

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

FRIENDS OF PATUXENT

Vol. 27 • No. 3

www.friendsofpatuxent.org

July-Aug-Sept 2016



A Night on the Wild Side is a Wild Success

By Bobbie Deegan



Photo by Ross Feldner

More than 200 guests visited Patuxent the evening of March 31st to experience our Night on the Wild Side (NOWS). Thankfully, the storm the weather forecasters had predicted never materialized, and we had a beautiful (if windy) evening for our event. The NOWS Committee had planned A Night on the Wild Side to revitalize support and appreciation for the Patuxent Research Refuge among local politicians, the business community, and other community leaders. Their hard work paid off, because the guests seemed to have a wonderful time from the moment they arrived until they left with their goody bags.

The invitation suggested that guests come an hour early to take a tram ride around the refuge before nightfall. This proved to be a very popular activity! So

many guests wanted to participate that two tram tours were completely filled. "I had no idea this was here!" was murmured repeatedly throughout the ride.

Continued on page 2

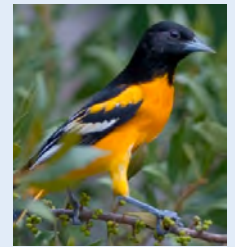
CHAIR'S COMMENTS

By Jeanne Latham,
Chair of Friends of Patuxent

All of us at Patuxent, who work or volunteer here, or support it in some capacity, possess a passion and love for this amazing place, don't we? We can't seem to get enough of being here, soaking in its beauty and peace, seeing wonderful sights and hearing nature's sounds - we're hooked.

And we want other people to come to Patuxent to be wowed and want to come back - to love this place as we do. So what each of us can do is put on our "refuge ambassador hat" and get the word out - to friends, family, business or work associates, neighbors and casual acquaintances. It's easy and

Continued on page 18



Inside...

Ospreys as a Sentinel of Ecosystem Health in the Chesapeake	4	What's New Around the Refuge?	12
Finding Birds at North Tract with Rod Burley	5	Annual Friends of Patuxent Monarch Festival	13
Patuxent Research Refuge Completes Draft Inventory and Monitoring Plan	6	Magnificent Whooping Crane Month	14
The Environmental Film Festival in the Nation's Capital at Patuxent is a Success!	7	Friends of Patuxent Wildlife Holiday Bazaar	15
Discovering Insects at Wildlife Images	8	Meet New Board Member Matthew Perry	15
Friends of Patuxent Special Event - Help Wanted - Monarch Festival 2016	9	Patuxent's "Magnificent" Whooping Cranes	16
Travels to New Zealand, Australia and the Galapagos Islands	10	Upcoming Events	17
		Welcome New Friends of Patuxent Members	17
		New Recreation Assistant	18
		Membership Application	19

A Night on the Wild Side is a Wild Success

Continued from page 1

More excitement awaited our guests inside the Center. The live owls were very popular, and they seemed to enjoy the attention! There were displays on monarch butterflies, bees and other pollinators, migratory bird banding, the American chestnut tree, and our beloved Whooping Cranes, among others. Volunteers and staff shared information on all the resources the National Wildlife Visitor Center and the Patuxent Research Refuge have to offer. Membership in Friends of Patuxent was promoted. And the glorious music of the band Rockfish filled the air!

The evening wasn't all talk, though. Six caterers generously donated refreshments for our guests: Bayside Bull, in Edgewater; Green Plate Catering, in Wheaton; Maggiano's Little Italy, in Columbia; Putting on the Ritz Catering, in Laurel; Casual Caterers, in Stevensville; and Three Brothers Italian Restaurant in Bladensburg. Their contributions to the success of the evening are greatly appreciated. If you have a need for catering services, please consider supporting one of these civic-minded businesses.



Photo by Ross Feldner



Photo by Steve Kwak

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

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

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

Or email to ross.feldner@verizon.net

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

Article submission deadlines:

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

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

Accomplishing something this awesome took a lot of work and many hands.

Thanks go to Friends of Patuxent Chairman Jeanne Latham and Board member Charlie Deegan, who co-chaired the event, as well as the hard-working members of their committee: Nell Baldacchino, Shannon Beliew, Frank Cockrell, Rich Dolesh, Ross Feldner, Stephanie Everett, Joe Gentile, Ed Grimes, Lucy Grimes, Ken Lavish, Diana Ogilvie, Barbara Richman, Sparky Sparks, and Harlan Tucker. The committee thanks Refuge Manager Brad Knudsen and Center Director John French for their support, too. Planning is necessary, but "do-ers" are essential. So a very big thank you goes to the Friends of Patuxent volunteers who helped us carry out all the tasks that needed to be done to make this night possible - those who staffed the



Photo by Steve Kwak



Photo by Steve Kwak



Photo by Steve Kwak



Photo by Steve Kwak

discovery stations, assisted with parking, stuffed the goody bags, and helped with all the other “little things” that made the “big thing” happen. 🐦



New Visitor Services Chief Jennie McNicoll

I am ecstatic that I was selected to work at Patuxent Research Refuge as their Visitor Services Manager. I know that it was a very competitive pool of applicants and I feel honored that I was chosen to become part of the refuge family and extended family (FOP). I hope I have the chance to get to know each and every one of you.

I would like to take this chance to introduce myself and share a little of my background with you. My passion for wildlife and the outdoors was instilled in me at a young age by my parents. I grew up in Minneapolis, Minnesota and completed my undergraduate degree from the University of Minnesota in Duluth and then in the Twin Cities. Right after I finished my Bachelor’s degree, I started my official career in wildlife biology at The Raptor Center at the University of Minnesota. I worked with a team capturing osprey and putting satellite telemetry back-pack units on the osprey to study their migration to South America and back. I also worked on a project to help get the previously endangered Peregrine Falcon off the Endangered Species list. Then, I moved east to Pennsylvania for a few years and worked in Visitor Services as an Environmental Educator and the International Intern Coordinator at Hawk Mountain Sanctuary. In addition, I worked with a team at East Stroudsburg University studying Louisiana Waterthrush as bioindicators of stream quality.

After working with international students, I decided that I wanted to return to a place that I consider my second home, Costa Rica. I had lived in Liberia, Guanacaste in the Northwestern region of Costa Rica in 1987-88 where I had gone to high school. So, I moved to the southeast corner of Costa Rica and headed up the first season-long raptor migration count site on the Kekoldi Indigenous reserve with the Bribri tribe. We counted more than 1.3 million migrating raptors!

