

A quarterly newsletter for Volunteers and Friends of the Patuxent Wildlife Research Center and Patuxent Research Refuge



FRIENDS OF PATUXENT

Vol. 30 • No. 2

www.friendsofpatuxent.org

April-May-June 2019

Some Fun Facts About the National Wildlife Refuge System

By Brad Knudsen, Refuge Manager

Hot off the press from the U S Fish and Wildlife Service's Headquarters in Falls Church, Virginia, and just in time for the 116th birthday of the National Wildlife Refuge System (NWRS) on March 14, 2019, every refuge has received copies of a beautiful new publication entitled "Experience the National Wildlife Refuge System." It is in an easy to read format, brimming with facts and gorgeous photos of what the NWRS is all about. Let me share some of what I find to be the most interesting information.

First, of course, it emphasizes – "The mission of the NWRS is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife and plant resources and their habitats within the United States for the benefit of present and future generations of Americans." Each refuge has a specific purpose, supporting the broader mission statement. Many focus on protection of migratory bird habitat, the "bedrock" purpose of many refuges. Some are quite specific, such as providing breeding habitat for redhead ducks, an overwater nesting species, at Horicon NWR in Wisconsin. Others are very broad – "do good things for migratory birds." Patuxent Research Refuge has the distinction of being the only refuge in



Trumpeter Swan

the entire NWRS with a specific purpose of supporting wildlife research; thus, it is the birthplace and current home of the USGS' Patuxent Wildlife Research Center.

The publication goes on to enumerate that the NWRS consists of 95 million land acres, 740 million sub-

Continued on page 2

Friends Co-sponsor Open House for Research Community at Bee Lab

By Rich Dolesh, Chair, Friends of Patuxent



Patuxent's whooping cranes may be gone, but with the return of the Bee Conservation Lab to the USGS Patuxent Wildlife Research Center, an entirely new opportunity for collaborative field research on bees and pollinator/plant relationships is opening up at Patuxent.

Continued on page 9

Inside...

Sustainable Campsite Management in Protected Areas	3	Share Your Patuxent Experience	6
Presidential Visits to Patuxent.....	4	Spring 2019 in the Hollingsworth Gallery ...	7
A Thwack in the Park	5	Wildlife Images Bookstore - Make Every Day Earth Day.....	8
Photograph From the Patuxent Research Refuge Wins First Prize in Juried Exhibit	6	Around the Refuge	9
		The White Deer of Patuxent	10

Some Fun Facts About the National Wildlife Refuge System

Continued from page 1

merged lands and waters, with at least one refuge in all 50 states and five territories. There are a total of 567 NWRs, and 38 wetland management districts, the latter primarily in the upper Midwest and Great Plains Prairie Pothole “duck factory” of the United States. If you think of a habitat type – be it bottomland hardwood forest, riverine/riparian corridors, salt marshes, native prairie, boreal forest, tundra, tropical rain forest, coral reefs – the NWRS has it covered!

This tremendous diversity of habitat makes up the largest network of lands anywhere in the world dedicated to wildlife conservation. Eight hundred bird species, 220 mammal species, 250 reptiles and amphibians, and hundreds of invertebrate species call refuge lands home. Nearly 70 refuges have been established for the specific purpose of preserving endangered species, such as Florida Panther NWR in, well, Florida, and Karl Mundt NWR, established in South Dakota in 1974 to protect wintering bald eagles,

a species on the Endangered Species list at that time.

Annual outdoor recreation statistics include 55 million visits in 2018, with over 31 million involved in wildlife observation (including 10 million for wildlife photography!), 2.6 million visits for environmental educational/interpretation programs, 7.3 million fishing visits, and 2.4 million hunting visits. Over 220,000 of those visits occurred right here at Patuxent last year! Collectively, these activities represent “the Big Six” wildlife-dependent recreational uses specified in the Refuge Improvement Act of 1997, and are considered to be priority uses of the NWRS, with each activity nurturing a link to wildlife and wild places.

All those visits translate to \$3 BILLION added to local economies and support of 43,000 jobs in the private sector! Buying gas, groceries, bug spray, maps, and outdoor supplies all add up to be critical components to some local communities’ economy. Nature spectacles like spring and fall bird migration, the Chincoteague NWR pony roundup, elk bugling in the west, etc. all attract nature lovers and their pocketbooks!

Over 40,000 people volunteered at refuges in 2018, contributing 1.3 mil-

lion hours of their time! At Patuxent, we had over 200 volunteers contribute over 22,000 hours. That is equivalent to 11 staff years! Many bring expertise that staff may not have – website construction, botanical expertise (including fungi ID!!), hunting skills to impart on a new generation of hunters, etc.

