

# Valley Views

Volume 40, Issue 3

December 2021/January 2022

## President's Note

By Jim Cummins, PVAS President



I tend to mostly be a fan of warm weather, but I also like our region's seasonal changes. Seeing old friends return with their seasonal migrations; the snow-covered landscapes with tree branches framed with cardinals, juncos, and blue jays - all are a treat. Winter beauty is mixed with its freezing weather discomforts and emergencies, but those can make Spring even more beautiful and refreshing. So, bring it on, Winter! But in short spurts, please.

It is wonderful that we can again use our bird and wildlife feeders. PVAS had another successful bird seed sale and online auction. I extend a BIG THANK YOU to all the volunteers and supporters! May our feeders, both old and new, stay busy helping our feathered and furry friends through the upcoming "trying season."

Perhaps most wonderful, as we close this year, is our return to more frequent and positive human interactions as we pull ourselves out of this awful pandemic. We have a new normal now, but it is so refreshing to reconnect with our human world and to better appreciate its diversity.

One positive side effect of the pandemic was that many people discovered or rediscovered the many pleasures of getting out and connecting with nature. PVAS is amongst the region's best venues for those connections. PVAS lands, facilities, and programs have never been so busy.

Our fiscal year audit was completed in November, and I am pleased to report that PVAS stayed healthy through a tough year. It wasn't a vaccine and phenomenal health care workers in this case: PVAS's health was made possible through your strong and loving care, a very talented, hardworking, and creative staff, and a stellar board.

Our Annual Appeal launches in December and runs to the end of February. Please continue your support. Another positive side effect of the pandemic ordeal was that it caused PVAS to develop new skills, as we adjusted and even expanded our programs and offerings to better connect wildlife with your homes, backyards, and schools. We look forward to further diversity and refinements. We need your help to make them happen.

Thank you for all that you do! Have a wonderful and happy set of holidays!

## 2021 Annual Appeal Is Underway!

We hope you'll support PVAS programs, preserves, and conservation efforts by donating to the 2021 Annual Appeal!

We recently sent you our Annual Report that summarizes all the ways we worked to *preserve, restore, and enjoy the natural world through education and action*, in spite of all the challenges presented over yet another year impacted by COVID. We hope you'll look at it carefully to see the ways that the creativity of our staff and the generosity of our members, friends, funders and partners, PVAS was able to continue its programs, manage its preserves, and provide conservation activities without missing a beat.

With your continued help into 2022, we will continue to provide critical educational programs, steward 500+ acres of preserved green space and habitat, and encourage positive conservation practices. We'd love your continued support as we enter the new year. You may donate by:

1. Using the enclosed remittance envelope to mail a check to "PVAS" at PO Box 578, Shepherdstown WV 25443
2. Our secure credit card payment processing at this link: [www.potomacaudubon.org/annual-appeal/](http://www.potomacaudubon.org/annual-appeal/).
3. Contributing a portion of your IRA to PVAS, which has certain tax benefits.
4. You may also donate stocks.

However you give, your donation is 100% tax deductible. Thanks to the generosity of members like you, we will continue to pursue our mission using safe, meaningful, and impactful methods that are sensitive to the needs of the community, both human and ecological.

Thank you, and have a safe holiday season!

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

## A Bird of a Different Color

By Wil Hershberger, Nature Images & Sounds, LLC

Have you ever observed a bird with white feathers or white patches where there should be dark-colored feathers and wondered, “what bird is that?” Many of our common backyard birds can exhibit these odd features, from just one or a few white feathers to nearly the entire bird being primarily white. This condition is called leucism and can be partial or full. It is caused by either a lack of the pigment cells that underlie feather shafts or a problem with those pigment cells. While not a genetic mutation, the condition can arise from an injury, disease, or a developmental issue affecting the pigment cells of the feather tracts. These feathers lack some or all of the melanin that would typically be deposited in the structure during growth. The pigment eumelanin is found in dark-gray and black feathers, and when missing, the affected feathers can appear pale, brownish-gray, or white. The other melanin, pheomelanin, produces reddish-brown to pale-buff colors. There seem to be a few species where leucistic birds are more common. These species include the Common Grackle, European Starling, American Robin, American Goldfinch, and Dark-eyed Junco. Perhaps this is because these species are more numerous than most species in our area, so there is a greater chance of seeing one of these rare birds.



Leucistic Dark-eyed Junco ©Jon Howard

Leucism is not to be confused with albinism. True albino birds lack the pigment eumelanin due to a genetic mutation and exhibit pale to white coloration over the entire body. Albinos also have pink eyes, bills, and legs, due to the lack of pigment throughout the bird’s entire body. True albino birds typically do not have a long lifespan; they can quickly go blind from the lack of pigments that protect their eyes. Since albinism affects only melanin, other non-black/gray pigments can be present in albino birds (carotenoids produce yellow, orange, and red colors). Partial albinism affects only some areas of the bird’s body and can be non-symmetrical. Leucism

is not a form of partial albinism because a genetic mutation does not cause leucism, though the two can look identical. Only genetic testing can separate the two conditions.

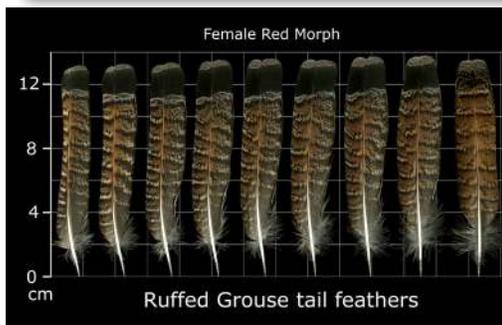
At the opposite end of the spectrum, melanism is an overproduction of the dark pigment in feathers. Melanism causes birds to appear darker than typical. This more common genetic mutation can be harder to detect and may often be overlooked. Some species have melanistic forms that occur at a certain level in the population and are more easily seen, such as the dark morphs of Red-tailed Hawks, Broad-winged Hawks, Rough-legged Hawks, and Hooked-billed Kites, to name a few.

The variable production of carotenoids causes other color variations either through genetics or diet. The breasts of Yellow-breasted Chats, which breed in thickets of bush honeysuckle, are often more vividly yellow-orange due to the increased levels of carotenoids in their diets. The rare yellow-form of the Northern Cardinal is an example of the underproduction of the red-carotenoid *a*-doradoxanthin.