I returned to the US and did a short stint working with fish in the Everglades and then a summer in the Arizona desert studying birds in the Sky Island region on Mount Graham. After all that fun, I decided I needed to go to graduate school. For my thesis, I studied Burrowing owls over the border in Chihuahua, Mexico on the Janos-Nuevos Casas Grandes prairie dog complex. I graduated with Master’s degree in Wildlife Biology from New Mexico State University in Las Cruces.

After a summer banding birds for the Institute of Bird Populations on their MAPS program, I went back to Costa Rica. This time in the central valley, banding and studying neo-tropical and migratory birds on the famous “godfather of Costa Rican birds”, Alexander Skutch’s property. After that, I moved to Peru for 7 months and then returned to Minnesota. After 2 years in Minnesota, I moved out to Maryland and started my government career. I worked as a Wildlife Biologist for the USGS Bird Banding Lab at Patuxent Wildlife Research Center for 7 years. This past January, I moved just down the road to the National Wildlife Visitor Center and started my new job as part of the FWS refuge family. I’ll never forget my first week, because I was unable to get to the refuge for my first few days of work because of the huge snow storm of 2016! I am so happy to be here and excited about being part of federal refuge system.

Something you might not know about me; I trained and showed Morgan horses for many years. And I speak, read, and write Spanish.

Please feel free to stop by my office and tell me what brought you to Patuxent. I would love to hear people’s stories about what Patuxent and the National Wildlife Visitor Center means to them.

Ospreys as a Sentinel of Ecosystem Health in the Chesapeake

By Rebecca Lazarus and Barnett Rattner

Adapted from submission to the Chesapeake Bay Foundation's Save the Bay Magazine & the Chesapeake Potomac Regional SETAC Chapter Spring 2016 Newsletter

The annual sighting of returning ospreys in the Chesapeake Bay region marks the beginning of spring. After migrating up to 2,000 miles from the coasts of South and Central America, Cuba, and other Caribbean Islands ospreys come home to breed in the Chesapeake. Upon their return, these charismatic “fish-hawks” quickly get to constructing nests on power poles, navigation aids, constructed platforms, and duck hunting blinds. Ospreys are highly adaptable and nests can be found in some of the most urbanized and industrialized areas in the Bay. Ospreys tend to forage for fish fairly close to their nesting sites, and as a result, osprey eggs and young have been shown to be excellent indicators of local pollution. This is one reason why environmental scientists have used them as a sentinel for environmental contaminants.

The last large-scale ecotoxicological study of ospreys in Chesapeake Bay was conducted in 2000-2001 and focused on U.S. EPA-designated Regions of Concern (Baltimore Harbor/Patapsco, Anacostia/middle Potomac, and Elizabeth Rivers) (Rattner et al., 2004). While concentrations of organochlorine pesticides were found to be decreasing in osprey eggs, levels of PCBs had not declined from historic values and remained a concern in some locations. A few eggs contained concentrations of polybrominated diphenyl ether flame retardants that approached suggested adverse effect thresholds.

A decade later, USGS and USFWS scientists have taken another look at contaminants in Chesapeake Bay os-



Osprey nestlings in Curtis Creek, Baltimore Harbor Maryland. The location that had the highest residues of PCBs in osprey eggs across all study sites. Photo credit: Rebecca Lazarus.



Rebecca Lazarus holds an osprey chick from Back River, Maryland. Photo credit: Rebecca Lazarus.

preys. From 2011-2013, we monitored osprey productivity and collected fish, osprey egg and nestling blood to investigate transfer of organic contaminants (organochlorine pesticides, flame retardants and PCBs) and pharmaceuticals in the fish-osprey food chain at some of the most heavily urbanized, industrialized and agricultural areas in the Bay (Baltimore Harbor/

Patapsco River, Back River, Elizabeth River, Anacostia/middle Potomac River, James River and Susquehanna River). Poplar Island, a mid-Bay location was used as our reference site. A variety of techniques were employed to monitor osprey diet including identification of food scraps and game camera observations to determine the key fish species in osprey diet at study sites around the Bay. The dominant species in osprey diet were sampled to relate concentrations of contaminants in fish to those in ospreys.

Our research findings demonstrated that osprey productivity was adequate to sustain local populations, and there was no relation between productivity and halogenated contaminants. These studies have documented the continued recovery of the osprey population, declining levels of many persistent halogenated compounds, and modest evidence of genetic damage in nestlings from industrialized regions. We also examined the transfer of phar-

Continued on page 18

Finding Birds at North Tract with Rod Burley

By Michelle Hanko

Introducing Rodney Burley, North Tract's expert birder and bird walk volunteer. Like most good birders, he has a sharp eye, and can identify birds by their calls and songs as well. Rod has watched the flow of birds through Patuxent Research Refuge - North Tract for many years, and no one has a greater knowledge of North Tract's birdlife, and the way it changes through the seasons.

Rod especially loves sharing his passion for birds and the outdoors with others. Rod leads at least one bird walk during the daytime each month, and often offers Owl Prowls in the evening or special trips for scouts as well.

I recently had a chance to interview Rod at the North Tract visitor center, after he just completed a two-hour bird walk on a chilly Saturday morning in March.

MH: First some background. Rod, where were you born, and where did you grow up?

RB: I was born in Washington, D.C., and I grew up in Laurel, MD. I still live there.

MH: When did you first start birding at NT?

RB: Not long after it first opened to the public in 1992. The North Tract of the Patuxent Research Refuge was a part of Fort George G. Meade until then. I consider North Tract to be a "little gem", with its varied habitat attracting a wide variety of species.

MH: How many years having you been leading birding trips here?

RB: I first started leading birding walks as a volunteer at North Tract in 1993 - so that is now 23 years!

MH: What is your goal for each walk?



Scarlet Tanager



Rodney Burley with some friends

RB: Actually I have several goals for each trip. The first is to make it fun for everyone, including myself. The second is to make each walk a learning experience for everyone. My third goal: I try to "tickle their curiosity", and leave each person with a desire to learn more.

MH: What do you enjoy the most about leading trips?

RB: Being able to share with somebody something that they have never seen before. When I lead a trip, I may have people who have literally never been birding before, and showing them an oriole or a tanager is a thrill. More experienced birders may spot a "lifer"

bird on one of my trips, and I can share in their joy at the discovery.

MH: What was your best bird sighting at North Tract?

