



THE POCAHONTAS CHAPTER OF THE VIRGINIA NATIVE PLANT SOCIETY

December 2020 - January 2021



NOTE:

Pocahontas Chapter VNPS programs will be shared via Zoom until further notice. We will not be meeting at Lewis Ginter. Our next meeting will be on Jan 14, 2021 starting at 6:45 PM. Information on how to connect to Zoom will be sent in January.

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**The topic of the January Meeting will be
“When butterflies beat the birds and the bees:**

Exploring the pollination ecology of Virginia’s native azaleas (Rhododendron spp.)”

by Mary Jane Epps

This talk will share recent discoveries and ongoing efforts to explore the surprising pollination biology of Virginia’s native azaleas (*Rhododendron* sp.).

Mary Jane Epps is an assistant professor of biology at Mary Baldwin University, where she teaches botany, ecology, and conservation biology. Following a bachelor’s degree at Duke University she earned a Ph. D. studying fungal-insect interactions at the University of Arizona in 2012, and completed postdoctoral research at NC State University in 2015. As an ecologist with a strong emphasis on natural history, especially in a Virginia context, her research explores various interactions between plants, fungi, and insects. In addition, some of her current projects also investigate underexplored areas of Virginia’s biodiversity, such as the little-known arthropod fauna of groundwater ecosystems.

Chapter Meetings

To join a Zoom meeting go to zoom.com and join the meeting by clicking on "JOIN A MEETING" then entering the Meeting ID then following the directions. We will email you the required meeting ID and passcode in January before the meeting.

If you need to download the zoom app go to zoom.com and click on "RESOURCES", then "Download Zoom Client".

If you have requests or suggestions for program topics or speakers, please contact Catharine Tucker, 804-938-6941 or via email cath.tucker@gmail.com.

Board Meeting

Your officers had a board meeting via Zoom on December 15 to discuss the upcoming year. Our first order of business at the January meeting will be to elect new officers. President Leslie Allanson, Vice President Catharine Tucker, and Treasurer Richard Moss are stepping down after serving for a number of years. So far the following have volunteered to run: Amy Ritchie Johnson for Vice President and for Treasurer Alli Baird. Our new Publicity Chair will be Lisa Hamilton. Currently we do not have nominees for President or for the Membership Chair. Leslie said in lieu of a president she would be willing to volunteer some but very limited responsibilities until April 2021. We are working on filling these positions and plan on posting a description of the duties of the President and the Membership Chair later this month. We need to fill these offices if we wish to remain a fully functioning chapter.

Other matters: We discussed if we should donate to the "Keep the Flora Alive" Campaign? Probably yes. Suggestions included up to \$1,000 by the board but needs to be approved at the upcoming January meeting. It was noted we still have an understanding with Lewis Ginter Botanical Gardens concerning our chapter meeting

there, so when we no longer have to worry about the COVID virus we can resume our meetings at the garden. Our Secretary Ashley Moulton would like a shout out for the new instagram page to be featured. Our username is @richmondnativeplants.

Treasurer Richard Moss reported we currently have \$5848 in our chapter account.

Ashley Moulton, Secretary,
Leslie Allanson, President

In Search of the Blue Wood Mushroom

by Emily Gianfortoni

I really enjoyed November's chapter meeting presentation on mushrooms and was inspired to write the following piece on *Chlorociboria* (Blue Wood Stain Fungus).

The one silver lining to COVID-19's interruption of normal life has been our weekly escapes to hike in the mountains. As we enjoyed the succession of spring ephemerals and trees leafing out, I kept noticing turquoise blue chips of dead wood on the trails. Curious, I picked some up and examined them. The wood appeared to have been stained, and I suspected the origin of the color might be fungal.

Research revealed that the vivid blue-green stain was created by the mycelium of two species of fungi in the genus *Chlorociboria*. (*C. aeruginascens* and *C. aeruginosa*, indistinguishable except by the size of their microscopic spores). This fungus, commonly called the blue wood fungus, blue stain fungus, or green elf cup in England, is found on soft, partly decayed pieces of oak and other hardwoods. Although classified as a saprobic or decay fungus, *Chlorociboria* is not a true wood decay fungus that breaks down the cellulose and lignin in cell walls of wood. The turquoise color results from the pigment xylindein produced by the mycelium. Fourteenth century Italian artists used the wood in inlaid designs. Wood workers in Tunbridge Wells, England made little wooden boxes with intricate blue



Chlorociboria stained wood

wood designs.