The truly amazing fact is that pigment production can be exquisitely modulated during feather development and growth. A wonderful example would be the flight feathers of a Downy Woodpecker, where the secondaries are black with white patches on both sides of the feather shaft. The tail feathers of a female Ruffed Grouse are magnificently banded and blotched with browns and blacks. And then there’s the Wild Turkey – truly amazing.



Downy Woodpecker secondary wing feathers



Ruffed Grouse tail feathers



Wild Turkey tail feathers

I hope that you will take a little more time to look carefully at the feathers and colors of these magnificent creatures, and ponder the magic of feather development and coloration while out birding.

Feathers: US Fish and Wildlife Service Forensics Laboratory

## PVAS Events

### Adult Programs Through the Winter

By Krista Hawley, Adult Programs Coordinator

What a glorious fall we had! The autumn colors were spectacular and the warm weather continued through November, giving us plenty of time to get outside, stay active, and appreciate the beauty of our area. As winter settles in, there is excitement in the air as we look forward to the first snow where we can bundle up and head out for a winter wonderland hike or even some skiing. PVAS has been busy planning ways for our community to stay engaged; whether it is on an early morning bird walk, a Community Science project, or participating in a virtual program from the comfort of your home, we welcome you to join us through these winter months!

Monthly Wellness Walks will continue in 2022! We have had so much fun walking and talking at Cool Spring, Eido-lon, Yankauer (and soon to be Stauffers) and we are excited to continue putting one foot in front of the other in the new year. The group walks at a pace that is comfortable for everyone, while always taking time to stop and ‘smell the roses’ (or in this case ooh and ahh over mushrooms, ferns, leaves, turtles, flowers and more!). While none of us are experts, we lean on each other (and our handy nature Apps) to learn about and enjoy all of the wonderful things found at our preserves. We hope you will join us on our next Wellness Walk at the PVAS Preserves.

Community Science projects are a fantastic way to learn about your community while promoting science. The C&O Canal is such a tremendous resource right in our ‘backyard.’ The C&O Canal Winter Bird Survey takes a look at the birds along the entire 185 miles of the canal and offers insight to the wintering bird population in the Park. Join Bill Tellfair as he will conduct his survey of miles 71, 72 and 73 on Saturday, January 22nd. Everyone is welcome to join this count, regardless of their birding experience. The Christmas Bird Count is another excellent example of a longstanding Community Science Project happening in our area. The Charles Town Count will take place on Sunday, December 19th with the Inwood Count happening on Sunday, January 2nd. Gather your friends or family together and head out to count some birds! At the end of the day, the Tally Rally (location is TBA) is a great way to connect with others and hear about what fabulous feathered friends were seen. Enjoy a hot meal together at the Tally Rally while listing your birds in the name of science.

Carolyn Duckworth is returning to Cool Spring Preserve for her annual Winter Solstice Nature Journaling on Saturday, December 18th! Bundle up, grab your art supplies and come on out to the preserve to learn some new techniques, share your ideas and take in the serenity of winter at Cool Spring. The Winter Solstice is an opportunity to celebrate the powerful energy of the sun; journaling in nature during this time allows us to focus

on the returning light, renewal and self-reflection. If you have never tried nature journaling, this is a perfect time to give it a try. During the winter months of January and February, Joy Bridy will be offering a virtual Journaling Prompt that can be done from the comfort of your own home space. These are a wonderful way to stay engaged and notice the natural world right in your own backyard or through your kitchen window. Joy looks forward to March when she will return to the preserves for her monthly in-person Nature Journaling Gatherings.

‘Let’s Play Trivia with Kingfisher Kahoot!’ was loads of fun during our October trivia night. We gathered virtually for a friendly competition of trivia on West Virginia’s Natural Symbols and Bird identification. Newly certified Master Naturalist, Roy Boyle, gave easy instructions to follow and lead the group through a fun, interactive evening of Kahoot! We will resume these trivia evenings in January and we invite you to join us for these exciting and educational games.



We pause our Monthly Programs in December to have time to focus on family and friends during the holiday

season. On Wednesday, January 12th, we will kick off the new year of programs with Mark Fresch, of the National Weather Services Office of Water Prediction, presenting “How Weather Forecasts Are Made.” Please check the Events Calendar at [PotomacAudubon.org](http://PotomacAudubon.org) to learn if we will be meeting in-person at the Education Center at Hospice or if this program will be virtual via Zoom.

We are happy to announce that PVAS’s monthly bird walks at Cool Spring Preserve, led by Beth Poole, and the USGS Eastern Ecological Science Center walks, led by an amazing team of birders, will be continuing through the new year. The walks at Cool Spring Preserve are held on the third Wednesday of the month while the walks at the Science Center are held on various Saturdays.

The Master Naturalists are now accepting applications for the 2022 year. Open Houses will be conducted on Saturday, December 4th from 2:00-2:30 at Cacapon Resort State Park and Wednesday, January 12th at 6:00pm at the Education Center at Hospice of the Panhandle. Master Naturalists will be on hand to answer any questions you may have and will be sharing information and details about the program. Following the Open House at Cacapon, Master Naturalist Dale Kirchner will lead a Nature Walk. This walk is open to those that attend the Open House as well as anyone interested in joining the Nature Walk. Please visit [PVMN.org](http://PVMN.org) for the application, scholarship application and details about the program. If you have questions, please do not hesitate to contact [PVMN@PotomacAudubon.org](mailto:PVMN@PotomacAudubon.org).

To find out more about these and other programs, subscribe to our biweekly Heads-Up PVAS! e-newsletter, and check our website ([www.potomacaudubon.org](http://www.potomacaudubon.org)) regularly.

PVAS Events

Farewell and Hello

By Kristin Alexander, PVAS Executive Director

We are sad to share that Hannah Donnelly, our Communications/Marketing Manager, will be moving on from PVAS. Her talent for graphic design, photography, video editing, and database management have contributed greatly to PVAS over the last year. The videos she made about each preserve for our “Virtual Walk in the Woods with Wine” particularly demonstrated her special skills. After a year with PVAS, she is ready to put those skills back to work more regularly and will be returning to her original career path as a Producer and Editor in Television Post Production.



