JEFFERSON CHAPTER VIRGINIA NATIVE PLANT SOCIETY

THE DECLARATION

SUMMER 2020

INSIDE THIS ISSUE:

All About the Stamens

By: Betty Truax, Chapter Member

Years ago, when I lived in Northern Virginia, my mom gave me a Mock Orange plant that had no scent. It was a shared plant from her friend Anna Davis in Rochelle, Virginia.

The plant was important to my mom because it reminded her of being young.

With this particular plant, she was disappointed because it did not have the wonderful smell she remembered.

Ultimately, she decided she did not want to keep it, so it grew happily (almost too happily) in one of my garden beds for several years.

Scentless Mock Orange Bloom

Sadly, when I moved, I forgot to take a clipping.

During one of my visits to fellow VNPS Jefferson Chapter member Pat Willis' home, we somehow got on the topic of her Mock Orange shrub.

Pat mentioned that her plant did not have a smell.

She concluded that it might be the native Scentless Mock Orange (*Philadelphus inodorus*).

When she mentioned the lack of smell, I was instantly reminded of my mom's plant. I had read it was rare in Virginia, so I was a little skeptical that it was Scentless Mock Orange.

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The Pipevine Swallowtail Butterfly and its Native Virginia Host Plants

By: Mary Lee Epps, Chapter President

I decided to write this article for our Newsletter, *The Declaration*, because of an experience I had two years ago.

On a family outing to the Dripping Rock area of the Blue Ridge Parkway, we explored a trail that leads from the west side of the Parkway. After a relatively short walk, we came to a grove of fringe trees and an overlook with a grand view of the Shenandoah Valley.

I had been to that place before in May when the fringe trees were in bloom, but this was the beginning of July, and we kept going along the west side of the mountain. There were no spectacular views, but there were great numbers of butterfly chrysalises.

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During the ongoing COVID-19 Chapter meetings featuring an educational speaker will be held **virtually** the second Wednesday of the month from 7:30-9:00 PM. Chapter meetings will be accessible through Zoom.

Virtual Plant Walks are available for **online** download for a two-week period starting the 3rd Saturday of the month

For help accessing the virtual walks or chapter meetings email Chapter President, Mary Lee Epps. (mse5e@virginia.edu)

Jefferson Chapter Plant Walks and Meetings

In this time of Covid-19, we have had to give up our usual monthly group walks and Chapter Meetings held at Ivy Creek Natural Area. Instead, we invite you to join us for self-guided/virtual walks and virtual group meetings. Please check our Facebook and Chapter webpages for login information. We are immensely grateful to our community and look forward to resuming live programming when we can do so safely.

Navigating the New Normal: Virtual Plant Walks

The Jefferson Chapter invites you to join us for a self-guided/virtual walk that you can do either at the Natural Area, or at home. Here is how it works. Each month, a designated walk leader will walk the trails of Ivy Creek with Catherine Boston, Ivy Creek's Education Director, talking about the plants they see. Catherine will record the walk, taking photos and marking each plant discussed with an orange flag. She will then post the tour and photos on-line for a two-week period (normally beginning on the 3rd Saturday of the month). She will also post a list of the plants in the order they are discussed. (The photos should help you make certain that you are looking at the right plant, even if its blooms have faded.)

There are several ways you can do the walk:

1. Print out the plant list and bring it along with a good wildflower guide to tell you about the plant as you find it. (Note: if you do this without a smart phone, listen to the talk first on a computer and note the basic route of the walk.)

2. You can download the free Izi travel app from your Play Store or iTunes onto your smart phone and it will guide you by GPS along the tour providing the walk leader's narration and the photograph of the plant as you come to it. It is helpful to download the walk before you come to ICNA, just so you are not reliant on cellphone service. You will also need to have your location turned on. To access all the photos on the app, just touch the box of images and scroll through them as you walk.

