



2023 WEST VIRGINIA MASTER NATURALIST CONFERENCE

CELEBRATION OF WV'S FIRST NATIONAL PARK

AUGUST 11 – 13, 2023 • THE RESORT AT GLADE SPRINGS

CONFERENCE SCHEDULE

CLASS DESCRIPTION

INSTRUCTOR BIOS

LODGING

The 2023 WV Master Naturalist Conference will be held August 11 – 13 at The Resort at Glade Springs. A focus of the conference will be the New River Gorge National Park & Preserve, which is only 12 miles away, and the surrounding richly diverse and unique habitats steeped in history. We will also be visiting Little Beaver State Park which is adjacent to the Resort and Babcock State Park about an hour away.

This document will serve as a guide for the:

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Please send all questions regarding the 2023 WV Master Naturalist Conference to info@mnofwv.org.

Cost

Conference Only:

- \$99 per person (*through 5/26*)
- \$110 per person (*after 5/26*)

Conference with Friday and Saturday evening meals:

- \$135 per person (*through 5/26*)
- \$155 per person (*after 5/26*)

Add On Meals:

- Fri/Sat Box Lunch: \$21 (*each*)
- Friday Dinner: \$40
- Saturday Banquet: \$50

Registration

Registration for the 2023 WV Master Naturalist Conference will open online on **May 1, 2023 at 12 p.m.** If you are unable to register online, please contact info@mnofwv.org.

Meals

- When registering, you will have the option between the conference with or without the Friday/Saturday evening meals.
- Box lunches will be available for an add on cost for Friday and Saturday.
- Breakfast is not included. Dining options are available at Glade Springs and in the surrounding areas.

Class Selection

- Classes must be selected at time of registration.
- All day classes and half day classes are available. Please review the schedule and time to ensure you do not register for conflicting classes.
- Unfortunately, some classes only have a limited number of spaces. If a class is not available to register, it is full.
- If you need to change a class after registering, please contact info@mnofwv.org.



2023 WEST VIRGINIA MASTER NATURALIST CONFERENCE

CONFERENCE SCHEDULE

Friday, Aug. 11th

- 8:30 a.m. Distribution of Box Lunches (purchased separately)
- 8:45 a.m.* Nuttallburg History and Nature Discovery Day*
- 9:00 a.m.* Riverscour Prairies, Appalachian Flatrock, and Aquatic Ecology*
- 9:15 a.m.* Hinton Historic District Tour*
- 1:00 p.m. Little Beaver Nature Walk
- 6:00 p.m. Cook Out Dinner and Welcome Session
- 7:15 p.m. New River Gorge: a National Park and Beyond
- 8:30 p.m. Star Gazing
- 8:30 p.m. Moths

Saturday, Aug. 12th

- 6:30 a.m. Morning Bird Walk
- 7:00 a.m. Chapter Coordinator Breakfast
- 8:00 a.m. Distribution of Box Lunches (purchased separately)
- 8:30 a.m. Communities of Kate's Branch Wetland
- 8:30 a.m. Geology of West Virginia
- 8:30 a.m. Bald Eagles in and around New River Gorge with a tour of Three Rivers Avian Center
- 9:00 a.m.* Babcock Discovery Field Day*
- 9:30 a.m.* Basic Mushrooms and Fungi for Master Naturalists*
- 1:00 p.m. Native Orchids of West Virginia
- 1:00 p.m. Lichen Biology, Ecology, and Identification
- 1:00 p.m. Salamanders of West Virginia
- 6:00 p.m. Banquet Dinner
- 7:00 p.m. Vulture: The Private Life of an Unloved Bird
- 8:00 p.m. Social Hour
- 9:00 p.m. Star Gazing
- 9:00 p.m. Moths

Sunday, Aug. 13th

- 6:30 a.m. Morning Bird Walk
- 8:30 a.m. Spider Starter: Basics of Discovering Spidey Senses
- 8:30 a.m. Fish Habitat & Aquatic Macro-Invertebrates
- 8:30 a.m. Tree Identification and Ecology of WV Forests
- 8:30 a.m. Nature Photography Tips & Tricks
- 8:30 a.m. All About M.A.P.S.

Daily

- 8:00 a.m.* Solar Viewing*
- 7:30 a.m. Breakfast on Your Own

** All Day Activity/Class*



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CLASS DESCRIPTIONS

All About M.A.P.S.