Refuges honor and conserve the nation’s heritage by being custodians to 4.5 million museum objects, preserving 1,927 historic buildings, with 114 properties listed on the National Register of Historic Properties. Petroglyphs at Pahrangat NWR in Nevada, artifacts from the Civil War era from the Steamboat Bertrand at De Soto NWR along the Missouri River in Iowa/Nebraska, archaeological remains from a slave settlement associated with the Underground Railroad at Great Dismal Swamp NWR in Virginia, and more than two dozen historic lighthouses – including one at nearby Chincoteague NWR – are some of the more unique historic items the NWRS protects. My personal favorite is the extent of dinosaur fossils embedded in the Missouri Breaks at Charles M. Russell NWR in Montana. While I was stationed there in the late 1980’s, the most complete fossil of a Tyrannosaurus rex was found on the refuge, including the first ever recovered intact forearm of the prehistoric apex predator.

The NWRS is becoming more and more involved in emergency response, providing staff, equipment, and staging areas for command posts for over 100 major incidents since 2006. This adds even greater value to local communities impacted by flood, fire, and other natural disasters.

I could go on and on – fire management, law enforcement/resource protection, wilderness preservation all are key components of this vibrant network of wildlife havens.

Sooo – as the name of the publication suggests – come on out and “Experience the National Wildlife Refuge System.” There is literally something for everyone who enjoys nature to take away when they visit a National Wildlife Refuge. See you soon! 🐻

Friends of Patuxent is published quarterly and can be read online or mailed to our Friends upon request.

Many of the regular newsletter contributors and assistants are volunteers. However, we welcome and encourage all volunteers and Friends to submit items for the newsletter by sending or bringing them to:

Editor, Friends of Patuxent Newsletter
ATTN: Ross Feldner
11811 Ivanhoe Street
Wheaton, MD 20902

Or email to ross.feldner@verizon.net

All articles submitted to the Friends of Patuxent Newsletter will be reviewed by newsletter staff prior to their publication. We reserve the right to not publish submissions based on length, content or suitability.

Article submission deadlines:

Issue			Issue		
No.	Months	Deadline	No.	Months	Deadline
1	Jan-Mar	December 1	2	Apr-Jun	March 1
3	Jul-Sept	June 1	4	Oct-Dec	September 1

To become a member of the Friends of Patuxent or send a donation, please see “Membership Application” on page 19.

Sustainable Campsite Management in Protected Areas:

A study of long-term ecological changes on campsites in the Boundary Waters Canoe Area Wilderness, Minnesota

Jeff Marion, PhD; USGS Research Biologist

Protected natural area managers seek to protect both natural conditions and high-quality opportunities for recreation visitation. Camping is an essential element of backcountry and wilderness recreation and overnight visitors spend a substantial portion of their time on campsites. Their behaviors determine the nature and extent of resource impacts and the quality of their experiences can be affected by campsite conditions. This longitudinal research assessed resource conditions on 81 of more than 2000 campsites in the Boundary Waters Canoe Area Wilderness in 1982 and 2014 to examine long-term ecological changes. A comprehensive array of physical, vegetative, and soil indicators were measured to identify long-term trends over 32 years of continuous campsite use. Our findings reveal substantial changes in vegetative tree and ground cover, exposed soil, and soil erosion on campsites. In particular, the ecology of campsites has been significantly altered by a large reduction in number and cover of campsite trees. The number of campsite trees decreased by 44% from 1982 to 2014. In addition to natural tree loss, visitors are cutting both on- and off-site trees for firewood, and tree seedlings are rarely able to germinate and survive due to visitor activity. Findings reveal that older campsites are not stable. Long-term camping impacts that are ecologically, managerially, and experientially meaningful are occurring; these impacts could be minimized through more sustainable management practices. These include selecting more resistant sites, such as those with resistant rocky shorelines, and sloping terrain that constrains campsite expansion. Construction and maintenance of optimal tenting sites can also attract and spatially concentrate camping impact. Actions to halt tree cutting are also critical. Heavy long-term visitation in protected natural areas requires more sustainable and intensive visitor impact management actions.



Photo comparison of tree loss and groundcover changes over 32 years on a representative campsite. Arrow identifies the same rock. The one remaining tree is severely damaged and dying.

