those who helped to organize this event which over 100 volunteers and staff attended.

The summer is a great time to enjoy a hike along some of the 8.5 miles of trails in the Refuge's Wilderness Area or a stroll down the boardwalks at the WOC. I hope that you find time to schedule a visit to Great Swamp NWR during the Refuge's "busy" time of year.



THE LENAPE NATIONAL WILDLIFE REFUGE COMPLEX

It was a real mouthful for Mike Horne when asked to introduce himself.

Hi.

I'm Mike Horne, Project Leader of Walkkill River National Wildlife Refuge, Cherry Valley National Wildlife Refuge, Shawangunk Grasslands National Wildlife Refuge, and Great Swamp NWR. By that time, the person he was talking to had moved on!

Now this group of four refuges has an official name—Lenape National Wildlife Refuge Complex. A refuge Complex is an administrative unit under the management of a Project Leader or Refuge Manager. This arrangement facilitates the sharing of resources, expertise, and equipment. The Lenape Complex includes four refuges in three states (New Jersey, New York, and Pennsylvania), and includes four Friends groups, one at each refuge.

A common theme among these four refuges is that they were all part of the tribal lands of the Lenape Nation of Native Americans. With agreement from the Lenape, we are proud to use the name of the original conservationists of these lands.

Giselle Smisko and the Friends of Walkkill River NWR designed a logo (with a bog turtle!) and we have a new brochure about the Complex, special tote bags and logo pins. The Friends of these four refuges have been holding joint meetings of their Officer groups to swap ideas, discuss best practices, and explore ways to share resources across the Lenape National Wildlife Refuge Complex.



A NEW BOARDWALK AT THE WILDLIFE OBSERVATION CENTER

Your membership dollars and donations are funding a new boardwalk at the Wildlife Observation Center. When completed, the entire facility will be ADA compliant. This is quite a project—615 feet of boardwalk, over 1/2 mile from the staging area. Check it out.



Left: May 14, 2018—Lumber is delivered; saws are set up and volunteers cut each board into required lengths for the boardwalk construction.

Right: Cut-up sections are then carted by volunteers to the work site, over 1/2 mile away.



Left: The base is first. Twenty-foot long “stringers” are positioned, leveled, and fastened together. Bends in the trail are a real challenge. George Solovay (far left), project coordinator, consults with his team.

Right & Left Below: As the base is completed, the decking is added.



This \$12,000 project is being funded by the Friends; the costs are for lumber. The boardwalk is being planned, designed, and constructed by volunteers with some much appreciated assistance from Dave Miller, GSNWR Heavy Equipment Operator.

615 feet of boardwalk requires a lot of pieces of decking. Each decking board is 5 feet long and 6 inches wide. You do the math!

Not quite half way as of July 6, but it is looking good! The project should be finished this summer. What's next? A project to refurbish and raise the Friends Blind is being discussed. Stay tuned.

MEET THE INTERNS

We are so fortunate to have six fabulous interns on board this year. Hear what they have to say about themselves ... and about their experiences at Great Swamp and other refuges in the Lenape NWR Complex.

BETHANIA ROCHA

Student Conservation Association Intern; Sponsored by U.S. Fish & Wildlife Service.

My name is Bethania Rocha. I was born in Manhattan and moved to Roselle Park, NJ before starting school. I graduated Magna Cum Laude from Kean University in May, 2018 with a B.S. in Environmental Biology and a minor in Psychology. I would like to continue working in a field setting and be able to travel while doing so. I was interested in working at the Great Swamp because I wanted the opportunity to help out at a refuge near my home. My experiences at the Refuge have been very exciting so far. The most challenging and unexpected experience so far has been goose banding. What I enjoy most so far is pulling water chestnut because I enjoy being out on the water. I look forward to the rest of my summer at the Great Swamp NWR.

KELLY VERA

Hispanic Access Foundation, Sponsored by U.S. Fish & Wildlife Service

My name is Kelly Vera and I am from Toms River, NJ. I am a recent graduate from William Paterson

University, majoring in English Writing with two minors in Environmental Science and Criminal Justice. I hope to work for the U.S. Fish and Wildlife Service and eventually become an active writer for National Geographic. I interned with Great Swamp NWR and Walkkill River NWR during the summer of 2017 and decided to return because of my past experiences and admiration for the environment. This internship has provided me with hands-on experience and overall amazing connections with friends and wildlife. I hope that I am able to continue to grow as an intern and am able to continue to connect people with wildlife to help conserve and protect it. During my free time, I am actively writing, reading or hiking!