Presented by: Keith Richardson, Allen & Mindy Waldron

M.A.P.S. stands for Monitoring Avian Productivity and Survivorship. Allen Waldron is a federally permitted Master Bird Bander who operates two MAPS stations, and other bird banding projects here in Southern West Virginia. The NERI station has been in operation near Sandstone Falls since the mid 90's, and the NRBO station has been running since 2017. Allen's wife Mindy is also a bird bander who has worked tirelessly to make both of these stations a success. This presentation will be an informative one that will allow you to know all the ins and outs of why we band birds, the importance of banding birds, and how the data is used to identify key indicators that effect certain species.

Babcock Discovery Field Day

Presented by: Jodi French-Burr, Emily Grafton & Sean Pettrey

One of West Virginia's most iconic locations, Babcock State Park has 4,127 acres of stunning scenery. Located 20 miles southeast of the New River Gorge Bridge, the park is most known for the Glade Creek Grist Mill, a fully functional replica of the original Cooper's Mill, which once stood on the grounds. Other attractions include recreational activities like hiking, fishing and mountain biking, as well as whitewater rafting nearby in the New River Gorge.

Be prepared for up to 5 miles of easy to moderate hiking on trails and roadways in Babcock State Park.

Bald Eagles in and around New River Gorge and Tour of Three Rivers Avian Center

Presented by: Jim Phillips & 3 River Avian Center Staff (Wendy Perone, Ron Perrone, & Rodney Davis)

Part I: This late in the breeding season there is no guarantee viewing of live eagles but will set up a spotting scope on an active nest. Discussion will involve recent history of bald eagle success in nearby Summers, Raleigh, Manroe, and Greenbrier counties along New River and some of its tributaries. Participants will be informed of available volunteer activities for them involving raptors. This site has no shade, so it is suggested for participants to make us of hats, sunscreen, and drinking water.

Short walks, uneven terrain in places.

Part II: Three Rivers Avian Center was founded in 1990 and is dedicated to wild bird conservation and to educating and involving the Public in ecosystem stewardship. Visit with the live Raptor Ambassadors featuring Hawks, Owls, Falcons, Vulture and Bald Eagle, enjoy interactive educational displays, and learn about the work of Three Rivers Avian Center. We are joined for this event by Hanging Rock Raptor Observatory, the longest manned hawk migration site in West Virginia. Located on Peters Mountain in Monroe County, the restored fire tower receives thousands of visitors annually. Hanging Rock will be hosting an informational display at Three Rivers Avian Center for this WV MN Tour. The majority of the tour is outdoors, so dress for the weather!



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Basic Mushrooms and Fungi for Master Naturalists

Presented by: Sean Means & Amy McLaughlin

Mushrooms and fungi are perhaps the least understood component of our forest's ecosystem, yet very well might be the most important. In this all-day class Master Naturalists can expect to:

- Learn the basics about mushrooms and macrofungi as it relates to general ecology in West Virginia.
- Gain an understanding of the lifecycle of fungi.
- Learn about fungi's interconnectedness with plants and importance in a healthy forest ecosystem.
- Learn about different types of mushrooms that are found in West Virginia.
- Learn how to identify and classify mushrooms.
- Learn to safely identify some edible mushrooms.
- Learn how to identify certain toxic mushrooms.

The class is designed to be a three-hours classroom session in the morning, followed by a foray on a nearby trail to collect specimens for identification, and ends with an identification session. If weather forecasts dictate, the foray can be held in the morning with classroom work following. The foray will be short walks with terrain to be determined.

Communities of Kate's Branch Wetland

Class Limit: 20

Presented by: Brian Streets & John Burkhart

Kates Branch lies just north of Interstate 64, which was rerouted to avoid this wetland complex due to the discovery of a rare orchid by amateur botanist Osbra Eye. This beautiful wetland is surrounded by hemlock and white pine forests. There are old fields in various stages of succession mixed with these even-aged pine stands.

Note: The trip involves a long walk on uneven terrain, through a large wetland complex and will require a high level of exertion.

Fish Habitat & Aquatic Macro-Invertebrates

Presented by: Brian Carlson & Mike Vernon

The ecological and biological health of a stream, river, lake, or pond is associated with the presence of several benthic macro-invertebrates. The life cycles of macro-invertebrates and how they are used as ecological indicators to better manage the health and function of streams, rivers, and lakes of WV will be reviewed in the classroom. Armed with this knowledge, the class will visit a nearby stream to assess its ecological health utilizing stream observations and the collection of benthic invertebrates. The collected aquatic macro-invertebrates will be examined at the macro- and microscopic level. Basic indices used to assess stream condition and overall watershed health utilizing benthic macroinvertebrate community data will be discussed.



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Geology of West Virginia

Presented by: Elizabeth Rhenberg

Come learn about what makes West Virginia, West Virginia. What rocks form our beautiful state? Why are the mountains like they are? How did the New River Gorge form? What animals once walked (or swam!) here? The geology determines much of how we live and love our beautiful state.

