

Like a Good Neighbor...

By Jennifer Greiner, Refuge Manager, Patuxent Research Refuge.

ope, not Jake from State Farm! As the end of 2023 approaches, I've been reflecting on the progress our Patuxent team has made toward the priority actions we set together last January:

- Good Housekeeping spruce up our facilities, grounds, habitats, and signage
- Enhancing the Visitor Experience make the refuge more welcoming, safe and inclusive
- Being a Good Neighbor tailor offerings to better serve our local community

Together with the Friends of Patuxent and our amazing cadre of volunteers, we've made important progress on each of these. I'm especially proud of how far we've advanced on the "Being a Good Neighbor" front. One indicator of this progress is our exemplary relationship with Bowie State University (BSU), the Refuge's neighboring academic institution of higher learning and one of the nation's premier historically black colleges/universities. Evolution of this partnership over the past 3.5 years exemplifies a steady building of a trusting relationship:

2020 – Providing safe, outdoor, nearby learning opportunities for BSU students during the pandemic

Good neighbors are approachable: BSU professor Dr. Anne Wiley con-Continued on page 2



BSU faculty outing to Patuxent during campus Wellness Week.

²hoto: Jason Cangelosi, Visitor Services Manager, PRR

Inside...

BBL Banding Station Receives a Major Upgrade	3
Winter in the Friends of Patuxent Bookstore	1
Book Review – <i>Birds, Beaches,</i> and Biologists5	5
Fostering Diversity in Science	5
Where Are They Now??? - Sanford R. Wilbur٤	3
Winter 2024 in the Hollingsworth Gallery)

Deer Hunting with a True Mentor 10
UPDATES on Mussels, Birds and Maglev, from Patuxent Research Refuge Biology Department11
Dedication of Chandler Robbins
Outdoor Education Center and
Wisdom Trail at South Tract
Our First "Walk for the Wild"14
FOP Accomplishments 202315
Around the Refuge 15
2023 Holiday Bazaar16

Like a Good Neighbor...

Continued from page 1

tacted the Refuge, looking to get her biology students off campus for some hands-on nature observation lessons. Our Visitor Services team jumped in to welcome them, then our Refuge Biologist and Urban Wildlife Biologist added value by planning and delivering lectures on the BSU campus and leading many field days on the Refuge. We then went 'beyond biology' and recruited a BSU art student to design chalk art in the Refuge parking lot on our first Urban Wildlife Conservation Day. This same student turned into a Refuge volunteer, taking photographs of visitors enjoying the Refuge, one of which we purchased for use on the new kiosks.

2021 – Moving beyond wildlife observation to offer hands-on experiential learning and internships

Good neighbors are considerate: BSU biology students participated in a covote survey on the Refuge under supervision of our Refuge Biologist; these students later presented their results in the Refuge auditorium to an audience of resource professionals. Our Urban Wildlife Biologist first presented a lecture on urban wildlife research (now an annual highlight). We worked with the Alliance for the Chesapeake Bay to offer opportunities for BSU students to conduct water guality monitoring on the Refuge and we reserved "learn to kayak" sessions for BSU students during our second Urban Wildlife Conservation Day.

2022 –Offering paid employment, career discovery & professional networking opportunities

Good neighbors look out for each other's interests: thanks to Refuge staff being in regular contact with BSU career services staff, BSU students were selected for participation in a paid summer internship program. The Friends of Patuxent sponsored BSU students to attend conservation networking and learning events in the DC area. Refuge staff began working with the National Park Trust to support BSU in their desire to start an Outdoor Club and invited BSU's art department to tour the Hollingsworth Gallery.



BSU students during their first-ever waterfowl hunt on the Refuge, mentored by Delta Waterfowl.

2023 – Offering tailored outdoor recreation and engaging students in other fields of study

Good neighbors work cooperatively to build successful communities: Refuge and BSU leaders met in February to discuss becoming a signatory of a growing national memorandum of understanding (MOU) between USFWS and other minority serving institutions around the country.

Meanwhile, refuge staff connected with BSU's "Green Ambassadors"

to engage students in outdoor skillbuilding opportunities including fishing, archery, birding, hiking, and camping. BSU invited the Refuge to help with judging at BSU's Natural Sciences Day and to have a table at BSU's first ever Climate Career Fair in March 2023, where Refuge staff from five programs connected with professors in Communications, Law Enforcement, Socio-Cultural History, and Fine Arts to arrange on-Refuge tours that are tailored to their stu-*Continued on page 18*

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. We welcome and encourage all volunteers and Friends to submit items for the newsletter by emailing them 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	3	Jul-Sept June 1
2	Apr-Jun	March 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, or join online at <u>https://friendsofpatuxent.org/Join</u>

BBL Banding Station Receives a Major Upgrade

By Megan Evans, Public Affairs Specialist, Eastern Ecological Science Center.

he USGS Eastern Ecological Science Center (EESC) fall migration bird banding station is getting a much-needed upgrade thanks in part to a generous donation from the Friends of Patuxent. The banding station is managed by the Bird Banding Laboratory (BBL) that was established in 1920 to study and help protect North American birds and is the oldest and largest program of its kind.

As the managing office for all banding in the United States, the BBL issues all federal permits for banding in the U.S., distributes the bands-about 1 million a year-to participating scientists in the U.S. and Canada, and acts as the central repository for banding records in both countries. However, few realize the BBL also manages a real bird banding station encouraging BBL staff participation. "If we are going to develop guidance for banding, we need to have hands-on experience and be up to date on banding technique," said Dr. Anthony Celis-Murillo, Chief for the BBL. "When we do the banding, we can help to improve the technology in a way that can serve the entire banding community.

Although the station has been in operation for 40 years, the existing pro-



Old banding station.

cessing structure is only 20 years old. It was solely a small wooden structure with a roof but no walls that could only fit a few banders at a time with no room for outside volunteers or guests. "We owe a huge thanks to the Friends of Patuxent for their contribution to the new banding station. Our old station was so dilapidated and small. It was near ready to collapse," said Matthew Rogosky, a biologist with the BBL.

With the recent addition of a pavilion, picnic tables and a large shed, the new banding station is on its way to becoming the banding station of the future. "With this new pavilion and banding shed, we'll be able to showcase this project and the work of the Bird Banding Lab to larger visiting groups in a more professional and safer environment for all," said Rogosky.

The new banding station is more reflective of the national and worldrenowned expertise that the USGS EESC Bird Banding Laboratory is noted for. It will have electricity, internet, and streaming capabilities to connect BBL staff to other banders across the world. "Internet is critical for many things," said Dr. Celis-Murillo. "Communicating and connecting in realtime with partners or collaborators enhances our experience and development of better banding procedures."

A larger and improved banding station opens up opportunities to become close with the local banding community. With space for visitors, the banding station can host more volunteers. While the banding team is currently doing its work in the pavilion, the shed will become the banding area with room for visitors to observe but not interrupt the banding process. The station will not only be a place for work but for learning with posters of birds and educational displays outside highlighting the value of migration bird banding at Patuxent Research Refuge.

Photo: Megan Evan



New banding station storage building.



New banding station.