We wish Hannah all the best in her new endeavors.

Fortunately, we have been able to fill the Communications/Marketing position quickly with a new team member, Chanda Drew.

Chanda lives in Harpers Ferry with her husband and 10-year-old son.

She brings with her extensive database experience, business acumen, website management, customer service, project management, and dedication to our mission.

Chanda will start with PVAS on December 7th. You can welcome her at [Chanda@PotomacAudubon.org](mailto:Chanda@PotomacAudubon.org).



**“This Race is for the Birds!”  
Saturday, April 9th, 2022**

A 5K or 10K Trail Run/Walk  
on the Trails of Broomgrass,

Or participate virtually from anywhere!  
Registration Opens December 15, 2021

[RunSignUp.com](http://RunSignUp.com)



**This Holiday Season, Give the  
Gift of Membership**

Give the gift of a PVAS membership! Members receive a variety of perks including discounts on PVAS programs such as Outdoor School, Audubon Discovery Camp, Birding 101 and much more!

Members even receive discounts to local participating businesses and participating nature centers and museums around the country!

Visit <https://www.potomacaudubon.org/support/gift-membership/> to gift a membership to your friends and family!

## PVAS Events

### Bird Seed Sale and Auction Wrap up!

Thank you for your generous support of our fall events. The 40th Annual Bird Seed Sale went very smoothly this year. We once again partnered with our friends at Sunny Meadow Garden Center to offer a variety of high-quality seed and suet. Seventy customers supported this year's Bird Seed Sale, so we imagine there will be a lot of full feeders and happy birds this winter! Thank you to all of the volunteers who helped Hannah coordinate the sale, Suzanne Offutt and Steve Paradis, and those who loaded bird seed into cars on November 6th at our various locations.



The On-line Auction was also extremely successful thanks to those who donated items or services to sell as well as those who purchased the items! Over 250 items or services were donated, and the sale of

those items grossed over \$9000 for PVAS programs and preserves. We couldn't have done the auction without volunteers Gretchen Meadows and Jane Vanderhook. These two women photographed, uploaded, described over 250 items, managed the

auction bidding process, and sorted and packaged the items for delivery to their forever homes. This was an enormous job and we can't thank them enough for their generosity of time, talent, commitment and organization.



### Join us at 2021 Christmas Parade

Join PVAS for the Shepherdstown Christmas Parade on December 4th! All are invited to march down the street behind the PVAS banner. The event will be held rain, shine or snow, so dress for the weather. Bring your binoculars, family members, your dog, your favorite stuffed animal or critter costume, your Santa hat...whatever you makes you feel festive and jolly as we welcome the holiday season.

The procession begins at 10am, so we'll plan to meet up on Church Street at 9:30. Volunteers along Church Street will help you find "Potomac Valley Audubon" in the lineup. Look for the PVAS banner and our smiling faces. We'll have butterfly wings and other festive items to share if you don't bring your own.

The event is entirely outdoors, but please bring a mask for those moments when distancing is not feasible. If you have questions, please contact Kristin Alexander at 304-676-3397 or [Kristin@PotomacAudubon.org](mailto:Kristin@PotomacAudubon.org). We hope to see you there!

## Volunteer Spotlight

### Have you met Stacy Toup, Kris Phillips and Lisa Kovatch?

Stacy, Kris, and Lisa are Master Naturalists and serve on the PVMN Coordinating Committee. This past year and a half, they have worked as a team to creatively and diligently navigate the extremely complicated scheduling, planning and execution of the 2020/2021 program. They turned what might have otherwise been another year without classes into an incredibly successful year for the Master Naturalists.

With Stacy as the Facilitator, Kris as the Instruction and Training Coordinator, and Lisa as the Student Coordinator, the three of them were able to create a fun, engaging and safe environment for the 2020 (turned 2021) cohort. They were able to pivot on a dime, conducting classes via Zoom when necessary, adapting to changing safety precautions, such as moving in-person trainings from indoors to outdoors, and making sure PowerPoints could be viewed despite outdoor light and winds. These three Master Naturalists went above and beyond to make sure this cohort had the same educational and interactive experiences as in years past. We thank them for their efforts and dedication to continuing education and the PVMN Program. It is because of people like this that PVMN is able to maintain its reputation in the community as a high-quality educational program.

All of our PVAS volunteers are great! If you know someone who deserves a shout out, please contact Kristin at [Kristin@PotomacAudubon.org](mailto:Kristin@PotomacAudubon.org).



## Family and Youth Programs

### Watershed Education Program Update

By Laurel Schwartz, Watershed Program Coordinator

This fall, PVAS has made the decision to continue teaching our 4th grade Watershed Education Program virtually, for the safety of our staff and community. Though we look forward to a time when we are able to safely enter classrooms again, we are so fortunate to have creative and dedicated youth program staff to make the most of virtual programming. It is our hope that our program will have just as much of a meaningful impact despite the virtual modifications. We are very optimistic, as we have some exciting additions to the program for this year. We are also excited to announce that Jefferson County schools were able to enroll in the Watershed Program for free this fall!

PVAS is very grateful for the flexibility and commitment of Jefferson County 4th grade teachers. Teachers are our best partners in delivering Watershed educational experiences to youth. This fall, teachers are taking a more active role in Watershed Education, as they have been following along with our staff-made videos to deliver the hands-on portions of the Watershed Curriculum to their classrooms. Each classroom is provided with a PVAS video and detailed lesson plan for each one of five sessions. Students participate in most all of the same interactive, hands-on Watershed activities and experiments that they would during an in-person year. After students have watched the videos and participated in the hands-on activities, they have the opportunity to meet with a Watershed instructor in a virtual meeting. During the virtual meetings, instructors expand upon concepts introduced in the videos, and students are able to ask any questions that they may have.

We are pleased to have been received with so much excited engagement from students in our virtual meeting so far. Our wonderful AmeriCorps educators, Gus Rasich and Jade Harris, are always thinking of creative ways to encourage active learning during our virtual meetings. Storytelling, quiz time, and sing-alongs have become regular parts of students' virtual experience. While the program will continue virtually through the fall, we are excited to have offered all Jefferson County schools an in-person field experience, in lieu of our usual

field trip this year. During this field experience, we plan to visit students outdoors on their school grounds and bring stream life to them! This gives students the opportunity to have a meaningful watershed experience without leaving their campus.

