

**Virginia Master Naturalist Program
Statewide Conference and Volunteer Training
September 20-22, 2019**

Massanetta Springs Camp & Conference Center; Harrisonburg, VA

**Printable List of Sessions and Agenda Items
for Saturday Only Conference Registrants**

(This schedule is subject to change.)

Saturday, September 21

Breakfast (optional, additional fees apply)

Saturday Morning Breakfast

Date/Time: Saturday, September 21, 7:30 AM - 8:30 AM

Location: Massanetta Springs

Price: \$10. Pre-registration required; you will not be able to purchase breakfast on-site.

President's Breakfast

Date/time: Saturday, September 21, 7:30 AM – 8:30 AM

Location: Massanetta Springs

Price: Free for invited Chapter Presidents or their designees.

Saturday Morning Onsite Long Sessions (9:00 am – 12:00 pm)

Black Bears of Virginia

Date/Time: Saturday, September 21 9:00 AM - 12:00 PM

Location: Massanetta Springs

Description: Black bear natural history, population changes, common myths and management of human-bear conflicts will be discussed. Some hands-on exercises along with a lecture.

Instructor(s): *David Kocka is a District Wildlife Biologist with 30 years of experience dealing with human-bear conflicts. He has over 30 professional and/or popular publications including a book in 2017 entitled "Bear with Me, My Deer: Tails of a Virginia Wildlife Biologist".*

Michael Pelton is a Professor Emeritus, Wildlife Science, The University of Tennessee. From 1968 until 2008 Mike and his graduate students conducted research on the biology and ecology of black bears on 16 study areas in the Appalachians and Southeastern Coastal Plain. Other studies included research on several other mammals including raccoons, European wild hogs, river otter, coyotes, woodchucks, skunks and white-tailed deer. Mike and his wife Tamra currently reside on their mountain farm in Augusta County, VA.



American Woodcock Biology and Migration Study

Date/Time: Saturday, September 21 9:00 AM - 12:00 PM

Location: Massanetta Springs (inside and out)

Description: This session will inform the participants about American Woodcock biology and management and current research. Participants will: view a well-done video on the life history of woodcock; learn how to sex and age woodcock using woodcock wing aging techniques; have hands on experience with techniques for capturing woodcock, such as mist nets, night lighting equipment, clover traps (in fields surrounding Massanetta Springs); and, will be introduced to the current American Woodcock Migration Study that the VA Dept. of Game and Inland Fisheries is participating in, along with many Atlantic Coast states. Volunteers will be shown the latest in GPS transmitters and the data these units are providing to help Biologists understand migration patterns, habitat use and timing of woodcock migrations. Volunteers will have an opportunity to assist DGIF with this study by volunteering to locate birds in their local areas and help with capturing woodcock and installing the GPS transmitters.

Instructor(s): *Al Bourgeois is a retired DGIF Biologist who has worked over 42 years in the wildlife management field. He worked 30 years for DGIF and has had a lifelong passion for woodcock. He did his MS degree work with woodcock in Michigan and has continued working with these birds in Virginia. He has a BS Degree from the University of Maine and a MS Degree from Michigan State University.*

Saturday Morning Onsite Short Session 1 (9:00 AM – 10:30 AM)

What Water Temperatures Tell Us About the Quality of Aquatic Habitats

Date/Time: Saturday, September 21 9:00 AM - 10:30 AM

Location: Massanetta Springs (inside and out)

Description: The most common measurement of water quality in streams, rivers, lakes, and other bodies of water is temperature. In this session, you will learn what water temperature tells us about these aquatic habitats, how monitoring devices – way beyond the simple thermometer – collect temperatures, and where to find more information about the water quality of streams near you. The session includes a hands-on activity using programmable sensors deployed into a nearby water as an example of how the technology works and how temperature data can be collected and analyzed.