Winter in the Friends of Patuxent (FOP) Bookstore

By Hank Dahlstrom, Store Volunteer.

love to walk in falling snow, and I also love to come inside, warm my hands by a fire, drink hot cocoa and curl up with a good book. When I was a teacher, snow days were the very best! Suddenly released from the daily routine, there would be a whole day with no scheduled tasks. I would find the book I had put away for a long winter's afternoon and immerse myself in it until early darkness descended and I realized it was time to make dinner. These books invariably were an entry into the natural world-a study of migratory birds or wolves or polar bears, or the tale of an intrepid explorer, her discoveries and descriptions filling me with wonder.

Winter, even without snow, is a good time for holing up with a favorite book. Let me remind you that the FOP Bookstore has many wonderful books that would make great reading on a dark, cold evening. Come browse our shelves to find a special one you can put away for a snow day for yourself, and then look again—books make wonderful gifts during the gift-giving winter holidays!

Speaking of gifts, many of us have children in our lives who love to cuddle up and listen to a favorite adult read to them. Your bookstore has a treasury of children's books related to the natural world that would make lovely gifts. The illustrations delight young ones as they learn to value, respect and love the many aspects of nature. Here are a few that are particular to the season:

A Warm Winter Tale, by Carrie A. Pearson and illustrated by Christina Wald is a picture book about how different creatures stay warm in the winter. The final pages have additional information and a matching game for grown-ups to share with their child.

When Snowflakes Fall, by Carl R. Sams, II, and Jean Stoick, is a board

"It is winter proper; the cold weather, such as it is, has come to stay. I bloom indoors in the winter like forced forsythia; I come in to come out. At night I read and write, and things I have never understood become clear; I reap the harvest of the rest of the year's planting."-Annie Dillard in Pilgrim at Tinker Creek



book for our youngest 'readers.' Delightful pictures tell the story of what animals do in winter.

Owl Moon, by Jane Yolen and illustrated by John Schoenherr, is one of my favorites. It's the story of a child and father taking a walk in the winter woods on a moonlit night to find an owl. They find not only an owl, but also the mystery and awe of such a journey.

If you like to get outdoors, even in winter, A Year Across Maryland: A Weekby-week Guide to discovering Nature in the Chesapeake Region, by Bryan MacKay, may encourage you to go exploring. For each week of the year, the author shares information about particular natural phenomena and suggests places in Maryland to visit to experience it. For example, for the first week in December he discusses Tundra Swans and suggests visiting one of three Eastern Shore National Wildlife Refuges to see them. Another winter-time pleasure for many of us is feeding birds. Watching these small creatures up close is a fascinating pastime and it can be life-saving for the birds. Our bookstore has several guides for setting up a backyard habitat that attracts birds. Having feeders with different kinds of seeds is a start, but there is so much more you can do to be bird-friendly!

The FOP bookstore offers other winter-related items besides books. We have socks to warm your toes, sweatshirts, some with holiday themes, for chilly days, and snuggly stuffed animals to hug. We also have mugs for your hot chocolate. And when you want a break from reading, there are colorful jigsaw puzzles to put together and a number of games to play. Of course, any of these items may be the perfect gift for someone on your holiday list! So please make sure one of your holiday shopping stops this season is your FOP bookstore.

Book Review-Authur Dr. Michael Erwin Birds, Beaches, and Biologists

By Matthew C. Perry, Scientist Emeritus, Eastern Ecological Science Center.

he capuchinbird, raccoon dog, and hoatzin are just some of the unique animals that Dr. Michael Erwin mentions in his 181-page book about his life as a Patuxent research scientist. This is

much more than just another nature book. It is a comprehensive personal glimpse of the life of a researcher and his close interaction with wildlife and people. His relatives were good companions on early trips, as they plodded through marshes and mudflats. and dealt with some of the smelly and lesspleasant side of the life of a field biologist. Many professional biologists also accompanied him while doing research in many countries. The

pages include scientific findings written in an easy-to-understand style in which the reader will instantly enjoy. The close contact experiences with wildlife that Dr. Erwin shares with the



Dr. Michael Erwin, Author of Birds, Beaches, and Biologists

readers are seldom possible for the average naturalist. I highly recommend this book to professional biologists or any nature lovers who wish to explore the exciting world of a wildlife research scientist in the field.

> Dr. Mike Erwin worked at Patuxent from 1978 to 2012. Many of the Patuxent staff members are mentioned in this book, including Ralph Andrews, Jeff Spendelow. Holly Obrecht, Tom and Christine Custer, Greg Smith, Mark Fuller, Roger Clapp, Lynne McAllister, Charlie Roman. Diann Prosser. Sanders, Jim Geoff Lunch, Don Cahoon, Dan Stots, Greg Gough, and Peter Osenton.

Austin Macauley Publishers, Paperback (\$13.95).

https://www.austinmacauley.com/us/ book/birds-beaches-and-biologists



Devoted readers of this Bay Journal column — and they are legion — have no doubt noticed that the words "by Mike Burke" have been missing from the text for some time now. That is because, in early 2023, Mike began treatment for what turned out to be inoperable liver cancer, and we are heartsick to report that he died peacefully on Oct. 11 at Johns Hopkins Hospital, surrounded by family. Full obituary at https://www.bayjournal.com/columns/on_the_wing/ remembering-mike-burke-our-bard-of-on-the-wing/article_93a898c2-8881-11ee-969d-e37f81f6c770.html



Friends of Patuxent Bequest Program

embers of the Friends of Patuxent volunteer countless hours at Patuxent Research Refuge, and financially support research. conservation, and education programs and activities through Friends of Patuxent memberships, donations, and purchases at the Wildlife Images Bookstore & Nature Shop. There is another way you can provide support long into the future: Leave a gift to Friends of Patuxent, a registered 501(c)(3) nonprofit, charitable organization. You may make this gift by listing Friends of Patuxent as a beneficiary in your will or as a beneficiary on your annuity, trust, insurance policies, securities, or other types of accounts. If you would like to know more about how you can support the work of Friends of Patuxent long into the future, just request additional information about our Bequest Program Email: friendsprr@friendsofpatuxent.org; Phone: 301-497-5789).

Friends of Patuxent thanks The Lee and Sheila Shaw Charitable Gift Fund for its generous donation in 2023

Fostering Diversity in Science

By Megan Evans, Public Affairs Specialist, Eastern Ecological Science Center. Photos: Clay Raines.

n 2023, the Friends of Patuxent generously donated funds to Eastern Ecological Science Center (EESC) earmarked for diversity in science internships. A portion of those funds went to Fish Biologist Clay Raines and his work on blotchy bass syndrome with the help of two high school interns. Raines is stationed at EESC's Leetown Research Laboratory in Kearneysville, WV. The two interns, from schools nearby the Leetown facility, were Emily Hunt, a senior at Jefferson High School and Brennan Landerkin, a senior at Spring Mills High School. "This funding provided the interns an opportunity to attend an upcoming conference of the West Virginia Chapter of the American Fisheries Society."

