December 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 Thursday December 2, 2021 starting at 6:45 PM Information on how to connect to Zoom is on the bottom of this page

On Thursday, December 2nd at 7 pm. we are proud to bring you a presentation by Louise Seals of the Richmond Tree Stewards.



Louise Seals is a retired journalist who became a tree steward following her journalism career. In her search for volunteer activities in 2008, she saw a calendar entry for a training course being organized by a Richmond City arborist. It didn't take long for her to realize she had found the opportunity she wanted — an outdoor activity where she could help make a difference.

She and Stewards Catherine Farmer and Suzette Lyon joined with Riverine Master Naturalists Laura Greenleaf and Emily Gianfortoni in 2015 to found the Invasive Plant Task Force for James River Park System. It all started with a planned tree walk and has grown into a citizen science project that the Virginia Department of Forestry likes to show off to other foresters of other southeastern states.

Richmond Tree Stewards have been recognized by the Richmond City Council for their work, and as a part of ArborDayRVA 2021, gave away 900 potted saplings.

Louise Crumrine Seals grew up on a dairy farm in West Virginia. After graduating from West Virginia University with a BS in journalism, she worked at newspapers in New York state and Ohio before landing in Richmond at The Times-Dispatch.

She was a leader in major changes such as use of computers and fostering more thoughtful community coverage, and was active in state and national journalism organizations. While she was managing editor (1994-2006) of the Times Dispatch, which then had a newsroom staff of 200, she won the Virginia Press Association's top public service award four times.

She also holds a master of science degree in mass communications from VCU and is in the Virginia Communications Hall of Fame. But her proudest journalism achievements remain those four public service awards.

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To join the meeting go to zoom.com and join the meeting by clicking on "JOIN A MEETING" then entering the Meeting ID then following the directions.

## The December Meeting Zoom ID is 836 0071 6160 and the Passcode: 910313

**Register for the meeting at:** https://us02web.zoom.us/meeting/register/tZcrd-mvrz0rHNQztAeaZeu9lsT-9eInfhgp

If you need to download the zoom app, go to zoom.com and click on "RESOURCES", then "Download Zoom Client". If you have problems or questions concerning the Zoom connection, please contact Matt Brooks at mattebrooks@protonmail.com.

# **December 2021 Pocahontas Chapter President's Message**

Happy holidays Pocahontas Chapter and Virginia Native Plant Society members. As we wrap up 2021, thank you all for participating in the VNPS this year. Every person who attends a meeting, plant walk, volunteers, or just reads the

### 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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newsletters adds to the success of the chapter.

First the news. Starting this month, the chapter will feature a plant of the month. During our chapter business meetings, we will choose a featured plant for the following month. Anyone can suggest a species, and anyone can volunteer to write up a blurb on the plant for the following month's newsletter. The December plant of the month is Hamamelis virginiana, witch hazel. Vice president Jason Aldrich has taken on this species, and his write up should be in this newsletter. On another note, we hope to lead a winter plant ID walk this winter, so stay tuned for that.

When we were discussing the plant of the month at our last meeting, someone mentioned mistletoe. This got me thinking about this strange holiday plant. I knew it's parasitic and associated with Christmas decorations and kissing, but what else? Why its spin-the-bottle reputation? Nowadays, it sounds like a recipe that includes mistletoe, alcohol, employee Christmas parties, and dumb men, all combined to make a steamy call to human resources.

The mistletoes we're talking about were traditionally placed in the family Loranthaceae (mistletoe family), then later the Viscaceae (Christmas mistletoe family). Plant Systematics: A Phylogenic Approach, 4th Ed. (Judd et al. 2016) places mistletoes in the Viscaceae, but other sources, including our own Flora of Virginia, place the Viscaceae within the

Santalaceae, the sandlewood family. Both the Viscaceae and Loranthaceae groups are in the Santales order. The modern Loranthaceae is a pantropical family with no members in temperate North America.

The Viscaceae includes the European mistletoe, Viscum album, and the American mistletoe, Phoradendron leucarpum. These are the traditional Christmas mistletoes used for decorations. We have two mistletoe genera in the U.S., Phoradendron (mistletoe) and Arceuthobium (dwarf-mistletoe), and diversity increases as we head west. In Virginia, we only have P. leucarpum, which the Flora says is widespread, parasitic to multiple tree species, and common in swamps. Flora of the Great Plains (Great Plains Flora Association 1986) includes America mistletoe (aka P. serotinum) and hairy mistletoe (P. tomentosum), which parasitizes mesquite and hackberries. By the time we hit New Mexico, we're swimming in mistletoe diversity. Flora Neomexicana III: Identification Manual (Allred and Ivey



Phoradendron leucarpum growing in a tree.

mistletoe diversity. Flora Neomexicana III: Identification Manual (Allred and Ivey 2012) shows six species of Arceuthobium and six species of Phoradendron. The Jepson Manual: Vascular Plants of California, 2nd Ed. (Baldwin et al. 2012) includes three species of Arceuthobium and four species of Phoradendron. It also includes the introduced European mistletoe, occurring in three counties. The Manual says it was introduced around 1900 by a Luther Burbank. Man, I hope my legacy never includes introducing nonnative species.