Instructor(s): *Dr. Thomas Benzing is a professor at James Madison University in the School of Integrated Sciences. His research and teaching interests are in water quality with a particular affection for trout streams.*

Soil Carbon, Nutrient Trading, and E. coli

Date/Time: Saturday, September 21 9:00 AM - 10:30 AM

Location: Massanetta Springs



Description: In this session, participants will learn about three topics that all relate to water quality and its relationship with land use. Study the role of carbon farming in our quest to sequester carbon from the atmosphere and its relation to emerging carbon markets. Learn how Virginia's nutrient trading program for phosphorus, in place since 2005, works. And, find out what exactly is E. coli, and how we can reduce its presence in our waterways!

Instructor(s): Robert "Bobby" Whitescarver is a farmer, award-winning writer, science educator, and watershed restoration consultant. He received James Madison University's provost award for Excellence in Teaching in 2018.

Saturday Morning Onsite Short Session 2 (10:45 AM – 12:15 PM)

Climate Activators

Date/Time: Saturday, September 21 10:45 AM - 12:15 PM

Location: Massanetta Springs (inside and in parking lot)

Description: Bring your curiosity and optimism as our local Climate Activators present creative and effective climate action solutions through A Little Climate Music, forest carbon storage – "How history has shaped our forests, and why they should be allowed to grow old with dignity.", electric vehicle show in the parking lot, and solar-powered homes tour. These folks are Activating, and they will answer your practical questions.

Instructor(s): Doug Hendren, (MusicalScalpel.com)– Doug Hendren is an orthopedic surgeon turned climate troubadour. Doug grew up and was educated in the Boston area (Harvard BA 1973), working as an inventor's assistant before medical school (Case Western Reserve, MD 1982), and orthopedic residency (Harvard, 1988). He replaced hips and knees in Eureka, California and Harrisonburg, Virginia until hanging up his scalpel in 2010.

Chris Bolgiano, (chrisbolgiano.com) Chris Bolgiano, mildly amusing nature writer, has written or edited six books, several of which have won literary prizes. She has also written innumerable nature and travel articles for *The New York Times*, *Washington Post*, *American Forests*, *Sierra*, *Audubon*, and many other publications. As Faculty Emerita at James at Madison University, she has access to an overwhelming world of research and is, in fact, usually overwhelmed.

BTW, both Doug and Chris live in homes powered by the sun.

Collective Action Can Win the War Against Invasive Plants

Date/Time: Saturday, September 21 10:45 AM - 12:15 PM

Location: Massanetta Springs

Description: Forming more Cooperative Weed Management Areas across the state of Virginia is one big key to making progress against the tsunami of invasive plants. Learn how the Blue Ridge PRISM was formed, what it has accomplished, what it takes to start similar organizations and the huge benefits of multiple PRISMs working together to help each other and to make a difference across the entire state. The Blue Ridge PRISM will



provide support to individuals and groups interested in making a difference beyond their own back yards.

Instructor(s): *Rod and Maggie Walker are two of the founders of the Blue Ridge PRISM, the first Cooperative Weed Management Area (CWMA) to be formed in Virginia. They are landowners in western Albemarle County who decided to move beyond their own property and help other landowners battle invasive plants.*

Wild Foods 4 Wildlife

Date/Time: Saturday, September 21 10:45 AM - 12:15 PM

Location: Massanetta Springs

Description: Come learn about the wild plant foods that animals eat and specifically about how volunteers can become a forager “Meals on Wheels” to a wildlife rehabilitator in your home region. We will do some hands-on plant identification and small group discussion and, as time allows, we’ll head outdoors to see what is in nature’s pantry or possibly do a quick seed cleaning demo.