Short walk and/or drive.

Hinton Historic District Tour

Presented by: Becky Linger

Join us for a tour of Historic Hinton, WV, a railroad town that saw its height during the coal baron years. We will tour the historic Campbell-Flannagan-Murell House, the Hinton Railroad Museum, The John Henry Historical Park, Sandstone Falls and the Sandstone Visitor Center.

Short walks.

Lichen Biology, Ecology, and Identification

Presented by: Dr. Zach Fowler

We will learn lots about lichen in this class. We will discuss the biology and ecology of lichens and go over the basics of lichen identification. We will also learn about the books that people use to learn about lichens and go for a hike to learn some common lichens and practice some lichen identification skills.

Little Beaver Nature Walk

Presented by: TBD

Join us for a walk through Little Beaver for a general nature walk where we discover the beauty of Little Beaver State Park and hone our skills together as nature interpreters.

Slow walking over some uneven terrain

Morning Bird Walk

Presented by: Laura Ceperley

What's better than starting the day walking outside at dawn with wonderful people? Answer - walking outside with wonderful people spying on birds! Join me for an hour meandering around the campus birding by sight and ear, and learning about a few plants too. Bring binoculars, and dress appropriately for the weather. All are welcome, (but dogs are not). Our sightings will be recorded into eBird for sharing.



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CLASS DESCRIPTIONS

Moths

Presented by: Paul Shaw & Bryan Wender

Did you know that there are 750 species of butterflies in the US and nearly 12,000 species of moths? Come with an open mind to learn about the ecological importance of the unsung hero in the insect world: Moths. We will have a short slide show of moth images taken in the New River Gorge over the past three years of National Park Service inventory. Following this presentation and Q&A we will walk into the night to a light station set up specifically to attract moths of many dazzling and exotic shapes, colors and patterns that often kick the diurnal butterflies to the curb.

Native Orchids of West Virginia

Presented by: Rosanna Springston

WV is home to 40+ amazing orchid species, some of which can be found in your own backyard. Everything from very showy 3-foot-tall ones to tiny hard see orchids that are barely 4 inches tall. We'll learn about all of these amazing orchids and about some of the hybrids that are also in the state during a photo presentation. After words, we'll take a look at a few of the orchids seeds and seed pods under a microscope.

Nature Photography Tips & Tricks

Presented by: Brian Schroeder

Get the most out of your DSLR, phone or point & shoot cameras. We will share some simple techniques to improve your photos. Its easier than you think! Geared to beginners to ??? photographers.

New River Gorge: a National Park and Beyond

Presented by: Jodi French-Burr

Join National Park Ranger Jodi French-Burr for a tour of the neighborhood, New River Gorge National Park & Preserve and beyond. Get a glimpse of the amazing natural and cultural diversity of the New River Gorge, host area for this year's WV MN Conference. Overview the national park and learn how you can explore this site at this conference and beyond, including Q & A with Jodi, a 35 year employee of this park.



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Nuttallburg History and Nature Discovery Day

Class Limit: 15

Presented by: Jodi French-Burr

Join National Park Service Park Ranger Jodi French-Burr on this nature and history discovery day at the historic site of Nuttallburg in New River Gorge National Park and Preserve. See how this once-bustling industrial coal town has changed over 100 years as we explore this historic site, taking a deep dive into the natural diversity of this recovering forest area along New River. Explore the area's botany, geology, and how the landscape challenged early settlement of the region. Many historic structures from the early 1900s remain at this site. Be prepared for up to three miles of easy to moderate hiking on park trails. Wear sturdy hiking shoes and be prepared for anticipated weather. Bring water, lunch, plus any favorite nature watching tools (binoculars, hand lens, and/or field guides/nature apps). As parking is limited at Nuttallburg site, carpooling is recommended from Canyon Rim Visitor Center; the dirt road to site is very small, so recommend vehicles with moderate ground clearance (drivers must be prepared to maneuver with other vehicles, including backing up). Meet at the parking area at NPS – Canyon Rim Visitor Center in Lansing, WV. (10:00 am – 3:00 pm)

Riverscour Prairies, Appalachian Flatrock, and Aquatic Ecology

Class Limit: 20

Presented by: Doug Manning & Jennifer Flippen

Riparian habitats represent some of the most diverse and rare plant communities in New River Gorge National Park and Preserve. This class will explore some of the unique habitats that occur along the New River and how the NPS monitors and manages these areas. We will explore the globally imperiled Appalachian Flatrock community as well as Riverscour Shrub Prairies. Participants will learn about the unique plants that occur in these habitats as well as some of the forces that maintain these habitats. We will also learn about water quality and aquatic ecology in the park.

