

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

FRIENDS OF PATUXENT

Vol. 29 • No. 2

www.friendsopatuxent.org

April-May-June 2018



Three Tracts, One Refuge

Brad Knudsen, Refuge Manager

In the 17 years I have been at Patuxent, it has become habit to refer to this treasure of a refuge as consisting of three tracts. Those tracts being – the South Tract, the Central Tract, and the North Tract. By the way, there are actually far more than these three tracts. “Tract” is a realty term that refers to a distinct past landowner and/or acquisition. The South Tract alone is made up of over 15 separate parcels of land, making up the entirety of the “Tract.”

We are all familiar with these tracts. The South Tract is dominated by the presence of the National Wildlife Visitor Center, at the time it was opened, the largest Visitor Center in the Department of the Interior. It is a beautiful facility, full of displays for the general public to learn about conservation and research aimed primarily at supporting wildlife and their habitats. It also has meeting space flexible enough for small group retreats or larger conferences of up to 200 attendees. The South Tract – recently renamed the Daniel M. Ashe Division of Patuxent – also boasts several miles of hiking trails and one of the refuge’s most popular fishing spots at Cash Lake, open mid-March to early October every year.

The Central Tract, of course, is the original 2600-plus acres of the refuge, obtained in 1936, and has long served



Photo: Brenda Stone

Goose Pond - Central Tract

as the home of the Patuxent Wildlife Research Center (PWRC). The Central Tract is dominated by the research presence, including the long history of studies conducted on population surveys, land and water management techniques to support wildlife, propagation of endangered species, and environmental contaminants. Closed

to the public, it serves as a secure location for animal colonies such as the kestrels and screech owls, and has been the home to the whooping crane breeding/rearing facility, covering close to 250 acres of the Central Tract. The Fish and Wildlife Service’s Division of Migratory Bird Management also has several Headquarters staff located there, where they can easily interface with PWRC scientists on matters of bird conservation.

That leaves the North Tract – the 8,100 acres received from Fort George G. Meade in 1991-1992, as part of the Department of Defense’s Base Realignment and Closure Act of 1985. This tract, too, has a distinct “personality.” It is dominated by former military uses, and current continuing use of the shooting ranges (by over 100 federal and state/local law enforcement agencies annually) and the softball field complex located at the

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Three Tracts, One Refuge

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refuge entrance off of Highway 198. The North Tract has one of the longest and most varied hunting programs in Region 5, with seasons for deer, waterfowl, mourning doves, rabbits, squirrels, and turkeys resulting in several thousand hunter visits a year. And – while the presence of unexploded ordnance (UXOs) from the 75 years of military use prior to becoming part of the refuge influences much of our management and public use of the area, it is important to point out we have not had a single injury related to UXO since it became refuge 27 years ago!

There are two points to take away from this little dissertation about these three tracts, with vastly different feels and flavors to them.

ONE: Despite the diversity of the history, the uses, the

ongoing activities, etc. one thing unites ALL these tracts. They share the original wildlife research purpose of Patuxent Research Refuge. Established by Executive Order 7514 by President Franklin Roosevelt in 1936, the pur-

pose of Patuxent is expressly stated to serve “as a wildlife experiment and research refuge.” By National Wildlife Refuge System policy, this purpose carries forth to every single additional acre obtained as part of Patuxent Research Refuge – then, now, and in the future. So the 12,841 acres now making up Patuxent ALL have the same research purpose. When we receive the 39.9 acres to be donated by Arundel Gateways along our North Tract boundary, those, too, will have a research purpose.

TWO: The diversity of these tracts (there is that word again) should be viewed as a strength, as we consider the refuge as a whole. Just as a diversity of habitats and species strengthens an ecosystem, and a diversity of thought/background strengthens a workforce, so too does a diversity of what a single refuge has to offer make that refuge stronger. A visitor’s experience at the North

Tract may be wildly different than their experience at the South Tract. A volunteer’s role at the South Tract may be wildly different than a volunteer’s role at the North Tract. A group gaining special access to the Central Tract to learn about conservation science may have a totally different understanding of what makes Patuxent special than the group bicycling on Wildlife Loop, or a family attending an “Owl Prowl” or a hunter pursuing turkeys at dawn on a chilly spring morning.

So there you have it — three tracts, one refuge — Patuxent Research Refuge offering a variety of experiences to the public as we fulfill our research purpose, and as we fulfill our obligation to the diverse natural resources we manage on these public lands. ***It is what makes us strong. It is what will keep us strong!*** 🦉



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

Many of the newsletter contributors and other assistants are volunteers. There are regular contributors, 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.