Eagleston, Holly, and Jeffrey L. Marion. 2017. Sustainable campsite management in protected areas: A study of long-term ecological changes on

campsites in the Boundary Waters Canoe Area Wilderness, Minnesota, USA. *J. for Nature Conservation* 37: 73-82. 🐢

The Friends of Patuxent Welcome Three New Board Members

By Rich Dolesh, Chair, Friends of Patuxent

The Friends are extremely pleased to announce the election of three new board members to the board of directors: Marcia Watson, Lindsey Baker, and Courtney Koivisto.

Marcia Watson of Bowie, MD, is a long-standing conservationist and birder from Howard County who joined the board in February 2019. Marcia is the current president of the Howard County Bird Club, a chapter of the Maryland Ornithological Society. She is the editor of the *MD/DC Birding Guide*, an online resource to guide birders to the best birding spots in MD and DC. Marcia is married and her husband, Gene Scarpulla, participates in the USGS Native Bee Inventory and Monitoring Program at Patuxent Wildlife Research Center.

Lindsey Baker of Laurel, MD, joined the board in March 2019. Lindsay is currently the executive director of the Patapsco River Heritage Greenway and was the executive director of the Laurel Historical Society. She is also a board member of the Maryland Museum Association and the Small Museum Association. Lindsey and her husband delight in taking their two-year-old daughter on walks and visits to Patuxent Research Refuge.

Courtney Koivisto also joined the board in March 2019. She is presently the vice-president of marketing for the NAI Michael company of Lanham. Courtney has a deep love of nature, especially birds, and she has worked and volunteered her time at several natural and cultural history institutions including the Smithsonian National Museum of Natural History, the Smithsonian National Zoo, and MNCPPC's Montpelier Mansion. She brings considerable marketing, graphic design, and web skills to her new volunteer position on the Friends Board. Courtney is married and mother of a two-month old daughter.

Presidential Visits to Patuxent

by Matthew C. Perry

Only two presidents of the United States are known to have walked the land of Patuxent Research Refuge, and both had the first name of George. According to history of the Snowden family, President George Washington was a friend of Richard Snowden and visited his large estate on his way to Baltimore. But of course, that was many years before Patuxent was created. In the 82-year Patuxent history, George W. Bush is the only president to walk on our land.

During his presidency he visited Patuxent with his wife Laura on October 20, 2007, regarding Migratory Bird Day to increase awareness of the public to the plight of migratory birds. Also visiting Patuxent that day were Secretary of Interior Dirk Kempthorne and Wendy Paulson, the wife of the Secretary of the Treasury. Patuxent Wildlife Research Center Director Judd Howell gave the president a tour of the endangered species area and, in the process, received an invitation to visit the White House, which Dr. Howell subsequently did with his wife, Nancy.

President Bush made more frequent visits for exercise and relaxation while riding his bicycle. Patuxent administrators would sometimes get short notice that the President was about to arrive for an outing. The secret service would secure the route with the Patuxent facility manager and sometimes a cryptic message was sent via email to staff that certain roads were closed. During this period of bicycle riding, there were small plastic tapes wrapped around utility poles with an arrow and the number "43" to denote the path our 43rd president should travel.



President George W. Bush making remarks at Patuxent with Mrs. Bush, Secretary Kempthorne, Refuge Manager Knudsen, and Research Director Howell in attendance. Photo by Eric Draper.



President Bush while cycling at Patuxent, stopped to talk with staff. From left to right: Dawn Fallacara, Linda Weir, Sandi Mattfeldt, Unknown, Priya Nanjappa.

On one of the early trips, the President on bicycle was preceded by Secret Service agents in a motorcade of two cars abreast. I was feeding my captive study ducks that weekend day and was driving toward the motorcade with no knowledge of the President's visit. At first, I thought one car was passing another, but as they got closer, I realized they were

commanding full use of the road and I hurriedly drove my car off the road. Our veterinarian, Dr. Glenn Olsen, was once told he had to stay in the veterinary hospital during the president's visit. He protested and said he had bird health checks to perform and was told by the Secret Service he could proceed with his work.

During one visit some staff had learned in advance the president was riding his bicycle on campus. With binoculars in hand, they situated themselves along the suspected bike path and pretended they were conducting a bird survey. The president saw the group with binoculars and stopped to enquire about their activity. They enjoyed a brief conversation with him, which included a question from the president about whether the fishing was good at Patuxent. They also got a memorable picture with the affable President Bush. 🐢

A Thwack in the Park

By Marilyn Kitchell, Wildlife Biologist, Great Swamp National Wildlife Refuge

I spent the fall of 2017 and winter of 2018 thwacking my way through the refuge's brushy young forests. Blackberry brambles snagging my thick Carhartt coveralls and grabbing my every limb made progress slow. Gnarly stumps lay their own obstacle course at my feet. Ducking below and around bare thin branches, I tried to spare my rosy red cheeks and face from the poking and scratching that threatened the only parts of me exposed in the cold, crisp air. My task: to evaluate each field and determine its fate - would it be cut this year, or would it remain?