RB: actually there several. I was amazed the day I saw a Mississippi Kite here, and during one of our fall hawk watches from the Viewing Tower I saw a Rough-legged Hawk and a Golden Eagle fly over Merganser Pond.

MH: Where are your favorite places at North Tract to go birding in the spring?


RB: Merganser Pond, Bailey Marsh and Lake Allen.

MH: what do you think people would find surprising about you?

RB: They might be surprised to know that I'm a beekeeper.

MH: Thank you!

Like many people who get hooked on birds, Rod's interest in all the other living wild things has expanded. This is only natural because watching the interactions between the birds and their environment leads to curiosity about the whole of nature. A few years ago he taught himself to identify the salamanders, frogs, snakes, lizards and turtles found in Maryland, and began participating in surveys of these creatures at the Refuge. Now that he has a black belt in amphibians and reptiles, he's moving on to butterflies and moths, with plans for a moth survey this year.

If you want to experience the wonder of spring migration, with its flood of warblers, tanagers, buntings and orioles, sign up for one of Rod's weekend bird walks and take advantage of this expert in our midst. 

Patuxent Research Refuge Completes Draft Inventory and Monitoring Plan

(Step-down plan of Refuge's Comprehensive Conservation Plan).

Sandy Spencer

Prioritizing and selection of surveys was conducted during an Inventory & Monitoring Plan (IMP) workshop at the National Wildlife Visitor Center on Patuxent Research Refuge held November 18 and 19, 2014. Refuge staff participating in this process included Project Leader Brad Knudsen, Acting Deputy Martin Brockman, Dan Murphy (Chesapeake Bay Field Office), Supervisory Wildlife Biologist Sandy Spencer, refuge biologists Christopher Wicker and Zachary Cravens, and Biological Intern Braden Harpool. The Refuge staff was provided general guidance in this process by Assistant Regional Refuge Biologists Jennifer Casey and Laura Eaton of Region 5 Refuge's Division of Natural Resources. The purpose of the IMP workshop was to review the refuge biological goals and objectives, discuss current and potential surveys, and to select surveys that could be implemented during the intended span of this IMP (2015 to 2029).

Refuge staff reviewed current biological data collection conducted by the refuge staff, partners and volunteers. This generated a list of current and expected efforts for biological (or abiotic) information gathering of refuge resources and for informing refuge management decisions. The survey list consisted of previously conducted and ongoing surveys that had been entered into PRIMR (Planning and Reporting Inventory and Monitoring at Refuges database) and four that had been identified as new, needed surveys during review of the CCP biological goals and objectives. These four additional surveys were named Forest Community Survey, Grassland Breeding Bird Sur-

Survey Name	Final Prioritization Score	Staff Priority Rank	Survey Status
Regional Resident Bat Inventory	0.574	2	Current
Forest Breeding Bird	0.418	3	Current
Shrubland Right of Way Vegetation	0.504	5	Current
Shrubland Right of Way Breeding Bird	0.363	7	Current
Waterbird Survey (IWMM)	0.352	8	Current
Shrubland Right of Way Lepidopteran/Bee	0.328	10	Current
Deer Population Monitoring	0.448	11	Current
Forest Community Survey	0.607	1	Expected
Savannah Restoration Monitoring	0.499	4	Expected
Box Turtle Search	0.319	6	Expected
Grassland Bird Survey	0.397	9	Expected
Whippoorwill	0.190	12	Historic

Fig. B1

vey, Box Turtle Survey, and Savannah Restoration Monitoring.

The prioritization and selection process required several steps. Prioritization scores were calculated using a Prioritization Tool and set of 24 criteria developed by the National I&M Coordination Team Region 5 Division of Natural Resources (DNR) staff reviewed the original 24 criteria and after careful consideration and discussion, some cri-

teria were dropped and the scoring scales for a few criteria were modified to match conditions or situations commonly found at refuges in Region 5 or specific to Patuxent RR. A resulting subset of 12 criteria was used by refuge staff to prioritize candidate surveys.

Prior to the workshop, the three refuge biologists reviewed the Scoring Criteria and applied them to the surveys in

Continued on page 18

The Environmental Film Festival in the Nation's Capital at Patuxent is a Success!

by Lisa Bierer-Garrett, EFF and FOP Liaison

The Visitor Center played host again this year for some fantastic films and great guest speakers on March 19, 2016.

This is the seventh year that Friends of Patuxent and the Patuxent Research Refuge have teamed up with the EFF.

Our 2016 line up was:

Osprey: Marine Sentinel (USA, 2015, 15 min.)



The recovery of the osprey population after population damage due to environmental contaminants is one of the great conservation successes of our time. *Osprey: Marine Sentinel* tells the story through a combination of dramatic footage of this iconic raptor and interviews with expert ornithologists. Directed by Jacob Steinberg.

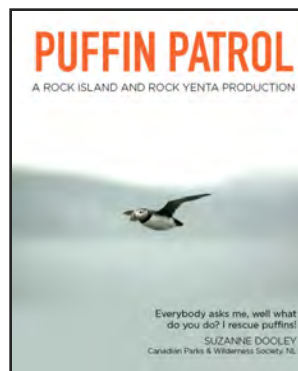
Puffin Patrol (USA, 2015, 50 min.)

On the remote coastlines of Maine, Wales, and Newfoundland, scientists observe the annual life cycle of the Atlantic Puffin to discover what this intriguing little bird can teach us about the dangers facing our natural world, while environmentalists fight to protect vulnerable chicks. Join our team of experts and puffin lovers on *Puffin Patrol*! Directed by Scott Dobson and produced by Charlotte Engel and Rosemary House.

We had the Director of Osprey Marine Sentinel, Jacob Steinberg as our guest Speaker answering questions about his Osprey film including using a helicopter to get the great shots in the osprey nest.

Refuge Manager Brad Knudsen welcomed the hundreds of film goers to the Visitor Center and USGS Deputy Director Mark Wimer spoke to the audience about the work of the USGS and how it relates to the Puffins and Ospreys featured in our films this year.

We had many volunteers from Patuxent and from the Environmental Film Fest staff assist with the event and help it run smoothly. The Refuge staff, as well as Shannon Beliew and Kinard Boone of the USGS, were very supportive and I thank them. We had a Crane Cafe, a Whooping Crane Display and live wood ducks from USGS. All the displays were a big hit with refuge visitors and the entire event was free.



Rich Dolesh, Vice-chair of the Friends of Patuxent, worked hard to secure an Everyday Grant from NEFF to help fund this outreach program.