Wintertime at the PRR

by Steve Noyes, Volunteer Naturalist

We don't always think of wintertime as the time to visit the Patuxent Research Refuge. There's something about the serenity of winter. The most picturesque time is just after a snowfall when only the footprints of critters can be seen. Unfortunately, the refuge may be closed until roadways and the parking lot can be cleared. A light layer of new snow will provide some great opportunities for a "new" look to previously taken photos (the refuge will probably remain open after recent dusting).

As a photographer, I'm always looking for opportunities to photograph pristine conditions, untouched by hu-



man activities. This is when black-and-white photos are more dramatic than color photos. So, soon after a snowfall occurs, grab your camera and head to the refuge.

Watch for an announcement of the snow emergency number to learn when the refuge is closed. It may be closed for several days following a major storm. 🦋

WE INVITE YOU TO JOIN!

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



Little Old School Houses Near Patuxent

By Matthew C. Perry

Before school bussing, children had to walk to school, so rural schools were fairly numerous and in walking distance. In the early 1900s, prior to the establishment of Patuxent Research Refuge, there were two schools along the Laurel-Bowie Road (Route 197). One was west in Laurel and the other east in Bowie. The one in Laurel, called Fairy Spring School, was located east of what is now the Baltimore Washington Parkway in the area near the current Harley-Davidson dealership. The school was at the intersections of Laurel-Bowie, Muirkirk, and Snowden Roads. However, when the Baltimore Washington Parkway was created, the old Muirkirk Road became a dead-end, stopping at the Parkway, and was rerouted to where it is today near the Montpelier Shopping Center.

A picture of the school provided by the Laurel Leader Newspaper shows a 1908 school with shuttered windows. However, the newspaper staff also provided a 1921 news item from the Washington Post that said: "The Fairy Spring School, near Laurel, considered a model rural school is being thoroughly renovated, and when improvements are completed there will be a formal opening. Miss Edna Waring has been the principal of this school for about 15 years. People of the neighborhood are much interested in the school and have bought \$250 worth of desks."

Elizabeth Hance Lammers, who lived in the old Hance House on Patuxent near Coburn Laboratory (and later in house across from the Harley-Davidson store), attended this one-room school. She told me in a conversation several decades ago that she walked from the Hance House to the school by way of trails through the Patuxent woods. She stopped half way at Snowden Hall to rendezvous with



Fairy Spring School located on the old Muirkirk Road with boarded windows in 1908.



Patuxent biological assistant, Michael Dubik, standing near shocked winter wheat on Henry Lammers farm, 1949.

the school teacher, Miss Edna Waring, who walked the rest of the way with her. Miss Waring rented a room in Snowden Hall on Patuxent from Mr. John Snowden for many years and married him later in life.

A color photograph taken in 1949 by Patuxent biologist, Mr. Fran Uhler, shows his assistant, Mr. Michael Dubik, standing near shocked winter wheat in a field of the Henry Lammers farm. Henry was the grandfather



Cedar Grove School House in Bowie with students raising the new flag around 1920.

of Mr. Bernie Lammers, who married well-known and respected secretary at Patuxent, Marylu Lammers. The renovated Fairy Spring school house can be seen in the background of the farm field.

After the school closed, the building was used as a dance hall. Many local people danced there and some met their spouses at the dance. After the dance hall closed, it was converted to a home and Bernie's uncle, Mr. George Lammers, lived there until his death in October 1979. After his death it was eventually destroyed due to deteriorating conditions.

The other schoolhouse, which was located east of the present Patuxent Research Refuge, was the Cedar Grove School. The original school was located along Jericho Park Road, but was destroyed by fire around 1910. Miss Lily Maude Duvall was the young teacher at this rural school and rode her Morgan horse, Lady, to the school from the historic Duvall home (Gladswood) on what is now Patuxent property. Miss Duvall was a relative of the descendants of Dr. Charles Duvall, who once lived in the old house.

After the school was destroyed by fire a new school was built at the small land triangle, created by the intersection of Jericho Park Road and the old Route 197. Miss Duvall continued to teach at the new school. She married Mr. Henry (Harry) Kuhl on May 21, 1912. Mr. Kuhl, a neighbor, lived immediately across the street from the new school, and was employed as the local postmaster in Bowie (now old Bowie). Mrs. Kuhl stopped work in 1915 when she became pregnant. Her daughter Elizabeth was born on November 12, 1915.