No wonder the woodcock love this stuff, I thought. This is a miserable place to be a large mammal. Opposable thumbs aside, I can't imagine it's much easier for a fox or a coyote to make its way through here.

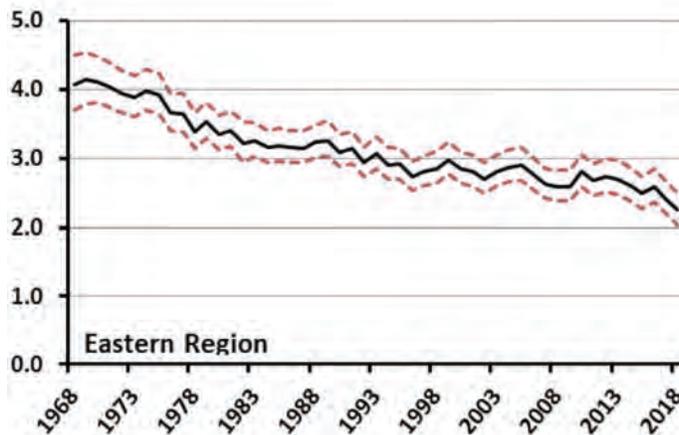
I envision what it must be like for a woodcock to wander through this brush, navigating their way through stems spaced like agility pegs and horse jumps. A canopy of branches is layered above. Dense leaves hide the sky from the woodcock's upward-looking and predator-leery eyes. The moist earth, protected from the sun's evaporative rays by leaves above and underfoot, is chock full of earthworms who erroneously think THEY are protected by all this bramble.

Not to be outsmarted, the woodcock have developed a graceful dance – a sort of forward-stepping, vertical bobbing motion – to detect the earthworm's nearly imperceptible underground presence. Shielded by all that's above, the woodcock must feel that this is the perfect place to build their ground nests and raise their fluffy young.

So if these brushy fields are so good for the woodcock, you might ask: why was it my task to evaluate them for



Hal Korber/Pennsylvania Game Commission photo



Average number of woodcock heard on annual survey routes across the Eastern region, 1968-2018.

Graph from Seamans and Rau 2018 (*American Woodcock Population Status, 2018*. USFWS, Laurel, MD.).

cutting? To answer that, we turn to the US Fish and Wildlife Service's Migratory Birds program, and the annual surveys that they've been conducting – one that the refuge participates in annually – since 1968.

Each spring, States and National Wildlife Refuges alike send volunteers and staff out to listen for singing males on 1,000 woodcock survey routes

across the species range. Following a standardized protocol, this cooperative data is submitted annually to the Division of Migratory Bird Management at Patuxent Research Refuge in Laurel, Maryland. Once compiled, the data is used to monitor the rangewide population and then to set annual harvest limits at the federal level. This long-term dataset shows that

the woodcock population has been in steady decline since surveys began. And the primary reason for their decline? Habitat loss.

You see, woodcock depend on the brushlands for rearing their young from ground nests. The protection it offers from mammalian and avian preda-

Continued on page 11

Photograph From the Patuxent Research Refuge Wins First Prize In Juried Exhibit

John R. Sauer, USGS Patuxent Wildlife Research Center

Even a government shutdown cannot prevent bird counting, natural beauty, and creative expression from happening at Patuxent! Despite the furlough, access was granted on New Year's Day for bird counters to conduct the Bowie Christmas Bird Count. One of the birders took an award-winning photograph while slogging through the Patuxent River bottoms on the central tract. "Seep/Patuxent Refuge/Christmas Bird Count," a photograph by Heather Martley, won first prize in the February 2019 All Photography Juried Exhibit at the Fredericksburg VA Center for the Creative Arts. The Juror Statement noted that Heather's photograph "...not only documents the remarkable landscape of the nature refuge but imbues it with a sense of beauty and mystery that communicates what it feels like to be there,



not just what it looks like." The photograph will be on display until 22 February at the Fredericksburg Center For

The Creative Arts, 813 Sophia Street, Fredericksburg, VA 22401. 540-373-5646 - www.fccagallery.org 🐢

Share Your Patuxent Experience

You, and most folks who visit Patuxent Research Refuge, find a connection with nature. It may be the calm feeling of the forest sanctuary; the sight of a Great blue heron flying over the lake; the scent of a fox who passed by the spot early this morning.