The Christmas mistletoes are stem hemiparasites with roots modified to form haustoria. Although parasitic, they still photosynthesize and produce chlorophyll. The imperfect flowers are inconspicuous, and plants are monoecious or dioecious. The fruits are sticky, or viscus, berries. According to one Forest Service article, the lodgepole pine dwarf-





Phoradendron leucarpum: Left, Flowers, Right, berries.

mistletoe, A. americanum, projects seeds 15 to 50 feet at speeds clocking 60 mph. Ideally, a projected seed sticks to the branch of another tree to root.

Mistletoes can profoundly impact western forests. The dwarf-mistletoes parasitize conifers. Their haustoria cause deformations, and "witches' brooms" may form on Douglas-fir, ponderosa pine, lodgepole pine, and other species. This negatively affects timber economics and decreases a tree's resistance to disease, pests, and drought, all of which increase a stand's vulnerability to wildfire. The berries are consumed by wildlife, and the witches' brooms provide cover and nesting habitat for songbirds, raptors, and small mammals. See the USDA's (2002) Mistletoes of North American Conifers for more information.

But what about mistletoe culturally? An internet search for "mistletoe" results in Wikipedia-type articles, kissing, and a Justin Bieber song. The common name evolved from an Anglo-Saxon name meaning "dung" and "twig." It seems these evergreen plants have been appreciated by humans for millennia. There are many references to their magical or spiritual qualities, there's a discussion by Pliny the Elder, and purported use by Celtic Druids. An arrow made of mistletoe killed the Norse god Baldur (son of Odin). It's the Oklahoma state flower. According to a Smithsonian Magazine article, the origin of its kiss-inducing properties is unclear, but the first distinct reference is from 1820 in Washington Irving's Sleepy Hollow and The Headless Horseman: "the mistletoe, with its white berries, hung up, to the imminent peril of all the pretty housemaids."

This holiday season, let's be the life of the party—if fully vaccinated—and fulfill our VNPS duty by telling people about the fascinating natural and cultural history of the Viscaceae (or Santalaceae).

Matt Brooks

# **Pocahontas Chapter Plant of the Month - Witch Hazel**

Hamemalis Virginiana v. virginiana is described in the Flora of Virginia p. 638 as being in a genus of 5 species of Eastern North America and Eastern Asia, being shrubs or small trees with alternate straight veined leaves. Its habitat is Mesic to dry upland forests occurring in a wide range of habitats, elevations, and community types. Common in the mountains and Piedmont; infrequent though widespread in the Coastal Plain.



1. Witch Hazel in bloom on November 2, 2016 at Crabtree Falls, Nelson County, VA

It is commonly known as common Witch Hazel, "Snapping Hazel", or "Winterbloom" and is the most recognized as a herbal remedy. Witch Hazel's philology is aged and storied. The common name harkens to the superstitions of

European "Hazelnut" or Corylus avellana, for which it is similar. It has been described as an herb that is used to locate witches. Other texts contend that witches used the plant to locate water and gold beneath the earth's surface. Still others argue that witches have nothing to do with the name and that the Old English word "wych", related to "wicken" meaning "to bend" or "wick" meaning "quick or living", also "...possibly even to the modern word "switch".

Of note is the violence with which the seeds are ejected from nearly year-old capsules. Just as

the winter blooms arrive, the seed pods snap open thrusting reliably viable seeds 25 to 30 feet in the air (*A Natural History of Trees of Eastern and Central North America*. Peaty. 1948).

An extract of Witch Hazel is used ". . .to help nearly everything, but not very much". It has been claimed as an astringent, tonic, sedative, and hemostatic. The plant does contain tannic and gallic acids, which have been known to produce an astringent effect on the skin. However, these compounds would be present only in a water extract of the plant. The distilled product would only contain water, alcohol and any essential oils present in the plant. Some argue that the tonic property is due simply to the effects of the alcohol that it is distilled in. Though purchasing Witch Hazel products is far less expensive and time consuming, a distilled extract can be prepared at home. ( *Stalking the Healthful Herbs*, Gibbons. 1966)

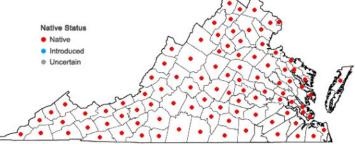
2. Close up of flower.
3. Seed pod.

4. Witch hazel with
"witches hats" on the
leaves. Witche's hats are

galls formed by an aphid which serve to protect the aphids.

### Witch Hazel Extract:

- 2 lbs dormant twigs, cut into  $< \frac{1}{2}$  inch pieces
- 8 cups of water
- ½ cups rubbing or distilled grain alcohol
- Drip still
- Blender



Range of Witch Hazel in Virginia

Put the ½ the twigs in the blender with the 4 cups water and process, repeat. Set the combined mixtures aside for the night. Pour the mixture into the drip still and put on high heat. Collect 2 cups and discard the remaining mixture. To the distillate add the alcohol, and bottle. Use within the season for best results.