

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



FRIENDS OF PATUXENT

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October-November-December 2020

Masks From Crane Costume Material

by Matthew C. Perry, Ph.D., Director, Friends of Patuxent Board

In March, when the Coronavirus scare first became a concern in the United States, there was apprehension about whether enough face masks were available for our citizens of the US. Some folks complained, some folks ignored, but Patuxent Veterinary Technician, Ms. Carlyn Caldwell, went to work. She used her skills as a seamstress to make masks herself. Her technique was quite innovative as she used the extra stock material used to make the whooping crane costumes. She had made all the costumes in the past, but now the stored fabric material was of no value since the termination of the whooping crane project.

The masks were cut to size from the material, and then ear loops and a metal nose wire were sewn into the material. The final product was as good, or possibly better, than any masks produced commercially. The masks were also cleaned, sterilized, and packed in a plastic zip-locked envelope with two filters for extra protection.

Since Patuxent has been closed due to Covid-19, the masks have been used by only a few employees, and now the government has provided large supplies of commercial masks
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Carlyn's mask modeled by 5-year old Adeline, a future wildlife biologist or veterinarian.

Walking Through the Pandemic

by Gail Melson, Education Programs Volunteer, Patuxent Research Refuge

During the pandemic, I've found that long walks are therapeutic. Since March 15 I've walked more than 750 miles. At my pace, that's about 300 hours of being outside. All those hours have kept me sane.

Most of my walks have been within a 3-mile radius of my home, but a few have been farther afield. My husband, whose exercise of choice is biking, has joined me on those walks. In mid-August, we walked on Wild Turkey Way and Sweet Gum Lane at Patuxent Research Refuge's North Tract.

Although it was a sunny day, the days before had been rainy. On Wild Turkey Way we got to see what a floodplain forest looks like during a wet season.

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NOTICE: Due to the ongoing COVID-19 Pandemic, the FOP Wildlife Holiday Bazaar has been cancelled

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for employees when they return to work. In the meantime, the Friends of Patuxent has received 50 masks made by Carlyn and is debating best use of these masks. For some folks they might be of value as a souvenir item from the pandemic, and also for the crane program that has recently ended. The Covid-19 masks made of crane costume material are especially an appropriate memento for Patuxent employees, who worked so hard on the costume-rearing project to save the whooping crane, and also endured the pandemic quarantine.



Photo by Francis Uhler.

Biological technician, Barbara Clauss, feeding crane during costume-rearing project.

Carlyn is not the type of person who seeks recognition for her efforts, but this is a special effort that goes beyond the call of duty. Carlyn will be happy to get back to conducting analyses of blood samples, assisting in health examinations of animals, and assisting in surgeries. And when the Friends of Patuxent get back to holding public events, the masks might be used for door prizes or other special uses as mementos of the crane project and the pandemic. Special thanks will also be given to Carlyn, who took the initiative to make face masks from the cloth material that once was used to make gowns for the whooping crane costume-rearing project. 🦒



Photo by Francis Uhler.

Veterinary Technician, Ms. Carlyn Caldwell, assisting Veterinarian, Dr. Glenn Olsen, with health check of a young Sandhill crane

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<https://www.facebook.com/PatuxentResearchRefuge>

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

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

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

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

Or email to ross.feldner@verizon.net

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

Article submission deadlines:

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

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

New Predator Guards for Nest Boxes - Snakes Beware!

by Tom Kirby, Volunteer Nest Box Coordinator

Just as the nest box monitor season was about to get underway, the coronavirus pandemic “stay at home” order came. All volunteer activity came to a halt.

Fortunately for the soon to be nesting songbirds, several volunteers (Sandra Hansen, Marcia Van Horn, Robert Van Horn and Tom Kirby with guidance from Diana Ogilvie, Park Ranger/Volunteer Coordinator and Sandy Spencer, Refuge Biologist) had, just the day before the halt order was issued, finished new nest box trails at Central Tract and South Tract with critically important new predator guards as well as a mixture of old and new nest boxes. The new predator guards were installed to significantly reduce, if not eliminate, snake predation at the Refuge, which has been a serious problem the last several years. It also protects against raccoons, although they have not been a predation problem at the Refuge.

On July 1, 2020, Diana Ogilvie began the “go ahead” process to resume certain outdoor volunteer activities including the 2020 Songbird Nest Box Monitor Program at the Refuge. Even though it was mid-to-late season, we had many new blue bird nests and some tree swallows getting ready to fledge across the Refuge. Even nests the birds built during our absence exhibited the classic flattened shape and left-over droppings from fledging chicks, a hopeful sign that predation did not occur.

The new guard system was graciously donated to the Refuge by Marcia and Robert Van Horn. It consists of a ¾-inch electrical conduit steel pole mounted with an 8-inch diameter, 5-foot length of galvanized steel stovepipe and associated hardware, on top



of which the nest box is attached to the pole.