Ms. Sonia Metelsky, a family relative, provided a photograph of the school dating back to the 1920 time period. The picture shows the children of the school in the process of raising a new flag on the school flagpole. The students in the photo of the Cedar Grove School were all identified by Ms. Metelsky's mother. They include several children from the Schafer, Knowles, Kuhl, and Kluckhuhn families, who all lived on the present property of Patuxent Research Refuge. Frances Schafer is seen holding the flagpole halyard. Miss Grace Roberts was the teacher at the time of the photograph, having replaced Mrs. Lily Kuhl in 1915.

Mrs. Kuhl's daughter, Elizabeth Kuhl, is in the photograph of the school children (front row, third from the right). Mrs. Elizabeth Kuhl Harman, who as a child attended this small school for seven grades, died on June 17, 2017, at the age of 101.

A fresh-water spring existed at both of the Cedar Grove Schools on the Schafer or Kuhl properties, but the exact location is unknown. The location of the schools near a well was important to provide drinking water for staff and students. Mrs. Harman told me that just prior to World War I, that soldiers from Fort Meade marched across Duvall Bridge over the Patuxent River as part of military training operations. They routinely stopped and received cold water from her mother taken from a spring on her property. When the school closed in the 1940s, the property was purchased by Millard Schafer and converted to a two-story rental house with basement. That house was torn down as part of Jericho Park Road improvements in the 1980s.

During the late 1800s and early 1900s, Black children attended different schools due to segregation. I have been told that there were several schools within a few miles of Patuxent, but have not been able to determine the exact location. Learning more about the schools of the past gives us a better appreciation of the life of young people and how things have changed over the years to the present time. 🐦



Royal Visit to See Whooping Cranes

by Matthew C. Perry

Royalty from the United Kingdom came to Patuxent on July 18, 1970, in the form of His Royal Highness, Prince Charles, Prince of Wales. He was accompanied by Mr. David Eisenhower, the grandson of President Dwight Eisenhower and the son-in-law of President Richard Nixon. Dr. Lucille Stickel, coordinator of the Environmental Pollution Research Program of Patuxent, along with Assistant Director, Mr. Jack Woolstenhulme, greeted the two dignitaries when they arrived at the Center in a helicopter. The greeting party also included Mr. Boyd Gibbons, a White House aide from the Environmental Quality Council.

The government helicopter landed on the lawn of the Patuxent headquarters in front of the flagpole and several secret service officers were noticeably in attendance for security. The helicopter had made several test runs in the week prior to arrival. The visit occurred on a Saturday so Patuxent was closed. Resident staff members of Patuxent were told of the tour, but were asked to keep it secret and remain at least 150 feet from the visiting party.

A limousine took the visiting party, Mr. Woostenhulme, and Dr. Stickel through the environmental pollution area and discussed the major program with pesticides that was making national news at the time. One year earlier Patuxent had published research findings that linked eggshell thinning in birds to the metabolites of DDT in the diet of birds.

To have two internationally well-known celebrities visit Patuxent at the same time was undoubtedly a very exciting, but challenging, experience for Patuxent administrators. Dr. Stickel stated concerning the Prince that "his relaxed and informal manner relieved the tensions, which had built up from



Mr. David Eisenhower, Prince Charles, and Dr. Lucille Stickel walking in the pen area for contaminant research.

both his presence itself and the tight schedule we had to follow." Dr. Stickel also stated, "He would ask questions of a technical nature and understand the resulting technical answers."

Dr. Dustman, Director of Patuxent, joined the tour group when they visited the main building for contaminant research and also some of the created wetland impoundments where waterfowl research was conducted with nesting structures. Dr. Dustman commented to news journalists later that the Prince was most interested in environmental pollution and although he "had no formal training in this area, the Prince was highly knowledgeable."

At the time of the visit, Patuxent had major studies underway evaluating the toxicity of lead shotgun pellets used in hunting. The Prince was told that over one million waterfowl die annually from lead shot ingestion and the resulting poisoning, and that Patuxent was testing alternative non-toxic

shot for hunting. The Prince, who was a hunter like his father, said that he would watch the start of production so that a similar measure could be started in England. The use of lead shot in waterfowl hunting was banned in the USA in 1991 and in England in 1999. Research conducted at Patuxent can take major credit for the ban in the USA, and possibly some credit for the ban in England!!!!