Short walks over mostly even terrain.

Salamanders of West Virginia

Presented by: Dr. Thomas Pauley

There are 36 species of salamanders known to occur in West Virginia. Two species, the Cheat Mountain Salamander and the West Virginia Spring Salamander, are endemic to the state. Two species, the Yellow-spotted Woodland Salamander and the Shovel-nosed Salamander, have been discovered in the state within the last four years. During the lecture session, I will give an overview of the biology and ecology of salamanders and provide characteristics that will aid in the identification of each of the 36 species.

After the lecture session, we will walk to the Red Trail and search for terrestrial and stream salamanders along the trail. Participants should wear field boots, not sandals, flip-flops, or open-toed shoes of any kind. If it rains, we will still go in the rain so bring a raincoat.



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Solar Viewing

Presented by: Greenbank Observatory's Sarah Olivera

Join us to channel your inner child and look at the sun – safely! We will be using two different telescopes to view two different layers of the sun. Our Coronado H-Alpha telescope allows us to view the chromosphere, the characteristic red layer of the sun, and hopefully some fun phenomena like prominences. Our Sunspotter telescope allows us to view a projection the sun, namely the photosphere which is the layer on which sunspots are seen! Weather dependent.

Spider Starter: Basics of Discovering Spidey Senses

Presented by: Jodi French-Burr

Join naturalist Jodi French-Burr to learn the basics of spiders. See how these often-misunderstood creatures live and contribute to their natural communities, plus learn family, species, and web ID tips. This session will include a leisurely outdoor spider walk in the neighborhood.

Star Gazing

Presented by: Greenbank Observatory's Sarah Olivera

Take advantage of West Virginia's Dark Skies by joining us to enjoy views of various deep sky objects and planets with our optical telescope! Also take a laser guided tour of the summer constellations and learn how to pick them out yourself. Starting a half hour after sunset – weather dependent.

Tree Identification and Ecology of WV Forests

Presented by: Chance Russo

West Virginia is at the heart of the mixed mesophytic hardwood forest region of the eastern United States, where abundant rainfall and variable topography creates the perfect conditions for rich species diversity across a wide variety of habitat zones. With over 100 native tree species inhabiting the hills and hollers of West Virginia, determining the exact species of tree one is looking at can often prove difficult. This class will go over basic tree biology and ecology for a wide variety of tree species commonly found throughout West Virginia through leaf, bark, and form characteristics as well as habitat preference. Additionally, general forest ecology topics will be discussed pertaining to forest processes and dynamics, with attention given to highlight major ecological concerns currently facing hardwood forests in West Virginia, ranging from changes in species composition, invasive species, and wildland fire. This course will take place on a guided hike along the Big Buck Trail at Shelter #2 at the Grandview area of New River Gorge National Park & Preserve. The Big Buck Trail is a 0.9 mile loop with an easy difficulty rating. Attendees should bring sturdy hiking boots and rain gear if there is a chance of rain. Attendees may also want to bring notepads for taking notes or binoculars for identifying leaves high up in the canopy of tall trees.



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Vulture: The Private Life of an Unloved Bird

Presented by: Katie Fallon

Vultures are often overlooked, underappreciated and unloved, despite the vital roles they play in healthy ecosystems. This fun presentation will explore the life and times of the noble turkey vulture, including its feeding, nesting and roosting habits, migratory behaviors and common misconceptions.



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INSTRUCTOR BIOS

John Burkhart

John Burkhart is the West Virginia Division of Natural Resources Natural Heritage Program botanist. He holds a master's degree from WVU. His work with the DNR focuses on rare plant conservation and in his free time enjoys skiing and biking with his family and friends.

Brian Carlson

Brian Carlson is an environmental professional who specializes in stream and river ecosystems, specifically benthic macroinvertebrates, fish and freshwater mussels in the Appalachian, Midwest, and Mid-Atlantic regions. Working out of EnviroScience's West Virginia office, Mr. Carlson is federally permitted for numerous federally threatened and endangered freshwater mussel species, the federally threatened Big Sandy Crayfish (*Cambarus callainus*), federally endangered Guyandotte River Crayfish (*Cambarus veteranus*) and federally endangered Candy Darter (*Etheostoma osburni*).

In addition, Brian is a SFS (formerly NABS) certified benthic macroinvertebrate taxonomist for Ephemeroptera, Plecoptera, Trichoptera, and Chironomidae genera. He also has experience in stream and wetland delineation, T&E species/sensitive habitat, water quality monitoring, stream habitat assessment, flow monitoring, stream valuation for mitigation, and GIS mapping.