Emily and Brennan were put in charge of two U. S. Geological Survey (USGS) data projects, both in collaboration with West Virginia University and Texas Parks and Wildlife. The first project was related to blotchy bass syndrome citizen science where we seek photos from the public of bass that have dark blotches on them. Blotchy bass syndrome is



Brennan and Emily conducting fish habitat surveys in Catoctin Mountain Park.

the presence of hyperpigmentation (melanosis) on the external surface of black basses.

"We have sourced images of fish from all around the continent through a variety of methods via the West Virginia University USGS Cooperative Research Unit," said Raines. "We now know a lot about where and when the condition occurs, but not



AFS Hutton Scholars Brennan Landerkin (left) and Emily Hunt (right) observing a tank of Atlantic Salmon (Salmo salar) at the Conservation Fund's Freshwater Institute.

really anything else. Assuming the fish have a virus, which we are more than 95% confident in our detections, we can learn a lot about fish from images alone."



Brennan and Emily assess habitat in a spillway plunge pool.



Brennan and Emily collecting water quality measurements in Big Hunting Creek, in Catoctin Mountain Park, MD.



Brennan and Emily collect and transfer salmon plasma to assess for PFAS.

The interns quantified individual blotches as well as the surface area of the fish to calculate a percent body coverage of the blotches using specialized computer software. When possible, the students also measured the length and fish body depth for a calculation of condition factor (how fat the fish is).

Additionally, the students worked with US Census data to calculate population estimates for a separate project in Texas where former student mentees examined microplastics in fish found in Texas reservoirs. Emily and Brennan conducted research to determine if watersheds with different population sizes had different levels of microplastics.

In addition to the two data projects, the students also conducted some field work consisting of fish and habitat surveys in National Park Service Catoctin Mountain Park. Limited lab work consisted of total estrogen detection in surface water of Chesapeake Bay streams and collection of blood/plasma from Atlantic Salmon to determine background levels of polyfluoroalkyl substances or PFAS. Also called "forever chemicals," PFAS are a group of more than 12,000 synthetic chemicals used in a wide variety



Dr. John Davidson (right) provides instruction on salmon internal anatomy.

of common applications, from the linings of fast-food boxes and non-stick cookware to fire-fighting foams and other purposes.

For Clay Raines, this past summer was part of a long-standing effort to encourage diversity in science. He has been supporting students within the West Virginia Health Science and Technology Academy (WVHSTA) intermittently since 2012. WVHSTA's mission is to promote college access within STEAM (science, technology, engineering, arts, and mathematics) for underserved communities including diversity, equity, inclusion and justice (DEIJ) initiatives and first-generation college students.

A similar program, the American Fisheries Society Hutton Junior Fisheries Biologist program, seeks to increase diversity specifically within fisheries as a field. Raines was able to recruit students from the local area (already enrolled in WVHSTA) and have them apply to the national AFS program, where they were competitively selected. "The synthesis of these two methods allowed us to hedge our bets of getting a qualified student who was in-

terested in working with EESC, while still promoting DEIJ initiatives which matter most of all for the future," said Raines. "We were also able to work collaboratively with two Hutton scholars working in Texas, broadening the exposures and impacts."

"Diversity in science is incredibly important. Not only does a diversified field stimulate a better marketplace of ideas due to a diversity of experiences, but it also promotes continual recruitment from more talent sources," said Raines. "I am not sure if I converted either of them to fisheries, but my hope is that over time with enough mentoring opportunities I will be able to make little contributions. Emily and Brennan are great, hardworking kids, and I am better for knowing them."

In addition to Clay Raines, funds were also awarded to Paula Henry and Andy Royle, both researchers stationed at Patuxent Research Refuge. Paula's intern participated in crayfish research while Andy's intern worked on the Refuge's box turtle survey. You can read more about these projects in the next newsletter.

Where Are They Now???-Sanford R. Wilbur

By Matthew C. Perry, Emeritus Scientist, Eastern Ecological Science Center.

anford Wilbur is not your typical government biologist, and some folks even believe he can talk to the animals. Well, not exactly, but Sandy does have a lot of compassion for wildlife and the environment. and writes numerous articles that have the animals talking for themselves. He uses this technique to make the reader realize that wild animals can't tell us their problems, and Sandy feels it is important that humans realize they need help from us. This technique allows the animals to inform us more accurately about what is impacting them and what they think of us. Sandy's many articles covering numerous species and problems can be accessed at: http://www. writing-it-down.com/conversations/

But let's back up a bit for a little background on this Patuxent retired researcher. Sandy grew up as a city kid in Oakland, California, and is not sure how he got interested in wildlife. He does admit that he enjoyed reading bird books and studying the pictures when he was young. His older brother liked birds, so that might have been another influence. Sandy attended local schools and then had an on-and-off relationship with Humbolt State College (now University). He obtained a Bachelor of Science degree in game management in 1963. It was during his college days when he met and married Sally Harris from New England. Each spring they would make the long cross-country trip from Oregon to spend the summer at their New Hampshire mountain camp.

Sandy had many unique wildlife jobs during his college years and this trend continued after graduation. He held jobs in administration, management, and research, and all dealt with various wildlife issues. From 1969 to 1980, he focused his interest on studies of the California Condor for Patuxent Wildlife Research Center. He was studying condors during the controversial period when the U.

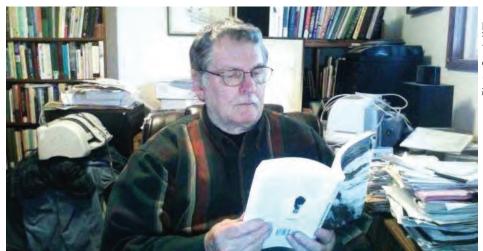


Sandy Wilbur at Sespe Sanctuary, Los Padres National Forest, California-1975.

S. Fish and Wildlife Services (USFWS) made the decision to capture all condors and propagate them in captivity. Other Patuxent staff working with Sandy at the time included Ray Erickson, Fred Sibley, Noel and Helen Snyder, Harry Ohlendorf, and Hank Pattee.

Some organizations like the Audubon Society resisted the plan to capture all condors and argued the species would essentially be considered extinct if removed from the wild. Sandy was a free thinker during the 12-year period he studied condors and didn't always agree with his agency or his colleagues. This was a contentious period, but the decision to remove all condors from the wild proved a correct decision and now releases from captive populations are restoring the species to the wild. Sandy has published many scientific articles during his career and a 400-page book "Condor Tales" in 2004. This treatise on the species and the management plan reveals many of the untold stories that were not captured in previous publications.

Sandy retired from government service in 1994. Sadly, Sally died in 2022, and Sandy now lives with his son in Gresham, Oregon. Since retirement he has been busy writing popular and scientific articles about the wildlife he loves and the problems they face. He is not reticent to state strong opinions that might make others uncomfortable. Sandy has an environmental conscience not always apparent with other scientists. He is committed to a healthier planet for wildlife and the humans who share their habitat. By letting the animals speak for themselves in his articles, he uses a technique that creates more empathy for the rightful cause of wildlife. He is a unique biologist for whom Patuxent can be justly proud.



Sandy Wilbur at his desk in Gresham, Oregon.

