

The Vine

The Quarterly Newsletter of the Southwestern Piedmont Chapter of VA Master Naturalists



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President's Message

After a record number of 90+ degree days this summer, I'm looking forward to the cooler evenings of Fall. It will be sad to see the hummingbirds leave town for the winter. They should be heading south soon. Keep your sugar water feeders out to give them some energy for the long flight.

The 2016 State Conference was the best yet. We had a great turnout from the chapter and everyone enjoyed the field trips, classes and chance to meet Naturalists from around the state. I hear great reports about the lectures given by Mary Foster, Dr. Ivanov and Dr. Moncrief. Next year's conference will be

Sept 14-17 in Front Royal. Mark your calendars!

At the conference, I spent some time with the Presidents of the BRFL and Roanoke Chapters. We will be collaborating more with our neighboring chapters in the coming year. Watch for another mini-conference with our neighbors. We are also discussing some cross-chapter service projects. Now is also a good time to catch up on logging your volunteer hours and advanced training. Let's see if we can't get more members to certify this year and earn that awesome turtle pin!

*-Submitted by Kathy Fell
President*

Invasive Species Detection



Multiflora rose: invasive species.
Photo by Flickr user jrix.

On June 18th 2016 my place was invaded by several Southwestern Piedmont Virginia Master Naturalist. Led by Kathy Fell, she had the support of Lynn Pritchett and Ellen Jesse.

Supporting members included Ashby, who organized the invasion, Joe Jesse, man, Chekka Lash and myself.

The invasion occurred at 0900 hours. Kathy's first victim was a Crape Myrtle in the yard. I made the appropriate excuses then we headed down to the bottom of the property.

We set the ground rules and proceeded to evaluate the plants. Our first bush was a Nannyberry I was sure was invasive, but, I was wrong. Ashby noticed the fruit and Lynne knew exactly what it was – the game was afoot.

We ambled along identifying native and non-native. The multiflora Rose was the most predominant followed by Honeysuckle and Stilt Grass. It was determined that my place wasn't over-ridden by invasive species, but we do have our work cut out for us (since there appears to be a lot of work I will include

my wife).

All in all I'd like to let you know we have some very impressive and informed members in our organization. I consider myself fortunate to have this amount of talent visit my place.

*-Submitted by Andy Lash
Virginia Master Naturalist*

Counting Grass

At the Master Naturalist State Conference, I learned about efforts to restore some of the Piedmont Native Prairie at the Booker T. Washington National Monument. I have a project at home, where I am trying to establish a small meadow and I was looking for any excuse to learn more about our native grasses. The Blue Ridge Foothills and Lakes Chapter is working with the Department of Conservation and Recreation, testing what it takes to replace a current hay field with native prairie species. They invited me to help count grass. An area was planted in 3 meter square sections with one of three seed mixes: tall grass, short grass and forage. We were divided into teams to count the species and determine the coverage in each of the test plots. Two



Sides oats grama grass. Photo by Kathy Fell.

squares, one meter on a side, were marked with flags in the center of each test plot. On hands and knees, we sorted

through what was growing in each square and estimated the coverage. We found that most of the species from the seed mixes had germinated, including: little blue stem, big blue stem, side oats grama, butterfly weed, black eyed susan, primrose, and others.

In addition, we found some healthy populations of native grasses, like purple top, that were not in the mix, as well as a lot of nutsedge and nightshade. A few tiny tulip tree seedlings were also identified. We also found the non-native invasive Johnson grass and many Alanthus seedlings. It was a great opportunity for me to learn more about grass identification. The next count will be sometime in the spring. Let me know if anyone is interested in helping out.

-Submitted by Kathy Fell
Virginia Master Naturalist



Please don't forget to check out the calendar on the volunteer management system for the most up to date information on upcoming events:

<https://viriniamn.volunteersystem.org/UniversalLogin.cfm>

BRFL folks counting grass. Photo by Kathy Fell

Pickled Frogs and Pretty Rocks



Butterfly specimens. Photo by Mel Cartwright.

Pickled Frogs and Pretty Rocks is the theme of this year's series of Second Thursday Science Talks. The series was kicked off on September 8th with a wonderful presentation by Dr. James Beard. Our chapter was well represented in the sizeable audience.