Laura Ceperley

Thanks to two very nature-oriented parents and Girl Scouts, being outside was key to Laura's childhood in Charleston. After a federal career in natural resources with the Forest Service and Bureau of Land Management, largely in the Pacific Northwest, Laura returned to WV, completed her Master Naturalist "degree" in Canaan Valley, and slid down the slippery slope of birding. What's her favorite bird? Answer - the bird I'm looking at!

Rodney Davis

Hanging Rock Raptor Observatory Hanging Rock is the oldest continual Raptor Observatory in WV, located on Peters Mountain near Xenith in Monroe county and is open all year. Since 1952 volunteers have manned the restored US Forest Service Fire Tower to count migrating raptors as they pass above, beside and below the Tower during peak migration times of late Summer through late Fall. Data is then shared with the national Hawk Count data base. Each year thousands of visitors hike the 1 mile steep trail to this historic and breathtaking Observatory. Analysis of the 2022 visitors log shows just under 10,000 visitors from 43 states, DC, and 23 foreign countries. Leaf peeper season in October was the most popular month for visitors.

Rodney Davis has been a long-time observer, recorder and volunteer coordinator for the Tower, along with Brian Hirt, Charlie Kahle and Dale Porter. For more information visit the Facebook page "Hanging Rock Raptor Observatory" or the Tower's web page at www.hangingrocktower.org.



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INSTRUCTOR BIOS

Katie Fallon

Katie Fallon is the author of the nonfiction books *Vulture: The Private Life of an Unloved Bird* and *Cerulean Blues: A Personal Search for a Vanishing Songbird*. She writes a column for Bird Watcher's Digest and is Executive Director of the Avian Conservation center of Appalachia. Her first word was bird.

Jennifer Flippin

Jennifer Flippin is the Aquatic Ecologist for New River Gorge National Park, Gauley River National Recreation Area, and Bluestone National Scenic River. Her current program focuses on water quality, fisheries, macroinvertebrates, and aquatic habitats in all three river systems. Flippin holds a BS in Biology from West Virginia University and an MS in Environmental and Molecular Toxicology from North Carolina State University.

Jodi French-Burr

Jodi French-Burr is a life-long explorer of nature. She has a special passion for the forests of the central Appalachian Mountains, especially wildflowers and birds. Jodi has a Recreation and Wildlife degree from Ohio's Hocking Technical College, where she specialized in Interpretation. Her career as an Interpretive Park Ranger with the National Park Service (NPS) began in 1987, where she still uses her skills as an educator, storyteller, naturalist, and historian to help others explore our nation's rich heritage. French-Burr currently works at New River Gorge National Park and Preserve in West Virginia, the park where she has spent most of her NPS career. Jodi is a Leave No Trace Outdoor Ethics Master Instructor and a member of the WV MN - New River Gorge chapter. French-Burr's love of nature often inspires her photography and the creation of visual arts. Jodi lives with her family in Fayette County, West Virginia.

Dr. Zach Fowler

Zach Fowler lives in Morgantown, WV, and works for West Virginia University as WVU Core Arboretum Director and Service Associate Professor in WVU Department of Biology. He spends much of his time helping connect people to nature at the Arboretum, maintaining the Arboretum, or teaching at WVU. He also likes to spend time with his family, bike, ski, go on adventures, and look at plants, birds, mushrooms, etc. He grew up near Middlebourne, WV, in Tyler County. Zach went to West Virginia Wesleyan College for a B.S in Biology and Physics and then to WVU for a Ph.D. in Biology (forest ecology and biogeochemistry). Between college and graduate school, he lived for a few years in Oakland, MD, and served as an AmeriCorps volunteer at Garrett County Cooperative Extension Office and the Western Maryland 4-H Center. Zach feels very lucky to have been able to stay in WV and pursue an education and career studying nature and sharing knowledge with others.



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Emily Grafton

Emily Grafton earned a bachelor's of science degree in Botany from Marshall University and Master's degree in Special Education from WVU. She worked as a seasonal naturalist at Babcock State Park in 1976 and 1977. Her first environmental science related job was working for the "Soil Conservation Service" (now Natural Resources Conservation Service). For three years, she walked miles of woods, fields, strip mines and farmlands across Pleasants, Tyler, Wirt and Preston Counties assessing the status of the natural resources at specified data points. In these forays, she acquired a deeper love and knowledge of plants and birds. Emily continued to learn more about the natural world of WV spending years with the Brooks Bird Club Forays, Blackwater Falls Wildflower pilgrimage, working for WVDNR, and years of observations of the trails of Babcock State Park from which she published an interpretive field guide, (*Through the Mill Door*) and a subsequent study of Blackwater Falls State Park from which she published an interpretive guide.