The grant was for a *Public Lands Every Day Grant from the National Environmental Education Foundation* and we were able to get a Film Fest Banner, road directional signs, welcome signs and also give an honorarium to our guest Director, Jacob Steinberg. Perhaps he might work on a full length osprey feature film in the future and we can have him back!

The support from the NEFF funding was a terrific benefit to the EFF and some of our other FOP events.

One of the highlights of the event was the green and white cupcakes, sporting tiny little EFF logo flags, served at our "Director's Meet and Greet". We look forward to the Film Festival coming to Patuxent next March in 2017. 🐦

Along with Lisa Garrett, the Friends of Patuxent would like to recognize and thank the following volunteers for helping at the 2016 Environmental Film Festival. With your assistance, this event was a big success. **THANK YOU!**

Claudia Papillo staffed the front desk.

Lucy Grimes and **Jeanne Latham** served food at the Crane Café.

Josh Kobylinski was a greeter and road signs remover.

Charice Shellahamer was a greeter and road signs remover.

José Olivieri served as an usher.

Kellie Dennis served as an usher.

Stephanie Everett and **Ken Lavish** each staffed a display before and during the event.

We appreciate your dedication to and hard work for the Friends and Patuxent Research Refuge.

Discovering Insects at Wildlife Images

By Pat Simons

An insect is defined as any of a group of small and often winged animals that are arthropods having six jointed legs and a body formed of a head, thorax, and abdomen.

Whilst the definition may be pretty clear, I quickly found that coming up with a “number” of individual insects or the number of insect species in the world or even North America was a bit trickier and presented a deeper thicket than I (a non-scientist) was prepared to wade into.

But just to give an idea, on the Entomological Society of America’s (ESA) website they cite the following: “According to ESA member and Pulitzer Prize winner Dr. E.O. Wilson of Harvard University, there are nearly 10,000,000,000,000,000 (10 quintillion) insects in the world. More than one million different species of insects have been identified, but some experts believe that there may be as many as 30 million insect species in the world that have yet to be discovered and identified.” (<http://www.entsoc.org/resources/faq/#triv1>).

And according to the Smithsonian: “In the United States, the number of described species is approximately 91,000. The undescribed species of insects in the United States, however, is estimated at some 73,000.” (https://www.si.edu/Encyclopedia_SI/nmnh/buginfo/bugnos.htm).

From the Internet, I turned quickly to some of the materials on the shelves in the Wildlife Images store where I found resources enough to start one’s exploration of the world of insects.

Field Books & Guides

Field Guide to Insects and Spiders of North America by Arthur V. Evans. (National Wildlife Federation). This is a beautiful book with 1600 brilliant photos, a waterproof cover, and an easy-



to-read layout. This guide covers more than 940 species of insects, spiders, and related species including ticks, mites, scorpions, millipedes, centipedes, and crustaceans found in North America, north of Mexico. The species are grouped within families and placed in sections divided into order, subclass, class, or sub phylum. Each section begins with an introduction on the number of species, physical characteristics, natural history, reproduction, growth, and development.

Peterson Field Guide to Insects by Donald J. Borror and Richard E. White. This classic Peterson’s Field Guide begins with an introduction to insect physical structure, growth, and development, plus notes on nomenclature and classification. It includes 142 color paintings and 1300 line drawings,

which use the unique Peterson Identification System to distinguish one insect from another. It also has an extensive glossary.

Caterpillars in the Field and Garden. A Field Guide to the Butterfly Caterpillars of North America by Thomas J. Allen, Jim P. Brock, and Jeffrey Glassberg. This book starts out delineating moth caterpillars from butterfly caterpillars, and then describes how, where, and when to find them. (Hint: Think about the caterpillar’s food source and then look for them hiding under the leaves). To this end, the guide provides color photos accompanied by text describing when to find caterpillars, their habitats, and their hosts along with coloration and distinctive markings.

Creep and Flutter, The Secret World of Insects and Spiders is another strikingly lovely book by author and artist Jim Arnosky. Each page describes a type of insect and includes engaging text such as “I know a secret place where the rare *Hexagenia limbata*-the largest of all mayfly species-lives.” Or “We once lived in a woodland that was infested by gypsy moths.” Or “I



was following a sandy seaside trail when I accidentally walked into the huge web of a golden-silk spider, the first I'd ever seen." The text is accompanied by stunning color pictures and giant fold-out pages of super-sized bugs.

Caterpillar Spring, Butterfly Summer by Susan Hood is a delightful way to start young readers thinking about the life of a caterpillar. This classic book includes gently rhyming text and a green fabric-colored spring that crawls through the pages mimicking the motion of a caterpillar.

The Life Cycle of an Ant by Hadley Dyer and Bobbie Kalman describes what is an ant, the castes of ants, their anatomy, their life cycle, and more. For readers ages 8-10, it also includes a glossary and close-up photos of ants in all stages of their life cycle.

Golden Guide of Insects. Full color pictures, non-technical language, a great guide for the novice to begin identifying and learning about insects. The store also stocks a similar book on Spiders.

Educational Fun

Insects & Spiders is the perfect kit for young entomologists to begin exploring the world of insects. The box includes a book, plastic bugs, 3-D models, fact cards, and a dramatic diorama to build.

Bugs Activities. This is a fun "chunky" book with over 200 activities such as mazes, word games, pages to color, connect the dots, word searches, and more.

Bugs Mazes. A Dover Activity book with 28 different insect-themed mazes.

Garden Creatures Puzzle. This is a 208 piece beautifully illustrated puzzle for children ages 8+. A legend on the back of the box describes the insects depicted in the puzzle and their defensive mechanisms (e.g., visual confusion, warning coloration, camouflage, color changing, etc.).

The Insect TOOB (tube) with 18 plastic insects is a great starter kit for learning to identify different insects.

Our newest book on Bees

And don't forget we have an extensive selection of books specifically about bees and butterflies, including, the recently arrived book: **Bees, An Up-Close Look at Pollinators Around the World** by Sam Droege and Laurence Packer. With 150 pages of photos, this is an awe-inspiring, one-of-



a-kind collection of close-up photos of bees from around the world. And the photographer, Sam Droege is a wildlife biologist here at PWRC and head of the bee inventory and monitoring program at the U.S. Geological Survey (USGS). If you are a photographer, you'll not only be amazed at the photos, but can also appreciate the notes on the process, camera, lenses, and equipment used to create the photos. 🐝

Friends of Patuxent Special Event - Help Wanted - Monarch Festival 2016

Come help out at the Second Annual Monarch Festival at the Patuxent Research Refuge



North Tract, Wildlife Viewing Area, on Saturday, September 17, 2016, anytime between 9am-2pm. Adult and teen volunteers are needed to help with preening plantings of milkweed plant plugs planted in 2015, supervising children's games, helping at information tables and pitching in on other activities related to this fun family event. You'll learn a lot about migrating monarchs and who knows, you might even get to see monarch eggs, caterpillars and help to tag adult butterflies.