Dr. Beard gave an interesting tour of some of the ten million specimens in the museum's collections that range in size from microscopic to several tons. He explained why they save so much stuff.

The VMNH mission is to maintain and preserve permanent collections of artifacts for use in scientific research to understand the Virginia Natural History in both a local and global context. The collections include bird and animal specimens collected as far back as 1872, in locations where they are not seen today.

Large collections document species diversity and individual variations within a species. When collected over a long period of time, they can also represent changes due to impacts such as global warming. Bags of artifacts from a

Native American midden (trash pile) show how their diet was influenced by the arrival of Europeans. A diet including a wide range of seafood and mammals changed to primarily venison to provide more deer pelts for trading with the Europeans.

The museum contains many "Type Specimens". These preserved organisms are the first identification of a new species, including a number of new species of millipedes that were identified and named by the late Dr. Hoffman. He ended the talk with puzzle on the list to be researched: Why do mice and shrews have different color teeth? I can't wait for the next talk, which will be about what we can learn from old, dead rats.

-Submitted by Kathy Fell
Virginia Master Naturalist

VA Master Naturalist Annual Conference 2016



Osprey nest at SML. Photo by Kathy Fell

This year's Virginia Master Naturalist State Conference was at the 4H Center on Smith Mountain Lake in Wirtz, Virginia. The host chapter, Blue Ridge Foothills and Lakes, did a fabulous job with the planning and logistics for over 250 attendees from across the state. We had a good turnout from our chapter. Our attending chapter members also volunteered to help out with the logistics: setting up computers, manning the registration table, and introducing the class speakers. We all had a great time.

I have merged the reports from Lynn and Ashby Pritchett, Christine Boran, Eric Tichay and myself into a single synopsis. During registration, there were so many excellent presentations that it was often difficult to choose which to attend! We are all looking forward to next years!

Friday field trips:

Smith Mountain Lake State Park is on the north shore of Smith Mountain Lake in Huddleston, VA. The park ranger, Jett, gave a wonderful interpretive talk as we hiked around the park. There is a nesting pair of osprey in with a live camera over the nest. She explained that this year's chicks were snatched in the dead of night by what must have been a great horned owl, causing quite the uproar online. They have not quite figured out how to protect a predatory bird nest from a different species of predatory bird.

Booker T. Washington National Monument is along Highway 122, near Hardy, VA. The site is part of a 207 acre tobacco farm from the 1800s. Ranger Timothy Sims showed us a movie and gave an interpretive talk, describing what life was like for Booker. Booker T. Washington was born into slavery in a

cabin on the farm and freed by the emancipation proclamation at the age of 9. Illiterate at the time, his goal was to learn to read. He later established Tuskegee University and became an advisor to several US presidents. Tim showed us the old outbuildings on the grounds, including Booker's old cabin with the potato hole in the floor. We also saw the restored kitchen gardens, farm animals and a tobacco plot, maintained by local volunteers. We found a water snake in the creek and cardinal flowers in bloom along the trail!

Friday evening was mix and mingle, time to look at the displays from the different chapters, a nice dinner and several announcements. Mary Foster received an honorable mention for her entry into the photo contest. The design for the recertification pin, to be handed out in January 2017, was revealed.

Saturday field trips:

Methods for Studying Mammals in Virginia was presented by Dr. Nancy Moncrief from VMNH. She gave a demo on the Sherman trap used to catch White-footed Mice and showed Plaster-of-Paris track samples and different mouse skins. Working in teams, we learned how to ID tracks using a guide and key provided by the instructor. Recommended books (field guides) were there for us to look at to purchase later. There are 95 mammal species and 74 of those are in VA. There are 25 rodent species. Dr. Moncrief also talked a bit about how they monitor the squirrel species in special nest boxes on trees. Christine reports this was very interesting, since bluebird nest boxes on trees will also attract squirrels!