This year, our staff has a goal of making Watershed education even more personal to students, and we are thrilled to have resources available to make this possible! Our staff made a plan to visit at least one local stream or river from each school's watershed address. During these visits, we get in the water with hip waders on and kick nets in tow, sample for macro-invertebrates, and most importantly, we take photos of our finds and smiling faces. We want to be able to show students that we are invested in their experience, and we would also like to represent watershed locations that students could visit with their families.

The most exciting Watershed Program development for this year is that each 4th grade class will have the opportunity to participate in a grant-funded, student-led action project. We are confident that this opportunity will truly take the impact of our curriculum to the next level, making it all the more meaningful for students. Not only

will our local community reap the benefits of student environmental action, but students will have a memorable experience of themselves and their peers acting as a catalyst for action and change. Action projects could include tree plantings, rain garden installation, public awareness campaigns, or litter cleanups. The important part is that the students come up with the idea and are actively driving the planning and execution of the project. By offering students the chance to be leaders and contribute their own ideas to the class action project, our hope is that students will take ownership of their own Watershed experience.

In the spring, our education staff will assist with Jefferson County action projects while providing our Watershed Program curriculum to Berkeley County. Currently, we are hopeful that there may be a possibility of resuming in-person instruction this spring. We would be thrilled to be able to have students participate in field trips. If we are able to plan for field trips, we will be calling on members of our wonderful PVAS community to serve as volunteers. If this is something you may be interested in, contact Laurel Schwartz by email at [Laurel@potomacaudubon.org](mailto:Laurel@potomacaudubon.org).

We are so grateful to our community for their continued support of our programming and interest in our meaningful education opportunities. We look forward to expanding our Watershed Program and witnessing the impact of continued investment in our youth.



## Family and Youth Programs

### Youth Programs Update

By Amy Moore, Lead Teacher & Naturalist/ Audubon Discovery Camp Director

It has been an interesting and somewhat challenging year-and-a-half leading youth programs in the age of COVID, but the PVAS Education team feels that we have definitely found our groove. From joining students in their classrooms through virtual programs over zoom, to hosting masked and exclusively outdoor homeschool and preschool programs, we have been able to provide safe and quality nature programs to children across the panhandle.

Our Homeschool Outdoor School Program, where about 20 homeschoolers join us one day a week over the course of a month, continues to be a huge hit in the community. Parents comment that their children return home after programs eager to share with the family the wealth of nature knowledge they have acquired. We have also started offering two sessions of our Wee Naturalists programs due to increased popularity. It is clear that parents truly value outdoor nature programs as they provide a safe opportunity for their children to learn and socialize.

We are happy to have also increased the number of family programs we are offering this fall. From family Monarch Tagging Events and an Owl Prowl, to our Trail of Bones Halloween event and Winter Solstice Camp Fire, we have been having fun with family programs. Our goal is to provide more opportunities for the entire family to enjoy nature together. We are looking forward to continuing to provide youth and family programs this winter and spring. Be on the lookout for our Winter and Spring Family and Youth program posting on our Website in Mid-December. Additionally, our 2022 Summer camp registration opens in early February.

Looking forward to the spring, we hope to be able to facilitate some in-person nature lessons at local schools. We are also crossing our fingers that schools will be able to plan field trips to our preserves as well. The return to in-person programming has been long awaited, by both our staff and our participating schools.



Finally, we wanted to share with you a few journal entries from our outdoor school students. To evaluate student learning, we design journal activities related to the lessons we have planned. Through reading these journal entries, instructors get a sense of what students are taking away from the program. For example, when learning about trees in October, students were asked to write a Haiku about the trees around them. This provided the students with the opportunity to slow down and be mindful of the environment surrounding them and then express creativity through a poem. In November, students learned about survival skills and what to do if you are lost in the wilderness. At the end of the month, we asked students to draw or write the first three steps they would take if they found themselves lost in the mountains in West Virginia. We hope you enjoy two examples of student responses to our assignments.

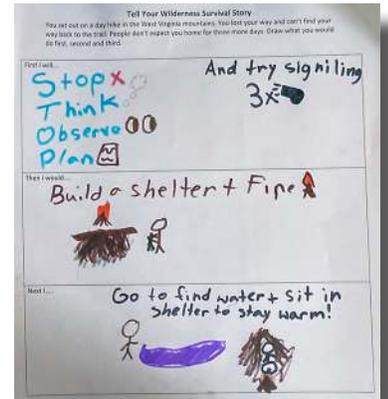
#### Haiku

Title: Ladybugs

Ladybugs are red  
5 syllables  
They have black spots on their wings  
7 syllables  
Experts at flying  
5 syllables

Title: Trout

Low, from green trees  
5 syllables  
Shake with the cooling breeze, I feel  
7 syllables  
A red fish so pretty!  
5 syllables



### PVAS AmeriCorps Service Positions Open for Applications

PVAS is seeking two AmeriCorps members to fill half year positions from March – August 2022.

One position is working as Land Management and Conservation AmeriCorps. The other position is a Youth Program Environmental Educator. If you know of anyone who might be interested in either of these positions, please direct them to our webpage "Positions with PVAS".