If you plan to stay the entire time please pack a lunch.
Water will be provided. This is an outdoor event.

Please contact Sparky Sparks, Monarch Committee Chair of the Friends of Patuxent at 443.255.6127 or email at csparks007@verizon.net

Thank you for your time and help!

Travels to New Zealand, Australia and the Galapagos Islands

By Jeanne Latham, with input from Jerry Feldman and Ken Lavish

Photos by Ken Lavish and Jerry Feldman

At the April 17th Friends-sponsored Social and Travelogue, attendees got to escape to some exotic places by viewing some great photos and hearing stories of these amazing spots in the world. Some 26 folks heard Jerry Feldman talk about his travels to New Zealand and Australia. And Ken Lavish shared tales and photos of his trip to the Galapagos Islands, off the coast of Ecuador.

Jerry shared that New Zealand and Australia are home to some unique critters - not seen elsewhere on the globe. There are koalas, kangaroos, wallabies (smaller than the kangaroo),



Ayer's Rock

penguins; and then there are amazing land formations and scenes.

The beautiful red bird is the King parrot. The penguins are called Little Penguins, which are the world's smallest at 13 inches tall.

Jerry stated that "Koalas spend their entire lives feeding in eucalyptus trees. Due to a lack of natural predators their

numbers have grown exponentially and they have destroyed vast tracts of eucalyptus forest."

The beautiful mountain scenes are in New Zealand. The reddish land formation is Ayer's Rock, an icon of the Australian outback.

Interestingly, one attendee introduced himself as a "kiwi," yes, a native of New



Koala



Kangaroos



Wallaby



King Parrot



Blue Footed Boobie



Short-Eared Owl



Zealand. Graeme Green shared a few points about New Zealand, gave kiwi mugs as gifts to Ken, Jerry and me, and also joined the Friends of Patuxent!

Ken and his wife Janice flew into Quito, Equador, and then flew about 800 miles to the Galapagos Islands. They stayed on a 20 person floating hotel - the ship, which traveled between the islands. Ken said that he liked the marine iguana the best of all the animals he saw, "even though it has a face only a mother could love." In this photo, he's

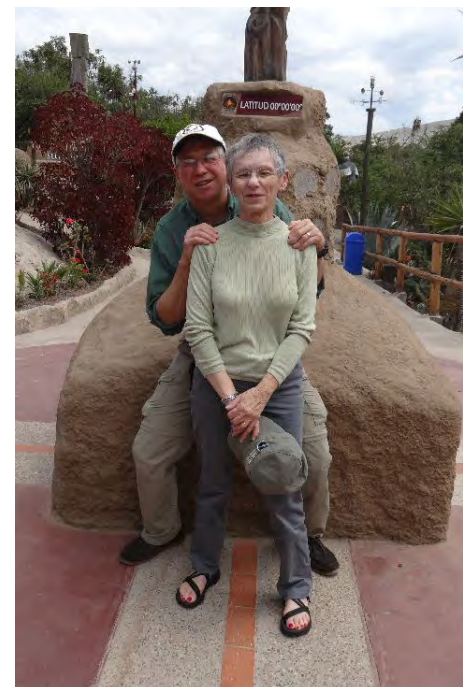


Little Penguins

Giant Tortoise



Marine Iguana



Ken and his wife Janice at the demarcation of the equator outside Quito which is 800 miles to the east, high in the Andes.

hiding in the Portulaca (not Ken, but the dragon).

Ken also remarked that the animals are not afraid of humans. In some cases one must be careful not to step on them! Other cool animals are the Giant tortoise, the short-eared owl and the Nazca boobie.

Thanks Ken and Jerry for sharing your terrific stories and photos with us. 🦅

What's New Around the Refuge?

Diana Ogilvie, JD Bolden

This spring has been a busy one for service projects by scouts and other groups. See pictures of the latest improvements at both South and North tracts.

1. New benches for North and South Tract trails-Jake Lahoff's Eagle Scout Project



Jake Lahoff and fellow scouts place new benches on refuge trails.



View from one of the new benches.

2. Fence and debris removal.



Volunteers from Ft. Meade cut out and remove a half mile of old rusty fencing and other debris that had become an impediment to wildlife.



Fence post removal required extra effort.



3. Boardwalk Repair- Severna Park High School Leadership class

Eagle Scout project improvements to scout and 4-H campsites at North tract include a new flag pole, message boards, picnic tables and benches.



Annual Friends of Patuxent Monarch Festival

Saturday, September 17th • 10:00AM - 2:00 PM



Wildlife Viewing Area
 Patuxent Research Refuge - North Tract
 230 Bald Eagle Drive • Laurel, Maryland 20724

Baltimore-Washington Parkway to Maryland Route 198 exit
 East on 198 for approximately one and one-half miles to the Refuge entrance on the right approximately one mile
 on entrance road to the Visitor Contact Station.

For further information call **(301) 497-5789, FAX (301) 497-5765**
 or visit us on the web at www.friendsofpatuxent.org

Children and Family Fun Activities and Games

Learn about the wonder of the annual 3,000 mile migration of the Monarch Butterfly.
 Come prepared to get dirty and help create a new and/or enhance established monarch habitats.
 We recommend long pants, old shoes or boots and gloves to dig in the dirt.

Special Weekend Events Sponsored by the Friends of Patuxent

- Wildlife Interpretive walks
- Monarch Story-time and Sing-Along
- Help us create a new Monarch Waystation - Habitat
- Monarch migration game

Magnificent Whooping Crane Month

By Ken Lavish

What is Magnificent Whooping Crane Month (MWCM)? MWCM hopes to raise public awareness of the plight of Whooping Cranes and highlight Patuxent's role in saving them. This brings to mind the Baba Dioum quote above the entrance to Patuxent's Aldo Leopold Auditorium: *"In the end we will conserve only what we love; we will love only what we understand; and we will understand only what we are taught."* I think it is working!

