

Valley Views

Volume 41, Issue 5

Summer 2023

Director's Report

By Kristin Alexander, PVAS Executive Director

Happy Summer!

As we welcome the new season, we must first reflect on the changes brought to us with spring! Spring is always thought of as the season of change – the greening of plants, the arrival of spring migrants, the blooming of flowers, the re-emergence of amphibians, reptiles, and insects.

Along with these natural changes that came with the spring, the season brought many organizational changes as well. Promotions, new positions, new hires, and even a new baby!

As you know, our organization's programs have been growing steadily each year. Thanks to creativity and sheer determination, even COVID didn't slow things down much. To keep up with the continued increase in demand for our programs and preserves, some changes were needed.

One of the first changes was to promote Katelyn "KC" Walters from her role as Land and Conservation Manager to Associate Director of Conservation and Operations. KC has shown talents in the realm of Operations, and having her take on this role formally was a natural progression to better use her talents, smarts, and dedication to PVAS. As part of this shift, she took on the task of transitioning to our new program registration system, is managing the PVAS website, has sourced computers for staff, and is helping to support the "big picture" of PVAS. She hasn't let go of many of her previous responsibilities, though, and we're looking forward to lightening her load this summer.

One of the new positions that will be helping do that for KC, and for others, is that of Lindsey Kesecker of Shepherdstown. Lindsey is our new Administrative Assistant, and has jumped right in. In her first "week" she delivered new wood "stumps" from her property for our play space. This was our first clue that she is one of those people who sees a need and jumps in to help. She has proven to possess this trait over and over again -- and she just started in late March! Lindsey has also been helping to manage the camp wait list, tracking donations in our database, making signs (did I mention she does graphic design?), generating press releases, and so many other tasks. Some of you may have met her at our fundraiser at the Mill, where she was helping to check in guests. Lindsey is a delight to work with.

The next big shift was the arrival of Lena Thomas, Amy's new baby girl! We've known Lena was coming, so we've had some time to prepare for this big change. Amy will be on maternity leave through the summer, so we've hired Tayah Hawley as the



summer camp site director for Cool Spring Preserve to manage the day-to-day camp program at that site. Laurel Schwartz will continue to be the site director at Yankauer Preserve's Discovery Camp. We have lots of returning summer staff this year, as well as some Counselors in Training who are now instructors, so everyone will be in good hands!

And the overall educational programs of PVAS will be in good hands as well. With Krista Hawley's (our former adult program coordinator) departure last fall, knowing Amy would be on maternity leave, and acknowledging the trajectory of growth for all our programs, it was time to add a new position to the PVAS team: Associate Director of Education. This new position will oversee all of PVAS's educational programs, from adult, to family, to Pre-K. The role will ensure that quality will be maintained as quantity increases, and will allow for new partnerships and programs. To fill this role, we recently hired Sonja Melander. Sonja started May 15, just in time to observe a few school field trips and in-school programs before the school year concluded. Sonja comes from the Mount St. Helens Institute, where she's been the Science Education Manager since 2018. Before that she had the roles of Science Education Coordinator and Science Educator. She has a M.S. in Geological Sciences from SUNY Buffalo and B.S. in both Physics and Geology from University of Pittsburgh. Her true passion is volcanoes, and she's been studying them and teaching about them for most of her professional career. She loves the interrelationships of all things, though, and looks forward to refamiliarizing herself to the east coast ecology that she grew up with. Her positivity, creativity, and thoughtfulness have already shown themselves in spades, and we look forward to your meeting her at a PVAS program very soon. She can be reached at Sonja@PotomacAudubon.org.

We are so fortunate to have these folks join our already solid team. Ellen Kinzer, who joined us last fall as our Communications and Fundraising Manager continues to shine with her ability to rise to every challenge. When we've been short-staffed, she's stepped right into whatever role is needed without missing a beat. Laurel Schwartz, our Watershed Program Manager, has done the same and is taking a leadership role as we enter the camp season. Our Education AmeriCorps Service Members, Ellie George, John Congo and Liz Janelle, are also solid team members who will bring their spring teaching experience and creativity to camp. And Hannah Kulla, our Land Management AmeriCorps Service Member, is busily clearing trails, spearheading volunteer workdays, and enthusiastically doing whatever is asked of her.

I can't say enough good things about this hard-working and dedicated team. Please drop them a note or say hi when you see them out and about this summer to welcome them, congratulate them, or thank them for their amazing dedication, as appropriate. I know you'll be as impressed by them as I am.

Potomac Valley Audubon Society is dedicated to preserving, restoring, and enjoying the natural world through education and action.

Lights Out at Night – Saving more than Migrating Birds

By Wil Hershberger, Nature Images & Sounds, LLC

The National Audubon Society and the Cornell Laboratory of Ornithology have been advocating for reduced levels of artificial light at night (ALAN) to protect migrating birds as they wing their way north and south during the year. These programs have been met with tremendous enthusiasm in many large cities within the migration path of our precious birds. Turning building lights out at night has resulted in substantially fewer fatal bird-building collisions. These efforts are focused on the spring and fall bird migration periods leaving the summer wide open for lots of light at night.

Many of our native insects require natural dark to breed successfully. One prime example is our beloved fireflies (lightning bugs). Males flash their lights to signal to females that they are in the area and ready to mate. Females return the male's signals with a signal of their own to alert the male that they are nearby and available. If the ambient light is too high, male fireflies will not flash their lights, and mating does not occur.