DANIEL CORREA

Hispanic Access Foundation, Sponsored by U.S. Fish & Wildlife Service

My name is Daniel Correa and since last year I have been the Hispanic Access Foundation intern at Great Swamp NWR and the Lenape National Wildlife Refuge Complex. I am 24 years old. I was born in Medellin, Columbia and now live in Old Bridge, NJ. I graduated



2018 Interns (l to r) Daniel Correa, Kelly Vera, Bethania Rocha, Blair Gomes, Kelsey Gardner, Carmine Colasurdo (Photo by Marilyn Kitchell)

from Stockton University where I earned my B.A. in Environmental Studies with a minor in Latin and Caribbean Studies. I became interested in interning at Great Swamp NWR because I believed that this experience would help me apply everything that I learned in school to real life situations. I would also be able to spend my days outside doing field work and helping with refuge projects, and I was interested in exploring a new part of New Jersey that I had never seen before.

I am still deciding where I would like to work, but for now I am thinking of working for state governments

and focusing on water quality and its impact on urban communities. Aside from thinking about my future job, I also have a dream of traveling and exploring the U.S. and visiting as many Latin American countries as possible.

My experience at Great Swamp NWR has been amazing. Every day there is something new to do, such as removing invasive plant species, working with our urban partners and helping out with Refuge events. I would also like to thank Hispanic Access Foundation, U.S. Fish and Wildlife Service and Friends of Great Swamp NWR for allowing me to intern

here and for all the great times that I had this past year.

KELSEY GARNER

Sponsored by Friends of Great Swamp NWR

I was born in St. Louis, Missouri and raised in Houston, Texas. I recently obtained my B.S. in Wildlife and Fisheries Sciences from Texas A&M University with an emphasis on wildlife ecology and conservation biology. I enjoy spending my free time hiking, travelling, herping, and taking photos of wildlife. My love of herps and past work with turtles drew me to this job, working with the wood turtles at the Great Swamp.

(continued on page 5)

MEET THE INTERNS *(Continued from previous page)*

As a biological intern at the Great Swamp my efforts are focused on wood turtle conservation, invasive species management, and maintaining the Refuge. I have enjoyed taking part in protecting the turtle nests and observing the many reptiles and amphibians that inhabit the swamp. Tracking the wood turtles and observing their weekly movements is surprisingly interesting. The most challenging part of my job is tolerating the plethora of mosquitos! My career goals are focused on conservation of herpetofauna, although I enjoy working with all wildlife. I hope to pursue a Master's degree in the near future and continue working with wildlife.

BLAIR GOMES

Groundwork Elizabeth; Sponsored by Friends of Great Swamp NWR

I was born and raised in Port Reading, NJ. I'm a semester away from graduating from Kean University with a B.S. in Environmental Biology and minor in Statistics. Once I graduate from Kean, I will be going to graduate school to gain a Master's Degree in Marine Science. In the future, I would like to work in a lab setting with a focus on helping marine biodiversity and conservation. One of my goals is to move out of New Jersey and help sea turtle populations throughout the United States. For my senior capstone project, I worked alongside Groundwork Elizabeth where I met Jessica Frago, who interned at the Great Swamp NWR last year. She told me of the fun experiences she had which got me to apply this summer. Since starting back in May, I have had the opportunity to check blue bird boxes, purple martin gourds, go goose banding, canoeing to remove water chestnut, other invasive species removal opportunities, and lots of trail maintenance. I'm very happy I was given the chance to intern here and I can't wait to see what the rest of the summer has in store for me.

CARMINE COLASURDO

Groundwork Elizabeth; Sponsored by Friends of Great Swamp NWR

I was born in Manhattan, NY, but was raised in Bloomfield, NJ. I graduated from Kean University in May 2018 with a major in Environmental Biology. I want to be a successful wildlife conservationist and work on wildlife documentaries, and hopefully have my own show one day on Animal Planet or Nat Geo Wild. What interested me about the internship at the Great Swamp was that, after reading the job description, I was happy to learn that I could be doing something that could benefit me dearly for my future dream. I love nature, the outdoors and of course the wildlife and so, if I could have a career that has to deal with any of those three, it would just be a dream come true. What I love about this job is that every day I am doing something different, and I am never bored. I have taken part in checking bluebird boxes and purple martins gourd racks. I've assisted in the removal of invasive terrestrial plant species as well as water plants species such as water chestnut which required going around in a canoe. Other activities I partake in are trail maintenance and goose banding, both or which I find loads of fun.