Patuxent veterinarian, Dr. Louis Locke, took part in the royal tour and commented to me in the early 1970s how the Prince had identified the beech trees in the forest between Snowden Pond and the Hance Farm area. The Prince stated that the diffused light caused by their structure was of good quality and that the Patuxent forest was similar to the forests in England.

Dr. Locke demonstrated the necropsy (post-mortem) of a bald eagle to the Prince in the laboratory, which was part of the Biochemistry Build-



Tour of whooping cranes: left-right, Mr. David Eisenhower, Unknown, Dr. Eugene Dustman, Mr. Glen Smart, Unknown, Prince Charles, Mr. Jack Woolstenhulme, and Dr. Lucille Stickel.



Prince Charles accepts drink from Ms. Evelyn Schoenborn, secretary in the Director's Office. Mr. David Eisenhower on far left and Dr. Lucille Stickel being interviewed by Ms. Helen Thomas.

ing (later renamed Stickel Laboratory). Following the demonstration, the Prince, displaying some of the humor he probably inherited from his father, told the scientists, "You can eat your lunch now." The day after the bloody examination, one of the biological assistants, Ms. Annie Ross, made the humorous comment using an analogy of the Grimm fairy tale that "you have to kiss a frog, to meet a prince."

The tour continued to the endangered species area, where Mr. Glen Smart led a tour of the pens and described some of the techniques to propagate the captive colonies of endangered species. The visitors saw whooping cranes, sandhill cranes, Andean condors, and Aleutian Canada geese. Prince Charles again demonstrated his friendly and relaxed demeanor when he flapped his arms at an Andean condor and clucked at a whooping crane.

The one and one-half-hour tour of the facility, although relatively brief, was followed by refreshments outside, and reporters attending the event had an opportunity to ask questions. In one of the historic photographs of the events, well-known journalist, Ms. Helen Thomas, can be seen interviewing Dr. Stickel. Ms. Thomas at the time was respected in the Washington, DC, area as the journalist who asked the first question to the President during White House press conferences. She also was known to be very probing and persistent in her queries. It would be interesting to know the questions and answers from the interview with Dr. Stickel. Unfortunately, no article written by Ms. Thomas could be located although several other press articles were published about the visit. One stated that the Prince considered the visit to Patuxent to be one of the major highlights of his U.S. tour. This was the first and only royal visit of the Patuxent facility in our impressive 80-year history.

Mr. Jerry Longcore was a fairly new research biologist at Patuxent in 1970, but got charged with being one of the

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My Love of Whooping Cranes

By Mary Beth Mattison

I fell in love with whooping cranes the first time I saw them. That was in the early 1990s on Matagorda Island off the coast of Texas. I was working as a fundraising assistant for The Nature Conservancy of Texas at the time. TNCT had a preserve on Matagorda Island, and they occasionally held meetings for staff there.

During my first trip to Matagorda Island, we took a break to go see some of the whooping cranes that were wintering on the Island. I still remember how excited I was while waiting my turn to get a look at them through high-powered binoculars. When I saw them, I was enthralled! They looked so elegant and shy. I couldn't get over the thrill of seeing these magnificent birds in their own habitat.

After I got home from that visit, my life went on as usual. But I could not get those birds out of my mind; they kept wiggling their way back into my thoughts. Finally, I decided to write a little story about them. For several months, the



Wendy Whooper show in Texas

story just sat on my dining room table. Then, because one of my hobbies was acting in community theater, I decided to turn the short story into a children's show. With the help of a friend who was good at designing costumes, I made a costume, bought props, and began per-

forming it at preschools. I also performed at schools, environmental fairs, and The Children's Museum of Houston.

After I moved to Maryland in 2012, I began going to Patuxent Wildlife Refuge and learned about the captive breeding program you folks were doing with whooping cranes. Diana Ogilvie, Ken Lavish, and Amy Shoop were generous with their time in educating me about the captive breeding program as well as the ultra-light training. I wrote another children's story about the whoopers here and how they were trained to fly behind ultra-light planes.

I was sad when I found out that both the ultra-light program and the captive breeding program here were being stopped. But I understand budgets and I know that money, like time and life itself, is finite.

I'll always love whooping cranes. I still think of these birds often. They became a part of me, and I'll never forget them. 🦩

Royal Visit to See Whooping Cranes

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drivers for the journalists due to his knowledge of pesticides. The press folks were very eager to move to the crane pens and repeatedly demanded with some salty language that he "hurry up." When the tour was over the staff members of Patuxent who had participated on the tour were given souvenir pens from the White House for their troubles, and Jerry still has his pen with the signature of President Richard Nixon.