3. If you prefer not to download the app or you prefer to do the walk from home, you can follow each tour on your home computer from the link and plant list that will be emailed to members and also posted on Ivy Creek's web page (https://ivycreekfoundation.org/) and on our Facebook page at (https://www.facebook.com/JeffersonVNPS/). You will be able to listen to the narration, following a map of the walk and seeing the photographs. To scroll through all the walk photographs from your computer, use the red dots below the image that begins each section of the walk.

Virtual Walk Schedule for August through November 2020 below.

Guided Plant Walks

Ivy Creek Natural Area, Virtual | First available for download on or about August 15, 2020 | Co-sponsored by Ivy Creek.

Enjoy a walk led by Tana Herndon, featuring late summer wildflowers such as goldenrods, tick-trefoils, thoroughworts, and horsemint, all of which should be blooming in the fields. Along the reservoir's edge, we might find swamp milkweed, cardinal flower, and other wetland plants. Co-sponsored by Ivy Creek Foundation and the Jefferson Chapter, Virginia Native Plant Society.

Ivy Creek Natural Area, Virtual | First available for download on or about September 19, 2020 | Co-sponsored by Ivy Creek.

This walk led by Tana Herndon will look at the early fall wildflowers in the sunny areas, the field and along the reservoir. With her guidance you will investigate the goldenrods and other aster family plants, potentially including Maryland golden-aster and beggar-ticks, and also look for seed pods and the uncommon Oval ladies'-tresses (*Spiranthes ovalis*). Co-sponsored by Ivy Creek Foundation and the Jefferson Chapter, Virginia Native Plant Society.

Ivy Creek Natural Area, Virtual | First available for download on or about October 17, 2020 | Co-sponsored by Ivy Creek.

Take a virtual fall walk with Phil Stokes focusing on trees. He will seek out many of the 50 plus species that naturally occur at Ivy Creek and explain the distinguishing characteristics that help identify them. With nuts and fruits present identification is made much easier. Co-sponsored by Ivy Creek Foundation and the Jefferson Chapter, Virginia Native Plant Society.

Ivy Creek Natural Area, Virtual | First available for download on or about November 21, 2020 | Co-sponsored by Ivy Creek.

Native plant enthusiast Ruth Douglas will lead this late fall virtual plant walk, giving participants an opportunity to learn to recognize some of Ivy Creek's wildflowers and alien invasives in their winter form; there are a surprising number of herbaceous wildflowers and invasives that can be identified from their dry stems and leaves. Co-sponsored by Ivy Creek Foundation and the Jefferson Chapter, Virginia Native Plant Society.

Blooms from July's virtual walk at Ivy Creek Natural Area

Black eyed Susan
(Rudbeckia hirta)

White snakeroot
(Ageratina altissima)

Ebony spleenwort
(Asplenium platyneuron)

Queen Anne's lace
(Daucus carota)

September Speaker, Chris Barton, Ph.D.

The Mower Tract was contour mined in the 1980s

Early restoration efforts – native seed collection and propagation

Vernal pool creation on the Mower Tract

Chapter Meetings

Wednesday, September 9th, 7:30 PM, Online Access | Native Forest Ecological Restoration of Red Spruce Forest on Mined Land in the Monongahela National Forest, WV

Abstract: Green Forests Work --- in partnership with the US Forest Service, Appalachian Regional Reforestation Initiative, West Virginia Division of Natural Resources, NRCS Plant Materials Center, Appalachian Headwaters, and the Central Appalachian Spruce Restoration Initiative --- has implemented an ecological restoration project on 2,600 acres of mine impacted land in the Monongahela National Forest. The project is located on Cheat Mountain, which traverses the entire length of central Randolph County, WV. This high elevation site was historically a red spruce-northern hardwood ecosystem prior to mining and logging activities. The red spruce ecosystem of the Central Appalachians is characterized by exceptionally high biodiversity and is a priority for conservation and restoration. The project area (Mower Tract) was mined for coal in the 1970s. During reclamation, the site was returned to approximate original contour and planted with non-native trees and grasses. Restoration activities were initiated in 2009 to reduce impacts from the mining and to restore the red spruce ecosystem. A holistic suite of restoration strategies including soil decompaction, wetland restoration, woody debris loading, and planting of native trees and shrubs have been employed. To date, this partnership has performed restoration activities in over 800 acres of the watershed, created over 1,000 vernal pools/wetlands and planted over 400,000 native trees and shrubs. Objectives achieved through implementation of this project will minimize impacts from past mining activities and help conserve and ensure long-term viability of the important plant and animal species associated with this high elevation forest and associated wetland communities.