Ticks and Tick-Borne Diseases in Virginia was presented by David Gaines, of the Virginia Department of

Health. The presentation identified the tick species of greatest health importance and described how landscape changes have affected tick populations. There are 16 tick species in Virginia. Only three tick species bite humans and transmit disease. They include the Blacklegged Tick, Lone Star Tick, and American Dog Tick. The class covered how to identify ticks at all ages, tick habitat, how to prevent a tick bite and how to properly remove and destroy a tick by putting it into a jar containing 70% alcohol. A tick needs 3 blood meals during its life cycle. Lyme disease is only transmitted by the black legged tick, which are carried by White Tail Deer. Lyme disease increases where there is no deer hunting. There is a higher rate of Lyme disease in suburbanized landscapes along major highways where there are fewer controls over deer populations. The tick must be attached usually over 48 hours to transmit Lyme disease. Additional information about tick-borne diseases and how to prevent tick bites is available from the Virginia Department of Health. Christine reports this was her favorite class because she has recently been plagued by bites from the Lone Star Tick.

About Bats was presented by Karen Powers, Radford University wildlife biologist (A.K.A the bat lady). This talk introduced Virginia's bats and the threats to our bat populations. A mist net and a harp net, used for capturing bats at night, were set up to see. Seventeen of the 1240 species of bats can be found in Virginia. Half are cave dwelling bats and the other half are tree bats. Virginia has a state bat: the Virginia Big-eared Bat, which seems to be doing ok. The Red Bat is having issues getting killed by wind turbines. The Little Brown Bat, commonly found in attics of old houses, is in serious decline due to White Nose Syndrome. The deadly White-nosed Syndrome disease, a fungal growth, attacks mostly hibernating cave bats.

According to researchers, there is a 90 percent mortality rate in some bat caves. The disease is mostly contained in the eastern and central states. At this time there is no known treatment to treat the disease. Contrary to myth, there are very few incidents of rabies in bites. Bats usually die quickly with rabies before transmitting the disease.

How to Establish a Successful Pollinator Habitat was presented by Carol Heiser, Education Manager and Habitat Education Coordinator of the VA Department of Game and Inland Fisheries and Jack Price Master Naturalist and conservation educator. The session focused on pollinator habitat as one type of project Virginia Master Naturalists can use for education outreach in the local community. The session provided an overview of pollinator ecology and habitat needs. Three key highlights learned from this session are (1) when we improve habitat for one native species we contribute to the food web and help other native species, (2) native plants better sustain native animals and (3) ornamental plants don't always sustain native life.

Native Plants for Piedmont Backyards was presented by Ryan Klopf, Department of Conservation and Recreation, Natural Heritage Program. Ryan talked about the geologic history of the piedmont and our typical red clay soils evolved, as well as how our native grasses evolved. This area used to be "open canopy" of predominantly oak, hickory and pine with the Native Americans maintaining native grasslands through prescribed burning. Fire was used to both clear areas to simplify transportation by foot, as well as to corral game for hunting. Roots of native grasses can extend up to 15 feet underground, allowing them to recover after fire. Difficult Creek Nature Preserve is one of the few remaining open canopy habitats. When the Europeans arrived, most of the area was converted to

tobacco farms, which rapidly depleted the fragile soils. He spoke about the invention of the lawn in the mid 1800s and showed a picture of the first steam powered lawn mower in 1902. Since then, lawns now cover over 63,000 square miles and are increasing at another 600 square miles a year. Ryan covered a number of alternatives to today's non-native lawn monocultures which require over 3 million tons of fertilizer, herbicides and insecticide. Buffalo grass, which grows to only 6 inches tall and is drought resistant is a nice alternative, requiring mowing only once a month. He also covered many native plants and grasses that can be used to turn a section of property into a Piedmont Prairie Garden.

Wildlife Mapping was presented by Brian Moyer of the Virginia Department of Game and Inland Fisheries. This is one of our current projects. To participate, in the past, required a certification class and the issuing of a user id and password to log data. The original data entry system has been taken offline and is now replaced by the Wildlife Mapping Project in iNaturalist. Anyone can sign up for iNaturalist at <http://www.inaturalist.org/>. The iNaturalist application can be put on a mobile phone and includes the collection of longitude and latitude data as well as photographs and sound files. Sightings can be validated by either scientists or other naturalists using a "crowd validation" scheme. The original project was looking for data about the number of a given species seen together at one time. The project is now more interested in verifiable, seasonal sightings of a species.

Raptors of Southwest Virginia by Corey Basham, a licensed Falconer from Botetort County. Amy, a peregrine falcon, sat calmly on her perch during the entire presentation, surveying the audience. Corey spoke about our native owls, eagles, falcons and hawks. At the end of



Amy the peregrine falcon sits calmly surveying the crowd. Photo by Kathy Fell

the talk, Amy and a barn owl were brought out so we could see them up close.