Please share your experience – the one that left you inspired, smiling, grateful, amused, or however you felt. You may have written a description in your nature journal or drawn what you saw in your sketchbook, or taken several photos of wonderful places, critters and sights

Send your write-up, photo(s), sketch, or excerpt so others can enjoy it too. If you prefer, you may do it anonymously; or we will be glad to acknowledge you as author, artist or photographer.



In advance, thank you for sharing.

You may send your submissions to Jeanne Latham at jelatham@verizon.net. Jeanne is the Vice-chair of the Friends of Patuxent. If you have any questions, call her at 410-798-1601.

Spring 2019 in the Hollingsworth Gallery

By Faith Leahy-Thielke, Patuxent Volunteer

Although the years seem to go by faster the older you get – spring seems to take longer to make its appearance. But reading the names and months of its Hollingsworth exhibitors assures me spring is on its way. We'll enjoy the work of photographers Bill Reichhardt in April, Emily Carter Mitchell in May and fine artist, Irene Sylvester in June.

Thank goodness for “serious amateurs” as Bill Reichhardt describes himself. A former practicing attorney in Virginia, he retired in 2014 and has devoted himself to “improving his skills as a photographer.” He describes a passionate interest in wild bird photography and shifts from Canon 7D Mark II to a Canon 400mm, 5.6 with a 1.4 extender to a “capture them in their natural habitats.” He says his April exhibit will reflect that interest. Sandy Point State Park, the Chesapeake Bay Environmental Center, Florida and the Carolina Barrier Islands have been favorite locales for Reichhardt's shots. Recently, at Bull Island, South Carolina, at an area known as “boneyard beach” due to trees drowned by rising sea levels and storm erosion, he was reminded of Annapolis area “nuisance flooding” in Spa and Back Creeks. Reichhardt wants to use photography to “document the way humans are influencing the environment.” His other subject matter includes glorious photos of sailboats and sailing races. Three of his images appear on the 2019 Eastport Yacht Club calendar. His work has been exhibited at Maryland Hall in a juried show and won a prize in the Chesapeake Bay Magazine's Best of the Bay photo contest. This “serious amateur” has found a second vocation.

Emily Carter Mitchell is an award-winning, Annapolis-based photojournalist. Her work has been published in local newspapers and magazines and appeared on book covers and smartphone



Emily Carter Mitchell

apps. She is a native of Florida whose anthropologist Dad sparked his daughter's early interest in the natural world. Mitchell has degrees from the University of Florida and the University of Phoenix. More than 20 years in the travel and hospitality industry fostered a “sense of adventure and delight in discovering lesser-known destinations.” Those run south from Acadia to Bolivia, and include local favorites like Patuxent and Great Falls. Carter too is an avid birder who packs a Canon and a variety of lenses. She had it with her at a visit to Rosaryville State Park and Mount Airy Mansion where she spotted a Timberdoodle! Although it was almost invisible among the leaves, she'd snapped an American Woodcock. At the Conowingo Dam, she caught a bevy of Bald Eagles – undoubtedly on a fishing expedition. She sponsored a “count the eagles” contest on her popular blog, “Hoofbeats and Footprints.” This blog is internationally recognized for its insights and images.

In addition to her own work Carter teaches wildlife photography classes for the Capitol Photographers Center all over the metropolitan area – April for instance, will find her in Alexandria, Ellicott City and Falls Church. Her May exhibit in Hollingsworth will “demonstrate the mission of the National Wildlife Refuge System “ underscoring the importance of “conservation and preservation.” We look forward to images from several national refuges – their “habitat, wildlife and conservation successes.”

Irene Sylvester is a watercolor and collage artist who is a longtime artist-in-residence and instructor at the Montpelier Art Center in Laurel, Maryland. She's originally from New York City and her formal training began early at Grammercy Park's Washington Irving High School, an institution known for its arts program. This included special classes in dress design and textiles. Sylvester pursued a career in this field at NYU's Traphagen Institute of Fashion and describes herself as “fortunate to find employment” in a “dress house” for several years. But for the last 40 years – since its establishment in 1979 – Sylvester has been part of the Montpelier Art Center scene – holding workshops and teaching classes. She has also traveled extensively-both in this country and abroad and painted on location whenever possible. She enthuses at the vast open expanses, brilliant colors, and textures in rock of the American Southwest. She's used watercolors, acrylics and collage in this group of paintings and often in abstract formats populating them with imagery of birds, animals, native Americans and cowboys.