Biographical Sketch: Christopher D. Barton, Ph.D. is a Professor of Forest Hydrology and Watershed Management in the Department of Forestry and Natural Resources at the University of Kentucky. He is currently working in the areas of ecosystem restoration, reforestation and remediation primarily in streams, wetlands and mined lands. In addition, improved methods for preventing water quality degradation from land-use activities are being examined. Dr. Barton is an Associate Editor for the International Journal of Phytoremediation and the International Journal of Mining, Reclamation and Environment. Dr. Barton is also the founder and President of Green Forests Work, a program to improve the environment and economy of mined landscapes. Through this program, over 3 million trees have been planted on mine lands in Appalachia and Australia and over 20,000 volunteers have participated. Dr. Barton was the recipient of several State and National awards including: Kentucky Department of Environmental Protection's 2018 Environmental Excellence Award for Resource Caretaker; the American Society of Mining and Reclamation's 2015 Researcher of the Year Award; the 2014 United States Environmental Protection Agencies - Scientific and Technological Achievement Award; and the 2011 United States Department of Interior - Presidential Migratory Bird Federal Stewardship Award. For more information visit: (www.greenforestswork.org) and (www.facebook.com/Greenforestswork).

Member Contributions

All About the Stamens

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I had done some research on Scentless Mock Orange for the *Plant Piedmont Native Plants: A Guide for Landscapes and Gardens*. From that research, I learned that besides usually being devoid of scent, their flowers were usually found on the end of branches in groups of three. I also learned Scentless Mock Orange had 60-90 stamens while other Mock Oranges have 20-60. I became fixated on wanting to count those stamens however, I never seemed to make it to Pat's house while her Mock Orange was in bloom.

One day, she offered to share her plant with me. I was thrilled and planted that small one-limbed shrub in my Tribute Garden, to remind me of my friend Pat, my mom and the Town of Rochelle, Virginia, the town my father grew up in. I was still skeptical about it being a Scentless Mock Orange, but it gave me joy.

For two years I waited for my little shrub to grow and to finally bloom. This spring it seemed to be in bud forever and the buds were mostly in groups of three and at the end of branches.

Finally, the flowers opened up and I couldn't wait to dissect one and count its stamens. I was absolutely thrilled when I counted 97 stamens. I instantly became a believer that this was in fact a Scentless Mock Orange.

I posted photos on my Facebook page of a leaf (front and back), stems (old and new) and a photo of the stamens. In this way, I reached out to the larger community to see if anyone could confirm my tentative conclusion.

Alan Weakley, one of the authors of *Flora of Virginia,* as well as being an American botanist with expertise in the flora of the Southeastern United States, confirmed my identification responding "P. inodorus. Native, but very widely "old-fashioned" horticultural plant (esp. in the 19th century)." Mystery solved!

This experience and discovery reminded me that I love having VNPS friends. They are kind, like-minded, and incredibly knowledgeable people that sometimes share the most awesome plants. Thank you, Pat!

Scentless Mock Orange Blossom

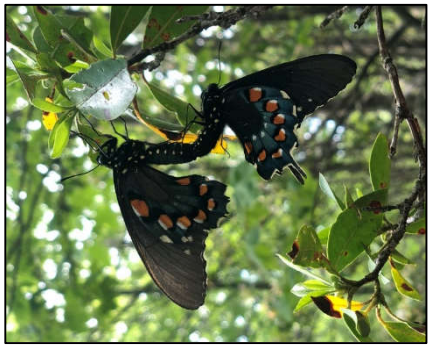
Pictures by Betty Traux

Scentless mock orange bloom

97 stamens

New bark, smooth

Top of leaf, rough



Pipevine swallowtails by M.J. Epps

Pipevine flower and leaves

VA snakeroot flower

Immature caterpillar

Brown form of chrysalis

Photos by Mary Lee Epps

The Pipevine Swallowtail Butterfly and its Native Virginia Host Plants

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Butterfly chrysalises were clinging to bark and twigs, but most were fastened with delicate silk threads to large rock outcroppings. We saw no butterflies, but there were occasional caterpillars and many pipevine host plants. These were the chrysalises and caterpillars of the pipevine swallowtail butterfly.