Newly designed nest boxes, built by volunteer Will Hershkowitz, allow monitors to photograph the interior of the boxes with a cell phone through a slit under the roof, minimizing disturbance to the residents. (The attached two photographs illustrate the new predator guard with the newly designed nest box as well as an iPhone view of the interior of one of the new nest boxes).

I believe, based on previous live test data by Marcia and Robert Van Horn, the days of snake predation are largely behind us at Central Tract and South Tract. Hopefully we can continue with upgrading North Tract. A great deal of thanks to Marcia and Robert for their generosity, innovative thinking and relentless drive to protect songbirds with predator guards that work. 🐾

The Signs and Gates of Patuxent

by Matthew C. Perry, Ph.D., Director, Friends of Patuxent Board

Patuxent Research Refuge was created in December 1936 by Executive order of President Roosevelt and then was dedicated in June 1939. Much construction work was conducted between 1939 and 1941, but then greatly curtailed due to World War II, except what was done by the Civilian Service Program (conscientious objectors). The entrance road that is used now from Route 197 did not exist until workers from the Works Progress Administration (WPA) constructed it in 1938. The stone columns and wall at the entrance were built by stonemasons of the Civilian Conservation Corps (CCC) camp and the metal, white-picket gate and fence built by WPA shop, during the winter 1938-39. There was a major push to get all work done before the planned June 1939 dedication of Patuxent Research Refuge.

In the late 1930s, Dr. Ira Gabrielson conducted many trips to the new Patuxent lands. He personally made many of the decisions regarding the construction operations being conducted. He wanted an office at Patuxent and considered the Knowles House a good location. Another entrance to Patuxent was proposed and the entrance road was lined with red cedar trees taken from the fields by Patuxent staff. To make the entrance more impressive to the new facility, a gate was installed with two posts that resembled the Washington Monument. Many jokes were created about these concrete gate posts that were eventually taken down and dragged off in the woods. They remain hidden in the woods to this day as silent reminder of the influence of Gabe, most good but some maybe not so good!!!

At the main entrance was a rustic wooden sign with the words "Patuxent



Stone gate built by the CCC camp and metal white picket gate and fence built by WPA shop, winter 1938-39.

Research Refuge." It also identified the area as part of the Department of the Interior and the Fish and Wildlife Service (FWS). It is of interest that at that time the FWS was not considered a full agency and it was not until 1956 when it became the USFWS. A brass plaque was installed on one of the columns at the entrance. When the research center became part of US Geological Survey (USGS) in 1995, a new sign was designed indicating the

Patuxent Wildlife Research Center (PWRC) was now part of the USGS.

On the other side of the gate a sign also welcomed visitors with the name Patuxent Research Refuge of the USFWS. As PWRC enters a new phase in its history as a merged lab with Lee-town Science Center, the staff looks forward to learning the new name and the subsequent installation of a new sign at the entrance gate. 



"Washington Monument" Gate Posts at Cedar Lane, June 1949

Photo by Francis Uhler.



Main entrance to Patuxent at intersection of Powdermill Road and Laurel-Bowie Road (Route 197).



Patuxent Research Refuge sign at main gate.



Sign at main gate when PWRC was part of Fish and Wildlife Service.

We Invite You to Renew!

by Ken Lavish, Membership Committee of the Friends of Patuxent

As a member of the Membership Committee of Friends of Patuxent, I want to thank you for your contributions and your support of Friends in the past.

We want to remind you that your membership will expire soon. I invite you to renew your membership with Friends of Patuxent. You can access the membership form at: http://www.friendsofpatuxent.org/images/2016_Friends_of_Patuxent_application_form.pdf. If you have already sent in your renewal, please accept my apologies and disregard this reminder.

We are extending the expiration date of all memberships that were received from March 2020 through October 2020 until October 2021. This extension will also be made to any memberships that have expired during this period and are renewed in the next 6 weeks.

Because of you and other generous contributors the Friends of Patuxent have been able to fund these improvements (and more) to our Refuge:

- Anti-bird strike window film
- School visit transportation
- Bird blind materials
- An upgrade to the Kids Discovery Center
- Echo Sonic monitor for North Tract

In addition the Friends of Patuxent have been:

- Primary planners of the Wolf Program
- Primary planners of the Pollinator Festivals
- Major partner of the Federal Duck Stamp Contest
- Sponsor of the Annual Holiday Bazaar

I hope you will join us for some educational, fun and enjoyable times. If you have any questions, feel free to e-mail me at membership@friendsofpatuxent.org. 

Walking Through the Pandemic

Continued from page 1

We managed to keep our feet dry on the trail, and we had plenty to look at. What follows are some of the things that caught my eye.

We saw plenty of fungi because water plus dirt fuels fungal growth. Fungi can be very difficult to identify. I needed the help of iNaturalist.org. This colony of tiny pinewood ginger-tail mushrooms (*Xeromphalina campanella*) was growing in a rotting tree stump. The false Caesar's mushroom (*Amanita parcivolvata*) was growing out of a bank.