Becky Linger

Rebecca Linger is the chapter coordinator for the Kanawha Valley Master Naturalists and is currently the president of the WVMN. She is a Professor of Medicinal Chemistry at the University of Charleston School of Pharmacy and gives talks throughout West Virginia on medicinal and wild edible plants. She has written a book on the toxicology of medicinal plants that is available for purchase here at the conference.

Doug Manning

Doug Manning is the Biologist for New River Gorge National Park and Preserve. He holds a BS and MS from Penn State in Forest Science and Ecology, respectively. His work focuses on managing the Forest Health Program for New River Gorge and working to protect and restore vegetation public lands. Prior to joining New River Gorge NPP, Doug worked as an Ecologist for the Monongahela National Forest and the Botanist for the NPS Eastern Rivers and Mountains Inventory and Monitoring program.

Sean Means and Amy McLaughlin

Shawn Means & Amy McLaughlin are mushroom enthusiasts and West Virginia Master Naturalists. They have presented this class for the Kanawha Valley, Mid-Ohio Valley, New River Gorge and Canaan Valley Master Naturalists chapters several times over the past three years. The couple lives in Charleston, but operates a vacation rental business in Fayetteville so they spend a great deal of time in the New River Gorge.

Sarah Olivera

Sarah Olivera graduated from the University of Texas at Austin in May 2022 with a B.S. in Astronomy and a B.S. in Physics and has worked at the Green Bank Observatory located in rural West Virginia since June of 2022 in the Education and Public Outreach Department as an Educator. Sarah works with groups ages 5th grade and up in the Radio Astronomer for a Day program teaching students to operate the 40 foot and 20 m radio telescopes to take HI and continuum data of the Milky Way and extragalactic sources and analyze it. She also gives StarLab constellation tours, assists with monthly star parties that include viewing through optical telescopes, and hosts scout merit badge weekends for BSA and Girl Scout Groups to receive their badges in Astronomy and Electronics.



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Dr. Thomas Pauley

Thomas Pauley received his BS. in biology from Morris Harvey College (aka University of Charleston) in 1962, his MS degree from Marshall University in 1966, and his PhD from West Virginia University in 1977. He taught school for 51 years with 47 of those years in higher education. He was a professor at Salem College from 1966 to 1981, the University of Pittsburgh at Bradford from 1981 to 1987, and at Marshall University from 1987 to 2013. During these years he also taught herpetology at West Virginia University's Biological Station at Terra Alta, West Virginia in the summers of 1974, 1975, and 1976, and at the University of Pittsburgh's Pymatuning Laboratory of Ecology in the summers of 1986 and 1987. While at Marshall he mentored over 90 graduate students in herpetology. While at Marshall University, he taught herpetology, ornithology, Conservation Biology, and Natural History of the Central Appalachians.

Currently, he is a professor emeritus in biology at Marshall University. He has studied amphibians and reptiles in West Virginia for over 50 years and recently published a monograph summarizing his 40 years of work with the Cheat Mountain Salamander. He has authored or coauthored over 80 papers, 190 abstracts, and several books or book chapters. He retired from teaching at Marshall University in 2013. Since then, he has been writing, along with nearly 50 of his former graduate students, the 2nd edition of the amphibians and reptiles in West Virginia. He also has a book contract with the Ohio University Press to write about his experiences with amphibians and reptiles in the Central Appalachians.

In 2015, a species of crayfish, Meadow River Mudbug (*Cambarus pauleyi*), was named in his honor by Drs. Zac Loughman, Roger Thoma, James Fetzner, Jr., and G. Whitney Stocker; in 2019 a species of salamander, Yellow-spotted Woodland Salamander (*Plethodon pauleyi*), was named in his honor by Drs. Zach Felix, Jessica Wooten, Todd Pierson, and Carlos Camp; in 2018 he received a Lifetime Achievement Award for contributions in herpetology from the United States Fish and Wildlife Service, United States Forest Service, and West Virginia Division of Natural Resources (the only time all three agencies collectively honored a single individual). In 2021, NEPARC (Northeast Partners in Amphibian and Reptile Conservation) presented him with an award for Excellence in Herpetofaunal Conservation; In 2022, a new trail at Kanawha State Forest was named T.K. Pauley Amphibian Loop in his honor and he was also featured in the September issue of *Wonderful West Virginia*, "Herpetologist with High Honors."