Winter 2024 in the Hollingsworth Gallery

By Faith Leahy-Thielke, Patuxent Volunteer.

he new year brings two wonderful local photographers and a Greenbelt artist whose work graced Hollingsworth two years ago at the Refuge's art gallery. In January, we'll enjoy the images of New Carrollton photographer, Wade Stephen; in February, the work of artistically gifted Amanda Spaid; and in March, New Carrollton's Rick Dove – and family, daughter April Price and son Patrick, share with their Dad a love of the natural world and wildlife photography.

When he was a kid, Wade Stephen had a dad who took him fishing on the Chesapeake. With Scouts he enjoyed camping and canoeing – and photography. At 11 and 12 he was reading avidly about it. He used and oldfashioned Kodak and created his own darkroom to develop his film, black and white at first, but color too later. Today, he says, he does not miss dealing with the "dang" chemicals and appreciates digital images.

When Stephen retired from his government job in 2015, he turned first to bird watching. He made trips with others – the Maryland Ornithological Society members, and some on his own. Some of these were all over the country and some were very local – including Patuxent, Lake Artemesia, Cape May and Conowingo Dam. Wade Stephen mats and frames his own images and has displayed them in local shows. We'll enjoy his record of our own nature preserves where his favorite subjects nest.

In February, we celebrate the return of Greenbelt Fine Artist, Amanda Spaid. Her exquisite work graced Hollingsworth in October of 2022. She has degrees in art from both Maryland and Ohio. She has worked with many media and wrote at one time that she especially enjoyed dry media on wood panels she'd collected and cut herself. However, she loves the "freedom" and "flexibility" of digital painting- which makes more detail and "precision" possible.

Her first child's energy and curiosity led to a reengagement with nature and interest in native species. Now, with her work, Spaid hopes to inspire people to slow down and better appreciate the "natural world." Her website includes faces, monkeys, dogs, squirrels, and crabs, but her primary focus is birds. She writes that artists and engineers have been fascinated by birds for centuries. They're colorful, important, beautiful – and they fly!

Spaid has been using media with acrylic and goache (an opaque, quickdrying watercolor) as recent favorites. Her work has been exhibited at the Greenbelt Arts Center, Watkins Nature Center, Brookside Gardens, Wheaton Regional Park, and Hollingsworth. We look forward to her latest work.

Rick Dove's fascination with photography was already evident in the fifth grade when he won a photo contest with an image from his "old" Kodak! (He's since graduated to a Nikon d800 although his daughter, April Price, who often accompanies him, boasts a d850!)

Dove worked for a long time at the US Post Office, but took a few years "early out" to pursue the "avocation" that has been a true calling. He'd taken numerous photography courses and attended many seminars, but was now free to be in and record the natural world - the world that is his "peaceful place" where he can capture and share the "awe and wonder of moments." Dove names Blackwater, Bombay Hook and Blackhill Regional Park as favorite places to catch glimpses on film of birds and animals and "any thing that moves." On Dove's website, you can view galleries that include alligators and crocs, birds and bugs and butterflies, Assateague ponies and Yellowstone bison – and many more. He has displayed his work in local galleries and regional public art shows. He won two first places from the Maryland Department of Natural Resources with the image of a seal on the beach at Assateague.

Dove writes that his 16-year-old son, as well as his daughter, has also developed an interest in their Dad's passion. Gorgeous photography will obviously continue to be a family affair!

Friends of Patuxent is Now on Instagram!

Please follow us @friendsofpatuxent to see great photos from Patuxent.

If you'd like us to share your pictures, please message us on Instagram or email us at friendsprr@ friendsofpatuxent.org

Visit us on Facebook and Twitter

https://www.facebook.com/ PatuxentResearchRefuge

https://twitter.com/ USFWSNortheast/status/78546358377783296

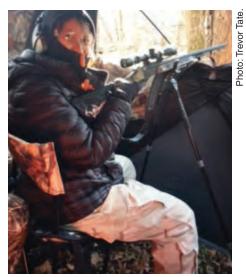
Deer Hunting with a True Mentor

By Trevor Tate, Patuxent Research Refuge Volunteer.

n experienced hunter named Jay mentored me and my mother on a recent deer hunt at Patuxent Research Refuge, North Tract.

He taught us about deer highways, trails, bedding areas, their food sources, how to target a deer, and more. We first traveled to a shooting range where I learned how to fire a shotgun, a muzzleloader, and use a crossbow.

In the process, I discovered that I was left-eye dominant. A week or so later we scouted the area "Y" in the north tract of Patuxent Research Refuge and saw signs of buck territory with dry patch scraping, droppings, and wood scrapings. After another week or so we went on the hunt, waking up at 3:00 am and arriving at about 5:00 am meeting up with Jay to check in at hunt control. Next we went to the hunting area. We parked a little bit past where we would put the blind. We ended up forgetting where we had our spot originally, and ended up making a lot of noise scaring off the deer. Eventually, we found our spot and set up the blind. We sat inside the blind for 4 hours or so. While we waited in the blind Jay told us stories about his hunting experiences. We



Yvonne Tate, Hunting Mentee, Patuxent Research Refuge Volunteer.

put on hunting hearing enhancers so we could hear the quiet sounds and each other's whispers and lessen loud sounds. I didn't like how they felt around my ears but I was able to hear squirrels running from farther away, and some deer stepping nearby. My mom was sitting in the front seat of the blind with the muzzleloader prepared to take a shot at a deer. Although we didn't see any deer we heard them. We also heard a squirrel alert call which seemed like screaming. After the closing of the 4 hours, we returned to the hunt control to change locations.

We ended up going to a new location. Jav did a quick scout and afterwards we ate lunch. We also tried the venison sausage that Jay brought, which tasted like an oddly sweet salami. After eating, we saw a small flurry of snow and began to walk in the woods to find a spot to set up the blind for another chance to find deer. Jav advanced ahead of us to hastily scout out the area when he saw a long clear deer trail. After scouting he signaled us over to him to set up the blind. We got inside the blind and set up the chairs. Next, Jay handed Mom the muzzleloader and continued to tell some more stories of his hunts. During this time, I started to feel tired and fell asleep and tipped my chair into Jay. Jay told me that I could just sleep on the ground and I proceeded to do so.

I suddenly woke up to a kick to my leg from an excited Jay. He realized this had woken me up and motioned for me to stay there. I looked up at my mom and saw that she was preparing to aim. I started to put on the hunting hearing enhancers and noticed Mom handing the gun to Jay. He had to put in the cap so the gun could fire. By the time Jay handed the muzzleloader back to Mom the buck was on alert. Mom made the shot after Jay said, "Shoot." At first, Mom thought she missed the deer but



hoto: Lauren Wakefield Hunt Control Managel for Mead Natural Heritage Association

Deer statistics: 8 point buck, 110.8 Ibs. after field dressing, approximately 3 1/2 years (From left to right: Jay Woelkers, Yvonne Tate, Trevor Tate).

Jay thought otherwise. Both mom and Jay searched for the deer and left the blind. About this time, I heard something hit the ground. Mom and Jay saw no blood trail and Jay pointed at the deer on the ground behind a fallen tree. I heard Jay burst out with a "whoo-hoo." They headed back towards the blind to get me and their tools. I followed them to the deer where we took photos of ourselves and the deer.