The sources I consulted agreed that the blue stained wood from *Chlorociboria* is commonly seen in temperate North America and Europe, but that the fruiting bodies (mushrooms) are uncommon. They are also very small, about 2-5 mm or less than a quarter of an inch in diameter. Thus, I was determined to find a fruiting body! During spring and summer hikes, I examined every little piece of blue wood I encountered with no success. Towards the end of August and into September there was quite a bit of rain. Amazing mushrooms were bursting out along all of the trails. Then, on September 28th we were walking along part of the Allegheny Trail in SW Virginia when I stopped to examine a large piece of blue wood. There they were – several tiny blue cups growing out of the blue stain.



Fruiting bodies (mushrooms)

Chlorociboria is a member of the Ascomycota or cup fungi. Looking at the mushrooms with magnification, you can see the cup from which the spores are produced. Attached with a stalk, the cup flattens with age. On subsequent hikes I found two more pieces of wood with the fruiting bodies. All of them were on pieces of wood at least 5 or

The Pocahontas Chapter of the Virginia Native Plant Society
serves the counties of Amelia, Charles City, Chesterfield, Dinwiddie, Goochland, Hanover, Henrico, King William, New Kent, Powhatan, Prince George and the cities of Ashland, Hopewell, Colonial Heights, Petersburg, and Richmond. It meets the first Thursday of September through April at 7:00 PM in the Education and Library Complex of the Lewis Ginter Botanical Garden, unless otherwise stated.

Chapter Officers

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6 inches long. This led me to wonder whether one reason the mushrooms are uncommonly seen is that the mycelium must have enough substrate to produce the energy necessary for fruiting body formation. Most of the blue wood I saw was on much smaller wood chips. Compared to other fungi that produce mushrooms, are Chlorociboria fruiting bodies really less common? The mycelium of most fungi is unseen, growing inside wood or under debris on the forest floor, while the blue wood mycelium living on the bare, partly decayed wood is obvious. The wet weather in the early fall provided the ideal conditions for mushrooms including those of the blue stain fungus that I was lucky enough to find.



Fruiting body under magnification

1 Chlorociboria aeruginascens. https://www.mushroomexpert.com/chlorociboria_aeruginascens.html

2 Chlorociboria aeruginascens, the green stain fungus. http://botit.botany.wisc.edu/toms_fungi/jul2008.html

3 Hanlin, Richard T. Illustrated Genera of Ascomycetes, Vol. II

4 Roody, William C. Mushrooms of West Virginia and the Central Appalachians .

An Odd shrub

by Richard Moss

While visiting North Carolina last September I noticed this shrub with the rather odd looking seeds on the grounds of the Granville county court house in Oxford, NC. The fruit reminded me of star anise (*Illicium verum*), a tropical

tree native to Vietnam and southwest China and often used as a spice in China and India. The crushed leaves of this shrub had anise or licorice smell. Since Oxford NC is about 15 miles south of the Virginia state line, this is certainly not a tropical plant. After a little investigation I determined this is most likely Yellow anise, (*Illicium parviflorum*) shrub originally native to Georgia and Florida, but now only found in the wild in about 20 occurrences in central Florida. Then, why is it growing in Northern NC? It turns out this plant is cultivated as a fragrant and attractive, if not very showy ornamental It can be pruned and shaped to form hedges and windbreaks. It is considered easy to



grow, deer do not like it does not any other have any other pest problems. However, *Illicium parvafolium* can not be used as a spice as both the leaves and seeds are toxic. This species is endangered in it's native habitat, and this could be a case where horticultural use might save this native plant from extinction.

See: 1. https://en.wikipedia.org/wiki/Illicium_parviflorum

2. <https://www.nurserymag.com/article/illicium-parviflorum/>

Miscellaneous Plant Sightings

by Richard Moss

A small stand of American Witch Hazel (*Hamamelis Virginiana*) in Surry County, VA was in bloom on November 8th.

Witch Hazel in found in almost all counties in Virginia and was the VNPS 2002 wildflower of the year.



Continued on next page



This evening Primrose (*Oenothera biennis*) was in bloom in a field in Surry Count, Va on last October, 18th.

1. New York ironweed with seeds near a pond in Surry County, VA taken on November 8th
 2. Shelf fungus on a dead tree also on November 8th in Surry county, VA
- Photos 3-7 were taken in my front yard in Chester, VA.
3. An interesting light purple mushroom on October 3rd.



4. Lichens growing on red oaks taken on November 30th. It was raining that day and the lichens were very green. After they dried they were almost invisible.

5. These lichens with red spore cases were on the base of a pine tree on December 21.

6. The little black mushrooms which have appeared in early winter for a number of years showed up again this year on December 18th.

7. I noticed a stain on the trunk of this Japanese maple. On closer examination it was covered by ants. Birds apparently pecked holes which were leaking sap and the ants shown here on Dec. 12th were feasting. Did the bird come back later and feast on the ants?