Jim Phillips

Jim Phillips retired after 30 years as a park naturalist at Pipestem Resort State Park in Pipestem, WV. He serves as adjunct instructor for nature study class at Concord University in Athens, WV. Taught 7th and 10th grade life science classes at Clear Fork High School in Colcord, WV. Has conducted Audubon Christmas Bird Bounds and Century Day Spring Bird Counts for 50+ years. Conducted Breeding Bird Surveys for U.S. Fish & Wildlife Service for 20+ years. Conducted Point Count Bird Surveys for National Park Service and WV Dept. of Natural Resources. Served on WV Bird Records committee. Served 20 years as "Field Notes" editor for the Brooks Bird Club journal *The Redstart*. Graduated in 1980 with B.S. in Biology & General Science in Education from Concord College (now Concord University).



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Elizabeth Rhenberg

Elizabeth Rhenberg works for the WV Geological and Economic Survey. She earned her B.S. at The University of Tennessee, Martin; her Masters at Kent State University; and her PhD at West Virginia University. She is a paleontologist by trade with a focus on crinoids. She works with the WVGES's little museum and is currently working on a mapping project in Moundsville.

Keith Richardson

Keith Richardson is a Naturalist for the WV State Parks at Hawks Nest State Park, a coordinator for the New River Birding and Nature Festival, and a federally permitted bird bander and field ornithologist.

Chance Russo

Chance Raso is a native of Beckley, West Virginia and developed his love for forests and being outside by spending time exploring the New River Gorge. He obtained a bachelor's degree in Geography at Concord University in Athens, West Virginia in 2015 where he assisted his professor on research projects in the field of Dendrochronology, or the science of tree ring dating. Chance helped in the field and lab with numerous projects on analyzing the impact that past climatic changes had on forest dynamics as well as constructing fire histories using tree rings within the New River Gorge, greater Appalachia, and in Acadia National Park, Maine. Chance continued this research in graduate studies at Virginia Tech where he co-authored a paper on the impacts European settlers had on white oak forest dynamics in Virginia throughout the 1700s. Chance began working as a Forest Health Intern with the National Park Service in 2018 where he assisted with invasive species treatments and amphibian research throughout the New River Gorge. Chance has since been an Interpretation Ranger at New River Gorge National Park & Preserve for multiple seasons, where he connects people to the outdoors through guided hikes and programs. He has recently worked with his original professor from Concord University again to conduct a research study dating trees in a previously undocumented old growth forest within the New River Gorge.

Brian Schroeder

With more than 30 years in the photography field, Brian has taught public and private photography classes throughout Harrison and Wood Counties, medical photography at Salem University, and others. Brian is a Nikon Advanced graduate and has completed Leica Master of Photography Programs and training in Photoshop Restoration.



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INSTRUCTOR BIOS

Paul Shaw

Paul Shaw is a lifelong student of the fine arts and natural history. A painter and illustrator of all things nature, from the West Virginia landscape to birds and butterflies, Paul has dedicated his life to introducing the avian world to anyone with a willingness to observe. In the past 40 years he has been a guide leading trips on whitewater as well as leading bird and flower walks by land. Being a co-founder of the New River Birding and Nature Festival in Fayette County WV has been a driving force of his zeal for turning a passive nature lover into a full blown fanatic. In 2007 Paul hooked the biggest large-mouth bass in West Virginia, but it got away.

Rosanna Springston

Rosanna Springston works for the USDA Forest Service at the Gauley Ranger District on the Monongahela NF. Where she has conducted tours of the Cranberry Glades Botanical Area for the last 15 years. She has a passion for wildflowers and nature/landscape photography and is determined to hunt down and photograph every rare and threatened plant species in WV.

Brian Streets

Brian Streets is the West Virginia Division of Natural Resources Natural Heritage Program Associate Vegetation Ecologist and Data Manager. He is a native West Virginian with a BS in Biology from Fairmont State University and graduate courses from WVU. He has worked as a field ecologist and botanist throughout WV over the last 30 years.

Three Rivers Avian Center

Three Rivers Avian Center (“TRAC”) is a private, nonprofit organization dedicated to wild bird conservation and to educating and involving the public in ecosystem stewardship. Founded in 1990, TRAC’s 100 acre facility is located in the southern region of the New River Gorge National Park and Preserve. TRAC focuses on veterinary and rehabilitative care for native nongame wild birds, environmental education outreach and research and conservation projects. TRAC has received awards from the WV Division of Natural Resources, the New River Gorge National Park and Preserve, the Boy Scouts of America, the Huntington-Tri-State Audubon Society, and an Innovation Grant from the World Wildlife Fund. Co-founders Wendy and Ron Perrone have both received Distinguished Mountaineer awards for their work. For more information, visit www.tracwv.org or the Three Rivers Avian Center’s Facebook page.