After photos, Jay field dressed the deer. I dragged it with Jay to somewhere near the blind and went back inside to wait for another deer which proved unsuccessful. We packed up our gear and dragged the deer back to Jay's truck. We headed back to the hunt control to have it reviewed, taking final pictures ending our long and eventful hunt.

WE INVITE YOU TO JOIN!

Your membership/contribution helps support the mission and programs at Patuxent. Application on page 19, or go to https://www.friendsofpatuxent.org to join online.

UPDATES on Mussels, Birds and Maglev, from Patuxent Research Refuge Biology Department

By Sandy Spencer, Refuge Wildlife Biologist.

appy holiday season greetings from the Refuge Biology Team! Just wanted to share some good and not so good news.

Mussels First the not so good: in 2021 and 2022, prompted by threats of the MAGLEV train (read below) which would impact water quality of the Patuxent River, we conducted surveys in the river on Patuxent Research Refuge (PRR) to determine if the federally threatened Yellow Lance mussel was present. In addition to physical searches in the river, we collaborated with the Fish & Wildlife Service (FWS) Chesapeake Bay Field Office (CBFO) and Maryland Department of Natural Resources (MDDNR) to collect water samples from the same sites in the Patuxent River and sent them to the FWS' Northeast Fisheries Center for analysis for presence of Yellow Lance genetic material, eDNA. Environmental DNA (eDNA) is nuclear or mitochondrial DNA that is released from an organism into the environment. In this case, we were hoping to capture Yellow Lance eDNA from release of gametes (eggs, sperm) during breeding season. How long a distance or reach does a given eDNA sample represent? It depends on several factors, such as the temperature of the water. In colder water, eDNA can disperse a further distance and still be detected. In warmer temperatures, there is higher presence of microbial life such as bacteria which consumes the eDNA. so it would not travel far.

A general rule of thumb is to assume a 500 m to 1 km distance. Collecting from pools (versus riffles) where eDNA may accumulate, and choosing reaches protected from warming sun by tree cover are strategies to maximize eDNA content. In mid-November we received the results and were dismayed to find that there were no posi-

tive detections from the Patuxent River samples. We did get positive results from the Hawlings River control samples, as there is a known population of yellow lance there. These results were not entirely unexpected, though there was a glimmer of hope since we found populations of three other mussel species in the river on Patuxent Research Refuge. Since there is a population upriver from PRR, there must have been historic yellow lance populations downriver in order for them to reach the Hawlings River site, either by transportation of larvae by its host fish, or the slow migration of individual adults. The creation of the two dams and reservoirs on the Patuxent River would have isolated the upper river populations, while increasing impervious surface and forest loss below the reservoirs have impacted the habitat suitability and water quality. Maybe someday the species can be reintroduced into the river on Patuxent Refuge once its host species strategy is better understood and enough quality habitat can be ensured.

Birds Now for some better news: In May and June of this year we conducted a refuge-wide survey of the forest breeding birds on PRR. All the observation data have been entered into a database and are now undergoing occupancy and trend analyses (to compare with previous surveys in 2008 and 2015). But I wanted to share some cool preliminary statistics for all you bird lovers out there, such as species diversity, or counts of certain forest quality indicator birds. We will continue to update the Patuxent community as our analyses unfold. Woodthrushes, a good forest indicator, were really well represented. Not sure if this means they are thriving regionally or if woodthrushes from everywhere are huddling on Patuxent as a last resort of habitat.

Sadly, the much sought-after Kentucky warbler was found in only 16 locations, way down from 31 in 2015 and 34 in 2008. A quick summary of stats here:

- Total number of species counted: 95 (similar to 2015, 97 and in 2008, 93)
- Bird species richness (SR) (total species/area): 0.15 (Area is 1.94 acres per point x 325 points or 630.5 acres. SR would be higher if 95 species observed over smaller area, so SR of limited use.)
- Total number of bird observations made: 12,788
- Total number of birds observed based on highest counts of each species at each point: 8,734
- Kentucky warblers 17 individuals at 16 points
- Woodthrush 462 at 200 points
- Scarlet Tanager 332 at 205 points
- Wormeating Warbler 59 at 47 points
- Ovenbird 540 at 220 points
- Black and White Warbler 11 at 8
 points

The most abundant species: red-eyed vireo (8%, no surprise there!), Carolina wren, Eastern tufted titmouse, Acadian flycatcher (5%), ovenbird, Eastern wood peewee, Carolina chickadee, and woodthrush (3%).

Stay tuned for more as the story unfolds from the data analysis.

Trains For folks in the FOP newsletter readership who may be unfamiliar with this train project, this is a high-speed train that is "levitated" rather than running on rails and is proposed to go from Washington to Baltimore in 15 minutes roughly using the BW Parkway (295) *Continued on page 18*

Dedication of Chandler Robbins Outdoor Education Center and Wisdom Trail at South Tract

By Marcia Watson, Member, Chandler S. Robbins Memorial Endowment Committee.

n October 14, 2023, Patuxent Research Refuge and the Friends of Patuxent hosted a dedication ceremony for the Dr. Chandler S. Robbins Outdoor Education Center and the Wisdom Trail. The event was the capstone for a Friends of Patuxent project that has been in the making since the death of Chan Robbins (1918-2017), a world-famous ornithologist employed for most of his life at the Patuxent Wildlife Research Center. He came to Patuxent in 1943 as a member of the Civilian Conservation Corps, and was hired as a biologist at the Research Center in 1945. Even after his official retirement in 2005 at the age of 87, he continued to come into the office and work on projects until shortly before his death. Read more about Chan Robbins on the Friends website https://friendsofpatuxent.org/Chan-Robbins.

The project was designed as a memorial to Dr. Robbins to keep his work alive and inspire others to walk in his footsteps. Two themes for the Outdoor Education Center and the Wisdom Trail are to inspire the public to preserve and restore unbroken native habitats, and to get to know the birds and wildlife in their area and participate in community science activities.

The dedication ceremony was part of the larger Urban Wildlife Conservation Day events held at the Refuge. Attendees included colleagues, proteges, family, and friends of Chan Robbins as well as volunteers who refurbished the Education Center, Refuge staff, and members of the Friends.

Refuge Manager Jennifer Greiner welcomed the crowd, saying "We've been working very hard to make this Refuge more welcoming and inclu-



Jane Robbins at Wisdom Trail sign featuring a photo of Chan Robbins, "Let's go for a walk."

sive for our local community. How fitting that this trail, named in honor of a man who loved to inspire others with his love of birding, can serve as an example of that by welcoming everyone . . . to experience the sights and sounds of birds."

Richard Dolesh, Chair of the Friends, described the fundraising and planning that led up to the dedication, naming the many volunteers who made the project possible. Rich touched on the importance of Chan's work at Patuxent, calling him the "animating spirit of Patuxent," and remarking "He was more than a scientist, biologist, and expert ornithologist — he touched birders and nature lovers literally around the world."