Instructor(s): *Kate currently is the Watershed Administrator for the Friends of the Middle River, and a former employee of 5 years for the Wildlife Center of Virginia—a hospital for native Virginia wildlife. She is a bit of a forager freak and she created a website database of the wild plant foods that wild mammals, birds and reptiles eat: wildfoods4wildlife.com.*

Saturday Morning Off-site Field Sessions (various times, check session listing)

Please note the following details regarding these off-site sessions:

- These sessions have varying starting and ending times. Pay careful attention to the times for your session.
- Start and end times for off-site sessions include the travel time from and back to Massanetta Springs.
- Some of these sessions begin with a classroom portion at Massanetta Springs, and then have a field portion. These aspects are indicated in the descriptions.
- Some sessions will have vans or buses providing the transportation, but we are not able to provide vans for all field sessions. Please assume that you will need to carpool in participants’ vehicles unless otherwise indicated. We will ask for carpool driver sign-ups before the conference.
- Travel times and distances listed in parentheses are one-way, unless otherwise indicated.

Carrier Arboretum

Date/Time: Saturday, September 21 9:00 AM - 12:15 PM

Location: Edith J. Carrier Arboretum (5 miles/15 minutes)

Description: The Edith J. Carrier Arboretum, a 125-acre woodland sanctuary on the James Madison University campus, is a public urban garden and forested greenspace that preserves native plant species, provides opportunities for research, and promotes knowledge of the botanical and natural world for people of all ages. There are between



three and four miles of interconnecting trails through the arboretum, and a magical children's area. In this session, participants will learn about how riparian planting projects have been designed and used to improve ponds and wetlands at the site. They'll also learn how Virginia Master Naturalists volunteer as Arboretum trail scouts.

Logistical notes: Wear your walking shoes, and dress for the weather. There are restrooms and water available at the Arboretum.

Instructor(s): *David Forrer and Burt Blessing are Virginia Master Naturalist volunteers in the Headwaters Chapter.*

Birding Basics

Date/Time: Saturday, September 21 8:00 AM - 11:30 AM

Location: Massanetta Springs and Lake Shenandoah (2 miles/5 minutes)

Description: Are you just starting to get into birds, and you wish you knew how to identify them? Or, perhaps you want to volunteer for a project that requires bird identification skills, but you don't yet know how to do that? If so, this is the class for you! This workshop will introduce you to birding and will cover all of the basics of how to identify birds, tips for finding birds, the materials and equipment you need to get started, and citizen-science/volunteer project applications. The workshop will begin with classroom instruction at the conference center (1.25 hours), then we will drive (10 minutes) to Lake Shenandoah for an outdoor field session to practice your new birding skills. We will be walking on trails (1.5 – 1.75 hours), so come dressed for the outdoors and in comfortable walking shoes. A limited supply of binoculars will be available for loan during the class, but if you have your own, please bring them. This class is recommended for new birders.

Logistical notes: Note the early 8:00 am start time in the Massanetta Springs classroom.

Instructor(s): *Jessica Ruthenberg has been the Watchable Wildlife Biologist for Virginia Department of Game & Inland Fisheries for over 5 years. She has a Master of Science in Natural Resources and Environment from University of Michigan where she specialized in Conservation Biology and Environmental Behavior, Education, and Communication.*

Purcell Park: Stream and Habitat Restoration

Date/Time: Saturday, September 21 9:00 am - 10:30 am

Location: Purcell Park (6 miles/15 minutes)

Description: This session will cover the restoration efforts that have taken place in Purcell Park throughout the years, centered around a stream restoration that was completed in 2009. The project restored about 3,500 linear feet of stream to a more natural state, bringing back a meander with riffles and pools for instream habitat. As part of the project, 17 acres of stream buffer was planted with trees and shrubs and placed into a conservation easement for permanent protection. Other restoration efforts that have taken place in Purcell Park include the installation of bubblers and management of invasive goldfish in Purcell Park Lake, management for Emerald Ash Borer, and a planned woodchip bioreactor project to remove excess nitrogen from the stream. The session will include a walking tour around Purcell Park to discuss these restoration efforts.



Logistical notes: Please wear comfortable shoes and weather appropriate clothing - the session will include walking in grass and graveled trails. Note that this session ends at 10:30 AM.