Participating staff include:

- Wendy Perrone: Executive Director and co-founder
- Ron Perrone: Education Director and co-founder
- Alisha Segars: Rehabilitation and Research Technician
- Caleb Keneipp: Mews Technician



2023 WEST VIRGINIA MASTER NATURALIST CONFERENCE

INSTRUCTOR BIOS

Mike Vernon

Mike Vernon is currently a Professor Emeritus in the Department of Obstetrics/Gynecology at West Virginia University (WVU). At WVU, he served as Chair of the Ob/Gyn Department and the Director of their In Vitro Fertilization (IVF) Lab. In his retirement, he has been actively engaged in the West Virginia Master Naturalist (MN) Program. He is the Director/Coordinator of the Monongahela Chapter in Northern WV and he is the Vice President of the State MN program. His area of expertise is in Ichthyology (fish). Mike received a BS degree from the University of Kentucky in Zoology, a MS degree from Eastern Kentucky University in Biology and a PhD from the University of Florida in Reproductive Physiology. For his post-doctoral training he went to the prestigious Wisconsin Primate Research Center at the University of Wisconsin where he was part of the WPRC team that had the first successful IVF in the Rhesus monkey. Prior to his tenure at WVU, he was on the faculty and had leadership roles at the University of Kentucky and LSU. Dr. Vernon received the Service Milestone Award from the American Society of Reproductive Medicine and the Lifetime Achievement Award from the Society of Reproductive Biology & Technology in recognition of his scientific, administrative and leadership contributions to Reproductive Technologies.

Allen Waldron

Allen Waldron is retired from the WV State Forestry Division, a field ornithologist and federally permitted master bird bander. As a lifelong birder and naturalist, Allen conducts Point counts for the National Park and guides each year at the New River Birding and Nature Festival. Allen and Mindy Waldron jointly oversee and organize the efforts of the M.A.P.S. stations at Sandstone Falls and the New River Bird Observatory with the help of Keith Richardson, and Bob Dameron.

Mindy Waldron

Mindy Waldron is retired from the WV Education system and is an outstanding birder and naturalist who enjoys the natural world. Mindy is also a federally permitted bird bander and field ornithologist. Mindy and Allen Waldron jointly oversee and organize the efforts of the M.A.P.S. stations at Sandstone Falls and the New River Bird Observatory with the help of Keith Richardson, and Bob Dameron.

Bryan Wender

Bryan Wender has led the Natural Resource Management Program at New River Gorge National Park and Preserve since April 2019. He previously worked in vegetation ecology, forestry, and natural resource stewardship positions at the Bureau of Land Management in Oregon, Mesa Verde National Park, the Virginia Natural Heritage Program, Big South Fork National River and Recreation Area, and the U.S. Forest Service - Pacific Northwest Research Station. He graduated from Virginia Tech in 2000 with a M.S. in Forestry.



LODGING

Conference members are guaranteed a rate of \$159 plus taxes and resort fee (approximately \$200 a night) for the rooms listed below. While rooms at the Inn are located at the Conference Center, all other lodging options will involve a walk (or a free shuttle ride) to the conference center.

You can request a “room at the Inn” or in the Chestnut Hill Cabins or the Manor Houses. A full list of accommodations options are listed below. Photos, resort amenities, and facility map are available at www.gladesprings.com.

The above room rate will only be available until June 26, 2023 or until all 75 rooms have been reserved. Rates will dramatically increase at Glade Springs following that date.

Possible accommodations include:

- Queen room at the Inn (Conference Center)
- King room at the Inn (Conference Center)
- Manor House Cottages single floor – One Bedroom that has 2 queen size beds, microwave, refrigerator, media hub and large vanity. Check website to see where rooms are located. No access to common area in the Manor House. (sleeps 4) (one Manor House shown in photo 4)
- Manor House full cottage with one bedroom with 2 queen sized beds and 2 sleeper sofas and 800+ square feet of additional space including living room, dining room, kitchen and fireplace. (sleeps 8) (one Manor House shown in photo 4)
- Manor house with 2 bedrooms each with 2 queen beds and sofa beds and kitchen and fireplace. (One Manor Houses is pictured in photo 4 above)
- Chestnut Hill Cabins, 4 and 6 bedrooms (2 of the Chestnut Hill Cabins are pictured in photos 2 and 3 above)

Alternative Area Lodging

- The Sleep Inn
- The Cabins at Pine Haven
- Little Beaver State Park (Cabins and Camping)