Dr. Matthew Perry, Scientist Emeritus at Patuxent, reviewed Chan's profes-

sional career and accomplishments. Dr. Perry recalled: "Chan's Golden Field Guide book, *Birds of North America*, had pictures of sonograms (graphic representations of bird songs) that he recorded from birds in the field. The publishers of the book did not want to include them. Chan balked at publishing and they relented and published the sonograms. Chan knew the value of sound in surveys so that the hardto-see birds would not be underrepresented in the population estimates."

Jane Robbins, Chan's daughter, shared remarks provided by her brother George Robbins, who unfortunately could not attend, and then gave her own lively rendition of what it was like to grow up in the household of Chan and his late wife Eleanor. Jane's reminiscences touched on the many scientific expeditions that were at the same



Jay Sheppard points out birds perched on the custom-designed dead tree sculpture.

time family trips, including outings at local streams and parks and of course, Patuxent Research Refuge, as well as adventures around the world. Jane recalled banding birds with her father: "We loved to release the banded, measured bird. Dad placed it, belly up, on our hand, outdoors. And showed us the fun of slowly opening the hand. The bird lay calmly for a moment, unaware of its freedom, then sprang into the air."

The crowd was then invited to "Let's take a walk," one of Chan's oft-repeated sayings, and moved onto the Wisdom Trail, the first new trail established on South Tract since the opening of the National Wildlife Visitor Center in 1994. The trail opens up access to an area of the Refuge's South Tract that was formerly closed to the public.

The Wisdom Trail features interactive educational displays that illustrate some of the key themes of Chan's life work. A custom-designed metal sculpture of a tree with silhouettes of perched birds illustrates how size and shape can be used in bird identification. A giant listening horn on a swivel post allows visitors to listen for birds in any direction, calling to mind Chan's system of monitoring bird populations using bird songs, and his insistence that dedicated amateurs could, with practice, accurately identify songs. A swivel stand with a pair of high-powered binoculars allows visitors to learn the skills needed to spot and identify birds by aiming at bird images strategically placed in the nearby trees.

The dedication ceremony continued at the Outdoor Education Center, a preexisting wooden pavilion that has been extensively renovated for its new role by volunteers from the Union Sportsmen's Alliance (USA).

USA is a non-profit organization composed of AFL-CIO union members with an interest in hunting, fishing, or shooting. The organization's mission is to educate future generations of sportsmen, conserve healthy wildlife

Why is it called the Wisdom Trail?

The name of the trail was inspired by what is arguably the world's most famous bird, a female Laysan Albatross that was named Wisdom after being banded by Chan Robbins in 1956 on Midway Atoll. Wisdom is believed to have been hatched in 1951, and is still alive and reproducing, returning to her nest site each year. Now over 70 years old, Wisdom is regarded as the world's oldest living wild bird. https://www.fws.gov/ story/2022-12/wisdom-worldsoldest-known-wild-bird-returnsmidway-atoll

On another level, the Wisdom Trail reminds us of the wisdom passed down to us from Dr. Robbins' long career, in which he focused on the importance of preserving unfragmented habitat for breeding birds; avoiding pollution of our land and water with pesticides and other chemicals; preserving corridors for wildlife migration; and – importantly – getting outside to enjoy nature and learn from it.



USA volunteers at the restored Outdoor Education Center.

habitat, and volunteer their time and skills for projects that improve access to outdoor recreation. The USA volunteers were a perfect fit to take on the work of renovating the Outdoor Education Center pavilion. Eight union volunteers from the Baltimore DC Metro Building Trades, International Union of Painters and Allied Trades (IUPAT) District Council 51, and the Eastern Atlantic States Regional Council of Carpenters overhauled the decking and railings on the pavilion, donating 264 hours of labor valued at nearly \$14,000.

John Robillard, Chief of the Facilities and Equipment Branch, Infrastructure Management Division, National Wildlife Refuge System, US Fish and *Continued on page 17*

Our First "Walk for the Wild" (WFTW)

By Karen H. Atwood, Volunteer and Friends Board of Directors Member.

ur "Walker" enthusiasm ran high, despite a day that dawned wet and cold for Friends of Patuxent's first annual *Walk* for the Wild (part of the new America's Wildlife Refuges program). Seven hardy adventurers joined Team Whooping Crane's volunteers in person on the South Tract unit of Patuxent Research Refuge, Saturday, October 7th, to wander 3.1 miles in the often-pouring rain!

We even welcomed the West Coast to our first-ever Walk for the Wild (WFTW) event: A traveling couple visiting from Washington state with their two small children joined us. The couple's young daughter, outfitted in a bright orange rain slicker, pink trousers and sturdy rain boots, her hair up in pigtails, excitedly related her plans for their Walk. She brandished the slender twig she planned to use if she found a spiderweb on her Walk, to "gently jiggle the web," hoping "to see what spider shows up to check its web, so the little spider can get something to eat!"

Two enthusiastic young adults also joined us, energized by the possibility of seeing new species of mushrooms and fungi. They eventually reached the Finish Line soaked but thrilled, declaring that their Walk had been "great and really cool — especially because of the rain," which had intensified the vibrant colors of the mushrooms they saw.



Some bright orange fungi that WFTW participant Chris Atwood photographed along his Walk.



Ken Coher

Team Whooping Crane 2023 and two FOP Board of Directors (BOD) supporters: L-R: Alan Williams, Hank Dahlstrom, Lowell Adams (BOD), Hailey Johnson, Debbie Myers, Diane Leopold, Rich Dolesh (BOD). Not pictured: Ken Cohen, Tim Myers, Barbara Saffir, Dave Sant, and WFTW/BOD Co-Coordinators Stephanie Kaufman and Karen Atwood.

The rainfall deepened the waning greens of summer, the reds and oranges of early October, and tweaked the textures in the grasses, tree trunks, leaves, and soils to high intensity. Walkers ambled through Patuxent's unbroken forests, marveling at soft, verdant mosses, colorful mushrooms on fallen logs, lacey lichen on limbs and rock outcrops, delicate fungi on standing snags. They paused to ponder trunks covered in intricate beetle larvae carvings and pock-marked with deep woodpecker cavities. Rain pattered on floating waterlily pads, drummed on beaver lodges, splashed in puddles as the Walkers watched and listened for ducks, geese, songbirds, and signs of other wildlife along the misty lake edges and glistening meadows. Damp, cool air, rich with earthy scents, quickened the spirit and sometimes the footstep!

Some GREAT news, too: Our first Walk for the Wild surpassed our \$1000 fundraising goal! We also qualified to receive a welcome chunk of additional money from the national WFTW campaign's "Amplifier Fund" (largely made up of corporate donations), bringing our very first annual Walk for the Wild event's fundraising total to just about \$1,682.



In preparation for this event, several WFTW volunteers collaborated to measure and mark out the 3.1 mile/5k trail with clever, motivating signs.

If you missed our very first annual Walk for the Wild (WFTW) event, you may be asking, "Just what IS "Walk for the Wild?" WFTW is an annual, national, week-long outdoor event to inspire thousands of people all across the nation to get outdoors and to "move in the outdoors" for a distance of 3.1 miles (5k), in celebration, in discovery, and in support of their local wildlife refuge and wildlife conservation. Walkers can complete their Walks all in one day or in smaller Walks that add up during the Event Week. Donations are not required Continued on page 17



THE FRIENDS OF PATUXENT RESEARCH REFUGE, INC. Accomplishments in 2023



- Financial support of the Patuxent Research Refuge and Eastern Ecological Science Center totaled \$37,458:
 - \$14,000 to support a postdoc researcher at the Science Center studying bird-building collisions.
 - \$14,000 to support a Whooping Crane Exhibit at the National Wildlife Visitor Center

to highlight the important contributions Patuxent Wildlife Research Center made in restoring the species.