We saw a few dragonflies and damselflies. This female whitetail dragonfly (*Libellula lydia*) seemed to be



Pinewood Ginger-tail



False Caesar's Mushroom



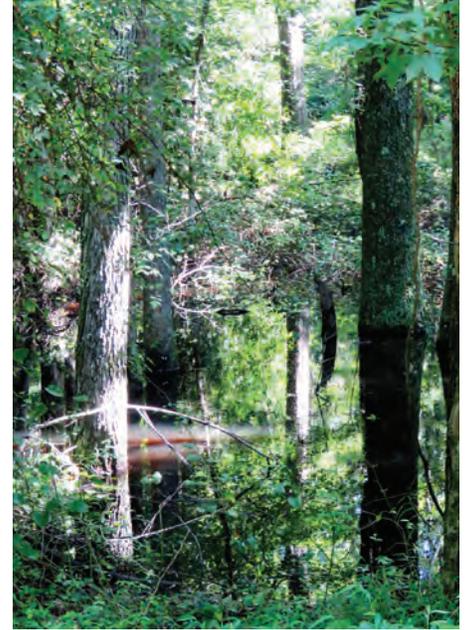
Wild Turkey Way

posing for a photo. I like dragonflies for two reasons. First, dragonflies eat mosquitos. Second, they are dazzling fliers. When I enlarged the photo, I got a good look at the complex structures surrounding each of the four wings. Those structures enclose muscles which enable a dragonfly to move each wing independently. They can fly upwards, downwards, backwards, forwards and side to side. They can also hover. Check out this video for a look at how their wings move in slow motion and for information on dragonfly flight research. <https://www.youtube.com/watch?v=cJJowVxiaRU>

We saw at least three different kinds of butterflies. Zabulon skippers (*Poanes zabulon*) are among the small grass skippers that fold their wings at right angles to each other when they are



Whitetail Dragonfly



perched on a plant. The photo below shows the unusual profile.

On Sweet Gum Lane under the electrical power lines, we saw grasshoppers for the first time. We also saw another butterfly, an American lady (*Vanessa virginiensis*). The underside of its wings is strikingly different from the top view as you can see in the photo I took of an American lady a few years ago. Before I started looking more closely at these insects, I assumed that from above and below, a butterfly looked the same. Not true, which makes them all the more fascinating to learn about and identify.

The black swallowtail butterflies were flitting around too much to get a good photo. This one finally decided to dine on a flowering bush. There are several black swallowtails in this area, includ-



Zabulon Skipper



American Lady (top view)



American Lady (underside view)



Jewelweed

ing a female form of the familiar yellow eastern tiger swallowtail (*Papilio glaucus*). If you can see both the top and the underside of the wings, it's easier to identify this Spicebush Swallowtail (*Papilio troilus*).

Turning to the plant world, one of my favorite August wildflowers is common jewelweed (*Impatiens capensis*). The flowers look like half-inflated balloons that bounce in the breeze. You often see them near streams and marshy areas. I look forward to seeing my old friends every summer.



Fan Clubmoss and Spotted Wintergreen

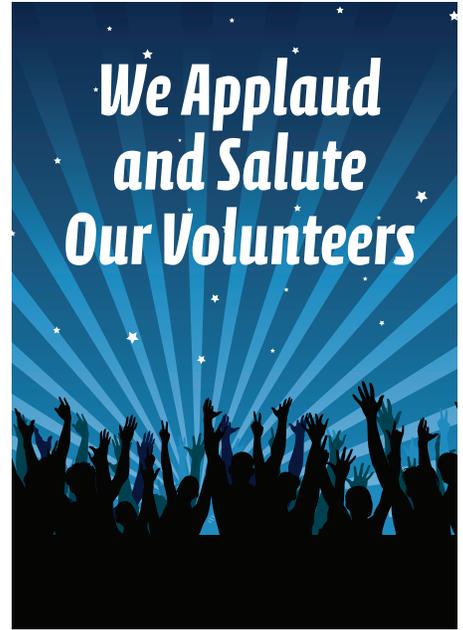


Spicebush Swallowtail

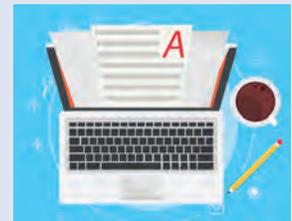
The other plant I was happy to see was a kind of lycopodium or clubmoss, in this case, fan clubmoss or *Diphasiastrium digitatum*, among the more typical moss and spotted wintergreen (*Chimaphila maculate*) plants in this photo. Also known as running cedar, it is not a flowering plant that produces seeds but a plant like mosses and ferns that produces tiny spores. In the time of dinosaurs when the atmosphere was much different, the fossil record shows that these plants could be 100 feet tall. Another fun fact is that the spores were used in early flash photography. They burn fast, bright, and cool.

Getting away from the usual neighborhood walks is always an adventure. The day on the North Tract was exactly what I needed: the joy in seeing things I recognized, the intrigue of taking photos home with me to figure out the things I didn't.