During the later years of the 20th century, researchers noticed a rapid and significant decline in insect populations worldwide.

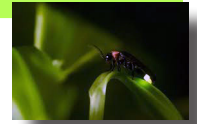
They found that many species of insects are negatively affected by ALAN. Some species do not develop properly if they are not exposed to very dark nights – circadian rhythms are disrupted. Other species will move toward lights, get disoriented, and never go through the process of mating and laying eggs and may even die from exhaustion or starvation. Yet other species do not forage in high light levels resulting in starvation and death. Overarching all of these ill effects is the fact that insect predators have a far easier time finding and consuming insects when there are high light levels at night. The resultant low population of insects affects the pollination of native plants as well as crops, the turnover of dead plant and animal tissues, and the aeration and mixing of soil. They even found that modern LED light fixtures emit ultrasonic frequencies that can affect insect behavior.

The effects of ALAN are not limited to city and urban areas. Lights along highways extend the reach of artificial lights well into rural areas. Once naturally dark remote areas and parks are now bathed in the skyglow from large cities and highways. Many of our dark sky-certified parks are now losing the faintest stars to this skyglow. ALAN around our homes can also be deleterious to our native insects.

There are many ways for you to reduce your impact by limiting ALAN. Perform a light-at-night audit to determine what lights are really needed around your house and property. Can these required lights be modified to be motion activated so that they are only on when needed? Can these or other lights be shielded so that the light is only projected to the areas where it is needed most? Can the intensity of lights be reduced so that “wasted light” is not spilling into areas outside of the target zone? Can you keep curtains drawn at night to reduce the amount

of light visible from the yard that might attract insects to their doom?

By modifying our footprint of light at night, we can do our part to reverse the current trends of insect population losses. It would be a sad summer if there were no fireflies signaling their affections to secluded suitors for young and old to marvel at and enjoy.



Lupines and fireflies © Mike Lewinski (creative commons)

Many factors were immediately suspected as causes for this loss; pesticides, climate change, habitat loss, and invasive species. It wasn't until recently that researchers turned their focus to ALAN as a possible causal agent for insect declines. Their findings were sobering.

PVAS Events

Summer Fun...For Adults!

By Kristin Alexander, PVAS Executive Director

So many of you have shared your knowledge and talents through PVAS activities! Whether you have a passion for birds, wildflowers, books, landscaping for pollinators, journaling, or sharing special places, we truly appreciate your willingness to share your interests with others.

This spring, volunteers led wildflower walks at the Yankauer Preserve and at Fairy Hill. Wellness Walks have been held at Eidolon, the C&O Canal, and other locations, and bird walks have been held at Cool Spring Preserve, Rolling Ridge, and Sundogs Bed and Breakfast! There are so many beautiful places to visit and wonderful people to meet as you explore new topics and places, and we are so grateful to our volunteers who make these experiences possible!

This summer, we look forward to the regularly scheduled bird walks at Cool Spring, Rolling Ridge, and USGS in Leetown. In addition to these regular events, volunteers will lead Wellness Walks at Yankauer in July and the newest Virginia State Park, Sweet Run, in August. PVAS's Pages and Pathways book group will be reading *Beautiful Swimmers: Watermen, Crabs, and the Chesapeake Bay* by William Warner and adventuring to Sandy Point State Park on the Bay. Nature Journaling gatherings will take place at Poor House Farm Park in July and Morgan's Grove Park in August. Dates, times, and other details for all of these events are on the calendar on our website. Every one of these wonderful programs and experiences is free and open to the public, but registration is required.

A new and exciting offering will be a "meet the author" event on July 23 from 4-6:30 pm at Cool Spring Preserve. The author will be Alison Zak, PVAS's first AmeriCorps Service Member and Founder of the Human-Beaver Co-existence Fund! Alison has just published her first book, *Wild Asana: Animals, Yoga, and Connecting Our Practice to the Natural World*. She'll be discussing this new nature memoir which includes a chapter featuring PVAS's Corn snake, Esther. Afterwards, participants can enjoy refreshments, get their book signed, meet the now-famous Esther, and participate in an optional hour-long nature yoga practice next to Bullsken Run. Details and registration are available on our website. We are so excited to be a part of another one of Alison's professional adventures.

And back by popular demand, Wil Hershberger will be hosting a Singing Insect Walk at Cool Spring Preserve on September 1. More often than not, Wil discovers a species at Cool Spring never before known to be in Jefferson County! Join him this year to see what new insects might be discovered!

PVAS does not hold a monthly program in the summer due to travel schedules, but we'll be back on September 13th at Hospice of the Panhandle for a presentation by PVAS member and Certified Master Naturalist Maria Parisi. Maria will be presenting "Pioneering Women in Conservation History - Herstories of the Known and Unknown."

We will be adding additional programs as they come together, so please check our calendar regularly. If you have ideas about future learning opportunities and adventures, please let us know! We're always looking for volunteers to organize and host fun events like these. We'll be gathering the Adult Programs Working Group soon to plan Fall outings and activities! Get in touch with Sonja Melander at Sonja@PotomacAudubon.org to join the group and talk about possibilities!