Protecting Our Pollinators: Hummingbirds, Living Jewels of the Garden by Donna Haley. Donna gave a

brief overview of hummingbirds. Of the 33 species of hummingbirds across the globe, 19 can be found in the US, but only the Ruby Throated hummingbird is common in Virginia. She spoke about the ranges and annual migration of

hummingbirds. They cannot tolerate temps below zero, nor can the nectar generating plants and insects that they eat.

After dinner on Saturday, Tim McCoy from Virginia Tech gave a tale about bees. He covered the many factors that contribute to colony collapse disorder in honey bees, which are not native to the Americas. Then, he spoke about the many types of native bees, which happen to be more effective at pollination of the native plants. Native bees are mostly solitary bees, who dig tunnels with chambers. In each chamber, one egg is laid on a “pollen biscuit”, providing food for the larva when it hatches. Native bees include Cuckoo bees (who lay eggs in someone else’s tunnels), Bumble bees, Carpenter bees, Sweat bees, Miner bees, Leaf cutter bees and Orchard Mason bees. He showed us some different plans for Orchard Mason

Sunday field trips:

Tree Identification Skills for All Seasons by Jason Fisher. This class covered identification of trees using shape, leaves, bark, tree canopy, fruit, etc. Tables were piled with branches cut from trees that morning to identify. Then, we took a walk outside to identify some more species. This was a great refresher to the Dendrology class and introduced more advanced markers such as leaf scars, terminal buds, flower buds and pith.

Classroom: Yes, Sedges Have Edges by Philip Coulling. This class met outside in the picnic shelter by the lake. We first discussed the differences between sedges, rushes and grasses. Sedges have three sided stems, where rushes and grasses have round stems. To distinctly identify between the 200 species of sedge found in Virginia requires a new vocabulary and at least a 10X lens. We passed around some plants to look at the achene (seed) and parigynium (sac that holds the seed) as well as some of the other



Barn owl from raptor demonstration by Corey Basham. Photo by Kathy Fell.

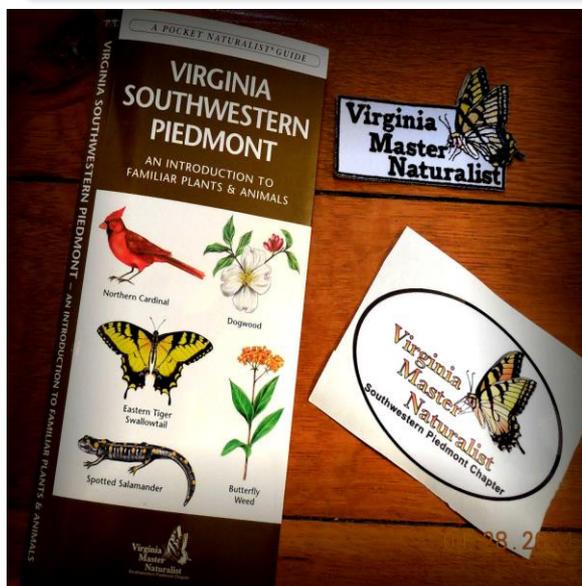
characteristics, then went on a walk in the woods to find some more examples.

*-Submitted by Kathy Fell
Virginia Master Naturalist*

Do not forget the next Annual Virginia Master Naturalist Conference will be held in Fort Royal, VA Thursday Sept. 14th through Sunday Sept. 17th, 2017

Keep a look out for upcoming election information as well as more about the annual banquet being held on Monday, January 19th of 2017!

SWPMN Store Offerings



If you are not aware, the Southwestern Piedmont Master Naturalist Chapter has their very own merchandise! Available for purchase is the following:

- Embroidered Patches: \$2.00
- Color Oval Decals: \$1.00 or 3 for \$2.00
- Virginia Southwestern Piedmont Pocket Naturalist Guide (Laminate Folding): \$4.00
- Southwestern Piedmont Virginia Master Naturalist Water Bottle (not pictured): \$10.00

Please submit all inquiries and orders to:
ChristineBoran@gmail.com



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Want to submit to The Vine? Please send all inquiries to SWPMNN@gmail.com. Any submissions will be answered promptly. Thank you for your contributions!

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