This year is rather special as it is the fiftieth year Patuxent has been working to pull Whooping Cranes back from the brink of extinction. It all began in 1966 with the arrival of the Whooping Crane "Canus" and several eggs collected from Wood Buffalo National Park in Canada. The name Canus came about as a way to recognize the wonderful joint effort of the governments of



Dr. Sarah Converse

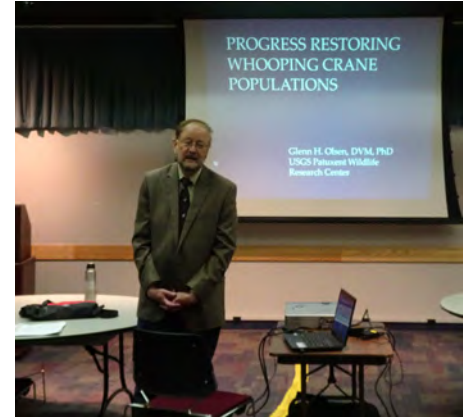
Canada and the United States to save these stately birds.

The reason May was chosen is that it is the month when most of our whoopers hatch. In addition, both International Migratory Bird Day and Endangered Species Day, are in May. Of course, whoopers fit the bill (no pun intended) for both days.

Which also brings to mind - A Whooping Crane walked into a bar and said "Drinks are on me!" The bartender asked how the whooper would pay. The bird responded "put it on my bill".

What could visitors experience during MWCM this year?

- Learn about whoopers from the following displays: *Measure Up To A Whooping Crane*, *What It Takes To Save Whooping Cranes*, *Whooping Cranes: an Endangered Species*, *Whooping Crane Hatchling Count*, *Raising Whooping Cranes At Patuxent*, and *50 Years of Saving Whooping Cranes At Patuxent*.
- Attend Endangered Species Day presentations by Refuge Manager Brad Knudsen and Park Ranger Jeff Bolden.
- Participate in Family Fun Days developed by Stephanie Everett with help from many others. This included



Dr. Glenn H. Olsen

Stephanie's mom, the very artistic Helen Silver, who made the Whooping Crane cutout.

- Listen to talks by Whooping Crane experts Dr. Glenn H. Olsen, a research wildlife biologist and veterinarian, and Dr. Sarah Converse, a Research Ecologist in the Wildlife Research Group both of whom work for the USGS Patuxent Wildlife Research Center.
- View Whooping Crane videos, including several which were recorded by Patuxent's own Crane Crew.
- Partake in Whooping Crane Observatory tours that were conducted every Sunday in May and were extremely popular. We even had a full house on Sunday, May 22, when it was rainy and chilly.
- Interact with the interactive display *Mimicking Whooper*. This very popular addition to MWCM was developed by Cathy Cook a film maker, artist, and university professor. *Mimicking Whooper* uses state of the art gaming software to provide participants an opportunity to figuratively dance their dance. This virtual interaction provided an engaging, fun and personalized glimpse into the magnificent world of crane behavior.



Whooping Crane Observatory tour




Materials used for this year’s Magnificent Whooping Crane Month—Family Fun Days were purchased with a generous grant from the National Environmental Education Foundation and Toyota Motor Corporation.

Magnificent Whooping Crane Month was developed and produced by the Friends of Patuxent Adopt A Whooper Committee. The Adopt A Whooper Committee is pleased to announce that after careful consideration it has discovered the answer to the age-old question — Why do Whooping Cranes stand on one leg? If they took the other leg off the ground they would fall!

The Whooping Cranes need your help. Please consider donating to the Friends of Patuxent’s Adopt A Whooper program. It supports research, educa-



tion, and interpretive programs of the US Geological Survey Whooping Crane Project at Patuxent. Pick up a brochure at the National Wildlife Visitor Center or the Visitor Contact Station at the North Tract. You can also download a donation form from our webpage at <http://www.friendsofpatuxent.org/adoptawhooper.html>. 

Friends of Patuxent Wildlife Holiday Bazaar



It’s not too early to bring in donations for the 2016 Holiday Bazaar which will be held **November 5**. When you drop donations at the Visitor Center, PLEASE remember to fill out a donation form and make a copy for yourself. We will NOT be accepting bed linens, posters, flat art, or large frames. The deadline for donations is **October 26**.

The Bazaar committee is in need of some extra help as we get closer to the event. We need a publicist, especially someone who knows how to get the word out via Twitter, Facebook, etc. We also need a volunteer coordinator. The next Bazaar committee meeting is Wednesday, July 13, 2 PM at the National Wildlife Visitor Center.

We’re always looking for new and different vendors, preferably folks who have nature or wildlife related merchandise. You can help us greatly by picking up a business card from any vendor that you think would be a good addition to the Bazaar. Or you can ask them to call the Friends at 301-497-5789 to be added to our vendor list.

For more information contact

**Brenda Stone at stonesoop@comcast.net
or 301-490-0384.**

Meet New Board Member Matthew Perry

Matt hails from Rhode Island where he grew up with five older sisters. He attended local schools and then the University of Rhode Island, graduating in 1963 with a BS in wildlife management and forestry. He then served as an officer in the US Navy during the mid-1960s and participated in two amphibious landings of troops in Vietnam. Matthew then worked for Rhode Island Fish and Game for two years before attending graduate school at Virginia Tech where he received an MS degree in wildlife management with his thesis on free-running dog impact on deer.

Matthew started his federal career on a refuge in Florida, before moving to Patuxent in 1971 to take a position as a wildlife research biologist. While at Patuxent he received a PhD from the University of Maryland in avian nutrition and physiology with his dissertation on canvasbacks. He retired from Patuxent Wildlife Research Center in 2011 after 45 years of federal service, with 40 of them at Patuxent. He stays active as an emeritus scientist, editing a book on the history of Patuxent. In addition to the Friends Board, he serves on the Board of the FWS Retirees Association and is a member of the Heritage Committee of the FWS. Matt leads ecotourism trips around the world and is very active with all aspects of Patuxent history. Matt lives in Mitchellville with his wife, and is the father of three boys and grandfather of two boys and two girls.

Patuxent's "Magnificent" Whooping Cranes

Gail Melson, Retired teacher and Patuxent volunteer

May was Magnificent Whooping Crane Month at the Patuxent Research Refuge. As a new volunteer and Friends of Patuxent member, I wanted to see for myself how "magnificent" Whooping Cranes are. If I sound jaded, it's because I remember when the word "awesome" meant more than excellent or very good. Had "magnificent" disappeared down that same rabbit hole?