## Conservation

### Top 5 Ways to Protect the Watershed

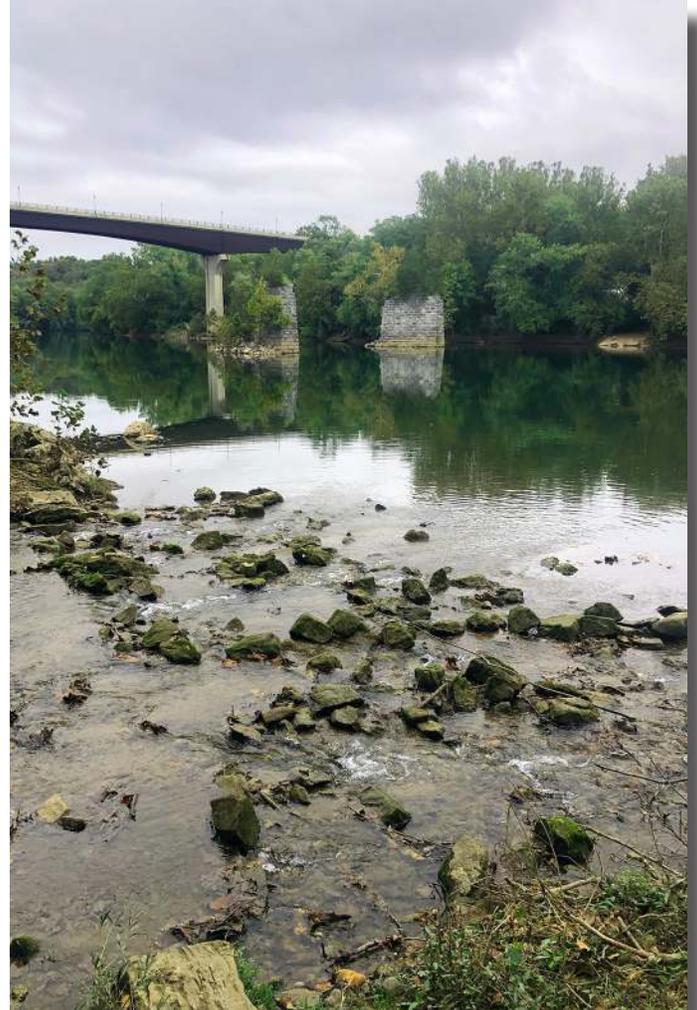
By Laurel Schwartz, Watershed Program Coordinator

**1. Conserve water in your home.** There are many ways that you can minimize your personal or family water usage. Only run your washing machine and dishwasher when they are full. Avoid “pre-washing” dishes before they go in the dishwasher. Efficient dishwashers generally do not need dishes to go in pre-rinsed. Use greywater or water collected in rain barrels for gardening. Be mindful of running water. Turn faucets off when they are not in use. Fix any leaky faucets, as dripping water can add up. Compost at home. Composting is not only great for reducing waste sent to landfills, but it can also reduce your water consumption, as in-sink garbage disposals require a lot of water to work properly. Insulate your pipes. If your hot water is able to stay hot, you’ll spend less time running water waiting for it to reach the desired temperature. Perform routine maintenance on appliances. When appliances work most efficiently, they will not use as much water. Making any or all of these changes in your home can help you to optimize your water usage and prevent waste of clean, drinkable water.

**2. Limit your use of fertilizers and pesticides.** Be mindful of the amount of fertilizer and pesticides you are using in your garden or on your lawn. Follow instructions and make sure that you are not using any more than the required amount and are applying directly to the area required. Do not apply fertilizer or pesticides before an expected rain. If you’re open to making a change in how you garden and landscape, consider planting native. Native plants require much less water and fertilizer than non-native plants. Additionally, use of nutrient-rich compost in your garden can replace much of the need for fertilizer. Taking these steps will reduce your impact on the fragile nutrient balance of the watershed.

**3. Properly dispose of household chemicals and medications.**

Keep all household chemicals in their original containers. Consult labels for proper disposal. Often, this may include dropping off chemicals at a local waste disposal location. Take unused medications to a local pharmacy or hospital medication drop off location. Information on how to find these drop off locations is accessible online. Flushed medications and excess chemical inputs can unintentionally harm aquatic life in our waterways and potentially create human health hazards as well.



**4. Educate yourself on local watershed issues.** Take the time to research local environmental and watershed specific issues concerning your community and larger watershed. When you know more, you can make more informed decisions. Further your impact and knowledge base by joining a local environmental organization, supporting a political candidate who shares your values for protecting water as a common resource, or meeting with a watershed expert to learn more about the ways that you can get involved.

**5. Be an environmental citizen.** Use your knowledge of local watershed issues to promote change in your community. This could include taking youth to visit a nearby creek or river for an unforgettable watershed experience, participating in a trash cleanup, or educating others about issues concerning local waterways. Taking any action to conserve water resources, keep the watershed clean, or promote watershed education will have a positive impact and will set an example for others to follow. Environmentally minded citizens can collectively make systemic changes to the way that we manage and conserve our natural resources.

## Conservation

### **A Monarch Minute: Monarch Alliance Milkweed Seed Project**

*By Bruce Guthrie, Monarch Alliance*

Even as winter approaches, The Monarch Alliance is looking for volunteers to prepare for the return of Monarch butterflies in the spring.

Milkweed is an important nectar source for adult Monarchs and, crucially, the only genus of plant that Monarch caterpillars are able to ingest. Unfortunately, farmers are often apprehensive about planting or hosting native milkweed because it can be harmful to livestock if eaten in large quantities. Development and frequent mowing also reduce milkweed habitat. However, milkweed is paramount to the survival of the iconic Monarch butterflies. It is our goal to spread awareness about this wonderful native plant and distribute as much of it as possible in our local community.

TMA member John Maciolak has collected thousands of milkweed seeds, and the Alliance is seeking volunteers to stratify the seeds, so that they will be prepared for planting next year. Cold stratification is a method of mimicking winter conditions to promote higher rates of seed germination. When milkweeds produce seeds in the fall, the seeds enter a state of dormancy. Without going through this dormancy state, the seeds would begin to grow immediately, and the seedlings would be swiftly killed by the winter cold. Stratification exposes the seeds to cold conditions while keeping them safe indoors. After going through the dormancy state, milkweed seeds are ready for planting and will sprout.

During cold stratification, the milkweed seeds are mixed with a bit of peat-based potting medium and the mixture is moistened and placed in a sealed zip-lock bag. It's best to label the bag "Common Milkweed." The bag is put in the refrigerator and kept at a cold temperature (in the 40 degrees Fahrenheit range) for at least 30 days. It's as simple as that!

The seeds TMA has collected are common milkweed, one of the four milkweed species native to our area. The others are swamp milkweed, whirled milkweed, and butterfly milkweed, commonly called butterfly weed. Monarch caterpillars will eat all three species, but common milkweed is the easiest to grow, and can spread aggressively. John has divided the seeds into lots of about 50 to 100 and stored them in envelopes.

This is where TMA is looking for help. We need 15 to 25 volunteers to take a few envelopes each and stratify the seeds. The Alliance will provide detailed instructions; all you need is a tiny corner of your refrigerator, potting medium, plastic bags, and a few drops of water.