4th of July Parade Invitation

Come celebrate Independence Day with PVAS by marching in the Shepherdstown 4th of July parade. The parade will assemble on Church Street, then proceed down German Street to Princess Street, and end there.



Come find us along Church Street any time after 10:30 a.m. If you have trouble finding us, ask one of the parade coordinators for help. Bring your binoculars, PVAS or camp t-shirt, a favorite stuffed animal to represent the critters we strive to protect, and/or whatever else you feel best represents PVAS. After the parade, you are invited to attend Rotary's 4th of July community picnic. The picnic will be held from 12 noon to 3:00 pm at Morgan's Grove Park. We hope to see you there!

PVAS Events

Down by the Old Mill Stream – THANK YOU!

By Kristin Alexander, PVAS Executive Director

For the first time in three years, PVAS was able to hold an in-person fundraiser this spring! To celebrate the occasion, PVAS was fortunate enough to be able to hold the event at the Thomas Shepherd Mill in Shepherdstown. Shannon and Adam Thomas, the owners, welcomed PVAS with open arms. Adam provided tours throughout the event, showing guests the workings of the mill, and allowed the mill wheel to spin for the occasion. All in all, the event raised over \$11,000!

The events committee, Susan Brookreson, Gretchen Meadows, Diana Mullis, and Jane Vanderhook, delighted guests with grist mill-inspired foods from Buckwheat Blinis to Cornmeal Madelines. They even provided the beautiful bread baskets that were available to the highest bidder! PVAS is so fortunate to be surrounded by such generous and kind people. These ladies, along with Alice Barkus (now retired) and Deb Patthoff (who passed away several years ago), have been organizing and sponsoring these events once or twice a year since Fall 2007, providing dependable revenue for PVAS every year. Even through COVID, they launched the online auction when in-person events weren't possible.

PVAS has always been incredibly fortunate to have volunteers like these amazing women and to have people like Shannon and Adam open their homes and gardens to PVAS for fundraisers. Events like these raise critical funds for PVAS programs, nature preserves, and conservation initiatives and are one part of the “tapestry” of funding that allows the organization to grow and thrive.

If you'd like to be a thread in this tapestry, please let me know! We're always looking for amazing volunteers to prepare food, pour drinks, host events, haul tables... Whatever your strength or talent, we're happy to accept your contribution! This is one of many ways to support PVAS and its important work.

In the meantime, a heartfelt THANK YOU to all who make the events possible and successful, from hosts, to volunteers, to guests. Every role is critical for an event's success, and we are so grateful to every single one.



Photos © Laurel Schwartz

PVAS Events

Membership & Founders Day Picnic

By Kristin Alexander, PVAS Executive Director

This year's Membership & Founders Day Picnic will be held July 8 at 6 pm at the Yankauer Nature Preserve, located in Berkeley County. You're invited to join your fellow members, PVAS Board, and staff for the annual event, this year held on the Saturday closest to Founders Day (July 10).

You'll have the opportunity to meet new board members, thank board members who are stepping off the board, thank board members who are staying ON the board, meet new and existing staff, and of course, interact with your fellow PVAS members whom you may not have seen in a while – or have never met before!

We'll be serving up Gary and Diane Sylvester's pulled pork and beans, and the Events Committee will provide vegetarian options, sides, and desserts. This is a FREE event for our members - one of several perks you receive as a PVAS member that is made possible in large part by our amazing team of volunteers who generously provide food. We hope you'll join us for a delicious meal, fellowship, and a celebration of another year of positive impact.



Board Elections

With the shift in seasons comes a shift in PVAS Board Members! The new fiscal and leadership year begins September 1, so in preparation, we must cast our votes for board members and update some policies.

For board elections, most people are renewing their terms or shifting positions. There is only one "new" person on the ballot, and that is Than Hitt. Than holds a B.A. in Biology from the College of Wooster, an M.S. in Organismal Biology and Ecology from the University of Montana, and a Ph.D. in Fisheries and Wildlife Sciences from Virginia Tech. Dr. Hitt's research investigates freshwater fish ecology from a landscape perspective, focusing on stream ecosystems in the Appalachian highlands. He is actively engaged in conservation in the Eastern Panhandle, both personally and professionally.

Other board members on the ballot will include: Jim Cum-

mins (Past President); Mike Sullivan (President, one-year term)); Dana Fogle (Treasurer, two-year term)); Patti Mulkeen-Corley (At-large Board Member, renewing two-year term); Mary Lynn Robinson (At-large Board Member, renewing two-year term); Keith Unger (At-large Board Member renewing two-year term). The Vice President position is currently open, with no nominations as of the writing of this article.

Also on the ballot will be some updated Bylaws and Financial Policies for members' approval to modernize business practices and allow for growth and efficacy.

The updates to the Bylaws and Financial Policies will be available on the PVAS website's About Us > "Governance" page: <https://www.potomacaudubon.org/about/gov/>. You will be receiving an email with a survey by the end of June with the ballot. If you prefer voting by mail, you may request a ballot by e-mailing Kristin@PotomacAudubon OR calling 681-252-1387.

We rely on and appreciate our members' participation!

Do You Value PVAS's Youth Programs?

Help them GROW with this year's Summer Appeal, coming soon to your mailbox. Enjoy photos and quotes from campers, parents, teachers, and past AmeriCorps members to hear what PVAS programs mean to them.

Love what you see and hear? Support this summer's appeal!