It was a day of deeply enjoying the sights and sounds of a beautiful place. What more could a nature lover ask for? 🐾



Calling for Your Articles and Photos



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' event along with a caption.

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!**

Cutting and Harvesting Wood at Patuxent

by Matthew C. Perry, Ph.D., Director, Friends of Patuxent Board

Road construction and wetland impoundment creation were two of the major field work projects done at Patuxent Research Refuge in the late 1930s. The entrance road to Snowden Hall was planned and constructed by the Bureau of Public Roads. The first wetland impoundment area, which had been selected by Dr. Ira Gabrielson, was developed, and became known as Cash Lake. The Civilian Conservation Corps was responsible for this work, but due to World War II many of these men were drafted for military service.

Field work continued at Patuxent in the early 1940s, with the help of the Civilian Public Service Program (conscientious objectors) and other men, who were not been drafted for the military. River Road was constructed in the bottomlands that paralleled the Patuxent River. Numerous trees were cut to develop the roads and impoundments.

The Civilian Conservation Corps used non-powered hand saws and axes for their work and at one time the third floor of the upper tobacco barn at Patuxent was full of the equipment they used. Many of the tools in long rows had the names of the men who used them carved into the wooden handles. These old saws and other equipment were still in the barn in the 1980s and arranged orderly as if the men had just walked away on their last day of work, even though it had been over 40 years ago. Later the tools were discarded during a cleanup of the barn and then about ten years ago the historic barn, used for drying tobacco by the Duvall family, was razed.

Chain saws were first developed in 1830 by a German doctor as a surgical instrument to cut bones, but these



Cutting tree with two-man chainsaw along the border of the future Lake Redington, January 1950. Note man in uniform from the Forest Service.

were small and hand powered. The first “endless chain saw” for cutting wood was developed by an American in San Francisco, with the intent to harvest redwood trees. The Canadians also developed a power chainsaw, but the patents lapsed.

The Germans made further advancements with chainsaws to cut wood, and in the 1930s, gasoline-powered chainsaws were developed and mass-produced for use in cutting trees and lumber. The company was called Dolmar, and it is possible that the two-man chainsaw used by conscientious objectors at Patuxent in 1945-46 to clear trees to make Snowden Pond was German made. Stump removal was done with dynamite and tractor as the first bulldozer did not arrive at Patuxent until late

1946. The American company, McCulloch, produced a heavy two-man chainsaw in 1948 and it is possible Patuxent workers used this model in clearing land surrounding Lake Redington and Cash Lake, now the National Wildlife Visitor Center site.

In 1951, a Disston circular chainsaw was used to cut Virginia pine trees to create the Canada goose “pasture area” around Cash Lake. The wood was sold and hauled away for pulp. Tree removal was done in the mid to late 1950s in other forested wetland areas to develop impoundments for waterfowl management. Some of the progressive biologists on staff complained about the loss of forested wetlands when the areas were flooded, which in recent years has become of national concern.



Photo by Francis Uhler.

Government worker at Patuxent with Disston circular chainsaw, September 1951.

In the early 1960s, massive tree removal was conducted at Patuxent for the creation of the Potomac Electric Power Company powerline right-of-way. Some wood was hauled away, but much of the debris was burned on site with huge fires. The introduction of herbicides at this time led to several alternative management strategies to control vegetation under the powerlines.

Since the creation of Patuxent, employees who lived on the refuge could cut and take dead trees on the ground for use as firewood for their homes. In the 1960s to early 1970s, it was common knowledge that Director, Eugene Dustman, and scientist, Bill Stickel, who lived in the two homes near Snowden Hall, had a friendly competition on who had the biggest and best looking stack of firewood.

In the late 1970s, Patuxent staff not living on the refuge requested and were granted permission to collect



Photo by Francis Uhler.

Logging truck with a load of Virginia pine pulp wood from Cash Lake goose pasture area, October 1951.



Photo by Francis Uhler.

Cutting large log with two-man chain saw, January 1954.

firewood. When the director of Patuxent, Dr. Lucille Stickel, learned that one staff person was selling the firewood, the personal use of firewood at Patuxent ended abruptly. Since then, all wood on the ground at Patuxent is left to provide habitat for the numerous invertebrates and vertebrates, who share Patuxent land as home with the staff.

In addition, many of the fields and some of the wetlands created for wildlife management areas mainly in the 1950-60s have been allowed to revert to forested areas, as habitat for forest interior dwelling songbirds. This change has been part of a national movement to mitigate the changes of humans and restore areas to reflect a pre-Columbus appearance more closely. 