In the spring, volunteers can plant the stratified seeds themselves, give them to gardening friends, or return them to TMA for distribution by the Alliance. We just want to get this wonderful native species in the ground! If you can help or would like more information, please email [MonarchAlliance@PotomacAudubon.org](mailto:MonarchAlliance@PotomacAudubon.org).



### **Do You Know a Group Interested in Installing a Monarch Waystation?**

The Monarch Alliance is actively soliciting applications until December 15, 2021 for its Monarch Waystation 2022 Grant cycle. We are inviting community-based organizations to apply for up to \$1000 worth of plants to install Monarch Waystations in public places.

Do you know a group interested in supporting TMA's mission?

For more information about the grants, please visit: <https://www.potomacaudubon.org/monarch-alliance/grants/>

## Notes from the Preserves

## In the Preserves

By KC Walters, PVAS Land and Facilities Manager

The beaver has (hopefully) been deceived! The newest Cool Spring marsh resident, a beaver, has been a challenging presence since May of this year. His first order of business was to construct a dam near the culverts crossing under Lloyd Rd. This resulted in the complete blockage of the two primary culverts, allowing the Bullskin to overtop the road. All summer, PVAS staff broke down the dam on a weekly basis to alleviate the flooding road, while we worked with the Division of Highways (DOH) to come up with a long-term solution to our predicament.

The “quick and easy” solution would have been to dispatch the beaver. Due to the high prevalence of rabies in Jefferson County, relocation was not an option, therefore, the beaver would have had to be euthanized if he were trapped. However, PVAS felt it was not in the best interest of the marsh to pursue this “easy” fix. Beavers are a keystone species, an organism that supports an entire ecosystem. The title “keystone” comes from the critical stone placed at the top of an archway. Without that keystone, the entire arch collapses. In the same sense, without a keystone species, the ecosystem may collapse.



Beavers have earned this elite title because they continuously work to create new wetlands and ponds. Wetlands account for just 5.5% of the surface area in North America, yet at least one-half of all our bird species depend on wetlands for nesting or feeding. The new beaver pond at Cool Spring flooded about an acre of the preserve wetland. This resulted in textbook ideal habitat for marsh frogs, turtles, fishes and many others. However, we still had the issue of the flooded roadway presenting a major safety concern.

With cold temperatures on the horizon threatening to freeze the water on the road, it was time to take action. Over the course of a series of meetings and discussions held in late October and early November which included representatives of PVAS, DOH, Department of Environmental Protection, WV Division of Natural Resources, US Fish and Wildlife Service and the Human-Beaver Coexistence Fund, a plan was formulated. To immediately relieve the water pressure on the road, first the DOH would excavate the portion of the dam obstructing the

culverts. Then, PVAS volunteers would install a beaver deceiver to prevent the beaver from blocking the culverts and avoid the beaver pond from cresting the road again. So, on a nice November day, the plans were put into action. DOH coordinated with PVAS and carefully cleared the culverts, with very minimal disturbance to the surrounding wetland, and the next day the deceiver was installed.

Our beaver deceiver is based on designs of Skip Lisle, a conservationist and wildlife lover from Vermont, who invented the first beaver deceiver as a child. We used a twelve-inch corrugated pipe, protected by cattle panels, at each end for our deceiver. The idea is the beaver can build a dam to his heart’s content on the outside of the cattle panel fencing, creating his desired pond. However, once the pond reaches a maximum level (of one foot beneath the road surface, in our case) the pond will begin to drain out of the culverts by way of the corrugated pipe -- resulting in what we are hoping is a win-win for everyone, people and marsh-residents alike!

While we are very excited about the progress we have made in mitigation and coexistence, we believe this is only a short-term solution to a much bigger problem. The section of Lloyd Road passing by the marsh is very low and it does not take much to cause flooding on the road. Additionally, the existing culverts are all very small, easy to clog and limiting to wildlife passage. Therefore, we are working with DOH to create a long-term solution that would include raising the road and installing a single, larger box culvert. DOH, with the support of PVAS, is pursuing Chesapeake Bay funding for this project. We are optimistic this new box culvert can be installed in the summer of 2022!



While the Cool Spring beaver has been top priority for PVAS staff, our wonderful volunteer force has been hard at work wrapping up 2021 tasks at the other preserves. We are so grateful for these volunteers taking on independent tasks to keep the preserves in tip-top shape for the incoming new year. If you need a task to finish up volunteer hours or are simply interested in volunteering, please check out the opportunities on our website or contact me at [Katelyn@PotomacAudubon.org](mailto:Katelyn@PotomacAudubon.org).

## Potomac Valley Master Naturalists

### Tidbits from the Potomac Valley Master Naturalists

By Rich Brager, PVMN Co-Chair

The Potomac Valley Master Naturalists will be completing our 15th year at the end of 2021. As it was for many organizations, the year 2021 has proved quite challenging due to the continuing pandemic. However, not only did we persevere, but we have thrived due to our dedicated membership. The following are just a few of our successes.

#### PVMN 2021 Cohort Training

Scheduling and conducting training for our new class proved exceedingly challenging this year. Scheduling and rescheduling were the order of the day. Conducting some training via Zoom and adapting to changing safety precautions including moving training from indoors to outdoors was an ongoing task for PVMN Members Lisa Kovatch, Student Coordinator, Kris Phillips, Instruction and Training Coordinator and Stacy Toup, Facilitator. Perseverance prevailed! Training was successfully completed by the 2021 Cohort.



The following people from the 2021 Cohort completed their education and volunteer requirements: Janice Boserman, Roy Boyle, Dave Curfman, Becky Guthrie, Bruce Guthrie and Allen Miller. The rest of the 2021 Cohort will continue to work on meeting certification requirements in 2022. The following people from earlier cohorts also completed their initial Master Naturalist requirements this year: Leslie Boyd, Dave Martz, Rachel Michaels and Karli Rogers. Congratulations to the newly certified Master Naturalists!

One of the upsides of starting out the year on Zoom was being able to provide classes to MNs from around the state who were also trying to complete their training during the pandemic. The online forum afforded us the opportunity to make connections with returning candidates from the Monongahela, Tygart Valley, and Canaan Chapters despite our geographical distances.