Overall, the visit of the Prince to Patuxent was favorable to Patuxent



"Richard Nixon" souvenir pen given to research biologist, Jerry Longcore, after Royal visit, 1970.

and also in some small way helped with the Prince's interest in learning more about the environment. In his 2010 Book entitled "Harmony – a new way of looking at the world," there are numerous references to problems with environmental pollution and endangered species, two major areas he discussed at Patuxent. In a rela-

tively new biography entitled "Prince Charles" the author, Sally Bedell Smith, mentions a 1970 whirlwind visit of Prince Charles to the Washington, DC, area with his sister, Princess Anne (who did not visit Patuxent). Ms. Smith stated simply that there was "a briefing for Prince Charles on endangered species at the Patuxent Center for Wildlife Research." 🦩

Spring Exhibitors in the Hollingsworth Gallery

Faith Leahy-Thielke, Patuxent Volunteer

As welcome as flowers and robins in spring will be the return of exhibitors, Jim O'Leary in April and Russell Lehman in May. In June, we'll appreciate the work of several members of the Laurel Art Guild.

Jim O'Leary has "enjoyed taking photographs since (his New England) childhood" – and recalls visiting places that inspired him: New Hampshire's White Mountains, Maine's rocky coast, Cape Cod's dunes and beaches and their night skies – which, he writes, spawned a life-long love of astronomy. Indeed, his whole career has been that of an astronomy and space science educator. O'Leary is a Senior Scientist at the Maryland Science Center in Baltimore, where he's directed both the Davis Planetarium and the IMAX Theater. Educated at Catholic University, one of O'Leary's activities there was photography editor for the Tower, the campus newspaper. He has continued photographing for years – much more, he says, when digital photography came along. His images are a combination of wildlife and nature, scenes from many locations, including Chile where he was an ACEAP ambassador (Astronomy in Chile Educator Ambassador Program). O'Leary writes that these images recall and preserve special moments and gives him even more appreciation of the majesty and diversity of our natural world.

Our Threepeat! Beltsville resident, and Friend of Patuxent **Russ Lehman**, is bringing his third and perhaps (due to health issues) last woodart exhibit to Hollingsworth in May. His deep love and appreciation of nature and wildlife developed during a childhood spent, during summers, on his grandparents' farm near Annapolis, but his artistic career didn't begin until 2011 with "retirement." Inspired by intarsia, he used a scroll saw to craft animal images from

a single plaque of wood. Cut from the plaque, the pieces are "then elevated to different levels" and shaped and sanded by hand. Lehman colors them individually, using colored ink or wood stains and finishes them with a polyurethane coating. He writes that this year's exhibit will include images of tropical birds, fish, horses and butterflies, in addition to other wildlife in sizes ranging from 4x6 to 12x16 inches. Although Russ Lehman says that another exhibit might not be possible, he is "fondly looking forward" to the 2018 Holiday Bazaar here in November.

In June we welcome the Laurel Art Guild, an organization of professional and amateur artists that has existed since 1967. Its membership is open to anyone with an interest in the visual arts. The Guild is located on the

grounds of the Montpelier Mansion and is under the jurisdiction of the Maryland National Park and Planning Commission which has been "instrumental in the Guild's success" by promoting classes, workshops and art shows. The guild holds monthly meetings from September through June in a variety of sites. These gatherings feature a speaker and offer a chance to meet and exchange ideas with fellow artists. Members assist with exhibits, suggest plein air locations, staff booths at fairs, keep records, publish a monthly newsletter, and help with workshops. And, of course, do their art work which they'll share with us this spring. The Guild and its members' websites feature lovely paintings I'm sure we'll enjoy and appreciate when that artwork is on display at Hollingsworth. Come on spring! 🐦

Calling for Your Articles and Photos Please

We're looking for articles—your articles—and cool photos for future Friends newsletters. You don't have to be a professional writer. Just jot down a paragraph or two about a nature topic dear to your heart. Or send us a photo or two of a beautiful plant, wildlife, or people at a Refuge or Friends events



Please consider sending us your article and/or your photos for your next newsletter. Make sure to title your article and include your name and volunteer position. When you send it, put Newsletter Article in the Subject Line of your email. We'd like to hear from YOU. Here's where to send them: ross.feldner@verizon.net **Thank you so much!**

What Trees are These?