- \$4,394 to support the Dr. Chandler S. Robbins Outdoor Education Center and new Wisdom Trail.
- \$5,064 to support facilities and education programs at the Refuge.



- 2) Sponsored and hosted the annual Wildlife Holiday Bazaar.
- 3) Supported the herbarium located in the National Wildlife Visitor Center.
- Supported exhibit displays in the Hollingsworth Gallery at the National Wildlife Visitor Center.
- 5) Supported the Hierarchical Modeling in Ecology Workshop at the Science Center.
- 6) Supported the Refuge's successful Latino Conservation Day.
- 7) Supported the Refuge's successful Wildlife Conservation Day.



- Supported the Refuge regarding land-use issues adjacent to the Refuge.
- 9) Continued the Pollinator-in-a-Pot Gardening Program at a nearby residential community.
- 10) Continued to operate the Wildlife Images Bookstore & Nature Shop for the Refuge.



- Logged countless volunteer hours supporting the Patuxent Research Refuge and Eastern Ecological Science Center.
- 12) Held a successful first annual *Walk for The Wild*, part of the America's Wildlife Refuges campaign with the Public Lands Alliance.

FRIENDS OF PATUXENT RESEARCH REFUGE, INC.

10901 Scarlet Tanager Loop • Laurel, Maryland 20708-4011 (301) 497-5789 • Email: friendsprr@friendsofpatuxent.org • https://friendsofpatuxent.org/



Around the Refuge

Photos by Matt Beziat, Volunteer.



Dotted Wolf Spider (South Tract)



Bridge Over Cash Lake (South Tract)



White M Hairstreak (North Tract)



Wheel Bug (South Tract)

Photo: Karen H.

Winter 2024

2023 Holiday Bazaar



A young guest high-fives Bald Eagle Sid Henkin.



Saffir

Photo: Barbara J.

USFWS Ranger/Volunteer Coordinator Diana Ogilvie with an American Kestrel.



Crane Café & Bake Sale volunteers Marcia Ray, Courtnye Koivisto, Kathy Lynn, Pira Mijatov Iven and Anne Sunny assist customers.



Author Joe Raphel reading aloud from his book, "How Oscar Met Olivia," for Storytime.



USGS Veterinary Technician Carlyn Caldwell introduces visitors to the Eastern Screech Owl "Brownie," one of the refuge's "ambassadors."



Nature Photography vendor Rick Dove and his assistant with customers.



Photo: Karen H. Atwooc



Volunteer Becky Henkin invites visitors into a customer area.



Volunteers Sarah Wood (left) and Nancy Morrissey enjoy helping guests at the Children's Holiday Crafts station.



Friends of Patuxent (FOP) Board Member Liz Humes and a visitor chat at FOP's table.



Bee City Laurel's Jimmy Rogers and USGS Native Bee Lab's Sydney Schumar provide native plant/pollinator educational info.

Volunteers Sid Henkin (Bald Eagle) and daughter Becky Henkin (center) greet guests next to the Moonlight Pottery stand.

Dedication of Chandler Robbins Outdoor Education Center and Wisdom Trail at South Tract

Continued from page 2

Wildlife Service, thanked the USA volunteers for their valuable work and received a dedication plaque presented by USA.

The fun then moved inside the Visitor Center, where USA volunteers worked with families and kids to build and paint bird houses to take home. Milwaukee Tools supplied all the tools, and funds from the USA's Capital Area Conservation Dinner were used to purchase 100 birdhouse kits and paint.

Funding for the construction of the Wisdom Trail and its displays was made possible by the Dr. Chandler S. Robbins Memorial Endowment Fund of the Friends of Patuxent. The Fund has received generous support from the Robbins family and other donors. Funding was also provided by the Refuge's budget allocation as part of the National Wildlife Refuge System.



Interpretive sign at listening horn.

The Friends invite additional donations to support future enhancements to the Wisdom Trail and the Outdoor Education Center, including accessibility upgrades for the trail and additional interpretive signage for the pavilion. Donations can be made online via the Friends of Patuxent website <u>https://friendsofpatuxent.org/</u> <u>donate</u>; please select "Dr. Chandler S. Robbins Memorial Endowment" from the drop-down box. If you prefer to send a check, please mail to Friends



Sign at entrance to Wisdom Trail.

of Patuxent, 10901 Scarlet Tanager Loop, Laurel, Maryland 20708-4011, and indicate the "Dr. Chandler S. Robbins Memorial Endowment" on your check. Friends of Patuxent is a Section 501(c)3 tax-exempt, nonprofit organization and contributions are tax-deductible as allowed by law.

How to find the Outdoor Education Center and the Wisdom Trail

Visitors may visit the pavilion and trail whenever South Tract is open. The Outdoor Education Center is adjacent to forest, field, and wetlands, allowing visitors to explore these diverse habitats.

The Wisdom Trail, a loop of under a half-mile, starts at the west end of the Visitor Center parking lot, passes through a grove of pine trees, and then emerges in a field dotted with a couple of small ponds. The trail continues into a deciduous woodland to reach the Outdoor Education Center. The Wisdom Trail goes past the Education Center onto the Old Telegraph Road, then crosses the entrance branch of Scarlet Tanager Loop where it connects to the Fire Road Trail to return to the parking lot.

Walk for the Wild

Continued from page 14

for WFTW participation, but donations like these through the Friends of Patuxent remain in the local communities and help support the educational and wildlife conservation work of national wildlife refuges. Funds raised by Friends of Patuxent directly support wildlife conservation, nature trails, passive recreation, and natural history/environmental education at and by this Refuge.

A refuge's nonprofit Friends' group coordinates a WFTW event upon signed approval from its refuge partner in the U.S. Fish & Wildlife Service (USFWS) and can run fundraisers for its refuge as part of the event. This year we ran an online WFTW fundraiser as "Team Whooping Crane" under the national WFTW campaign, and also ran the free guided Walk on 10/7. We laid out our Walk, created an educational Walk map and stocked copies of our map at the front desk in the Visitor Center so people could come for a WFTW Walk on their own during the week, too, right through the refuge's Urban Wildlife Conservation Day. Then we kept our online fundraiser open until October 20th.

Participation in Walk for the Wild, whether one donates money or just comes and walks, benefits the work of this Refuge both directly, but also indirectly, through Patuxent's capacity as a "unit" of the National Wildlife Refuge System (NWRS). Patuxent Research Refuge is unique in the NWRS; it is the only national wildlife refuge in this system of over 570 refuges and hatcheries that is designated specifically for wildlife conservation research - research that benefits us all. America's magnificent and unparalleled refuge network of public lands and waters is not as wellknown as her amazing National Park System. Walk for the Wild is part of helping to change that. We'll hold our second annual WFTW during next October's National Wildlife Refuge Week. Please join us in 2024!