And now we are looking forward to our 2022 cohort. We are looking for people who want to continually learn and share their knowledge and enthusiasm for the natural world with others. Please consider applying to be in the 2022 PVMN Cohort (applications can be found at PVMN.org). Applications are being accepted until Jan 31, 2022. We will notify accepted candidates in the middle of February. Classes will start in March, and the 2022 PVMN class schedule will be available in January.



#### United Way Day of Caring

On September 14th, the United Way conducted a Day of Caring at the PVAS Nature Preserve, Cool Spring. PVMN Member, Peter Mulford, captured the event for us: "It was a great 'Day of Caring' at the Cool Spring Preserve, HQ of PVAS, with approximately 25+ members/ volunteers of PVMN and PVAS sharing in some major outside projects. With bright sun and clear skies overhead, the group painted and weatherproofed all outside benches and picnic tables, planted a butterfly garden at the building entrance, and repainted the front deck. PVAS staff provided a well-organized work schedule and a hearty picnic luncheon to replenish our energy!"

Everyone enjoyed reconnecting with old friends and making new ones with and among 'those who care' about preserving and improving our natural environment.

#### Outdoor Classroom Construction

Page Jackson Elementary School lies in a rather bucolic location in the middle of West Virginia farmland on the outskirts of Charles Town. The students at Page Jackson are primary school aged, grades K-3, so when the students are outside, the campus is filled with cuteness. Jennifer Walter is a second-grade teacher who had a vision of creating outdoor classroom activities for the students, where they could learn about nature as well as get their hands dirty, quite literally. In collaboration with Roger Ethier of Engineers Without Borders and with the assistance of a number of PVMN volunteers and Page Jackson teachers, Ms. Walter's dream was brought to fruition.



The outdoor classroom activities are quite extensive including a fenced-in, raised-bed vegetable garden, a pollinator garden, a wetlands observation area/science center, a bluebird trail with 6 bluebird boxes, a multifaceted art center with a "music wall" and a true outdoor classroom with boulders for seats. There was a Grand Opening held on October 20th. A front-page article documenting the event appeared in the Martinsburg Journal on October 22nd. It was very gratifying to see the children fully engaged in their outdoor learning activities.

#### PVMN Tri Fold Display Board

Each year, PVMN conducts open houses to educate the public about us and attract interest to fill our annual training cohort. PVMN members also attend various PVAS activities and other community events to raise awareness about the natural world in general and our Master Naturalist chapter specifically. To help attract attention and encapsulate the mission of PVMN, members Carol Winckler and Charlotte Fremaux, created a well-designed tri fold display board to use at upcoming events.

## PVMN Open Houses

**Saturday, December 4th**

Cacapon Resort State Park  
2:00 – 2:30pm

*Nature Walk following the Open House*

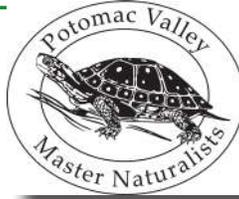
**Wednesday, January 12th**

Hospice of the Panhandle 6:00 – 7:00pm

*Everyone interested in the Master Naturalist Program is welcome to attend!*

*Applications for the 2022 year are being accepted through January 31.*

Applications and information available at [PVMN.org](http://PVMN.org)



## Advocacy

### The Hot Air About Methane

*By Neal Barkus, Panhandle Progressive*

When President Biden left for the COP26 meeting in Glasgow recently, his primary plan for reaching the greenhouse gas reduction goals in the Paris Accords was in disarray. The cause of this disarray was mainly the opposition of West Virginia Senator Joe Manchin. But Biden had a Plan B, which involves a two-pronged approach to sharply reducing methane emissions. In Glasgow, Biden announced that more than thirty countries have pledged to cut emissions of methane 30% by 2030. Given our decades-long focus on reducing carbon dioxide, this pivot to methane is a bit disorienting.

Carbon dioxide is by far the largest contributor to climate change, and it comes from recognizable fossil fuel sources such as coal-burning utilities, and automobile tailpipes. Carbon dioxide persists in the atmosphere for hundreds of years, making the climate change that it causes not just a current problem, but a future one as well.

Yet, some experts say that methane (CH<sub>4</sub>) is a bigger problem than carbon dioxide (CO<sub>2</sub>). While methane dissipates naturally after about 100 years, its pound for pound impact is 25 times greater than carbon dioxide in trapping heat reflected from the Earth's surface.

#### Sources of Methane

Some methane occurs naturally from the decay of plant and animal matter. Domestic livestock, such as beef cattle, pigs and sheep, produce CH<sub>4</sub> as part of their normal digestive process. However, human-produced methane far exceeds what is produced naturally.

Agriculture, including raising of cattle for human consumption and management of animal wastes, is the single largest source of methane. Natural gas and petroleum systems are the second largest source. The U.S. oil and gas industry emits more methane than the total emissions of greenhouse gases from 164 countries combined. Landfills are the third-largest source.

Some politicians call natural gas a “bridge fuel,” meaning that burning it emits less carbon dioxide than burning coal. However, it is wrong to call natural gas clean. Methane is the primary component of natural gas. Methane is emitted during the production, processing, storage, transmission, and distribution of natural gas. In addition, burning natural gas still releases carbon.

Satellite imagery of the Permian gas field in Texas show huge plumes of methane erupting from hot spots throughout the area. No human artifice or industrial process is infallible, and that is certainly true with gas production and pipeline transmission. Major failures to capture methane and leaks from pipelines, pumps and valves are endemic.

#### Biden's Plan B

Not surprisingly, Biden's plan to reduce methane emissions focuses on the oil and gas industry. Regulations issued under President Obama placed controls on methane emissions from new and modified sources in the industry, but failed to address existing wells, production facilities and pipelines. Even as toothless as they were, these regulations were shelved during the Trump Administration. In April 2021, Congress restored the Obama-era methane regulations.

*continued next page*

## Advocacy

### Advocacy Committee Launches New Initiative

Do you feel hopeless about climate change? Do you feel powerless to help our environment? Well, you are not alone.

These days it is important for all of us who love nature and are concerned about our environment to speak out. It's an all-hands-on-deck moment! It is all too easy to think, “what can my one voice possibly do?” But as anyone who has ever attended a march or rally knows, there is power in numbers, and it is amazing how our voices can be amplified when each of us speaks out or acts for the benefit of our environment. As you know, there are many ways to be an activist – call or write a politician, sign a petition, write a letter to the editor, recycle, plant a native species, participate in a community science initiative, educate a child – all are ways to turn the tide towards healing our planet and making others aware of what can be done.