Irene Sylvester

Sylvester has been featured in solo exhibits in regional galleries and has won any number of awards. Her work can be seen in permanent collections throughout the metropolitan area. Her business card reads appropriately: “distinctive contemporary and traditional art.” Check her out at her website or she'd love a call at 301-377-7800.

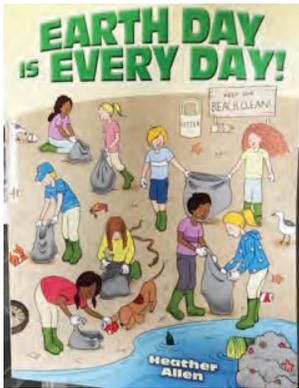
Spring really is on its way. 🐢

Wildlife Images Bookstore

Make Every Day Earth Day.

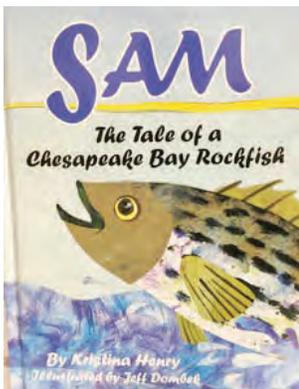
By Evelyn Kirby, Volunteer

Earth Day is April 22, and it's a great opportunity to spend some time on that day, or any day with the family, learning the lessons that nature has to teach. There are many books in Wildlife Images Book Store to help you along the way. Here are four suggestions for young and young-at-heart.



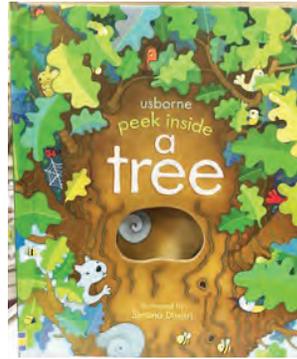
Earth Day is Every Day

For the young ones we have *Earth Day is Every Day*. According to the book's description, children will "encounter fun facts about Earth Day and ideas for recycling, saving energy, and making other conservation methods a part of ... everyday life."



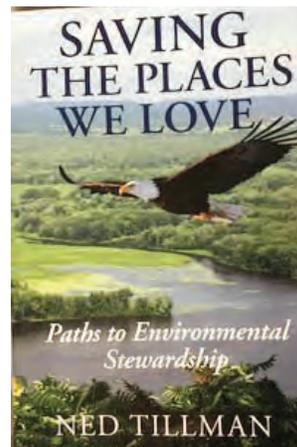
Sam, The Tale of a Chesapeake Bay Rockfish

With "Fishing Day" coming up at the Refuge on June 1st, *Sam, The Tale of a Chesapeake Bay Rockfish*, by Kristina Henry is a cute book for children about age 5 and up. Sam gets stuck in a green bottle at the bottom of the creek and wonders if he will ever get out. Adventure.



Peak Inside a Tree

By Anna Milbourne and illustrated by Simona Dimitri, *Peak Inside a Tree* is written for ages 3 and up. It is new to the bookstore and has hard pages with flaps to lift and holes to look through as children discover what goes on inside a tree.



Saving the Places We Love, Paths to Environmental Stewardship

By Ned Tillman, *Saving the Places We Love, Paths to Environmental Stewardship* "interweaves engaging first-person accounts, science, and evidence-based arguments in suggesting ways each of us can meet the environmental issues of the 21st

century." The author "offers examples of what we must do now – on our watch—to preserve our country's wonders for ourselves and future generations."



The warm spring days with their gentle breezes make it a good time to fly a kite. How about flying a three-foot falcon, or smaller butterfly, both made with bright colors? 🐢

Your purchases from the Wildlife Images Bookstore help support the work of the refuge. "Friends" receive a 10% discount

We Applaud and Salute Our Volunteers

Around the Refuge

Photos by Matthew Beziat



Telegraph Road on the North Tract



Trumpeter Swan at Merganser Pond on the North Tract



American Robin on the South Tract near Cash Lake



Skunk Cabbage on the North Tract

Friends Co-sponsor Open House for Research Community at Bee Lab

Continued from page 1

By serendipitous coincidence, soon after the last of Patuxent's whooping cranes left last year, the Native Bee Conservation Lab moved back to Patuxent's central tract from its former location at the Beltsville Agricultural Center (BARC) and is now housed within the former endangered cranes complex.