The pipevine swallowtail (*Battus philenor*), is a beautiful butterfly with iridescent blue on the back when the wings are open and large orange spots that become visible when the wings are folded.

It is distasteful or toxic to many predators thanks to the Aristolochic acids in the caterpillar's host plants, which include all species in the *Aristolochia* genus that are native to the butterfly's range (much of the eastern and central U.S. with an isolated population in California). Only two species of *Aristolochia* are native to Virginia—pipevine, *Aristolochia macrophylla*, and Virginia snakeroot, *Aristolochia serpentaria.* (Note genera based on USDA Plant Database)

In Virginia, pipevine is found mainly in the mountains as far north as Rockingham County. It is a high-climbing, woody, twining vine which can reach 30 feet or more and has large, heart-shaped leaves, but the really remarkable feature is the flower. It is mauve colored and shaped something like a curved pipe stem and bowl.

Like all *Aristolochia* species, pipevine also has a very interesting pollination mechanism. When the flowers first open, the stigma is receptive, but the stamens are immature and not releasing pollen. Small flies, dusted with pollen from another flower, enter the newly opened bloom, deposit pollen on the stigma, but then are trapped inside by downward-sloping hairs and slippery walls. On the 2nd day and after pollination, the anthers release their pollen and the hairs begin to wither, allowing the fly, now dusted with fresh pollen from this flower, to escape.

The second native Virginia host plant, Virginia snakeroot, is found throughout the Commonwealth. It is a small herbaceous, woodland plant that is easily overlooked, but it too has a flower similar to that of pipevine, although not quite so curved in shape and located near the base of the plant where it can be hard to see.

The aristolochic acids in these host plants protect the pipevine swallowtail eggs, caterpillars, and adult butterflies. Both the caterpillars and adult butterflies can secrete a distasteful liquid that deters some parasitoids, birds, and other predators. Both mature caterpillars and adults also have tough skins, giving the caterpillars time to secrete the liquid and allowing adults to survive being tasted by a predator. The coloration of both caterpillars and adult butterflies works to warn away vertebrate predators. Some other butterfly species, including both the spicebush butterfly and the red-spotted purple, have taken advantage of this by mimicking the pipevine swallowtail's coloring.

In Virginia, the pipevine swallowtail has two generations a year. Eggs are laid in small groups on young foliage or stems at the base of leaves. In their early instars, the caterpillars are gregarious. However, as they mature, they become solitary. Their coloration also changes. In our area the early instars are reddish while they later normally darken to nearly black with bright orange-yellow spots. Chrysalises may be brown or green, although brown tends to predominate. This is certainly what we found on our hike.

Natives on the Frontlines

BY: Annemarie Abbondanzo, Newsletter Editor

Our landscapes are not what they were 300 years ago. In the last century alone, intensification and reshaping of landuse has altered the characteristics and extent of our forests and open spaces. These changes in landuse impact water, soil, and nutrients, stressing native plant communities. Invasive, or injurious species, have been quick to wreak havoc in imbalanced native plant communities further disrupting the local ecology. In the fight against invasives, many agree that the most effective strategy is to prevent their spread. This major effort relies on a hold-the-line mentality and requires native plants that can combat invasive species. While aggressive plants generally are not popular, **aggressive native plants** may have a major role to play in holding and gaining ground against invasives. Aggressive natives are equipped with traits that make them tough and reliable. Survival mechanisms like self-seeding, rhizome spreaders, quick germination, full sun hardiness and deer resistance allow them to compete with invasives. While more work is needed to understand how these species might fit into an ecosystem, aggressive natives offer benefits worth considering like soil retention, support for pollinators, and food for songbirds. These hardy natives include woody plants, like red maples and boxelder; herbaceous plants (annual, perennials and grasses) like fleabane, ragweed, violets, some goldenrods, ferns, and grasses like many rushes. While colonizing natives may be most loved for restoration plantings, these plants may also help gardeners that have the space for them to achieve wildlife goals while resisting encroaching non-native species.