Instructor(s): *Rebecca Stimson is the Stormwater Compliance Specialist at the City of Harrisonburg Public Works Department. Rebecca is involved with management of water quality in the city as well as other environmental and sustainability initiatives.*

Growing trees for the future: Virginia Department of Forestry Seedling Nursery (Augusta Forestry Center)

Date/Time: Saturday, September 21 9:00 AM - 12:15 PM

Location: Augusta Forestry Center (19 miles/30 minutes)

Description: This session will be a tour of the Hardwood/mixed conifer nursery. Every aspect of the nursery will be described on how we sow seeds, manage the seedlings and harvest the crop. Please bring boots to walk in seedling fields. The walk is short and not more than a ½ of mile.

Logistical notes: Bring boots, water, and sunblock.

Instructor(s): *Joshua McLaughlin (Assistant Forestry Center Manager) graduated from Virginia Tech with Bachelor's in Wildlife Biology and minors in Forestry and General Biology. Josh has been at the nursery for 15 years and grew up right across the river from the facility.*

Shenandoah National Park Habitats

Date/Time: Saturday, September 21 9:00 AM - 12:00 PM

Location: Shenandoah National Park (South River Picnic Grounds) (24 miles/35 minutes)

Logistical notes: Pit toilets are available at the picnic grounds. Bring day back pack with water.

Description: Views of the Shenandoah River Valley and Alleghany Mountains, with one hour easy circle walk along the Appalachian Trail, viewing wild flowers and insects in different habitats below South River Picnic Grounds of Shenandoah National Park.

Instructor(s): *Andy and Frances Sale are ten-year Master Naturalists with love of Appalachian wildflowers, with over five years of seasonal observations on this particular circular trail.*

Saturday Lunch

Lunch

Date/time: Saturday, September 21, 12:15 PM – 1:15 PM

Location: Massanetta Springs

Saturday Afternoon Onsite Long Sessions (1:30 PM – 4:30 PM)

Freshwater Fishes of Virginia Field Guide



Date/Time: Saturday, September 21 1:30 PM - 4:30 PM

Location: Massanetta Springs (inside and out)

Description: Participants will be indoors for an hour-long lecture based on Freshwater Fishes of Virginia Field Guide, which will cover fisheries management, anatomy, ecology, distribution, fish watching/collecting, and a detailed review of all 25 families. The remaining session will take place outside in the area around Massanetta Springs. Participants will learn the features of a spring creek, practice fish watching, seine for fish in the stream, identify their catch, and possibly sample Lake Campbell. Students will come away with a deeper appreciation of freshwater fish found in the Commonwealth.

Logistical notes: Participants should plan on one hour of indoor instruction and two hours outdoors. Bring river shoes, sunglasses, hat, and shorts or pants that can get wet.

Instructor(s): *Paul E. Bugas, Jr. is a Fisheries Manager with the Virginia Department of Game and Inland Fisheries (VDGIF) based in Verona. He graduated from Virginia Tech in 1975 with a Bachelor's of Science Degree in Forestry and Wildlife (Fisheries Option), immediately starting his career with VDGIF. He currently oversees fish stock assessments, habitat improvement, fish stocking, environmental impacts, fish health, and water quality projects in 29 counties. Bugas has received awards from the American Fisheries Society, Garden Club of Virginia, Trout Unlimited, the Izaak Walton League of America, and others for his outreach efforts in aquatic education. In 1990, Paul organized the Virginia Chapter of the American Fisheries Society and served as its first president. He also served as the chapter advisor for the Headwaters Chapter of the VMN program for many years.*

Corbin Hilling is a Virginia Se Grant Graduate Research Fellow and PhD student at Virginia Tech. Corbin completed degrees in biology (BS) and wildlife and fisheries resources (MS) at West Virginia University. He is an award-winning instructor in the Virginia Tech Department of Fish and Wildlife Conservation, where he teaches students to identify Virginia fishes. Corbin has published several scientific articles on fishes and their biology during his young career. Further, he is active in public outreach and engagement to spread awareness of fishes and their conservation. Corbin enjoys fishing during his free time for both freshwater and marine fishes.

