

Sow and Tell

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Member of the National Capital Area Garden Clubs, Central Atlantic Region, District III

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PRESIDENT'S MESSAGE

Upcoming Events

- Oct 12** **Virtual Board Meeting**
10am
- Oct 13** **Clean Up Day**
9:30am
- Oct 19** **Virtual General Meeting**
10am
- Nov 9** **Board Meeting**
10am
- Nov 16.** **General Meeting**
10am

Welcome Autumn and its brilliant colors and cooler temperatures. What a wonderful time to take a stroll in the great outdoors and relax in the healthy surroundings.



In the fall, some of us think of shopping and preparing for the holidays which helped to make our Yard Sale amazingly successful! Thank you to all for contributing! A special thank you to Joy Salpini, Chair; Ann Carter, Co-Chair; Noreen Linnemann, Host; and Anne Nelson, Lura Marshall, and Lucia Bacon, Bake Sale Organizers. A lot of hard work went into it but the rewards included not only the proceeds, but renewing and making of friendships. Thank you, all!

Our club's autumn gardening efforts are off to a great start! Thank you to Noreen Linnemann, Civic Chair, and all those who have volunteered at Meadowlark in September and October. I also want to thank those who contributed to planting the President's Project. Great job! There are more club gardening occasions ahead.

Remember to take advantage of the opportunities Five Hills offers us to learn, enhance, and share our skills in gardening, conservation, horticulture, landscape design, and floral design. That is what we are about!

Shelia

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What a little work and a lot of love will do!

Thank you Julia Smith, Ann Balch, Lura Marshall, Noreen Linnemann, Anne Nelson, Helen Mertz, Margaret Bain (guest), Gail Gile, and Lucia Bacon (not pictured). We have a garden in which we can all take pride!



Program For October 19th Meeting

Ramblin' in Dave's Shady Garden

Dave Reed, the author of the blog, Ramblin' Through Dave's Garden, takes us on a meander of his garden on an acre and a quarter that he has created in Warrenton. Employed by Meadows Farms Landscape department since 1976, Dave uses his garden to test new plant introductions and, as he says in his blog, <https://davernfarm.wordpress.com/>, "Plant as much as the wife will allow". His garden is designed for relaxation, contemplation, and wonder" and not necessarily around a master plan. As the trees he has planted have grown to create a canopy, he describes how he has incorporated more shade-loving native plants in his garden and suggests what we might plant this Fall for next Spring.

Val Plisko - Program Chair

Field Trip: Thursday October 21, 2021

"Fine Arts & Flowers 2021"

VA Museum of Fine Arts (VMFA), Richmond, VA

200 N Arthur Ashe Blvd, Richmond, VA 23220 (@ 2 hours each way)

Museum opens at 10:00 a.m.

Admission to the museum is free & parking in the garage is \$6.00

The museum will provided a handout for the exhibit, and there will be docents to answer questions as you walk through the museum looking at the 80+ floral interpretations inspired by the art work located throughout the museum.

Because the museum could be crowded, it may be hard for a group of Five Hills members to stick together while touring the museum. Each car pool can decide what time they want to arrive at the museum, and what time they want to meet for lunch in the museum cafe.



Best Cafe VMFA

Cafe hours - 10:00 - 4:30

(You may want to plan to eat lunch early, or late, to avoid a crowd)

Send Rosemarie an email if you plan to attend - ejaksetic@aol.com and let her know if you are willing to be a driver.

Please welcome our newest member Kathy Snead who worked tirelessly helping us prepare for our very successful yard sale. We are lucky to have her join us. Her email address is: kathymsnead@gmail.com.

If you have someone that would like to attend our meetings please let me know in advance so I can introduce them.

Andy Bothwell - Membership Chair



Jane Schmiedekamp - Horticulture and Design Chair

An article in the Wall Street Journal during the pandemic suggested that each of us find a tree friend. The author described finding a steady, calming and awe-inspiring tree as the perfect antidote to residual pandemic anxiety. What we need is a tree friend. Trees have a lot to teach us about surviving harsh years and thriving during the good ones. They can show us the importance of taking the long view. They are masters at resiliency, enduring fallow periods every winter and blooming anew each spring. They're generous — they share nutrients with other trees and plants and provide clean air and shade for the rest of us. They certainly know how to age well. And trees promote awe — that emotional response to something vast that expands and challenges the way we see the world. Research shows that awe decreases stress, anxiety, and inflammation. It can quiet our mental chatter by deactivating our brain's default mode network — the area that is active when we're not doing anything and that can get absorbed by worry and rumination, according to Dacher Keltner, a professor of psychology at the University of California, Berkeley. He suggests that we visit a special tree at least once a week. Over time we will build our capacity for awe and an appreciation for the natural world around us. Find your tree and make time to appreciate its place in your world.