Nest Box Monitors

(Pandemic-Truncated 2020 Season*)

by Tom Kirby, Volunteer Nest Box Coordinator

South Tract (All boxes have new guard system)

7 active nests; 32 eggs; 23 chicks fledged; 5 eggs didn't hatch

6 Bluebird nests, 1 Tree swallow nest

Central Tract (All boxes have new guard system)

5 active nests; 19 eggs; 18 fledged; 1 egg didn't hatch

3 Bluebird nests; 2 House wren nests

North Tract (Variety of old-style guards)

4 active nests; 12 eggs; 6 chicks fledged; 6 eggs didn't hatch

3 Bluebird nests

Patuxent Research Refuge Total

16 active nests; 57 eggs; 43 fledged; 12 eggs didn't hatch

The 2020 nest box monitor season began at the end of the first Bluebird and Tree swallow nesting period, the only reported active Tree swallow nest was first observed with the chicks about a week old. With the exception of 2 House wren nests, the remaining nests were the second brood of Bluebirds that closed out the season in the last week of August. Nothing is known for sure during the earlier part of the season and nest use in the later part of the season when monitoring began would only have been moderate, mostly the normal second brood of bluebirds.



Photo Credit: Volunteer Bobby Jones

The success rate for 2020, a truncated season, with at least one chick fledging from the nest, is 94%, a hugely successful outcome. 12 eggs did not hatch for unknown reasons. Of note is that there was no predation by snakes (see photo) in the nest boxes and that is a credit to the new guards that were de-

ployed at ST and CT. But that was true also at NT where new guards were not installed due to the pandemic.

Thanks to the many volunteers to the nest box monitor program this year even though some did not get a chance to participate. 🐾

* Volunteer activity was halted at the Patuxent Research Refuge in mid-March due to the coronavirus pandemic, two to three weeks before our traditional monitoring season began, April 1, 2020. Volunteer activity was allowed to resume outdoors the first week of July 2020 after individually provided training guidance from the Refuge Volunteer Coordinator. Volunteer activity picked up as each volunteer came on board as they were able. Ultimately, most, if not all of the Refuge nest boxes, were monitored.

Fall 2020 In the Hollingsworth Gallery

by Faith Leahy-Thielke, Patuxent Volunteer

Let's hope that Patuxent's Visitor Center can open – even if it's with masks, social distancing and number controls. People's needs go beyond grocery and liquor stores – and libraries, churches and refuges are biggies on my list. This fall, the Hollingsworth Gallery has scheduled a welcome return of the Southern Comforters Quilt Guild in October, and Steve McDaniel Photography in November. McDaniel has offered graciously offered to share gallery space with earlier exhibitors who were blocked by the shutdown. December has again been set aside for the work of refuge volunteers.

The Southern Comforters guild has about 65 members and always welcomes new. Rather than their usual second and fourth Wednesdays of each month at CCPC (Christian Community Presbyterian Church), they are presently meeting by Zoom – and hoping for live resumption of meetings and activities. This fall the guild plans to bring nature and wildlife-themed quilts to the gallery. The collection includes art, traditional and modern style quilts. Barbara Dahlberg, their exhibit curator, writes that some of these resulted from challenges developed by guild members "to stretch our skills – and increase awareness in the public

sphere." A few can be viewed on their Facebook page and current information about the group on their website.

Two years ago, in December 2018, Steve McDaniel of Manchester, Maryland, exhibited his "fine art" images here and it's lovely to welcome him back. He has photographed widely along the US Eastern seaboard – and Hawaii. His work encompasses landscapes, scenic views, pollinators (birds, bees, and butterflies), and endangered species. His close-ups or "macro images" are especially arresting. View his website, for instance,

for an amazing shot of honeybees at "Supptime." McDaniel is also a popular lecturer whose presentations are "interactive" and fun events. The Maryland Wildflower one would grab me first, but beekeepers everywhere would appreciate his talks on every aspect of fostering and maintaining these essential insects.

December has again been set aside for the work of refuge volunteers. In fall 2017 we enjoyed their needlework, carvings, photos, painting and quilting. We expect an equally varied and interesting exhibit. 

**Start planning now for the
2020 VOLUNTEER ART SHOW
DECEMBER 2020
HOLLINGSWORTH GALLERY**

**Any Medium
1-2 Pieces of Artwork per Volunteer**

ZUFROMMAH@GMAIL.COM

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



Around the Refuge

Photos by Jerry Herman



Brown-belted Bumble Bee



Ospreys



Coopers Hawk



Black-and-Yellow Garden Spider



Purple Admiral



Great Egret

Around the Refuge

Photos by Matt Beziat



Black Trumpet Mushrooms (North Tract)



Jack O' Lantern Mushrooms (North Tract)



Orange Sulphur (North Tract)



Eastern Newt (North Tract)



Red-footed Cannibal Fly (North Tract)



Common Whitetail (North Tract)

CRITTER CORNER - For Kids of All Ages

by Jeanne Latham, Volunteer

Here are some fun nature questions to challenge you:

1. Which Maryland reptile has lines on its body, moves very fast, and you might see near your home?
2. Which playful furry mammal lives in a holt (den) near a river or stream? (Hints – is a carnivore; has a long, round tail)

Enjoy the Nature Facts below.