Saturday Afternoon Onsite Short Session 1 (1:30 PM – 3:00 PM)

Owl Wisdom

Date/Time: Saturday, September 21 1:30 PM - 3:00 PM

Location: Massanetta Springs

Description: This session has two parts, with interactive questions at the end. First, Dr. John Spahr will share the results of the past 6 years of his field work with Eastern Screech Owls in Highland County. The most common and wide-spread owl in Virginia, Eastern Screech Owls live close to us, but are more often heard than seen. Slightly smaller than the American robin, this handsome owl feeds on prey as small as crickets and as large as squirrels and pigeons.

Part two of the session will feature Dr. Clair Mellinger, who, along with co-researcher Charles Ziegenfus, has banded about 2,000 Northern Saw-whet owls since 2001



with Project OwlNet, studying their migration and wintering habits. Saw-whet owls are Virginia's tiniest owls, weighing less than 3 ounces, but are ferocious hunters with a rasping metallic call that gives them their name.

Not only do these two renowned researchers join forces to bring you in-depth information on two species of owls, their lifelong observations and research demonstrate the wisdom and staying power we are all seeking as naturalists. Come be inspired!

Instructor(s): Penny Warren, VMN volunteer, will moderate this joint session.

After a 30 year medical career, John Spahr, MD, of Stanton, turned his attention completely to birds – doing a 90,000 mile 700 species birding “big year” to mark his retirement. He has served as president of the Virginia Society of Ornithology, which recently published one of his owl studies in its scientific journal, The Raven. He is a regional reviewer for eBird and serves as regional coordinator for Virginia’s second Breeding Bird Atlas program.

Dr. Clair Mellinger, of Harrisonburg, taught biology at Eastern Mennonite University for over 35 years. He earned his PhD. at UNC at Chapel Hill. Dr. Mellinger has served as President for the Virginia Society of Ornithology, and Rockingham Bird Club, and is the author of the “Birds of Rockingham County”. He ran two USFWS Breeding Bird Survey routes for over twenty years and also numerous breeding birds surveys for the George Washington Forest.

Yes We Can! Controlling Invasive Plants from Suburban Parks to Rural Landscapes

Date/time: Saturday, September 21 1:30 PM - 3:00 PM

Location: Massanetta Springs

Description: Whether it's stiltgrass glades in the understory, honeysuckle or bittersweet strangling shrubs and trees on a forest edge, lesser celandine carpeting a floodplain, or kudzu shrouds along streambanks, battling invasive plants can be a daunting challenge. But there's hope, and we CAN make a difference! Armed with some knowledge, teamwork, resources, wise strategies, and stamina, it is possible to eliminate these beasts or reduce them to a level of discretionary weeding, at a variety of scales. Come hear some stories, of projects complete, and works in progress, outright victories, and teeterings on the brink. Just remember: It's Always a Good Day for a Bad Plant to Die!!

Instructor(s): Jim Hurley is a leader with the Blue Ridge PRISM, and formerly an organization development consultant working with national environmental nonprofits. He has been doing, organizing and leading invasive plant control projects since 2002, beginning in northern Virginia, continuing on his 156-acre property at the base of the Blue Ridge in Greene County, and regionally in central Virginia.