Many of us already are activists, and participate in supporting environmental and social justice causes. But, in order to make activism more accessible for those who would like to become more involved, and as the result of our recent meeting to determine our five-year goals, the PVAS Advocacy Committee is launching a new vehicle to bring those opportunities to your attention.

We'd like to help by giving you small actions that can easily be done, via a regular email blast. You will receive notice of a variety of actions you can take, or practical steps to make your own life and property more sustainable. Small actions by individuals add up! And, this email blast will not go out to the entire PVAS membership. You will have to opt in to receive this communication. We promise not to overwhelm you with too much information or too many actions! But we hope that you will participate, helping PVAS to be an even more effective voice for Mother Nature.

Look for information about how to opt in by checking out the next couple of *Heads Up, PVAS!* emails. If you have more immediate questions, please send them to: [vicepresident@potomac-audubon.org](mailto:vicepresident@potomac-audubon.org). We're just getting started on our mission, and hope you'll be on board!

## Advocacy

*Methane continued from previous page*

Then, on the eve of Biden's trip to Glasgow, the Environmental Protection Agency issued a proposed new rule that covers existing sources of methane emissions in the oil and gas industry. The proposed rule involves a comprehensive monitoring program for new and existing well sites and compressor stations, and proposed performance standards for other sources, such as storage tanks, pneumatic pumps, and compressors.

The proposed rule would reduce 41 million tons of methane emissions from 2023 to 2035, the equivalent of 920 million metric tons of carbon dioxide. That's more than the amount of carbon dioxide emitted from all U.S. passenger cars and commercial aircraft in 2019. The EPA will receive public comment for 60 days and projects a new final rule by the end of 2022.

Additionally, Biden's \$1.2 trillion infrastructure bill, which just passed both houses and awaits the President's signature, contains a provision to spend \$4.7 billion to clean up abandoned oil and gas wells, many of which spew methane into the atmosphere. Central West Virginia is littered with these orphan wells.

The stronger second prong of Biden's Plan B is a methane tax contained in the Build Back Better social spending bill that has not passed either the House or the Senate. As described in a recent *Forbes* article, the plan would tax methane emitted in excess of specified thresholds and begin at \$60 per ton. It would take effect in 2023, with the revenues used to administer the program, provide technical and financial assistance to companies for monitoring and reducing emissions, and to support communities affected by pollution from oil and gas systems.

A fee on methane would boost the incentive for companies to reduce emissions and require companies to internalize the cost of the pollution they emit. A methane fee would have double duty, raising revenues and discouraging pollution, while holding industry accountable. Climate policy experts say that the two-pronged approach, regulation and fee, is necessary to shut down methane emissions, particularly because executive regulations alone could be undone by a future administration.

### The Ball is in Manchin's Court

By now, we are all aware of the immense power that has fallen to Senator Joe Manchin, purely because he is a key vote in a balanced Senate. Unfortunately for the environmental community, his power has been exercised to block legislation that is widely seen as necessary to meet the challenge of climate change. Having already caused the removal of Biden's plan to radically reduce CO2 emissions in the electric power sector, all eyes are now on Manchin regarding the methane tax in the Build Back Better Act.

Initial signs are not good, even though Democrats reduced the starting fee level from \$1500 per ton to \$60 to win Manchin's support. But Manchin appears still to be opposed, arguing that since we have the technology to reduce methane then the technology should be used, not a fee that he regards as punitive. One wonders how it is "punitive" to impose a fee designed to cause the largest industrial producers of methane finally to end their harmful practices. Instead, it seems exactly the sort of measure required to make them internalize the true cost of their behavior. The language of money is the language this industry understands.

## GIVE THE GIFT OF MEMBERSHIP!

ALL of your dues will stay here to support local PVAS efforts and help us grow! And here's what you'll get:

- 10% member discount on program fees, facility rentals, and birthday parties.
- A subscription to our bi-monthly 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**.

### Gift Membership Form

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/](http://www.potomacaudubon.org/support/become-a-member/).

Your Name: \_\_\_\_\_

Recipient's Name: \_\_\_\_\_

Recipient's Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip code: \_\_\_\_\_

Recipient's E-mail: \_\_\_\_\_

Recipient's Phone (optional): \_\_\_\_\_

Please note if you'd like us to mail your gift membership directly to the recipient of your choice, or to you. If you'd like us to mail it directly to the recipient, also note when you would like it to be mailed.

### Clip and mail this form to:

Membership Chair, PVAS

PO Box 578

Shepherdstown, WV 25443



**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](http://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.*

*PVAS Officers and Board Members (year of term expiration in parentheses)*

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- Past President: ..... Suzanne Offut (2023)
- Vice President: ..... Ginger Hankins (2023)
- Secretary: ..... Carolyn Thomas (2022)
- Treasurer: ..... Stephen Paradis (2021)
- Board Members-at-Large:
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  - ..... Susan Brookreson (2022)
  - ..... Dana Fogle (2023)
  - ..... Melissa Gonzalez (2023)
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  - ..... Wil Hershberger (2022)
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  - ..... Herb Peddicord (2022)
  - ..... Mary Lynn Robinson (2023)
  - ..... Keith Unger (2023)
- Emerita Board Member:*** ..... Jean Neely

***Special Contacts:***

- Executive Director: Kristin Alexander (304-676-3397) ..... Kristin@PotomacAudubon.org
- Land/Conservation Mgr: KC Walters (304-283-7319) ..... Katelyn@potomacaudubon.org
- Lead Teacher/Naturalist: Amy Moore (240-818-4714) ..... Amy@PotomacAudubon.org
- Adult Prog. Coord: Krista Hawley (703-303-1026) ..... AdultPrograms@PotomacAudubon.org
- Communications/Marketing Manager: Chanda Drew (681-252-1387) ..... Chanda@PotomacAudubon.org
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- Web Master: Kathy Bilton ..... kathy@fred.net
- PVAS Wildlife Rescue Coord: Diana Mullis (304-754-3753) ..... dianamullis7@gmail.com
- Valley Views editor/publisher: Charlotte Fremaux (301-404-8639) ..... newsletter@potomacaudubon.org

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