Support this summer's appeal by using the enclosed envelope or visiting www.potomacaudubon.org

PVAS Events

Jane Rissler - In Memoriam

We are saddened to share that Jane Rissler, a neighbor to Cool Spring Preserve and supporter of PVAS, passed away in February. Jane often walked at Cool Spring and loved the conservation and education programs PVAS offers and fosters at the preserve. As a child, she had spent a short time living in what is now known as Mrs. Thornton's Cottage – the small yellow cottage PVAS owns and uses for staff housing. She shared photos of the house and surrounding fields from her time there.

Jane continued to be a generous benefactor to PVAS, even in her death. We recently learned that she left a Roth IRA to PVAS in her will, valued at over \$35,000. What an amazing surprise! We are truly grateful for this thoughtful gift, and are deeply touched by her generosity.

We encourage you to learn more about Jane and her many contributions to the environment and history at <https://tinyurl.com/54bf22cj>. She was truly remarkable and has left many positive marks on the community.



The Audubon Name...

By Kristin Alexander, PVAS Executive Director

Whenever I am “out and about” these days, the inevitable question is asked, “Is PVAS considering changing its name?” The board has begun to discuss the implications of the Audubon name and consider what action to take, if any. (For those who may not know, John James Audubon was a slaveholder, among other troubling pursuits.)

A small task force has been created to discuss the issue, and we'll keep you apprised of any actions. If you have an opinion on the matter, you'd like to share, by all means, drop me an email (Kristin@PotomacAudubon.org) or give me a call (304-676-3397). I'd value your thoughts.

There will also be an opportunity to share ideas in the electronic survey you will receive as part of the board election process.

Please contribute to the conversation!

Family and Youth Programs

Fresh Views

By Sonja Melander, PVAS Associate Director of Education

Hello! My name is Sonja Melander. What a joy it is to be a part of such a wonderful organization, with wonderful people, doing wonderful things. My term at PVAS began in mid-May, just in time to observe some of the remaining school field trips for the year. Over the past month, seeing PVAS programs in action and the behind-the-scenes cog-turning, I am reminded of how valleys connect. The interconnectivity of nature and people is a significant theme of our Watershed school program, as it is in all aspects of PVAS. The Potomac Valley and its watershed connect. Valleys connect. The Potomac Valley Audubon Society connects!



During my first week at PVAS, I observed several school field trips for PVAS's fourth-grade Watershed Program. During the Watershed field trips, students walked on paths and noticed features of the environment around them to assess the habitat. Students designed filtration systems using natural materials to model the effects of riparian vegetation on water quality. Students spoke of “infiltration” with knowledge and confidence, sharing ideas about the various pollutants that can contaminate water. Students “put their scientist hats on” and gathered data such as pH, temperature, and dissolved oxygen content from the streams to investigate water quality. Students further investigated water quality by finding the critters of the creek. The buzz of excitement was palpable.

“I grabbed it!”

“Right there! A crawdad!”

“There are so many animals I've never seen before!”

“Can we do it again?”

Enthusiasm and joy flowed in all directions! I saw PVAS educators, side-by-side with students, sharing their joy and asking students questions to get them to think more deeply. This joyful memory will stick with the students for years to come. Students connected with nature through their hearts and their minds. They connected with their community up and down the watershed by learning about how they can impact their watershed and those living there.

As I look out from my office window of the Case Nature Center on this Friday afternoon of the first week of summer camp, I see campers swinging butterfly nets with grins from ear to ear. Summer camp is a time of new experiences and new connections. PVAS's enthusiastic and empathetic educators are leading games, helping with Band-Aids, making garlic mustard crowns, assigning special roles to campers like “honorary spiderweb detector,” and so much more! Despite the challenges of wildfire smoke, it's been a fantastic first week of camp. I am honored to be a part of the PVAS community, and I look forward to all the joyful moments to come!

Family and Youth Programs

Watershed Program Year in Review

By Laurel Schwartz, Watershed Program Coordinator

As we have wrapped up the school programs for the year and are getting into our summer camp season, we pause and reflect on the Watershed Program and the memories that we have made this year. There have certainly been many uplifting moments, as well as some frustrating and humorous ones. Even though a field trip day (or a consecutive week of field trip days) may feel exhausting at times, there are so many moments that make it all feel worthwhile. All in all, each of our educators feels a sense of pride and ownership in the role that we have played in teaching about the environment.



Environmental education at PVAS goes beyond classroom learning and outdoor activities. Our programs aim to foster a sense of awe about the natural world. Through the 4th grade Watershed Program, thousands of students experience many “firsts.” I have heard “I’ve never been in a creek before!” or “I’ve never held a crayfish before!” or even “I’ve never been on a hike before!” countless times this year. These experiences create powerful memories and connections. If a

student doesn’t walk away from the program remembering what pH is and how it relates to water quality, but they do remember the sense of bravery that they had when picking up a squishy, fat, craneffy larvae, that’s a win in my book.

One of my favorite memories this year happened toward the end of our field trip season, and really reminded me why we do what we do. At one of our field trip locations, we came across a big mess of plastic confetti and popped balloons that had been carelessly left after a weekend party at the pavilion. Of course, our education staff and I threw up our hands in disgust, and picked up as many shiny pieces of confetti as we could before the students arrived. It seemed like a lost cause because there was just so much - and the wind would blow some of it all the way down toward, and eventually into, the creek.