The view from the Whooping Crane Observatory on May 29, 2016, taken with a cell phone camera. The small white dots are a pair of Whooping Cranes being tested to see how they do with raising a Sandhill Crane chick. The chick was shorter than the grass but there were a few sightings of it.

The answer is a resounding no! "Magnificent" is the perfect word to describe whooping cranes as well as the work that has taken place here at Patuxent since the first whooper arrived in 1966. Although there are many reasons to describe them as magnificent, these are my top three.

Reason #1: They are still with us! In 1941, there were twenty-one Whooping Cranes in North America, the only place in the world where they live. Twenty-one! In the whole of North America! You probably have more pennies accumulating on your dresser than there were Whooping Cranes in the world in 1941. This was largely the result of over-hunting (their feathers were valued in the fashion industry)



Tour guide Ken Lavish demonstrates how a Whooping Crane puppet is used to teach a Whooping Crane chick how to eat. The chick Ken is holding is a stuffed animal toy.

and destruction of their habitats. The fact that there are now around 600 whoopers in North America, and about 10 percent of them live at Patuxent, is nothing short of a miracle.

Reason #2: Supporting that miracle are all the discoveries and things we've learned since 1941 about saving this nearly extinct species. For instance, whoopers tend to lay two eggs in a nest but often only one chick survives. In the initial stages of the program, taking one egg away from a nest and hatching it in a safer place meant more chicks would survive and could become part of a captive breeding population at Patuxent and other locations. Wearing white cover-up robes and black wading boots, carrying a whooper vocalization box, never speaking, and feeding newly hatched chicks using a puppet that looks like an adult whooper's head are good ways of getting chicks to think like cranes and not humans. The creativity and persistence of the researchers in keeping wild birds wild has been awe-inspiring. Check out this video of George Archibald, the man who danced with a Whooping Crane:



Tour guide and volunteer Ken Lavish uses a Whooping Crane puppet as a pointer. Ken is one of the volunteers who dons a full-coverage, all-white, booted costume and uses a puppet like the one in the photo to teach Whooping Crane chicks how to be Whooping Cranes.

<https://www.youtube.com/watch?v=SlvkkUaoqtE>.

Reason #3: It is frightening to think that these glorious cranes almost went the way of the passenger pigeon and the ivory-billed woodpecker. Fortunately for us, dedicated and inspired humans took the lead before it was too late. Some of the whoopers will live as captives for breeding, but every year more are being released to the wild and surviving. That is an incredible accomplishment. Would that it had never come to captive breeding and release, but for now it's the best we can do to repair the damage done.

Thanks to all the folks at Patuxent for putting on another successful Magnificent Whooping Crane Month. Special thanks to crane volunteer and leader of the Adopt a Whooper project Ken Lavish, intern Sabrina Nunez, and Park Ranger/Volunteer Coordinator and crane volunteer Diana Ogilve, who led the last tour of the month. They were splendid ambassadors and spokespeople for the cranes. 🦩

Upcoming Events

Wildlife Conservation and Recreation Day

Saturday, August 13th, 2016

10:00 am - 2:00 pm,

FREE! For All Ages

Patuxent North Tract Entrance

Learn about wildlife conservation and recreational opportunities through habitat exploration, children's crafts, fishing, archery and firearm demonstrations.

301-497- 5770

Monarch Festival

Saturday, September 17th, 2016

10:00am-2:00pm,

FREE! For All Ages

Patuxent North Tract Entrance

Join the Friends of Patuxent as they celebrate the magnificent Monarch butterfly. Visit Monarch Waystations and learn about Monarch conservation through educational displays, family friendly activities, games and crafts. No registration necessary

Patuxent Wildlife Festival

Saturday, October 15th, 2016

10:00 am - 3:00 pm

National Wildlife Visitor Center

Enjoy live animals, children's crafts, tram tours (\$), scientific demonstrations, and behind-the-scenes research tours of the USGS Patuxent Wildlife Research Center. See where endangered Whooping Cranes and Sea Ducks are raised and studied.

FREE: 301-497-5887;

<http://www.fws.gov/refuge/patuxent/>

Friends of Patuxent

Wildlife Holiday Bazaar

Saturday, November 5th, 2016

9:00 am - 3:00 pm

National Wildlife Visitor Center

Shop for wild and not-so-wild, new and gently-used treasures. Find unique gifts and at the same time support the Patuxent Research Refuge and the Patuxent Wildlife Research Center. 301-497-5789; www.friendsofpatuxent.org

Welcome New Friends of Patuxent Members

(Since January 2016)

Aileen Agar
Sharon Akers
Lindsey Baker
Carole Bendler
Carolyn Brosch
Mike Brown

Lou & Celeste Cafiero
Joseph Chazen
Brian Connolly
Francis DiSalvo
Ashley Eugenio
Pamela Finlay
Bryan Fletcher
Danielle Glaros
Wendy Guyton &
Jude Simon

Lisa & Ernie Hoerger
Nick Kelly
Catharine Kuehne
Mary Lehman
Russ & Sharon Lehman
Amie McDaniels
Elizabeth McNeal
Gary Mangum
Gail Melson
Ken Michael
Robert Mignon
Bobby Mitchell
Jennifer Mook
Rich Mulhare
Jerome & Therese Myers
Alexander Nunez

Emily Ottens
Dwight Patel
Chef David Perry
Bill Rees
Mario Repole
Barbara Richman
Brian E. Riddle
Helen Schlessinger
Robert Schroder
Graeme B. Simpson
Nadine Smith
Jane Ulrich
Erv Whitehead
Michael Woernle
Kit Wood

Renewing Friends Members

(Since January 2016)

Kirk & Melissa Adams
Helen Alexander
Susan & Marcos Alvarez
Richard & Marjorie Buck
Bob and Ann Coren
Charlie & Bobbie Deegan
Stephanie Everett
Claude D. Falls

Glenda Kamosa
Ken Lavish &
anice Devine
Edward & Dawn Lowe
Christine McElroy
David & Margaret
McManis
Bruce Ours, Jr.

Nancy Perry
Steve Shapiro
Pat Simons
Sparky & Jean Sparks
Robert Squire
Pam Waterworth
Joyce Wineland

New Lifetime Friends Members

Charlie and Bobbie Deegan

Charles and Becky Dukes

Sponsors and Donors of Friends of Patuxent

Many thanks to those who provided sponsorship and donations to the Friends of Patuxent for the Friends March 31, 2016 Night on the Wild Side. With your generous support the event was a tremendous success - and the Friends of Patuxent realized nearly \$4000 on the event thanks to you.