Common Five-lined Skink

You may have seen this small lizard on your deck or near where you live. It measures about 5 to 8½ inches long. The young are easy to spot, having five yellow or white stripes on the head, a black body and a bright blue tail. The adult females look like the young, without the blue tail, and a dark brown to brownish-gray body. The adult males are all tan or olive with an orange-red jaw area during the breeding season (May-July). The orange color fades after that.

These skinks have short legs and a streamlined body. Like most lizards they have scales. The scales are smooth and flat, which makes them look shiny. The skinks scurry around, warming in the sun, and then seeking shade to moderate their temperature,

as all “cold-blooded” reptiles do. They can move very quickly.

Here’s something else fascinating. Like many other lizards, skinks are able to disconnect the tail when held. The disconnected part of the tail continues to twitch and distract the predator while the skink runs away to hide. The tail will eventually grow back.

Skinks are at home on the ground or in trees. They may be found in almost any habitat, and are most common in wooded areas with lots of fallen trees and stumps in which to hide.

What do these lizards eat? These skinks are carnivorous. They prey on a wide variety of insects, spiders, and other invertebrates, but may also eat snails or frogs.

Other Fascinating Five-lined Skink Facts:

- This skink’s scientific name is *Plestiodon fasciatus*. It comes from the Greek language and means “toothy.” And yes, it has teeth, which are very small.
- These skinks look similar to their cousins, broad-headed skinks. Broad-headed skinks have five labial scales

near their upper lip (between their nose and eye); while Five-lined skinks have four labial scales.

The North American River Otter (River Otter)

Do you enjoy swimming and sliding and playing around in the water? So do River otters. Otters are very playful and have a warm furry coat. They like to have fun – they pounce, somersault, and swim underwater; they like to slide down a muddy hill. In the winter, they glide on their bellies on the snow and ice.

These otters live along rivers, streams or lakes. They make their home, or place for their young, in a den or holt, that is dug into a riverbank or under the roots of trees. Their slinky body is covered with brown water-proof fur. An otter measures 3 to 4 feet from the top of its head to the tip of its tail. And they can weigh from 11 to 30 pounds.

Otters are underwater acrobats. They move their long bodies up and down, paddle with their webbed hind feet. And use their strong tails to steer through the water. They can stay under the surface of the water for up to



Andrew Hoffman

Andrew Hoffman, 2012

Juvenile Five-lined Skink



Matt Sell

Adult Common Five-lined Skink



River otters playing by David Ellis, Flickr CC BY-NC-ND 2.0

River otters playing - https://dnr.maryland.gov/wildlife/Pages/plants_wildlife/Otter.aspx

4 minutes. As they begin to dive, they close their nostrils and ears to keep the water out. They like to hunt underwater, chasing after fish, which is their main source of food.

Otters also help maintain river ecosystems, which means they help keep a balance in the environment in which they live. As predators, otters help control the populations of food species they prey on. This affects the

ecosystem as a whole. So the otters' presence is a signal that the ecosystem is healthy.

More Cool River Otter facts:

Baby otters are called kits. They are usually born in the holt in the spring and stay there for several months.

As carnivores, otters feed on fish, frogs, crayfish, shellfish, and sometimes

aquatic insects. They also eat snakes, turtles, salamanders, earthworms, small birds and small mammals.

Otters are most active at night, but can be active at almost any time of the day.

For additional information you may want to visit:

Five-lined skink:

https://dnr.maryland.gov/wildlife/Pages/plants_wildlife/herps/Squamata_Lacertilia.

https://dnr.maryland.gov/wildlife/Pages/plants_wildlife/herps/Fieldguide_SubOrder_Lacertilia.aspx?LizardName=Common%20Five-lined%20Skink ; https://dnr.maryland.gov/wildlife/Pages/plants_wildlife/herps/Fieldguide_SubOrder_Lacertilia.aspx

North American River otter:

<https://kids.nationalgeographic.com/animals/mammals/river-otter/>

https://dnr.maryland.gov/wildlife/Pages/plants_wildlife/Otter.aspx

<https://marinelab.fsu.edu/archive/virtual-classroom/fast-facts/river-otters/> 



<https://marinelab.fsu.edu/archive/virtual-classroom/fast-facts/river-otters/>

Otter kits - <https://marinelab.fsu.edu/archive/virtual-classroom/fast-facts/river-otters/>

We're Still Here!