Chronic Wasting Disease in Virginia's White-tailed Deer

Date/time: Saturday, September 21 1:30 PM - 3:00 PM

Location: Massanetta Springs (inside and out)

Description: Chronic Wasting Disease is an on-going concern for Virginia's deer population. CWD has the potential to cause long-term, possibly irreversible, population impacts and DGIF is working hard to monitor and manage it. In Part 1 of this session, we



will provide an introduction to CWD: what is CWD, history of the disease, Virginia's situation, potential deer population impacts, latest CWD research, what actions DGIF is taking, and volunteer opportunities. In Part 2, we will do a CWD sample collection demonstration using decapitated deer heads. We will go outside for this part of the session. There will be a hands-on option for anyone who wants to try collecting tissue samples. Those who are considering volunteering with DGIF in the future with CWD efforts are encouraged to have a try. Wear clothes that you won't mind if they get a bit bloodstained. Aprons, gloves, and all tools and disinfectants will be provided. There will be blood, and given the time of year some foul smells, but guts and gore will be minimal these are the heads only.

Logistical notes: Participants who wish to stay for Part 2, and would like to try collecting samples, rather than just observing, will need to wear clothes they don't mind getting some blood on, just in case.

Instructor(s): *Chelsey Faller is the Wildlife Disease Biologist with the Virginia Department of Game and Inland Fisheries.*

A Soft Spot for Spotted Skunks: What We've Learning about Virginia's Little Stinkers

Date/time: Saturday, September 21 1:30 PM - 3:00 PM

Location: Massanetta Springs

Description: In this session I will introduce you to the eastern spotted skunk, a small and elusive (and stinky) small carnivore. We will explore spotted skunk ecology and the differences between this species and its larger, striped cousins. I will also discuss current conservation issues involving the spotted skunk and the research I have been conducting over the last years at Virginia Tech. I will also provide updates about the ongoing VMN Eastern Spotted Skunk Survey, how past volunteers have contributed to our research, and how interested folks can get involved. There will also be several examples of game cameras and tracking and trapping equipment to view and handle.

Instructor(s): *Emily Thorne is a PhD Candidate in the Department of Fish and Wildlife Conservation and Virginia Tech. She has been conducting research on the rare and elusive eastern spotted skunk since December 2014 and has organized a Virginia-wide citizen science based spotted skunk camera survey with the help of many dedicated VMN volunteers.*

Saturday Afternoon Onsite Short Session 2 (3:15 PM – 4:45 PM)

A Soft Spot for Spotted Skunks: What We've Learning about Virginia's Little Stinkers (REPEAT)

Date/time: Saturday, September 21 3:15 PM – 4:45 PM

Location: Massanetta Springs

Logistical notes: none

Description: In this session I will introduce you to the eastern spotted skunk, a small and elusive (and stinky) small carnivore. We will explore spotted skunk ecology and the differences between this species and its larger, striped cousins. I will also discuss current



conservation issues involving the spotted skunk and the research I have been conducting over the last years at Virginia Tech. I will also provide updates about the ongoing VMN Eastern Spotted Skunk Survey, how past volunteers have contributed to our research, and how interested folks can get involved. There will also be several examples of game cameras and tracking and trapping equipment to view and handle.

Instructor(s): *Emily Thorne is a PhD Candidate in the Department of Fish and Wildlife Conservation and Virginia Tech. She has been conducting research on the rare and elusive eastern spotted skunk since December 2014 and has organized a Virginia-wide citizen science based spotted skunk camera survey with the help of many dedicated VMN volunteers.*

Wild Foods 4 Wildlife (REPEAT)

Date/Time: Saturday, September 21 3:15 PM – 4:45 PM

Location: Massanetta Springs

Description: Come learn about the wild plant foods that animals eat and specifically about how volunteers can become a forager “Meals on Wheels” to a wildlife rehabilitator in your home region. We will do some hands-on plant identification and small group discussion and as time allows we’ll head outdoors to see what is in nature’s pantry or possibly do a quick seed cleaning demo.