After the field trip, we walked up to the pavilion with the students for their lunch. After chatting with a few tables of students about their favorite parts of the field trip (usually the macroinver-

tebrates station), we sat in the grass and got back to picking up as much confetti as we could. As students finished their lunches, they walked over to ask us what we were up to. It was a great opportunity to educate about respecting the natural environment and picking up after yourself. Quickly, we found that the students were just as disgusted with the non-biodegradable mess as we were. I heard remarks such as “Who would do this?” and “Can’t



adults just clean up after themselves?” Then, the few students we had engaged sat in the grass with us and got to work picking up confetti.

I remember being amazed at how quickly our litter-pickup group, that started as just a few students, grew. After just a couple of minutes, about half of the entire field trip group had migrated over to the confetti-littered

field and were lending a helping hand. I listened as the original few students spread the word about what had happened and why it was a good deed to pick up the plastic. We chatted some more about what alternatives we could try, besides plastic confetti, at our next birthday party. The students were completely focused on the challenge at hand and were so eager to clean up as much as possible. One boy looked up at me and said, “I don’t care how long it takes, I just want to help the environment.”

That statement drove home for me the “why” of this program, and of environmental education in general.

Children are naturally empathetic and show a great deal of care for the world around them. As educators, we strive to foster that sense of empathy, and when things come full circle, as they did for me in that moment, it feels truly amazing and inspiring. The next time that I don’t feel like cleaning up someone else’s mess, I’ll remember that students’ words and the 4th grade group’s effort and enthusiasm.

Photos © Laurel Schwartz



Conservation

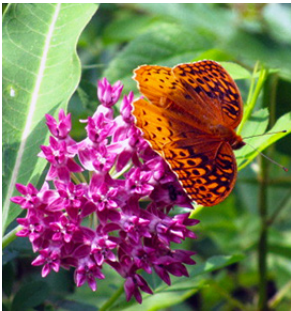
Plants for Your 'Park'

By Bruce Guthrie, *The Monarch Alliance*

In the last issue of *Valley Views*, we explored naturalist Doug Tallamy's concept of a "Homegrown National Park:" the concept that individuals can convert a portion of their lawns - which are generally sterile deserts in terms of biodiversity - into native plantings and thereby create a "national park" of millions of acres of non-contiguous, wildlife-friendly environments. He touts this as a way to save multitudes of threatened species, particularly insects, that are the foundations of the natural world.

If you're sold on the concept, what specific plant species should you put in your park in our region? Some years ago, Alonso Abugattas, a prominent naturalist in the Washington, DC area, put together "top 10" lists of beneficial native plants. Abugattas oversees a Facebook group called "Capital Naturalist," publishes a blog of the same name, and has a Capital Naturalist YouTube channel. He is also the natural resources manager for the Arlington County parks. Let's look at his top wildflower recommendations:

Spring beauties: These short perennials produce delicate pink, white, or purple flowers (depending on the particular variety). Spring beauties do well in shade and can spread to produce a lovely carpet. For pollinators, the beauty of these flowers is that they bloom as early as March, so they provide a food source during a period when most flowers haven't come out. Many pollinators visit them, including various solitary bees. When we think of pollinating bees, we generally think of honeybees. But in reality, solitary bees (carpenters, masons, and others that visit spring beauties) are, bee for bee, more efficient pollinators.

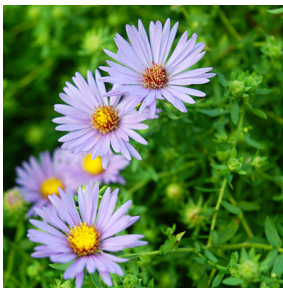


Milkweeds: The leaves of these plants are the only food source for the caterpillars of the struggling Monarch butterfly. Milkweed blooms also provide nectar for adult Monarchs and other butterflies. Two species native to our area, Common milkweed and Swamp milkweed, do well in the clay soils of our area. Another species, Butterfly weed, does well in hot, dry conditions, but it is not as favored by Monarch caterpillars because it contains less of the toxins the caterpillars build up in their bodies to counter predators.

Goldenrods: Tallamy has called these plants "one of nature's greatest gifts to animal life." Goldenrod is a host for 42 species of specialist bees and nearly 200 species of caterpillars. It is considered deer-resistant (although it doesn't seem like the deer in my neighborhood can resist anything that is green). Blue-stemmed goldenrod is shade-tolerant. Because goldenrod blooms late - from August to November - it provides food for pollinators (including late-migrating Monarchs) when other plants are fading. So you can plant spring beauties for the early butterflies and goldenrod (and asters - see below) for the late. And no, naturalists say goldenrod is not the trigger for your allergies; they say ragweed, another plant with small yellow blossoms, is to blame.