Horticulture: Bring a vegetable or herb grow in your yard or neighborhood.



Design: Make an arrangement including fall leaves from your yard. Can you name the leaf source?

Photos from Anne Nelson



Yard Sale Wrap Up

Another Five Hills fundraiser is in the books – and what a success it was! If you haven't heard the good news yet, our club raised \$3,000!

The sale was held on Saturday, Sept. 18, but preparations started several weeks in advance. This year the sale included a Plant Sale and a Bake Sale. Members dropped off sale items on Thursday and Friday and several members worked hard to get everything priced in advance. We knew we were off to a good start when we raised \$500 while setting up Friday!

Saturday was hot and steamy, but that didn't stop the public from showing up and buying. We had a steady stream of shoppers, and when all the money was counted, we had exceeded our expected sales of \$1500 by \$1500!

By mid-afternoon, Noreen's property was back to normal – Thank you Clean Up Crew! Leftover items were boxed up and donated to several charity organizations.

To everyone who showed up – Thank you! Thank you for your donations, your gift of time, your sense of humor, your organizational skills, and your willingness to stick around and get the job done. Many members came early and stayed late. Several volunteered on Thursday, Friday AND Saturday! I wish I had tracked the many hours we spent on this sale – because I know they far exceeded what I had imagined.

I cannot possibly name everyone, but I do want to single out and thank, Noreen Linneman – Thank you for letting us use your house, garage and yard. Thanks for the endless supply of food and drinks, and thanks for your enthusiasm, guidance and voice of reason throughout the sale.

Joy Salpini - Ways & Means Chair



Five Hills Members volunteering at Meadowlark October 5, 2021



Thank you to our October 13th Glyndon Park clean up day helpers.

Nancy Walker, Valerie Warriner, Karen Thompson,
Jane Schmiedekamp, Lura Marshall, Noreen Linnemann,
Shelia Creswell, Ann Carter, Lucia Bacon



Pawpaw: Small Tree, Big Impact

Submitted by Elizabeth Huebner



With leaves and branches that deer avoid, and fruit that is loved by all, the pawpaw (*Asimina triloba*) is a fascinating native tree. It's the only local member of a large, mainly tropical plant family (Annonaceae), and produces the largest edible fruit native to North America. Despite being a small, understory tree, unlikely to ever grow into the forest canopy, pawpaw is the most frequently observed sapling in forest monitoring plots tracked by the National Capital Region Network Inventory & Monitoring program (NCRN I&M). What do we know



Photo courtesy of Winnie Frost (GFGC)

about the ecology of pawpaw in our region, and what could its dominance mean for our future forests?

One of the tastiest late-season rewards for hikers and wildlife alike is the pawpaw fruit, which begins to ripen in late summer and peaks in September and October. The flavor of pawpaw fruit is often compared to bananas, but with hints of mango, vanilla, and citrus. The fruit has the ungainly appearance of a small green potato and may occur in clusters on the tree. Despite pawpaw's prevalence in National Capital Region forests, successfully foraging for its fruits can be a challenge. Pawpaw is self-incompatible, which means that pollen produced on a plant cannot pollinate flowers on the same plant. Instead, to produce fruit, a pawpaw flower must receive pollen from flowers on another tree, and sometimes this "other tree" is farther away than it may appear at first glance! Although pawpaw's frequently grow in clusters (think pawpaw patch), the trees in a patch are often genetically identical and connected underground by roots (and thus, in biological terms, are a single plant). Nonetheless, pawpaw's pollinators (which include flies and beetles) inevitably pollinate some flowers, and fruit-hunters may eventually find a tree with fruit. Opossums, foxes, squirrels, raccoons, and birds are all known to enjoy pawpaw and are likely to be closely watching for ripe fruits. Still, pawpaw fruit can often be found by closely surveying the ground underneath a fruiting tree. (Note: National Park regulations on activities like foraging are found in the superintendent's compendium for each park.)