Good News! Six Invasive Plants Added to VDACS Noxious Weed List

BY: Ruth Douglas, Co-chair VNPS invasive plant education committee

Recently, the Virginia Department of Agriculture and Consumer Services (VDACS) added 6 more invasive plants to its Noxious Weed list. The plants include some of our "favorite" invasive plants: Tree of Heaven, Porcelain berry, oriental bittersweet, hydrilla, mile-a-minute, and incised fumewort (a relatively new invasive in Virginia)

The Culmination of Years of Work

This is just the beginning of adding more invasive plants to the Noxious Weed List. It is the culmination of literally years of work by members of VNPS, VDACS Noxious Weed Advisory Committee, staff at VDACS, members of the horticulture community, members of the General Assembly and their staff, Blue Ridge PRISM, and others. The process of adding to this list is long and complicated.

Teeth in Enforcement

The designation, Noxious Weed, means that a plant cannot be sold or moved without a permit from VDACS. This is quite different from the term "invasive plant" because it has "teeth" in the enforcement process, while an "invasive plant" designation is advisory in nature with no "teeth" for enforcement.

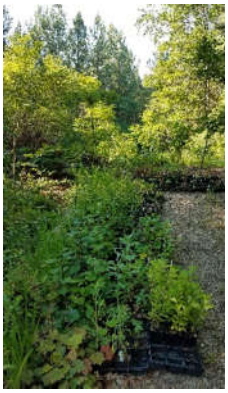
The Significant Impact of Educational Outreach Locally and at the State Level

The importance of the non-profit Blue Ridge PRISM in this process (blueridgeprism.org) cannot be understated. The organization was created six years ago by residents of Albemarle County, Rod and Maggie Walker. It focuses on educating the public, including landowners, about invasive plants in the 10-counties surrounding Shenandoah National Park. It has already had a significant impact locally and at the state level. They have various workshops planned (and will be continued via Zoom) and their website has extensive resources on all aspects of invasives, including methods for identifying and controlling several plant species that are invasive in our area. They also are working to expand the number of organizations like theirs, in other regions of Virginia, and are working with officials of state agencies including VDOT and VDACS.

For additional information email Ruth directly at cvilleruth@gmail.com.

Plant Sale Delayed Until Spring

BY: Phil Stokes, Plant Sale Chairman



Potted plants at Will Shaw's. These plants need a new home. Contact Phil if you are interested in fostering these plants!

As one would expect Covid-19 virus social distancing concerns caused cancellation of the Jefferson Chapter's April 26th Annual Native Plant Sale both this summer and for the fall.

Last fall's potted sale plants, like us, wish they could escape their confines and be more comfortable elsewhere. We can only hope by spring it will be safe to hold our sale.

Volunteer Needed to Foster Plants

Presently it has become increasingly challenging to care for the nearly 1,000 plants potted last fall and the plants from the prior year's carryover. Plants are currently quarantined at Chapter members Phil Stokes' and Will Shaw's homes.

Will Shaw is retiring from plant sitting responsibilities, and a pick-up truckload is looking for a new home. Thanks go out to Will for decades of caring for and providing plants for the sale! He even served as Plant Sale Chair. If you are willing and able to care for plants, delivery and pickup on sale weekend will be provided. It is perfect timing to foster plants and enjoy the reward of seeing the late season flowering and ephemerals emerging early in the spring.

Challenges Due to the Delay

With a record streak of 32 continuous days of 90 degree and over temperatures, watering has become essential.