Instructor(s): *Kate currently is the Watershed Administrator for the Friends of the Middle River, and a former employee of 5 years for the Wildlife Center of Virginia—a hospital for native Virginia wildlife. She is a bit of a forager freak and she created a website database of the wild plant foods that wild mammals, birds and reptiles eat: wildfoods4wildlife.com.*

Shenandoah Mountain National Scenic Area

Date/time: Saturday, September 21 3:15 PM - 4:45 PM

Location: Massanetta Springs

Description: Learn what’s special about the proposed 90,000-acre Shenandoah Mountain National Scenic Area and the diverse flora and fauna found there. This large tract of mostly unfragmented forest supports 250 species of birds, healthy population of native brook trout, black bear, and two species of salamanders found nowhere else. The Shenandoah Mountain proposal, located in the George Washington National Forest, encompasses five roadless areas, one of which is the largest east of the Mississippi River. The proposal includes headwaters of both the Potomac and James Rivers and provides drinking water for Harrisonburg, Staunton, and many towns and communities downstream. It has long been a recreational destination with 150 miles of trails, popular trout streams, lakes, campgrounds, picnic areas, and some of the most outstanding scenery in Virginia. The proposal, which was developed through collaboration with diverse forest interest groups, including wilderness advocates, mountain bikers, hunters, fishermen, game managers, and timber producers, has been endorsed by over 400 businesses and organizations. Friends of Shenandoah Mountain has been educating the public and building support for the proposal for 15 years and is now reaching out to local governments to gain their support, bringing the proposal a step closer to federal legislation.

Instructor(s): Lynn Cameron, Co-Chair of Friends of Shenandoah Mountain, lives in Rockingham County with her husband Malcolm who is a Headwaters Master Naturalist. Lynn is a past president and current board member of the Virginia Wilderness Committee and currently serves as Conservation Chair for Potomac Appalachian Trail Club – Southern Shenandoah Valley Chapter. Lynn and Malcolm lead hikes, trail maintenance worktrips, and nature walks on Shenandoah Mountain.

Pocket Tricks for Naturalists

Date/time: Saturday, September 21 3:15 PM - 4:45 PM

Location: Massanetta Springs

Description: I remember being led on a twilight hike with a naturalist at Yellowstone Park when I was a teenager. At one point, she gathered her flock in a circle, and told us we needed to tune our night time eyes with a special device. She then passed out little squares of colored construction paper, and asked us to tell her what color we each had. We tried so hard to please her, but we really could only see shades of gray. With good humor, she praised us for being so honest, and made her point about night vision in animals. As we began to hike again, she stopped short and asked us to employ our tuned vision to make sense of a shape on the trail ahead. It was a rattlesnake, and we could home in on the patterns and shadows. She said we all passed our naturalist test, and should all lead hikes in Yellowstone one day. Now that's a good pocket trick. A "pocket trick" is a planned short activity used by a hike leader to engage the hikers, often with a sensory component, and often employing a metaphor that will enhance the theme of a hike. It should be pleasant, memorable, and personally engaging for each hiker. Even though we are concentrating on children's hikes, most of these are appropriate for guided hikes for all ages.

Logistical notes: Bring your smile, and, if you want, your own favorite pocket tricks to share during the last half hour.

Instructor(s): Sandy really is just a Massanetta Camp Counselor who never outgrew the magic of a hike with kids, and who acknowledges that she will continue to be happily surprised at Nature's deep pockets. With a checkered past that includes degrees in Biology and Education, teaching, working for big pharma, and The Wildlife Center of Virginia, raising a family on a farm in Augusta County, a fresh-cut herb business, and working in her husband's children's dentistry practice, she spent 13 years as the Education Specialist at the Headwaters Soil and Water Conservation District. Sandy has taught summer courses at Blue Ridge Community College and teacher workshops at James Madison University, including the Carrier Arboretum, and still helps to coordinate outdoors experiences for students, teachers and the general public as a volunteer Master Naturalist. She was honored to be named National Outstanding Environmental Educator of the year in 2006 by Project Learning Tree, receive the National Education Award in 2007 from the Daughters of the American Revolution, as well as receive a National Wildlife Federation National Conservation Achievement Award in 2013. Along the way, she has picked up a few fool-proof pocket tricks to stimulate, inspire, or just charm your hikers.