At the July 8 Meet the Interns Program (l to r): Jonathan Phillips, Executive Director, Groundwork Elizabeth; Carmine Colasurdo; Blair Gomes; Dave Wiener, Director of Youth Programming, Groundwork Elizabeth *(Photo by Blair's mom!)*

MARK YOUR CALENDARS

GREAT SWAMP IS *TREE-MENDOUS* ANNUAL FALL FESTIVAL SEPTEMBER 15, 2018 10:00 A.M.—3:00 P.M.

Join us for a Fall celebration.

This year we are celebrating trees.
Trees have been friends through the ages and affect
and enrich our lives in so many ways.

Guided walks, crafts, archery and hoverball.
Climb aboard the Refuge heavy equipment.
Activities for kids ... and more! All free!

Our Great Swamp Partners will have
tree-mendous exhibits.

Photo contest winners will be announced at 11:30 a.m.

It's a day of fabulous fun for all—with free hot dogs on
the grill and plenty of parking.

Great Swamp National Wildlife Refuge
Helen C. Fenske Visitor Center
32 Pleasant Plains Road, Harding Township NJ

REFUGE VOLUNTEERS & FRIENDS DONATE 14,263 HOURS; *Photos by Peter Lebovitz*

The 32nd Annual Volunteer and Friends Recognition Event was held on Saturday, June 2, 2018 to recognize and celebrate the exceptional contribution of volunteers and Friends to Great Swamp National Wildlife Refuge. Despite the threat of thunderstorms, the weather held and it was a beautiful evening.

This year the event, co-sponsored by the Friends and the Refuge, was again held in the Richard J. Guadagno Pavilion where nearly 120 volunteers, staff, interns and guests enjoyed a buffet dinner followed by the awards ceremony.



Lia McLaughlin

Deputy Refuge Manager Lia McLaughlin addressed the attendees:

"This is arguably my favorite event each year. We are all so busy. It is so easy to get caught up in what is next. Taking this time, to reflect and appreciate the generosity of all of you, all of the hours and all of the efforts you contribute to help make the Refuge and the Complex not just good, but better every year, is so important and inspiring. So, thank you all for all that you do every day, every week, every year."



100 HOUR MILESTONE AWARD

When you begin volunteering, 100 hours seems like a long way away. But it is amazing and rewarding to see the hours add up. This first significant milestone is the awarding of a personal blue goose name tag, recognition for a continuing commitment to the Refuge through the generous donation of time and talent.

100-Hour Club (l to r): Tom Gula, Robert Lin, Roberto Reisinger, Evelyn Morton, Corinne Errico, Allen Dreikorn, Ruth Nahm.

Missing from photo: Bonnie Langdon, Bryan Mathis, Alice Qian, Donna Ricca.



1,000 HOUR MILESTONE AWARD

Donating 1,000 volunteer hours to Great Swamp National Wildlife Refuge is truly a milestone. Often, by the time you reach this level of volunteering, you have become a specialist. You know what you like to do and you do it well ... and frequently! These volunteers receive a 1,000 hour pin, an engraved clock, and their name and first blue goose on a perpetual plate on the Blue Goose Honor Board.

Congratulations to (l to r): John Berry, Paul Fenske, Steve Gruber, Walter Willwerth.

Missing from photo: Joe Balwierczak



ADDITIONAL NOTABLE VOLUNTEER MILESTONES

150 HOURS: Brenda Bourassa, May Duttonhoeffer, Tom Gula, Lois Harold, Lorraine Novinski, Brian Osborn, Jerfelis Pimentel, Roberto Reisinger, Kent Stevens.