By Pat Simons

Is there anything quite like following a path through the woods, catching the sun as it shines through the overhead foliage, examining the different textures and colors of tree bark, slushing through fallen leaves in the fall, and all the while either consciously or unconsciously putting a name to the different trees along the way? Oak, elm, maple sycamore, sweetgum, walnut, or perhaps we're in a forest of pines and hemlock. Is that a sassafras, a pawpaw, a tulip tree? Or we might be on a city street looking at a ginkgo or flowering cherry tree. Coniferous and deciduous. Leaves that are needlelike, egg-shaped, heart-shaped, oblong, elliptic, trifoliate? Is the silhouette spreading or conical? The bark peeling or papery? What about the flowers or the seeds? Once we begin to see the individual trees within the forest, we start to notice these details and develop a deeper understanding of the variety of trees in any ecosystem, and the complex interdependency between plants, animals, and trees. And when you are looking for materials to guide your exploration, the Wildlife Images Bookstore has a variety of books and guides—from children's story books and simple identification books for beginners to more comprehensive field guides, and even journals for recording your observations.

History, Essays, and Field Guides

A Wind-Storm in the Forests by John Muir is a short essay presented in its own small, nicely bound book. The book is part of the American Roots series of writings by famous American nature writers. Others in stock include ***The Gospel of Nature*** by John Burroughs, ***The Passenger Pigeon*** by John James Audubon, and ***A Winter Walk*** by Henry David Thoreau.



American Canopy, Trees, Forests, and the Making of a Nation by Eric Rutko. Winner of the U.S. History, American Publishers Award for Professional and Scholarly Excellence, this is a highly readable and entertaining history of how trees were essential to the early years of the republic. It includes stories about subjects such as the Liberty Tree, Thoreau's retreat into the woods, the creation of Central Park, and the efforts to save the American chestnut.

Tree is an "Eyewitness" book filled with photos that accompany explanations ranging from "What is a tree?" to discussions of animal pollinators, wildfires, different types of tree leaves, and how trees grow. A great introduction to trees for both adults and children.

What's That Tree? One of a series of beginner's guides to plant and animal identification this guide features over 150 different trees. The book is broken down first by type of tree—conifer, simple broadleaves, or compound broadleaves, and then within each category by leaf shape. The introductory

pages discuss how to identify trees, tree habits, leaf characteristics, bark, flowers, and seeds. Other titles in the ***What's That?*** series include flowers and birds.

1001 Questions Answered About Trees by Rutherford Platt. In this classic book, the author, as the title suggests, answers 1001 common as well as fanciful questions about trees.

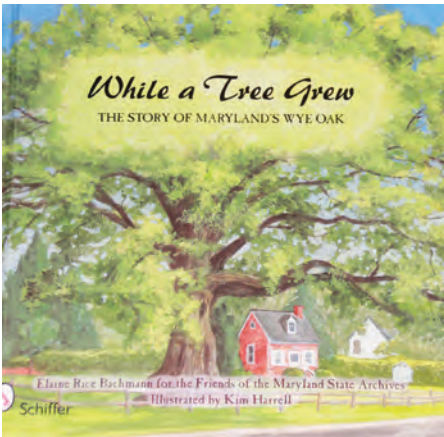
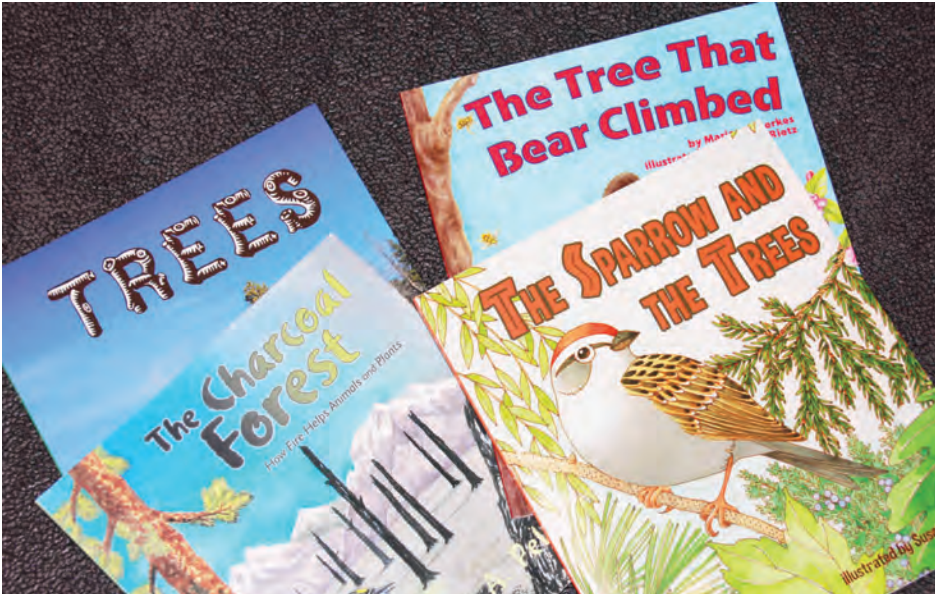
Peterson's Field Guide to Eastern Trees by George A. Petrides and Janet Wehr is another standard Peterson guide, this one focused on trees of the eastern U.S. and Canada and the Midwest. The book includes general information about trees, a section on tree silhouettes, and then detailed descriptions, drawings and color photos of 455 species of trees.