Led by USGS biologist Sam Droege, the Bee Lab is planning to partner on limited collaborative field research on bees and pollinators to create a pragmatic union of pollinator and in-

sect research with conservation and land management, utilizing the former crane pens which are entirely deer-proofed and perfectly suited to such research and management objectives.

The Friends of Patuxent have had a longstanding interest in bee and pollinator conservation.

The Friends of Patuxent have had a longstanding interest in bee and pollinator conservation. The Friends annually sponsor the annual Pollinator Festival at Patuxent, a family-friendly event which

drew nearly 500 attendees last year, many first-time visitors to Patuxent.

The invitation-only open-house event, supported by the Friends for the federal, state, academic and non-profit research community, will take place in late April at the Lab.

As co-sponsors of the Bee Lab open house this spring for the pollinator and bee research community, the Friends of Patuxent continues its support for Patuxent's research mission and its impact on critical national conservation priorities. The Friends will provide on-going updates about the Bee Lab and this initiative in the newsletter and social media. 🐝

The White Deer of Patuxent

by Matthew C. Perry

When Patuxent Research Refuge (Patuxent) was established in 1936 the original 2,650 acres (now mainly the Central Tract) did not have any white-tailed deer (*Odocoileus virginianus*). Patuxent now includes 12,800 acres and is still officially known as Patuxent Research Refuge, although the research program comes under Patuxent Wildlife Research Center of the USGS. Deer had been extirpated from this area in the late 1800s from a combination of factors, but predominantly from excessive hunting and extensive land clearing for farming. Deer were not only absent at Patuxent, but also in most of Maryland, and in many parts of the east.

In 1902, the Maryland General Assembly made it illegal to hunt deer throughout the state, and this ban continued until 1929, when hunting of deer was again legalized. Some deer were imported into Maryland and released in the early 1900s in an attempt to rebuild populations. Other deer were raised in large enclosed forest areas and released into other areas. In the late 1940s and early 1950s, about 2,000 deer from Aberdeen Proving Grounds, which had been protected for many years, were trapped and transplanted throughout the state.

Bill Stickel, in a booklet on the flora and fauna of Patuxent, classified deer as very rare in the early 1940s, but as abundant and destructive in the 1970s. The first surveys to estimate the number of deer at the Central Tract of Patuxent began in January 1975 and continued once a year until 1979 (5-year ave.= 96 deer). In 1988, the survey was reinstated and was conducted annually until 1998.

Although not representing the total population, counts in the Central Tract give a good approximation of



“Whitey” was seen at Patuxent from 1989 to 1994 and produced normal colored offspring.

the number of deer and an indication of population trend. The population during 1988-93 increased (6-year ave. = 214 deer). Counts after 1993 indicated population numbers ranging from a low of 322 in 1996 to a high of 357 in 1998. This trend had also been noticed throughout Maryland and the Northeast. The increase in deer during this period has been attributed to the unusually mild winters and excellent habitat conditions created mainly by suburban developments.

Piebald deer (partially white) are from a recessive genetic trait and the deer usually become more prevalent due to overpopulation of a deer herd. Some piebald deer were observed in a study conducted by the Southeastern Wildlife Disease Center at Patuxent in the 1960s and many have been seen in subsequent years. Although Patuxent staff has never recorded what is considered an albino deer (all white with pink eyes) there have been several deer that have over 90 percent white pelage. Most white deer are short-

lived and often have abnormalities, such as deformed feet.

Results of a special science study conducted by a high school student, indicated that white deer of Patuxent are not ostracized by normal colored deer. In 1998, there was a twin piebald deer at Patuxent with a normal colored sibling, and white deer have given birth to normal colored fawns. Five white deer that have had over 50 percent white pelage were seen commonly at Patuxent during the 1990s.

Hunting began at the Central Tract of Patuxent in 1998 and resulted in a reduction of the overall deer herd and essentially the elimination of white deer. Although white deer add an interesting aspect of a deer population, they typically represent an overabundance of the deer population, which is causing excessive damage to the habitat used by many other wildlife species. Ground-nesting birds are especially hindered by the loss of low vegetation caused by browsing of deer. 🐾

A Thwack in the Park

Continued from page 5

tors, and the rich earthworms that can be found there, make it prime real estate. But brushlands themselves are a short-lived phenomenon, and around Great Swamp they can attain forest character (with trees dominating and shading out the ground layer) in as little as 10 years. Across the east, nearly 13 million acres of scrubby brushland habitats have been lost either to suburban development or to forest conversion since the 1960's, and with it go the woodcock. Here in the northeast, mature forests seem to have captured the heart of the average suburbanite as sign of a healthy bit of nature left to be – and scrubby brushlands can be perceived as an interim mess, no longer pretty or useful to us. Beauty is, of course, in the eye of the beholder. For the woodcock, the loss of brushlands has been an ugly thing.