250 HOURS: Jane Bell, Barry Bowman, Lucille Dwyer, Corinne Errico, Jim Halsey, Dave Katz, Terry Kulmane, Kathie Willwerth

500 HOURS: Pictured at right (l to r): Bob Hofmann, Steve Herdman, Helen Hoffman, Judi DiMaio (Missing from photo: Bridget Mracek)

2,500 HOURS: George Solovay

5,000 HOURS: Randi Emmer

6,000 HOURS: Leo Hollein

7,000 HOURS: Kathy Woodward

PRESIDENT'S VOLUNTEER SERVICE AWARD: Randi Emmer



Active volunteers with the total number of hours contributed since first becoming a volunteer (through March 31, 2018)

James Ahlstrom (34)	Tom Colandro (3.5)	Kimberle Gray (10)	Peter Kubat (29.5)
Patrick Ambrosio (45)	Janis Cole (295.5)	Ellen Greenhorn (304)	Zaven Kubat (29.5)
Mike Anderson (3)	Matt Comrie (1.5)	Groundwork Elizabeth Green Team (69)	Terry Kulmane (478)
Jim Angley (515)	Judy DeMouthe (3)	Steve Gruber (1,233.5)	Ericson Lac (25.5)
Garry Annibal (77)	Richard Derosier (36.5)	Tom Gula (172.5)	Andy Lamy (22)
Evelyn Anthony (2.5)	Jim Detizio (1,603)	Jim Halsey (354.5)	Lorrie Lane (336.5)
George Apgar (43.5)	David Dietz (92.5)	Mary Beth Hansbury (290)	Bonnie Langdon (163)
Joann Apgar (368.5)	Judi DiMaio (548.5)	Lois Harold (218)	Peter Lebovitz (70)
Fabian Aquino (9.5)	Allen Dreikorn (127)	William Haskins (21.5)	Ethan Lim (14.5)
Pete Axelrod (494.5)	Patricia Dreikorn (40.5)	Anne Hebenstreit (466)	Robert Lin (111)
Joseph Balwierczak (1,197)	Rich Dufort (1,159)	Kristen Hellstrom (3.5)	Daria Lisco (62)
Kate Bartley (23.5)	May Duttonhoeffer (174.5)	George Helmke (1,177)	Bob Loveland (3)
Cheri Beaulaurier (202)	Lucille Dwyer (368)	Greg Henderson (732)	Linda Loveland (3)
Jane Bell (436)	Willard Dye (3.5)	Stephen Herdman (752)	Sean Lyons (25.5)
Steve Bell (11)	Tara Eklert (4)	Jack Higgins (2,144)	Dave Marecheau (4)
Mark Benson (6)	Randi Emmer (5,341)	Maryann Higgins (122.5)	Jim Marquis (427.5)
John Berry (1,188)	Corinne Errico (257)	Richard Hiserodt (11.5)	Judy Marsh (48)
Betsy Boles (854.5)	Myles Farrell (3)	Helen Hoffman (562.5)	Bryan Mathis (114.5)
Melissa Bonaccorso (9)	Nancy Felicito (1,159)	Bob Hofmann (549.5)	Ann Mauro (6)
Brenda Bourassa (181.5)	Donna Fenske (56)	Victoria Hogg (39)	Ernie Mazzarisi (108.5)
Barry Bowman (313)	Paul Fenske (1,058.5)	Leo Hollein (6,085.5)	Steve McAuliffe (5)
John Breault (577.5)	Andreana Field (27.5)	Carlene Hopkins (229.5)	Matthew McInerney (7.5)
Robert Brennan (10.5)	Jonathan Field (8)	Rob Johnson (21.5)	Pat McMahon (5)
Maggie Brucker (40.5)	Alexa Fiumarelli (4)	Sue Johnson (1.5)	Lauren Merrill (6.5)
Danny Bustos (87.5)	Alyssa Fortuna (2.5)	Paul Julich (6)	Betty Mills (87)
Jackie Bustos (77)	Jessica Frago (443.5)	Glenn Karaban (3)	Akash Mishra (20)
Steve Byland (940)	Charlie Friedman (55)	Nathaniel Karaban (3)	Prabhu Mishra (1.5)
Ann Campbell (378)	Susan Garretson Friedman (2,588.5)	Dave Katz (324)	Reshma Mongia (35.5)
Mark Canavan (72)	Pat Garvin (1,414.5)	Susan Katz (101)	Sue Moore (1.5)
Pat Carruthers (14)	Julie Gerke (10)	Jane Kendall (1,311)	Lauren Morse (10.5)
Sarah Carruthers (116)	Jim Gilbert (20.5)	Laurie Kirk (229.5)	Evelyn Morton (106.5)
Terry Carruthers (208.5)	Lynda Goldschein (84.5)	Neil Klingenburg (808)	Bridget Mracek (562.5)
Teri Catalano (640.5)	Russell Gonier (60)	Bill Koch (601.5)	Jim Mulvey (813)
Kevin Catlin (5)	Charles Gould (233.5)	Murali Krishna (29.5)	Kate Murphy (26.5)
Ryan Catlin (1.5)	Laurel Gould (9,446)	Melene Kubat (25)	Kevin Murphy (30)
Peter Clark (55.5)			<i>(continued on page 8)</i>