For journaling, note-taking, and recording your observations—***Advice From a Tree***, is a lined journal with selected journal prompts and/or "advice" inspired by trees. The ***Observer's Notebook*** is a lined journal for recording your observations of trees, and I'd suggest flowers, birds, animals, etc.

Waterproof, folding tree identification guides in the store include ***Sibley's Common Trees of Trails & Forests of the Mid-Atlantic***; ***Sibley's Common Trees of the Cities and Towns of the Mid-Atlantic***; and two Pocket Naturalist Guides — ***Maryland & DC Trees and Wildflowers*** and ***Trees, A Folding Pocket Guide to Familiar North American Plants***.

Books for Children

While a Tree Grew, The Story of Maryland's Wye Oak by Elain Rice Bachmann and illustrated by Kim Harrell tells the story of Maryland's great Wye Oak from how the original acorn



may have been planted through its hundreds of years of growth until the night it succumbed to the wind and it is now remembered through a variety of artifacts made from its limbs and branches. The tale is a quick trip through Maryland history citing the explorations of John Smith, the arrival of the Ark and Dove, the Revolutionary War, Frederick Douglass (who lived on a nearby farm), and the building of the Chesapeake Bay Bridge.

The Charcoal Forest. How Fire Helps Animals and Plants by Beth A. Peluso describes how a forest is regenerated, and how quickly after a fire, the burned forest begins to show signs of life. The book focuses on the Rocky Mountains and includes illustrated descriptions of a variety of plants and animals and how they are affected and nurtured by a burned for-

est. From the Clark's nutcracker to the grizzly bear, the lodgepole pine to the lung liverwort, we see how different plants and animals survive and thrive after a fire.

Trees. A Compare and Contrast Book by Katharine Hall shows how different types of trees grow in different environments. Oak trees that live in deep forests, acacia trees that live in solitude on the savannah, Joshua trees that thrive in the desert and other trees that live in swamps or on rocky surfaces. The book also includes simple descriptions of conifer and broadleaf trees, and evergreen vs deciduous trees.



The Sparrow and the Trees, by Sharon Chriscoe and illustrated by Susan Detwiler tells the tale of the trees that do or do not offer assistance to Papa Sparrow who is unable to fly south until his injured wing heals. The “selfish” trees that refused to help Papa Sparrow now lose their leaves in the winter, while those that provided food and shelter are our evergreens. The story provides an introduction for larger discussions with young children about the different types of trees, tree adaptation, and bird migration.

The Tree that Bear Climbed by Marianne Berkes and illustrated by Kathleen Rietz. As bear climbs the tree we learn about the different parts of a tree and why the bear wants to climb the tree. The book, written in cumulative verse takes us from the roots, to the soil, the rain, the leaves, the sun, blossoms, pollen, bees, a hive, until, yes we finally get to the honey the bear is after.

A Walk in the Forest by Maria Dek, is a delicately illustrated tale of what a child might see taking a walk in the woods. The book is an exhortation to run wild in the woods, shout and play, follow footprints, look carefully for things small and large, patiently observe plants and animals, play hide and seek, and in the end appreciate the mystery and wonders of the woods.

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The Wildlife Images Bookstore Needs Volunteers!

Spend a few hours a week in the book store—meeting other volunteers & staff in the Visitor Center; greeting visitors in the shop; and helping customers find that perfect souvenir of their visit. Bookstore hours are flexible (weekdays or weekends) and training provided. Contact the bookstore manager, Linda Shive at wibookstore@friendsof-patuxent.org.