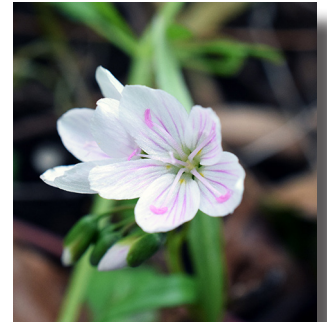
Asters: The New England aster is another clay-tolerant plant and makes a fine companion for Goldenrod. Its purple blooms complement the yellow goldenrod blossoms, and experts say that when the two wildflowers are planted close together, they draw more pollinators than either would attract alone. Asters are another late bloomer and thus can be a lifesaver for late-season butterflies (including laggard Monarchs on their way to Mexico) and bees. Asters host more than 100 types of caterpillars. Interestingly, the yellow centers of the flowers turn a brownish-red after pollinators have visited, but the blossoms remain. This helps a clump gain the attention of passing pollinators but promotes efficiency by the insects; they go to the still-yellow flower centers and don't waste time and energy visiting the brownish ones.



Dogbane: A widespread member of this family is sometimes called Indian hemp. It produces tiny, greenish-white flowers. Dogbane is favored by many bees and Lepidoptera, including the snowberry clearwing, the peculiar-looking insect commonly called the hummingbird moth. Indian hemp likes sandy soil and sunny areas. Caution: The plant produces a toxic latex (even more potent than that of the related milkweeds) that is poisonous to mammals, including people. Because of its bitter taste, animals tend to avoid it. But it can cause death to livestock (including cattle, horses, and sheep) if they turn to it in the absence of other forage. For this reason, Western ranchers try to eradicate dogbane. Keep pets away from it. And, obviously, don't eat it yourself. Be sure to wash your hands after touching this plant because contact with the latex from a broken stem can cause blisters on the skin and eye issues if you rub your eyes.



This is just a sample of the wildlife-supporting native plants Abugattas suggests. He recommends more wildflowers, plus lists of trees (perhaps the champions of caterpillar production, and therefore crucial to nesting birds), shrubs/small trees, ground covers, and deer-resistant plants. Google "top 10 lists of wildlife plants" to see his full list on the Prince William Conservation Alliance website. Doug Tallamy's books also highlight beneficial plants. These sources can give you a good start on your own corner of Homegrown National Park.



Notes from the Preserves

In the Preserves: We do it for the birds and the bees

By KC Walters, Associate Director of Conservation and Operations

In the Spring issue of Valley Views, we began exploring the reasons why PVAS has taken on the enormous task of managing over 500 acres of wild space across four nature preserves. We started at the bottom of the food chain, with plants. Plants are arguably the greatest contributors to the circles of life and the basic supporters of all living things. As if that wasn't enough of an argument to support plants, they're also beautiful, mostly smell nice, clean our air and even release isoprenes that make us feel good! Go plants!

Now, with our Summer issue, we will look into the living fauna PVAS is dedicated to protecting at the nature preserves. This includes the birds (obviously), and the bees, and the mammals, and the amphibians, and the reptiles, and the fishes! Our preserves are the home to nearly every class of animal found in West Virginia. Of course, our love of birds is implied by our name and founding, but why do we care about the preservation of these nature preserves for other animals too? Why have we advocated for the mischievous black bears of Eidolon that raid bird feeders, the startling black rat snakes of Yankauer that fall from the shelves in the sheds, the determined beavers of Stauffer's Marsh who chew down native trees, or even the voracious whitetail deer of Cool Spring that nibble on the "deer resistant" plants in the pollinator garden? One simple answer is this, if we don't, who will? Wild animals belong here just as much as we do, perhaps even more so. Living with wildlife isn't always easy, but it's worth it.

The beaver-induced flooding of the Bullskin Run at Cool Spring was not the only reason a small, streamside section of Linda's Loop had to be rerouted last year. There was actually another rodent to blame as well, the muskrat. Muskrats make their homes in the streambanks; digging deep burrows that rise above the waterline to form air chambers. For years I filled in the holes along the Linda's Loop trail edge that passed close to the stream, not really knowing what they were; only knowing that I didn't want anyone twisting an ankle! Once I learned these holes were the home of an adorable marsh resident, I knew it was time for the humans to move. Although widely considered pests, muskrats are actually outstanding creators of waterfowl habitats. Their foraging habits make pathways for ducks to swim through the marsh, and their cattail lodges are great perches for goose nests. If you're lucky, you can catch a quick glimpse of these amazing swimmers at work this summer.

One of the most iconic sites of Summer is fireflies at dusk over a meadow or along a woodland edge. With water, field, and woods, Stauffer's Marsh is a peaceful firefly paradise. There are over 160 species of fireflies in North America, and most are pollinators! They rely on nectar plants for sustenance and play an essential role in the transport of pollen just as much as bees and butterflies. Unfortunately, firefly populations appear to be in decline. It is hypothesized that this is the result of pesticide use, habitat loss, and light pollution. Although the functionality of their bioluminescent butts is not fully understood, it is thought