ACTIVE VOLUNTEERS THROUGH MARCH 31, 2018 *(continued from page 7)*



Congratulations to (l to r): Randi Emmer, Leo Hollein, Kathy Woodward. You are looking at 18,000 cumulative hours of volunteer service among these three!

Robert Muska (15.5)	Bonnie O'Connor (41)
Ruth Nahm (134)	John O'Connor (33)
Joe Nally (361)	Al Oleksy (1.5)
Laura Nally (4,118)	Jack Onufer (3.5)
Susan Nanney (70)	Robin Onufer (3.5)
Lorraine Novinski (253.5)	Brian Osborn (157)
Melinda Nye (271.5)	Claudia Osborn (210.5)
Arlene O'Connor (17)	Peter Osborn (226.5)
	Tom Ostrand (205.5)

Angela Oviedo (442.5)
Candace Paska (797)
Michael Patton (15)
Terri Pedone (3)
Kenneth Peters (5.5)
Wayne Petko (7.5)
Gail Petrillo (207)
Jerfelis Pimentel (197.5)
Louis Pisane (4,210)
Pegg Ponzio (10.5)
Giannamarie Porambo (8)
Alice Qian (144)
Dionis Ramirez (500.5)
Gail Rapaport (597)
Fernanda Reisinger (22.5)
Roberto Reisinger (209)
Donna Ricca (109)
Priscilla Rizzo (6.5)
Simon Roberts (77.5)
Andrew Rogers (23)
Elizabeth Roth (3.5)
Ethan Roth (5)
Johnny Roush (261.5)
Carolyn Rubinfeld (107.5)
Michael Rubinfeld (27.5)
Amelia Russell (812)
Pamela Russo (1.5)
Nancy Schenck (2,683)

Jolynn Schmidt (220.5)
Judy Schmidt (7,233)
Erin Schultz (1.5)
Ian Scollan (12)
Ginnie Scott (64.5)
Emily Scully (607.5)
Elaine Seckler (1,489.5)
Andrew Shen (9.5)
Peter Shen (12)
Christine Shoengold (28)
Mark Shoengold (19)
Shary Skoloff (33)
Gina Smith (231.5)
Bill Smullen (226)
Dorothy Smullen (3,666.5)
Lyn Snyder (28)
Mike Snyder (19.5)
George Solovay (2,930.5)
Margaret Southwell (79.5)
Steve Sox (231.5)
Sharon Sperduto (156)
Janet Stadelmeier (144.5)
Matt Steffens (193.5)
Kent Stevens (249)
Ed Sullivan (378.5)
Florence Swanstrom (25)

Elaine Taub (652)
David Towell (8)
Laura Trawinski (6)
Andrew Tsai (23)
Pam Venanzi (6)
Kelly Vera (19)
Bridget Vogtman (788.5)
Ellen Waldstein (27.5)
Mary Jane Walsh (498)
Kevin Ward (87.5)
Esther Warner (615.5)
Bianca Wentzell (8.5)
Larry West (371.5)
Elaine Weyuker (180)
Barbara Whitmore (400.5)
Chuck Whitmore (1,053.5)
Kathleen Willwerth (314)
Walter Willwerth (1,370.5)
John Wilmot (2,193)
Dona Wilson (7)
Carl Woodward (664)
Kathy Woodward (7,946)
Bob Yurkovic (20)



DO YOUR PART FOR REFUGES AND FOR CONSERVATION—BUY A FEDERAL DUCK STAMP

It's not about hunting. It's actually about buying habitat for waterfowl—and for the songbirds and other wildlife that benefit. Stamp sales, which are used to buy land for refuges, have declined over the past 30 years, a loss of more than \$10 million annually. Less habitat, fewer birds.