Around the Refuge

Photos by Michelle Hannon



Tundra Swans



Great Blue Heron



Lilies



Tree Swallow



Bridge at Cash Lake



Pontoon bridge at Cash Lake

Photos by Matt Beziat



Mayapple - North Tract



Mountain Laurel - South Tract



Orange Milkwort - North Tract



Eastern Prickly Pear - North Tract



Yellow Trout Lily - North Tract



Lesser Celandine - North Tract

BALD EAGLE FACTS

Our nation's symbol is the Bald Eagle, which is not really bald; it has white feathers on its head, neck, and tail. The word ***bald*** in the eagle's name comes from a derivation of ***balde***, an Old English word meaning ***white***.

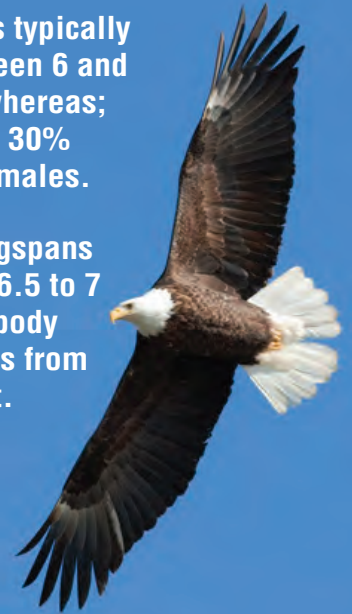


In 1782, the U.S. Congress selected the Bald Eagle as our national symbol because of the bird's long life, great strength, and majestic looks.

There are
8
different
species
of eagles
that inhabit
North America.

Male eagles typically weigh between 6 and 8 pounds, whereas; females are 30% larger than males.

Eagles' wingspans range from 6.5 to 7 feet, while body length varies from 3 to 3.5 feet.

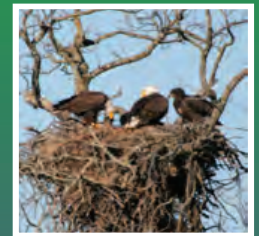


Bald Eagles can live up to 30 years in the wild and 48 in zoos.



Bald Eagles feed primarily on fish, but will also feed on ducks, rodents, snakes, and carrion (dead animals).

They are diurnal (day) hunters that can swim, fly 20-40 miles per hour in normal flight, and dive at speeds over 100 miles per hour. Eagle nests are very large (they may use the same nest year after year, adding more twigs and branches each time). One nest found had been used for 34 years and weighed over 2 tons!




The bald eagle belongs to a group of birds known as raptors, or birds of prey that hunt and feed on other animals. They have very sharp vision that allows them to find prey during flight. They also have very strong talons (claws) and beaks. Raptors are important for a healthy ecosystem and by protecting them many other species are protected.

Other raptors include: Ospreys • Kites • Hawks • Harriers • Vultures • Falcons • Owls

What Trees Are These?

Continued from page 11

Who Will Plant a Tree? By Jerry Palotta and illustrated by Tom Leonard shows how animals plant trees illustrating how a squirrel plants an oak tree, a bear an apple tree, migrating geese a chestnut, a dolphin a palm tree, a wild horse a cherry tree, monkeys fig trees, a wren a juniper, a camel a date palm, an owl an elm tree, a moose a pear tree, ants a pine tree, a beaver a maple tree, and even an elephant that plants an unnamed tree.

The Tree in the Ancient Forest, by Carol Reed-Jones and illustrated by Christopher Canyon, describes through cumulative verse, the interdependence of a variety of plants and animals and a three hundred year old tree in the forest. Soil and roots, truffles, voles and mice, owls and owlets, woodpeckers, ants, and a marten are all a part of the tree's ecosystem, depending on one another for growth and survival. 

Fun Tree-Themed Items

And don't forget our "May the Forests Be With You" sweatshirts, t-shirts, caps, and recently arrived mugs, plus our "Advice From a Tree" magnets.



FRIENDS OF PATUXENT BOARD OF DIRECTORS 2018

- Richard Dolesh, Chair
- Jeanne Latham, Vice-Chair
- Clarence "Sparky" Sparks, Secretary
- Robert Schroeder, Treasurer
- Lowell Adams, Director
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LIAISONS

- Diana Ogilvie, Patuxent Research Refuge Liaison
- Shannon Belief, 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. 16, 2018; Feb. 20, 2018; Mar. 20, 2018; Apr. 17, 2018; May 15, 2018; Jun. 19, 2018; Jul. 17, 2018; and Sep. 18, 2018. 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

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.



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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)