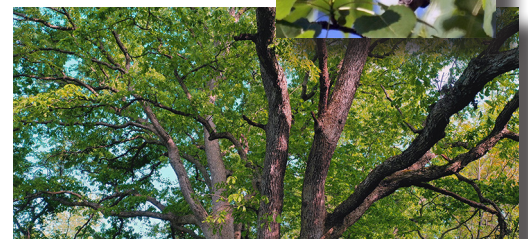
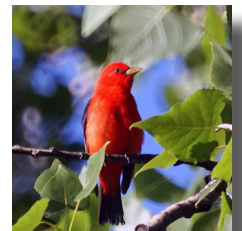
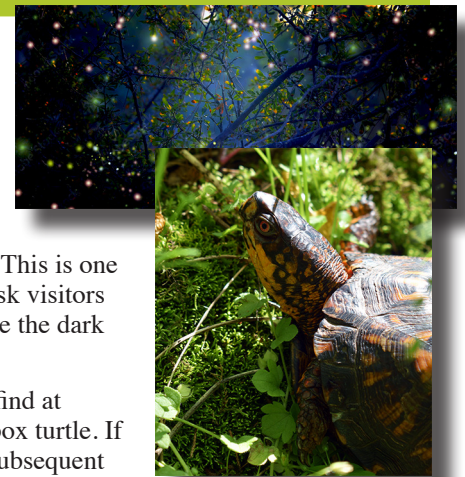
to have to do with mate attraction and selection. With light pollution, the fireflies can't seem to communicate effectively. This is one of the many reasons we ask visitors to depart at dusk and leave the dark hours to the wildlife.

A fun forest friend to find at Yankauer is the beloved box turtle. If you visit Yankauer over subsequent years, you may have the pleasure of encountering the same box turtles again and again. They are a long-lived species, averaging 30-40 years, and have relatively small home ranges. These two features lend a hand in the box turtle being considered an indicator species of ecological health. When box turtle populations are doing well, the environment in which they are living is also doing well. Inversely, when their populations start to decline, something is amiss. Yankauer is one of many sites in our area where the WVDNR is now conducting box turtle monitoring surveys to track these population fluctuations. Our campers this summer will even be helping with these surveys!

I simply couldn't write this article without specific mention of birds. Eidolon is critical habitat for many woodland birds, including some beautiful and endangered warbler species. The vast old oak trees of Eidolon that we admired in the spring now serve as both bedrooms and kitchens for breeding birds during the summer. The adults are on the fly for 75% of the daylight hours, foraging for food for both themselves and their young back in the nest. Hosting over 400 species of tender, juicy caterpillars, oak trees are one of the most preferred nesting trees due to the close proximity of food for baby birds. Some of the breeding birds you may find at Eidolon this summer include the Cerulean warbler, Red-eyed vireo, Scarlet tanager, Pileated woodpecker, and Eastern wood peewee. Their songs fill the woods with magic.

The best time to spot native wildlife at the preserves this Summer is in the early mornings or late evenings.

Wild animals don't like the heat any more than we do! As you adventure out, give yourself the time to pause, look, and listen. Perhaps even try sitting silent and still for an hour or so. You'll be surprised by all the creatures you see and hear around you. As you observe them, reflect on their function and purpose. Decide for yourself if preserving a home for them is as important to you as it is to us.



Potomac Valley Master Naturalists

Watershed Train the Trainer Training

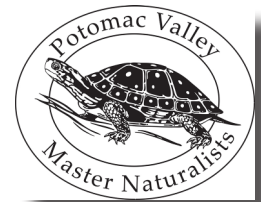
By Rich Brager, PVMN Co-Chair

On a spring day in late April, Potomac Valley Master Naturalists and other volunteers took part in a watershed training session at Cool Spring Preserve's Case Nature Center. Training was provided by Laurel Schwartz, PVAS's Watershed Program Manager, aided by our enthusiastic AmeriCorps Education Service Members, Ellie George, John Congo and Liz Janelle.

First, we learned about the **Rain Water Filtration** that is performed by soil, and why it is important for the environment. We then learned how to make a rudimentary water filter using a plastic bottle filled with small rocks, grass, sticks, and leaves. We then poured "polluted" water through the filter and collected the filtered water to see if the filter was effective.

We then set up a **Water Quality Measuring Station**. We learned how to measure dissolved oxygen, pH, and water temperature from the stream water. We learned that dissolved oxygen is essential for aquatic life to survive. Cold water holds more oxygen than warm water. The runoff of fertilizer, manure, and other pollutants can cause over-nutrication, depleting dissolved oxygen levels.

Next, we learned how to lead a **Watershed Survey Hike** and how to observe the physical conditions of the land surrounding the stream and of



the stream itself. Is the land surrounding the stream wooded, meadow, or marshy? Is there a buffer zone? Is the land sloped? Rocky? Do you see signs of wildlife, e.g., scat? Turn over rotted logs to look for insects; hear bird calls; look for signs of a beaver damage on trees, etc. How about the biodiversity of plant life? Observe the type and age of trees and look for invasive species. Observe possible effects of human-made features such as chemical run-off and paved areas that can cause excessive run-off or erosion. Observe buffer widths, excess algae, and test water odor.

Next, we learned about **Benthic Macroinvertebrates**, why it is important to study them - and how to study them. Benthic macroinvertebrates are small critters that live at the bottom of stream beds. Most are insect larvae of nymphs that originate from insect eggs. We used dichotomous keys to identify the species of macroinvertebrates. Some of them are intolerant of polluted water, and will die. Others

are more tolerant of polluted water. By identifying the type of species thriving in the water, we get an indication of the health of the stream. We used kick nets in the stream to collect the various species for identification,

So, with our training complete, we trainees now felt relatively competent to provide training to 4th graders. On April 20, I got my first chance to try out my skills! Fortunately for me, Laurel and other PVAS and AmeriCorps volunteers were on hand to keep me on the straight and narrow. We met at Poorhouse Farm Park on a lovely morning. Shortly thereafter, two busloads of enthusiastic 4th graders from local schools descended upon us. Organized chaos ensued!