Through the required purchase of duck stamps, hunters have long funded one of the most successful conservation programs ever created. But those of us who visit refuges just to enjoy nature, hike, bird, or take photos are not required to purchase a stamp. Yet we all enjoy the benefits of wetlands and refuge lands.

It's really simple. If wetlands become housing developments, shopping malls, and agricultural fields, there are fewer birds or wildlife of any kind. We all must do our share.

Stamps are available at the Helen C. Fenske Visitor Center, open daily. Purchase your Federal Duck Stamp today.

Since 1934 over 1 billion dollars has been raised by the sale of Federal Duck Stamps to help conserve over 6 million acres of high quality waterfowl habitat. The Federal Duck Stamp is a conservation success story for the ages.

Artist: Robert Hautman, Mallards ©

If applicable, sign your stamp. Conserve habitat for the future... buy Duck Stamps!

SPRING IS AN EXCITING TIME AT THE WILDLIFE OBSERVATION CENTER

By Judy Schmidt, *Volunteer*; Photos by Matt Heiss, *Volunteer*

This spring Mother Nature didn't give us many nice days. But still, many people came—and so did the wildlife. There were snakes, frogs, tadpoles and turtles in April. Then there were two fox kits under the Friends Information “shed” and from late May to early June, the snapping turtles came out to lay their eggs.

But the birds put on the best show. The bald eagles and barred owl were often seen. In June, a red-winged blackbird was nesting near the boardwalk in plain sight. From our vantage point, volunteering at the shed, we could watch the tree swallows flying into their nest box and we could also see nests of a chipping sparrow, blue-gray gnatcatcher and a hummingbird in the nearby trees.



WILDLIFE OBSERVATION CENTER THIS SPRING

Ruby-throated Hummingbird nest (above)
Two Barred Owls (left)

What fun it was to show these special sightings to visitors. During the first and second weeks of June, the weekly Sightings Board was filled. The final tally of spring sightings was 90 different species of wildlife. So don't let the weather keep you home. There is always something great to see at Great Swamp National Wildlife Refuge.

SWALLOWTAILS AND MONARCHS AT THE HELEN C. FENSKE VISITOR CENTER

Story and Photos by Kathy Woodward, *Volunteer*



We learned so much and had so much fun raising Monarchs over the past two years, we decided to expand our efforts. A likely candidate was the black swallowtail, the state butterfly of New Jersey. Fortunately, we found a caterpillar in the Visitor Center garden and, on June 27, we released our first black swallowtail, *Papilio polyxenes*, a beautiful male (left).

We are observing how different this species is from the Monarch. The chrysalis (below) looks like a twig. It can be brown or green and is suspended by a fine silk girdle. The male and female look quite different. The female has a blue band across the bottom of her wings, which is missing from the male. Some black swallowtail butterflies emerge in two weeks and others winter over and emerge in spring.

The Visitor Center is open daily from 10:00 a.m. to 4:00 p.m. Come and see what surprises we have for you.



PAINTED TURTLE NEST IS SUCCESSFUL

Story and Photos by Leo Hollein, Volunteer

Painted turtles (*Chrysemys picta*) are the most common pond turtle at Great Swamp National Wildlife Refuge. They prefer the slow moving fresh

water that is abundant in the Refuge. Groups of painted turtle can often be seen basking on logs or mounds in ponds on sunny days. Its name reflects the red markings on the borders of its upper shell, called the carapace. Painted turtles can lay two or more clutches of eggs on land from late May to mid-July. They hibernate in the mud at the bottoms of ponds and other bodies of water during the winter months.



It was mid-morning in early July. The weather was warm and muggy. The weather prediction called for late day showers. These were perfect weather conditions for a turtle to lay its eggs. Many turtle nests are dug up and the eggs eaten by predators such as raccoons, mink and opossums. Predators locate the turtle nests by the odor of the eggs. This telltale odor can be washed away by a heavy rain shower.

A female painted turtle came out of the water and climbed about 20

feet up the side of a Refuge dike. It started digging a nest about three feet above the water line and several feet off a Refuge road. The photo above shows the turtle beginning to dig a nest hole with its hind legs. After pushing aside small rocks, it lubricated the ground by urinating to make digging easier.