Increasing the difficulty, the plants need protection from more than just the temperatures. Phil has been hard at work constructing plant protection enclosures due to the shading ash tree removal (emerald ash borer). While shade cloth is on order, dozens of potted trays are being kept on the porch and in a densely shrubbed areas that deer rarely enter.

Losses Over Winter

There were some losses over the winter among the approximately 1,200 plants potted at Pat's last October and November. Problems resulted from our bare root supplier not shipping when promised, wrong species shipped, and spoilage due to difficulty rescheduling a second bare root potting date.

Some of the failures were also from volunteer potting errors including planting depth, root orientation, and not using enough potting soil. We may have lost about a third of our bare root from these factors. On the bright side, a few trays of trilliums from at least two years ago have now developed into healthy flowering specimens. The plugs potted last fall have more successfully rooted. In fact, a few of the full sun species may require re-potting in larger pots or having top growth cut back.

Fall Potting

The Chapter Board decided not to have a large potting event this fall. Instead, we will announce a schedule for small gatherings to pot plants, or have members take them home to pot.

Members are also encouraged to pot up desirable natives from their gardens. For pots, soil, and more information email Phil at philipfs@embarqmail.com.

The Virginia Native Plant Society is dedicated to the protection and preservation of the native plants of Virginia and their habitats, in order to sustain for generations to come the integrity of the Commonwealth's rich natural heritage of ecosystems and biodiversity for purposes of enjoyment, enlightenment, sustainable use, and our own very survival.

The Jefferson Chapter serves the counties of Albemarle, Fluvanna, Greene, Louisa, Madison, Nelson, Orange, as well as the City of Charlottesville.

Submissions of articles, events, photographs, and other information of interest to the chapter are welcome. Please submit them by email to Annemarie Abbondanzo at: annemarie@ecosystemservices.us with the subject line "Newsletter Submission".

Items of Interest From our Friends

The Nature Foundation at Wintergreen

Ladies' Day Out Hike- Wednesday, September 2, 2020 9:00 am – 2 pm

Ladies' Day Out hike along Sherando's Mill Creek Trail and Torrey Ridge Trail along a cool stream for a moderate five miles. This hike is rated *moderate to difficult*. Wear hiking shoes/boots. Bring water and lunch. Payment is due at time of registration. Covid- 19 restrictions will be followed.

Living with Nature at Wintergreen Hike- Saturday, September 5, 12, 19, and 26th 2020: 10:00 am – 12 pm

Join a Foundation Naturalist for an interpretive hike and explore Wintergreen's natural environment! These hikes are rated moderate to strenuous. Meet at Trillium House parking lot. Payment due before event. Covid- 19 restrictions will be followed.

Journey to Hike Places Hike- Thursday, September 24,2020 9:00 am- 4 pm

Power hikers can stretch their legs on this hike for a cool 7.5 miles from Humpback Rocks to Rockfish Gap. *Rated strenuous.* Bring water and lunch. Wear hiking shoes/boots. Payment is due at time of registration. Due to Covid- 19, we are following the state's restrictions.

Meet the Mushrooms Hike- Saturday, September 26, 2020 1:00 pm – 4 pm

Join Mary Jane Epps on an introductory tour into the world of mycology. The goal of this venture is to educate each hiker on the basics of mushroom identification. We will tour various locations around the Wintergreen landscape in search of the many varieties our ecosystem can produce. The hike is rated as moderate. Due to Covid- 19, we are following the state's restrictions.

Prince William Master Gardeners-

Fall Bulb Class - Online Event- Wednesday, September 2, 2020 11 am -12 pm

What bulbs should you plant for a beautiful spring garden? This class answers questions about the planting and care of fall bulbs. Please email mastergardener@pwcgov.org to register and receive a login code.

Virginia Cooperative Extension

Woody Plant ID Class Part I- Thursday, September 10, 2020 5:00 pm – 6 pm

Learn tree ID techniques and basic botany related to leaf shape, leaf attachment, and leaf venation. Visit Facebook page for more information.

Virginia Native Plant Society, Jefferson Chapter

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Conserving Wild Flowers and Wild Places

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https://vnps.org/jefferson/