by Karen E.H. Atwood, Volunteer

The COVID-19 virus has changed much in our lives — **but not everything!** The Friends of Patuxent's local and classy *Wildlife Images* Bookstore and Nature Shop continues to be THE place through which to support the mission and work of the Patuxent Research Refuge, and for unique shopping experiences. **Watch for announcements** on the Bookstore* and the Refuge's** websites, as well as on *Friends'* emails and newsletters: We're exploring a variety of COVID19-prevention-compatible possibilities to offer you some shopping this fall and for the holiday season, and to continue Refuge support. Meanwhile, wonderful workers outfit and maintain the Refuge Visitor Center and the Friends' Bookstore and Nature Shop (*additional thanks to some generous benefactors*) with new, MERV13-rated filters for air-cleaning and ventilation; hand-sanitizers; physical-distancing markers, barrier shields and more, to provide virus protections for staff, visitors and volunteers. *Wildlife Images* carries: Both recently published and "tried-and-true favorites" in Nature, Natural History and outdoor-themed books, including guides for wildlife observation, identification and tracking; fishing, hiking and other outdoor activity guides; other instructional resources for adults, children and families; outstanding audio-visuals for learning more about birds; educational and engaging 2-D and 3-D games and puzzles; creative, stylish and fun Nature-themed jewelry, from earrings to pendants and pins – *think otters and foxes, bluebirds and owls, fish and dragonflies, snakes and butterflies, bats and bugs, flowers, feathers, and turtles ...!* — and birdhouse kits, bat boxes, clever t-shirts and caps;

Continued on page 19



Animals leave clues when they come by. Figure out whose tracks and "scat" (poop!) are whose, through guides and games like these at Patuxent's Wildlife Images Book and Nature Shop.



For guys and gals who fish, we've got your wish! Ok, maybe we don't have the big one that got away, but we do have a mug and a cap for a campfire telling of the tale.

Baltimore City Kids Experience Nature at the Refuge

by Jorge Abraham Lopez Trejo, Environmental Educator, Patterson Park Audubon Center, Baltimore, Maryland (and former Refuge Intern)

Recently, 25 city kids and their families from Patterson Park Audubon Center in Baltimore participated in an outdoor educational field trip to Patuxent Research Refuge. It was their first experience with the Refuge. Many in the group were amazed that Patuxent was free and open to everyone, and several participants indicated that they were coming back with the rest of their families. The adults were excited to be able to learn about nature along with their kids. Both kids and adults enjoyed being outdoors and exploring the forests and wetlands. The group saw crayfish, frogs, toads, slugs, fish, dragonflies, a box turtle, and more.

Both kids and adults enjoyed being outdoors and exploring the forests and wetlands. The group saw crayfish, frogs, toads, slugs, fish, dragonflies, a box turtle, and more.

I thank everyone who helped to make this outing happen, especially Friends of Patuxent for funding transportation cost for the trip. Also, thanks to Refuge staff who helped plan the event and who helped to conduct the program (Diana, Tim, Jennie, and Brad). And thanks to the amazing interns, Alli and Doris, for conducting fun activities, interpreting for the Spanish speaking parents, and for their patience throughout the day. The parents and kids really enjoyed doing activities with the two of them. 🐾



Kids and adults enjoyed being outdoors and exploring the forests and wetlands.



Baltimore city kids and their families enjoyed an outdoor educational field trip to Patuxent Research Refuge, June, 2019.

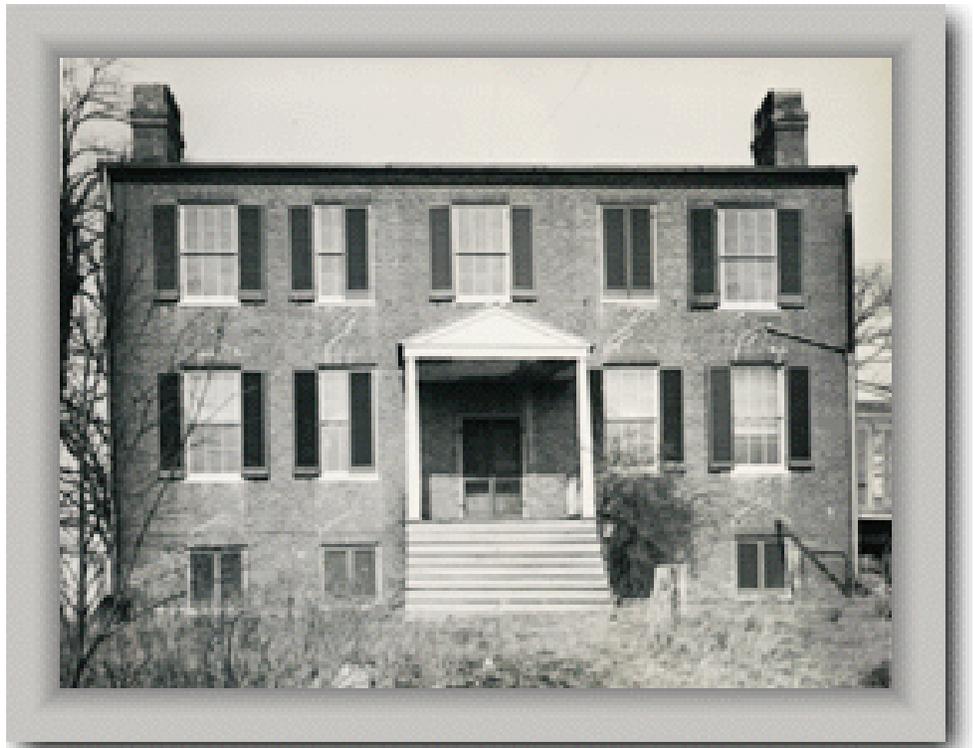
Early History of the Patuxent Wildlife Research Refuge Area (Part 1)