And so, odd as it sounds, the only way to maintain these ephemeral habitats is...to cut them down. By cutting early



Scan this QR code to see video of the woodcock feeding on its favorite meal - earthworms.

successional (“young”) habitats in rotation, staggered from year to year and field by field, the refuge is able to consistently maintain suitable habitat for our woodcock friends. And as much as our brushlands love to grow up into forest, they are equally eager to regenerate following cuts – often growing back even thicker than they started. In as little as 6 months those fields will be dense with vegetation 5-6 feet tall, eagerly sprouting upward and outward.

And the woodcock happen to love hanging out in those really thick brushlands, even if I do not. 🐢

FRIENDS OF PATUXENT BOARD OF DIRECTORS 2019

- Richard Dolesh, *Chair*
- Jeanne Latham, *Vice-chair*
- Lowell Adams, *Secretary*
- Robert Schroeder, *Treasurer*
- Lindsey Baker, *Director*
- Ken Cohen, *Director*
- Charles Deegan, *Director*
- Courtney Koivisto, *Director*
- Kenneth Lavish, *Director*
- Matthew Perry, *Director*
- Clarence “Sparky” Sparks, *Liaison*
- Marcia Watson, *Director*

LIAISONS

- Diana Ogilvie, Patuxent Research Refuge Liaison
- Shannon Beliew, USGS Patuxent Wildlife Research Center, Liaison
- Douglas Meister, Esq., General Counsel

FRIEND OF PATUXENT BOARD MEETINGS

Friends Board meetings will be held at 5 PM at the Visitor Center on Jan. 15, 2019; Feb. 19, 2019; Mar. 19, 2019; Apr. 16, 2019; May 21, 2019; Jun. 18, 2019; Jul. 16, 2019; Aug. – no meeting; Sep. 17, 2019. Dates, location and times are subject to change.

JOIN TODAY!

MEMBERSHIP APPLICATION



Name: _____

Address: _____

City: _____ State: _____ Zip: _____

E-mail: _____

(E-mail address will not be sold or shared. It will be used for Friends and Refuge announcements only.)

Phone: (opt.) _____ New Renewal

Individual (\$25/yr), gift: FOP bookmark (or other) Family (\$35/yr), gift: FOP decal (or other)

Contributor (\$75/yr), gift: History of Patuxent DVD (or other) Sponsor (\$250/yr), gift: FOP hat (or other)

Life (\$500), gift: FOP shirt (or other) Please size: S M L XL XXL XXXL

Life-65+ (\$300), gift: FOP shirt (or other) Please size: S M L XL XXL XXXL

Corporate \$1,000 Gift: 1/4 page ad in the Friends newsletter for one year. (4 Issues).

Donation \$ _____ Make check to “Friends of Patuxent” and mail to address on reverse side of this page.

Check here if you prefer not to have a gift, and instead have your entire dues support Friends of Patuxent.

Check here if you would like save a tree by reading our quarterly newsletter online.



Friends of Patuxent

National Wildlife Visitor Center
10901 Scarlet Tanager Loop
Laurel MD, 20708-4011

NONPROFIT ORG.
U.S. POSTAGE
PAID
LAUREL, MD
PERMIT NO. 2408



Friends of Patuxent

National Wildlife Visitor Center
10901 Scarlet Tanager Loop
Laurel MD, 20708-4011

Phone: 301-497-5789
www.friendsofpatuxent.org

WE INVITE YOU TO JOIN!

Friends of the Patuxent Wildlife Research Center and Patuxent Research Refuge, Inc. is a designated Section 501(c)(3) public charity. It is a membership organization whose mission is to financially support the research of the PWRC and the environmental education, outreach and recreational missions at the PRR. All contributions are tax deductible to the extent allowed by law. Our Maryland Charitable Organization Registration-2348.

Your membership/contribution helps support the mission and programs at Patuxent. You also receive the following benefits:

- Quarterly newsletter (mailed on request or go to www.friendsofpatuxent.org)
- 10% discount in our Wildlife Images bookstore and other area refuge bookstores
- Attendance at member functions
- Participation in on-site educational programs
- Sense of accomplishment in providing many opportunities for wildlife-related recreation, education and research

(Application on reverse side)