The turtle dug a hole about four inches deep and laid a clutch of eggs as

shown below. Turtle eggs are white, oblong and flexible. They do not have hard shells like bird eggs. The turtle laid eight eggs. When the clutch of eggs was complete, the turtle covered the eggs with its hind legs as shown in the center photo below. The painted turtle then retreated to the water. Its parental duties were complete. The eggs are now on their own. The entire process took about 90 minutes.

As predicted, there was a heavy rain shower starting in late afternoon. It evidently did a good job of dissipating any odors from the turtle eggs. The nest site was checked for the next few days and did not suffer predation. The eggs should hatch in about 10 weeks. The sex of painted turtle hatchlings is determined by the temperature at which they are incubated by the sun. Cooler temperatures produce predominantly males. Temperatures above 90 degrees Fahrenheit produce all females. Since the eggs are laid on top of one another, both genders may be produced from a clutch.

Turtle nests of all species are commonly raided and the eggs eaten. It is a welcome change to observe a turtle successfully lay a clutch of eggs that avoided predation.



Laying eggs



Using hind legs, the painted turtle covers the nest



Evidence of a predated nest

*“The first step in promoting turtle conservation
is to educate the public.”*

From: Turtles of the Southeast, by Kurt Buhlmann, Tracey Tuberville, and Whit Gibbons. According to Dr. Buhlmann, all of our northeast turtles are covered in this book, which has detailed descriptions of the species and a wealth of information. Available at the Friends Nature Shop.

HEAD-START TURTLES ARE WELCOMED BACK HOME

Story and Photos by Peter Lebovitz, Volunteer

Normally, we don't encourage visitors to handle any of the wildlife found in the Refuge. But on June 2, "Head Start Turtle Day", the Helen C. Fenske Visitor Center was packed with young and old who came to do just that.

This wasn't just any wildlife, though. These were some very special wood turtles who were returning to the Refuge after wintering over in the relative luxury of a greenhouse in Massachusetts. How they got there, and why they are coming back, was the subject of a presentation by turtle expert Dr. Kurt Buhlmann and Colin Osborn, a biologist with the U.S. Fish and Wildlife Service.

Now in its eighth year, the "Head Start" turtle program at Great Swamp NWR represents a unique response to the threat of declining wood turtle populations. But today it's all about the dozen or so critters scrambling around in plastic bins, waiting their turn to be picked up and examined before they are released into the Refuge.



Kurt Buhlmann shows wood turtle to attendees



Biologist Colin Osborn (left) explains the head starting program with Dr. Kurt Buhlmann (right)

If you're going to let toddlers handle wild animals, turtles are a good place to start. A living metaphor for slowness, they are easy to apprehend and rarely show signs of aggression. Their only real defense is to withdraw into their shell, but on this day that is not enough to save them from the grasp of a curious two year old.

Of course, these same traits which we find so endearing also make them an easy target for predators. Older turtles are tough as a hock-

ey puck, but the young are quite small and relatively tender. So before they can become lunch for a raccoon, Dr. Buhlmann's team swoops in to snatch the hatchlings from their nest. The lucky ones get to spend the winter in, for lack of a better word, a turtle health spa. The rest are released back into the Refuge to fend for themselves and, when the time comes, hibernate until spring. All are marked for identification and some are fitted with radio transmitters for tracking.

Friends of Great Swamp NWR has supported the Head Start Turtle Program since its beginning. You can read more in the December 2017 issue of Swamp Scene, available on our web site.

TURTLE FAST FACTS

- Predation by raccoons is the primary threat to hatchlings and eggs, but even a bullfrog can eat a baby wood turtle.
- Radio transmitters which are attached to hatchlings are so small and light that they could also be used on a dragonfly.
- The closest relative to the wood turtle is the bog turtle, now the official state reptile of New Jersey.

INTERESTED IN TURTLES?

MARK YOUR CALENDARS—OCTOBER 7, 2018

In 2017, turtle enthusiast George Heinrich launched "The Big Turtle Year", a 12-month adventure to locate all of the 59 species of turtles that occur in the United States. Did he succeed? Come and hear more about this incredible adventure ... and you'll learn a lot about turtles too! Read more at: <http://www.thebigturtleyear.org/>.

Check our website for more details as plans are finalized for this exciting program.

Friends of Great Swamp NWR
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THE SWAMP SCENE JULY 2018

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.