21st District Delegation,
State Senator
Rosapepe, State Delegates
Barbara Frush,
Joseline Pena-Melyk
and Ben Barnes
API Source
Atel Bus & Truck Service
Center, Inc.
Baltimore Gas and
Electric, an Exelon
Company
Bayland Consultants &
Designers, Inc.
Bayside Bull
Bell Nursery &
Home Depot
The Beltsville Lions Club
Casual Caterers
Francis J. DiSalvo, CPA

Rich Dolesh
House of Printing
Homestead Gardens
Green Plate Catering
Lamptiques, Richard
Latham
Maryland Is Beautiful
Meyers, Rodbell &
Rosenbaum, P.A.
Minuteman Press, Laurel
NAI Michael
Nell Baldacchino
New Age Graphics,
Ross Feldner
Diana Ogilvie
Maggiano's Little Italy,
Columbia
Matt Perry
Power Solutions, LLC

Prince George's
Committee to Elect
the Sitting Judges
Prince George's County
Community Credit
Union
Prince George's County
Council Member
Dannielle M. Glaros
Prince George's County
Council Member Mary
Lehman
Putting on the Ritz
Sparky Sparks
St. John Properties
Three Brothers Italian
Restaurant
Wild Birds Unlimited,
Gambrills

Our apologies for any omissions or errors.

Ospreys as a Sentinel of Ecosystem Health in the Chesapeake

Continued from page 4



Osprey nestling from coastal inland Bays. Photo credit: Rebecca Lazarus

maceuticals from water to fish to ospreys. Of the 24 analytes, 18 were detected in water, 8 in fish plasma, but only 1 in osprey nestling plasma. The antihypertensive drug diltiazem was detected in all 69 osprey nestling plasma samples, and levels in fish and osprey plasma were below the human therapeutic plasma concentration. Thresholds for wildlife are unknown at this time, but there was no evidence to suggest adverse effects.

This project was a collaborative effort with scientists from the U.S. Fish and Wildlife Service Chesapeake Bay Field Office, Baylor University, and the Virginia Institute of Marine Sciences. This past 2015 field season, a large-scale ecotoxicological study was undertaken in Delaware Bay to compare to previous findings from over a decade ago. Osprey eggs, nestling blood samples and fish were again collected from various sites in Delaware Bay (ranging from Cape Henlopen, DE to Bristol, PA). We hope that this work will continue to expand the scope of our knowledge, document spatial and temporal pollution trends in fish and wildlife and contribute towards the improvement of the health of these major estuaries. 🐦

New Recreation Assistant

Hello Everyone,

If you have not met me yet, my name is Jen Chin and I am the new recreation assistant for the National Wildlife Visitor Center. I am now in charge of coordinating conferences and outreach events.

A little background on my Patuxent history: I was here at Patuxent as an Interpretation Intern for Amy Shoop in the Summer of 2012. I then finished college and worked at Walt Disney World in Orlando, FL. Then I came BACK to Patuxent and worked for Mark Wimer in the Director's Office as a receptionist. I then received a job offer to be an Alcatraz Island Park Ranger at Golden Gate National Recreation Area in San Francisco, CA. But I am now back working for the Visitor Center and I am so happy to be here!

I look forward to catching up with folks, but also meeting the new folks we have here.

Please stop by and say hello!

Best, Jen



Jen Chin with Shaquille O'Neal and his girlfriend at Alcatraz Island

Chair's Comments

Continued from page 1

we have a chance to do it every day - in a phone conversation, Facebook, email, Twitter, and especially face-to-face conversation! Tell your grocery store cashier or barber or cousin that they have a fantastic opportunity awaiting them - right in their own "backyard." It's their National Wildlife Refuge too!

The Friends members, Research and Refuge staff and volunteers did just that on March 31st with the exciting "Night on the Wild Side" outreach event. We invited community representatives of large and small businesses, schools, local government entities, and service and civic groups, among others, to experience what Patuxent has to offer. It was a smashing success; and a number of these folks joined Friends and plan to return to the Refuge to see more! You'll be reading an article about this terrific event elsewhere in this newsletter.

Enjoy your day, enjoy your Refuge, and invite those folks you encounter every day to enjoy Patuxent too! 🐦

Patuxent Research Refuge Completes Draft Inventory and Monitoring Plan

Continued from page 6

PRIMR. During the IMP workshop, participants reviewed and discussed each other's survey scores. The consensus scores were applied to the surveys in the Prioritization Tool as the group discussed each survey. The evaluation scores were averaged, rounded to the nearest whole number, and criteria weights were applied, resulting in a final prioritization score between 0 and 1.0 for each survey.

To select the surveys for this IMP, Refuge staff discussed each survey and assigned a status: current, expected, future, and historic.

Twelve surveys were prioritized using the tool. Final prioritization scores ranged from 0.607 to 0.190 (See Fig. B.1, page 6). The charted array of scores showed 4 surveys with relatively high-prioritization scores (≥ 0.500), 7 surveys with moderate to low scores, and 1 survey with very low (< 0.200) score (See Fig. B.1, page 6). 🐦

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



FRIENDS OF PATUXENT BOARD OF DIRECTORS 2014-2015

Jeanne Latham, Chair
 Richard Dolesh, Vice-Chair
 Clarence "Sparky" Sparks, Secretary
 Brenda Stone, Assistant Treasurer
 Ed Grimes, Director
 Charles Deegan, Director
 Harlan Tucker, Director
 Ken Lavish, Director
 Matthew Perry, Director

LIAISONS

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

FRIEND OF PATUXENT BOARD MEETINGS

Friends Board Meetings are usually held on the 4th Tuesday of each month at 7 PM at the Visitor Center. No Board meetings are held in August and December. The scheduled meetings remaining for this fiscal year are: June 23, July 28, September 22, October 27, November 24.

JOIN TODAY!

MEMBERSHIP APPLICATION

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

E-mail: _____

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

Phone: (opt.) _____ New Renewal

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

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

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

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

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

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

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



FRIENDS OF PATUXENT



FRIENDS OF PATUXENT

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

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



FRIENDS OF PATUXENT

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

Phone: 301-497-5789

www.friendsofpatuxent.org

WE INVITE YOU TO JOIN!

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

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

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

(Application on reverse side)