Pawpaw: Small Tree, Big Impact (continued)

While National Capital Region Forest monitoring shows pawpaw to be the most common sapling in the region, some parks have many more pawpaw saplings than others. Pawpaw is the most common sapling species in C&O Canal, GW Memorial Parkway, Harpers Ferry, and National Capital Parks - East, and ranks as the second most common sapling species at Antietam, and Monocacy. This distribution is likely a reflection of the amount of preferred pawpaw habitat in each park but may also be related to other ecological processes.

Habitat Expansion & Understory Domination

In recent decades, naturalists have noted the expansion of pawpaw from well-drained, lowland habitats into drier, upland forests. This phenomenon appears to be driven, at least in part, by patterns of deer browse. Deer find pawpaw foliage unpalatable and, therefore, avoid browsing pawpaw seedlings and saplings. Instead, they preferentially browse species such as spicebush (*Lindera benzoin*), oaks (*Quercus* spp.), red maple (*Acer rubrum*), and blackgum (*Nyssa sylvatica*). Deer avoidance of pawpaw is evident in NCRN forest data. Out of 2,480 saplings recorded in the most recent sampling period, 27% showed signs of deer browse. The browse rate is strikingly different for pawpaw (which represents 21% of all saplings) with less than 1% showing signs of deer browse and greater than 99% being browse-free!

This deer behavior benefits pawpaw in two ways. First, small pawpaw's don't need to allocate energy to recovering from browse, and instead can put that energy towards growth and reproduction. Second, frequent deer browse on sapling and shrub species preferred by deer suppresses the growth of these species, clearing the way for pawpaw. As a result, we might expect to see pawpaw becoming more common in forest understories that are heavily impacted by deer browse (which describes most NCR forests). Indeed, NCRN's forest data show that pawpaw sapling density is increasing across the region, while the density of some deer-preferred species (e.g., red maple and black gum) is decreasing.

Another potential contributor to the success of pawpaw is the suppression of fires that were an important part of the disturbance regime in many eastern forests before European settlement. Pawpaws are not strongly fire-adapted (unlike other common canopy dominators, such as oaks), and they likely benefit from the lack of fire in contemporary forests.

Pawpaw: Small Tree, Big Impact (continued)

Future Forest Canopy

What are the long-term implications of increasing pawpaw dominance in the forest understory? Although we don't have a firm answer to this question just yet, we do know that the mix of tree species in the forest understory influences the long-term trajectory of the forest canopy. Many factors determine which saplings ultimately become canopy trees, but trees that do not show up in the sapling layer will never join the forest canopy.

Similarly, species that are more common in the sapling layer have more potential to be represented in the canopy than those with fewer saplings. If pawpaw continues to become more common in the sapling layer at the expense of other species, we might expect it to one day dominate the tree canopy as well.

Pawpaw is a small tree species (some might even consider it a tall shrub), growing to a maximum height of 15m— considerably shorter than the species that currently dominate NCR forest canopies. The five most common forest trees according to NCRN monitoring data include tulip tree (*Liriodendron tulipifera*), red maple (*Acer rubrum*), American beech (*Fagus grandifolia*), Virginia pine (*Pinus virginiana*), and white oak (*Quercus alba*). All of these grow to 30m or more. If deer populations remain high, the forest canopy height may decline over time, particularly in areas where pawpaw is the only understory species available to replace dead or dying canopy trees. Or, perhaps the forest canopy would become patchier, with short patches dominated by pawpaw and tall patches dominated by other species that are represented in the sapling layer of the forest (American beech, for example, is deer-browse resistant and the second most common sapling in NCR forests).

Interestingly, a similar phenomenon has been observed in over-browsed forests in central Pennsylvania. In these forests, the small, understory species striped-maple (*Acer pensylvanicum*) has become increasingly common in the forest understory over a 60-year observation period. At the same time, tree species that are capable of growing into the forest canopy have declined by 85% (Kain et al. 2011). Striped maple and American beech were found to make up 82% of all trees in the deer-browsed forests. The authors of this study speculate that these forests may experience unprecedented changes which will ultimately lead to a forest canopy dominated by only a few species that are resistant to deer browse. It is too early to tell if this is the future for NCR forests. For the time being, it is clear that deer-avoidance of pawpaw is contributing to its increased dominance in our understory, and while we may appreciate additional opportunities for fall fruit foraging, we hope it's not at the expense of losing our mighty tree canopy!

This article is thanks to Elizabeth Matthews, Botanist for National Capital Region Network, Inventory & Monitoring program.