Saturday Afternoon Off-site Field Sessions (1:30 PM – Various end times)



Please note the following details regarding these off-site sessions:

- These sessions have varying starting and ending times. Pay careful attention to the times for your session.
- Start and end times for off-site sessions include the travel time from and back to Massanetta Springs.
- Some of these sessions begin with a classroom portion at Massanetta Springs, and then have a field portion. These aspects are indicated in the descriptions.
- Some sessions will have vans or buses providing the transportation, but we are not able to provide vans for all field sessions. Please assume that you will need to carpool in participants' vehicles unless otherwise indicated. We will ask for carpool driver sign-ups before the conference.
- Travel times and distances listed in parentheses are one-way, unless otherwise indicated.

Wildlife Center of Virginia

Date/time: Saturday, September 21 1:30 pm - 4:30 pm

Location: Wildlife Center of Virginia (36 miles/40 minutes)

Description: Learn about the inner workings of one of the nation's premier wildlife hospitals with a presentation by an educator, a video introduction to our hospital, and a close-up experience with a resident education animal. Finish with a tour of our medical clinic, exam room, and operating suite, as well as our outdoor raptor enclosures where you'll see and learn about non-releasable owls, hawks, and eagles.

Logistical notes: Weather-appropriate clothing and shoes should be worn, as a portion of the tour (30-45 minutes) will be spent outdoors on non-paved, uneven terrain. There is one restroom available for use, but no water fountains. Long-sleeves or bug spray may be preferable, as biting insects can sometimes be an issue.

Instructor(s): *As a member of the outreach department Alex Wehrung works to create meaningful and lasting relationships with the public in a variety of ways, such as presenting educational programs, creating website and social media content, training volunteer docents, and providing care for the Center's non-releasable education ambassadors. He joined the Wildlife Center staff in 2016, graduating from Slippery Rock University with a M.Ed. in environmental education later that year.*

Shenandoah National Park Habitats (REPEAT)

Date/Time: Saturday, September 21 1:30 PM – 4:30 PM

Location: Shenandoah National Park (South River Picnic Grounds) (24 miles/35 minutes)

Description: Views of the Shenandoah River Valley and Alleghany Mountains, with one-hour easy circle walk along the Appalachian Trail, viewing wild flowers and insects in different habitats below South River Picnic Grounds of Shenandoah National Park.

Logistical notes: Pit toilets are available at the picnic grounds. Bring day back pack with water.

Instructor(s): *Andy and Frances Sale are ten-year Master Naturalists with love of Appalachian wildflowers, with over five years of seasonal observations on this particular circular trail.*

Walk and Talk through a Working Woods and Through Time

Date/time: Saturday, September 21 1:30 pm - 5:30 pm

Location: McCormick Farm/Shenandoah Valley Agricultural Research and Extension Center (43 miles/50 minutes)

Logistical notes: Note the later return time. Wear sturdy, close-toe shoes as we may venture off trail.

Description: McCormick Farm is the homeplace of the McCormick Family who invented and perfect the world's first mechanical reaper to transform American Agriculture. A behind-the-scenes look at this historic property will unveil the historic role of farm woodlots and how today's science driven management continues to meet society's needs. From wolf-trees and deer exclosures to crop-trees and oak regeneration, this Virginia Tech Research Station has much to share. This is also a great potential site for more VMN volunteer activities, and you'll learn about stewardship and education project opportunities there!

Instructor(s): *Since 2001 Adam has served Extension's Northern District, a 28-county area, as the Forestry & Natural Resources Agent. In addition to working with a number of different VMN chapters, he provides educational opportunities to landowners, loggers and youth.*

If you are a person with a disability and desire any assistive devices, services or other accommodations to participate in this activity, please contact Tiffany Brown at 540-231-0790* during business hours of 9:00 a.m. and 5:00 p.m. to discuss accommodations at least 5 days prior to the event. *TDD number is (800) 828-1120.

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