Dear Friend of Patuxent,

We need your help to strengthen Friends of Patuxent and our support of the Refuge and Science Center. Friends of Patuxent is a volunteer organization, and we seek members who are willing to assist in the following roles.

- 1. **Board of Directors**. Help to lead the organization.
- 2. Bookstore and Nature Shop Volunteers, including someone with experience in establishing and operating an online store.
- 3. Volunteers to assist with programs and events, such as the Annual Meeting, Pollinator Festival, and Wildlife Holiday Bazaar.
- 4. Information Technology (IT) specialists. We have store and office computers and a website to maintain and keep current.
- 5. **Committees**. We have several committees that conduct important work of the organization.
- 6. **Archivist**. To organize and maintain the historical record of Friends of Patuxent.

If you can help in any of the above capacities, or would like more information, please email **friendsprr@friendsofpatuxent. org** or phone **301-497-5789**.

Board of Directors Friends of Patuxent



Like a Good Neighbor...

Continued from page 2

dents' interests. Recently, Visitor Services staff led Wellness Walks for BSU faculty around Cash Lake as a culmination of campus Wellness Week activities.

Patuxent's ongoing commitment to connect BSU students and staff to nature reached a new milestone in November when the Refuge partnered with Delta Waterfowl to offer them a mentored waterfowl hunt. The Refuge hosted BSU students and faculty for a comprehensive mentored hunting experience, complete with hunter's education, target practice at the local Trap and Skeet Center, and a mentored hunt day followed by a wild game feast. The students and faculty had a great experience, captured best in their own words:

"I had a ton of fun just being out in my element with others and seeing their first experiences in the sport of hunting. I'm especially glad that the sport of hunting is being shared with minority students, as it is traditionally viewed as a white-dominated sport..."

"If I had to consolidate my experience hunting with the Bowie State University Outdoor Club, it would be "profound". Growing up, I have always been fascinated by nature, however due to living in a large city at the time I was never granted the opportunity to explore my interest in things such as hunting, fishing, camping... The Outdoor Club has given me the opportunity to make those fantasies of being an outdoorsman a reality."

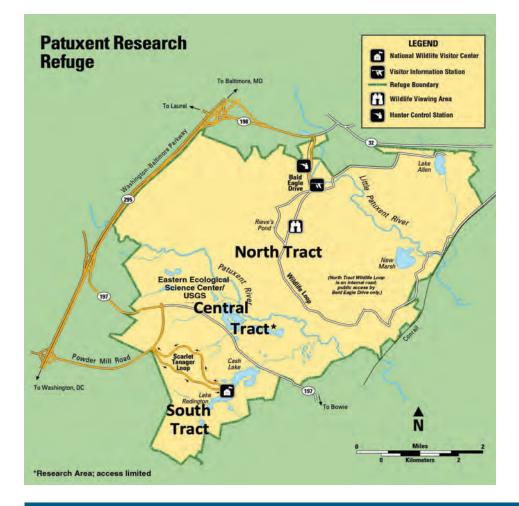
What will 2024 hold for the Refuge and our neighbors? For starters, a Memorandum of Agreement between USFWS and BSU is to be signed this winter, followed by community listening with our North Tract neighbors and the Friends of Patuxent starting in the spring. Exciting things to come in the new year!

UPDATES on Mussels, Birds and Maglev, from Patuxent Research Refuge Biology Department

Continued from page 11

corridor. The preferred alignment chosen by the proponents to accomplish this would go through the western portion of PRR's North Tract, impacting forests, streams, the river. Most of the route would be tunneled but to save on construction cost, the proponents wish to place the portion through the Patuxent Refuge above ground on a viaduct that's up to 100' elevation. There would be additional structures on the Refuge that serve the train route. To learn more you can go to https://mde.maryland. gov/programs/water/WetlandsandWaterways/Pages/SCMAGLEV.aspx, http://www. stopthemaglevtrain.org and https://www. stopthistrain.org.

You decide if this is good or bad news: Recently we were alerted that the Baltimore-Washington Rapid Rail/Federal Rail Administration submitted an application for their proposed Superconducting Magnetic Levitation (SCMAGLEV, or MAGLEV) train to Maryland Department of Environment. The Water Quality (WQ) Certification from the Maryland Dept. of the Environment (MDE) is needed for a permit from Army Corps of Engineers to move forward. The application outlines the project's estimated impacts on WQ and summarizes proposed mitigation and minimization of impacts. Patuxent Research Refuge was not notified as an adjacent or even affected landowner, even though the proposed route would go through PRR. Fortunately, our partners at the US Fish and Wildlife Service Chesapeake Bay Field Office let us know in the nick of time so we could review the application, prepare our findings, and get our comments approved by our Regional Office and Dept. of the Interior (DOI) Regional Solicitor and solicitor's office to submit by the deadline! In our review we found a significant number of major issues or omissions regarding impacts to Patuxent River and Patuxent Research Refuge.



FRIENDS OF PATUXENT BOARD OF DIRECTORS 2023

Richard Dolesh, *Chair* Rebekka Thompson, *Vice-Chair* Helen Lowe Metzman, *Secretary* Stephanie Kaufman, *Treasurer* Lowell Adams, *Director* Karen Atwood, *Director* Ross Feldner, *Director* Liz Humes, *Director*

LIAISONS

Diana Ogilvie, Patuxent Research Refuge Liaison

Megan Evans USGS Eastern Ecological Science Center Liaison

GENERAL COUNSEL

Benjamin R. Carter, Legal Counsel Carter Law, LLC. Beltsville, Md.

FRIENDS OF PATUXENT BOARD MEETINGS

Friends Board meetings are currently held by Zoom at 4 pm. Dates for Board meetings for 2024 are: January 16 March 19 May 21 July 16 September 17 October 15. Annual Members meeting to be determined.

JOIN TODAY!

MEMBERSHIP APPLICATION

Go to https://friendsofpatuxent.org/Join to join online!							
Name:							
Address:							
City:	_State:Zip:	Friends of Patuxent					
l 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						
l I 🖵 Individual (\$25/yr) 🖵 Family (\$35/yr) 🖵 Contributor (\$75/yr) 🖵 Sponsor (\$250/yr) 🖵 Life (\$500) 🖵 Life-65+ (\$300)							
Corporate \$1,000 (includes 1/4-page ad in the Friends newsletter for one year).							
Donation \$ payable to "Friends of Patuxent". Ma	ail to: 10901 Scarlet Tanager Loop, Laure	l, MD 20708-4011					
r Credit card No	Exp. Date/ Security	Code					
I I 🖸 🚭 🗅 🏧 🗅 📟 🗅 🌌 🗅 Check here if you would like	e save a tree by reading our quarterly new	vsletter online.					



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 friendsofpatuxent.org/

WE INVITE YOU TO JOIN!

Friends of 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 Eastern Ecological Science Center and the environmental education, outreach and recreational missions at the Patuxent Research Refuge. 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 https://friendsofpatuxent.org/
- 10% discount in our Wildlife Images Bookstore and Nature Shop 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 page 19, or go to https://friendsofpatuxent.org/Join to join online).