Excerpted from *EARLY HISTORY OF PATUXENT WILDLIFE RESEARCH CENTER* (circa 1948) by Dr. L. B. Morley

A representative commissioned by Lord Baltimore to inspect the Patuxent Territory as to its suitability for colonization reported back that it gave promise of being both fruitful and prosperous. An early History of Maryland in discussing the wildlife of the colony reported that the upper regions of the Patuxent abounded with game and fish. Turkeys, pheasants, woodcock and other game birds were numerous and flocks of turkeys numbering more than a hundred birds were frequently seen. Deer were found in great numbers and were so tame that they could be easily approached and almost touched.

The entire Chesapeake region witnessed the migration of immense flocks of waterfowl and pigeons. The waters in the vicinity of the bay were said to be so black with ducks that 15 to 20 birds were easily killed with a single shot. Clams, oysters, crabs, fish and other sea food could be had by the early settler with a minimum of effort. A site on the refuge near the old mill race on the north side of the Patuxent River is the reported location of an early Indian village or encampment. That Indians roamed and hunted the area intensively is evidenced by the numerous relics that have been found and added to the refuge collection.

The lands comprising the refuge are traced back to several original grants from Charles II patented through Lord Baltimore and his agents to the various settlers. The different manors or parcels of land known as "Robin Hood's Forest", "Duvalls Delight", "Moore's Industry", "Contention", "Tal-



Snowden Hall

botts Adventure", Batsons Vineyard", "Friendship" and others came eventually to be controlled by the families of two early arrivals, Richard Snowden and Mareen Duvall. The Snowden family of Maryland was founded by Major Richard Snowden of Wales who held a commission under Cromwell and immigrated to the colony in 1658. In 1679 he purchased a tract of iron ore land on South River and in 1686 was granted "Robin Hood's Forest", a tract of 1,976 acres, later to be incorporated in Snowden's "New Birmingham Manor."

Ten thousand acres were owned by 1719, including Snowden Hill, the site of the refuge headquarters. Richard,

the second, discovered a rich iron ore deposit on the manor, and since the production of raw material was encouraged in the colonies by Great Britain, he built on the Patuxent near Laurel in Prince George's County the first iron works in Maryland. The Snowden forges were well known here and abroad and were a source of considerable wealth. Richard Snowden built Birmingham Manor in 1690, and it was the home of a family who held or were heirs to a vast estate extending for more than a distance of 50 miles from South River to and beyond Sandy Springs, including land now lying in Anne Arundel, Montgomery, Howard and Prince George's Counties. 🐾

Part 2 next issue

We're Still Here!

Continued from page 16



We find the most unusual jewelry!

handsome walking sticks; beautiful note cards and stationery, wildlife posters and original art; one-of-a-kind handcrafts and charming home-décor pieces for gifting (or keeping!), and — well, you get the idea. Be well; looking forward! 🐾

*Wildlife Images Bookstore and Nature Shop Website: <http://friendsofpatuxent.org/wildlifeimagesbookstore.html>

**Patuxent Research Refuge/NWR Website: <https://www.fws.gov/refuge/Patuxent/>

FRIENDS OF PATUXENT BOARD OF DIRECTORS 2020

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- Douglas Meister, Esq., General Counsel

FRIEND OF PATUXENT BOARD MEETINGS

Friends Board meetings will be held at 5 PM at the Visitor Center. Dates for Board meetings for is calendar year are: January 21, February 18, March 17, April 21, May 19, June 16, July 21, August 18⁽¹⁾, September 15, October 20⁽²⁾, November 17, December – No meeting. Dates, location and times are subject to change. ⁽¹⁾ Strategic plan review ⁽²⁾ Board meeting and annual members meeting

JOIN TODAY!

MEMBERSHIP APPLICATION

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

E-mail: _____

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

Phone: (opt.) _____ New Renewal

- Individual (\$25/yr), gift: FOP bookmark (or other) Family (\$35/yr), gift: FOP decal (or other)
- Contributor (\$75/yr), gift: History of Patuxent DVD (or other) Sponsor (\$250/yr), gift: FOP hat (or other)
- Life (\$500), gift: FOP shirt (or other) Please ✓ size: S M L XL XXL XXXL
- Life-65+ (\$300), gift: FOP shirt (or other) Please ✓ size: S M L XL XXL XXXL
- Corporate \$1,000 Gift: 1/4 page ad in the Friends newsletter for one year. (4 Issues).

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

- Check here if you prefer not to have a gift, and instead have your entire dues support Friends of Patuxent.
- Check here if you would like save a tree by reading our quarterly newsletter online.





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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)