I was assigned to assist with the macroinvertebrate training. We helped the kids get fitted with rubber boots so they could get into the stream. Using kick nets and D-nets, they began to disturb the water and rocks to bring macroinvertebrates to the surface for collection. Then we scoured through the collected material and found various creatures, including very tiny macroinvertebrates, as well as a number of crayfish and some small fish. The creatures were placed in small tubs of water, and we used dichotomous keys to identify them. Crayfish were by far the most popular animal. The kids loved picking them up and screaming when the crayfish snapped their claws! All the kids seemed to enjoy the experience, and learned quite a bit about nature. After studying our catch, all were returned to the stream to continue their metamorphoses and lives. Apparently, I did well enough that I was allowed to come back a help out again a few weeks later!



Photos © Rich Brager

Advocacy

Actions and Updates

By Charlotte Fremaux

Help Than Hitt advance conservation in Jefferson County

Than Hitt, recently recruited to the PVAS Board, is strategizing ways to advance environmental and historical conservation in Jefferson County with the goal of developing common strategies for the County Comprehensive Plan update currently underway. If you have questions or would like additional information on how to get involved, please contact Than Hitt at thanhitt1@gmail.com or 304-268-4886.

Action Needed for Mature Forests from Friends of Blackwater

Friends of Blackwater has issued a call for action to push the Biden administration, the Forest Service, and Bureau of Land Management to conserve and protect mature and old growth forests. President Biden issued an executive order in 2022 calling for this policy as a climate solution. We need to continue to encourage our government agencies to make sure permanent protections for these vital ecosystems be put in place. Please go to this link and take action. The website offers talking points as to the importance of mature and old-growth forests to the protection of biodiversity and water quality. There is a place for you to submit personal comments and sign on to their letter:

<https://www.climate-forests.org/take-action>

Comments are due July 20th.

Update: Jefferson Orchards, Inc's request for rezoning the 194 acres on Northport Avenue (across the road from Rockwool)

The land is currently in Smart Code zoning that supports mixed use residential, business, shopping, and parks, and supports agriculture, open space, and natural buffers to land zoned rural. Jefferson Orchards, Inc. has requested taking the land out of Smart Code and rezoning it as "industrial." That replicates the beginning of the process that brought us Rockwool, which continues to operate without a valid air permit, and has already caused negative health issues in the community.

On June 5, 2023, the City of Ranson Planning Commission held a public hearing to solicit public comment on the proposed amendment to the zoning ordinance map proposed by Jefferson Orchards, Inc. Jefferson County Foundation had organized speakers to address each one of the objections to the proposed rezoning, thereby challenging each assertion by the representatives of Jefferson Orchards. Those individuals, and others offering other objections to rezoning, spoke eloquently about the considerable environmental and economic detriments of rezoning, mirroring many of the concerns about Rockwool that have come to pass. Also addressed were the considerable errors and incompleteness of the application itself that were required by Ranson Code. The arguments against rezoning were very strong and eloquent, and resulted in the Commission voting unanimously to "not recommend" the zoning map request. The next step sends it to the Ranson City Council to consider. There will be two readings at the City Council, with a public hearing likely at the second one. It is hoped that the vote to *not recommend* will carry sufficient weight with the Council. For more information, please go to: <https://www.jeffersoncountyfoundation.org/jefferson-orchards-2023-re-zoning-in-ranson/>.

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- A subscription to our quarterly newsletter, *Valley Views*, and twice monthly e-newsletter, *Heads Up, PVAS!*
- Free or reduced admission to participating nature centers/museums.
- Discounts to participating **local businesses**.

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To purchase a gift membership, send in the form below with an enclosed check. Dues are \$50/household, \$35/teacher (covering membership for everyone in your household for one year) or \$20/full-time adult student (benefits apply to member only). Make the check out to "PVAS." For more details on membership, go to: www.potomacaudubon.org/support/become-a-member/.

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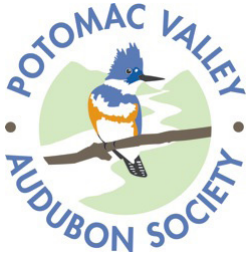
Membership Chair, PVAS
PO Box 578
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Thank you for your support!

About the National Audubon Society

National Audubon has a membership program that is separate from PVAS. To become a National member, go to the Society's website at www.audubon.org, and click on "join." If you join National Audubon and reside in Berkeley, Jefferson, or Morgan counties in West Virginia, or in Washington County Maryland, you will automatically become an affiliate of PVAS, but not a full PVAS member. Affiliates will have access to our communications, and invitations to our events. However, all National Audubon dues go to the National Audubon Society and are not shared with PVAS. We heartily invite you to become a dues-paying member of both organizations.



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The Potomac Valley Audubon Society meets at 7:00 p.m. on the second Wednesday of each month, September through May. Programs are free and open to the public. For additional information about PVAS or its programs and activities, please contact any of the board members listed here or see <http://www.potomacaudubon.org>. PVAS serves the Eastern Panhandle of West Virginia and neighboring Washington County, Maryland.

All Officers, Board Members, and Staff can be contacted at 681-252-1387.

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PVAS BOARD

PVAS Board meetings take place the first Thursday of every other month (September through May, except December). Meetings are open to all PVAS members. Please contact the President or Vice President if you would like to attend.