

SUMMER

# POTOWMACK NEWS

*Potowmack Chapter of the Virginia Native Plant Society*

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## Post Oak

By Nelson DeBarros



POST OAK (*QUERCUS STELLATA*) CRUCIFORM LEAVES. ALL PHOTOS IN THIS ARTICLE BY NELSON DEBARROS.

A stunted tree growing on a ridge overlooking New Haven, a set of gnarled branches emerging from rock outcrops along Long Island Sound; these were my first experiences with Post Oak (*Quercus stellata*) in Connecticut where the species occurs in only the driest conditions near the coast.

Since moving to Northern Virginia, I have come to realize that Post Oak can occur in a variety of habitats further south in its range. I have encountered the species in both Basic and Acidic Oak-Hickory Forests, along the margins of upland depression swamps, and even within sluggish drainages in the Culpepper Basin. Once relegated in my mind to only the most xeric habitats, I now understand that Post Oak can occur and thrive under a broader range of conditions.

Post Oak naturally grows from coastal Massachusetts, south to Florida, and inland to Nebraska. The species is most common, however, in the southeastern and south central states where it can form pure stands.

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## Upcoming

### Potowmack Chapter programs are paused for the summer,

but VNPS has over 60 online videos about native plants, mostly recordings of presentations to state & chapter meetings (not just Potowmack). You can browse them here: <https://vimeo.com/vnps>. Or you can select from 15 past Potowmack Chapter programs at <https://vimeo.com/showcase/7989944>; or 7 educational videos on the *Flora of Virginia* at <https://vimeo.com/showcase/8814177>; or 4 presentations from the 2022 VNPS Annual Workshop at <https://vimeo.com/showcase/9346728>

### Riverbend Meadow: Walk with the Grass Bunch

Saturday, June 25, 9 am-12 noon

Registration required, space limited. See <https://vnps.org/potowmack/events/>

### Ferns at Fraser Preserve

Margaret Chatham will lead this walk, unless she can find someone more expert  
Saturday, July 2, 9 am-12 noon

Registration required, space limited. See <https://vnps.org/potowmack/events/>

### Wakefield Field & Forest Walk with the Grass Bunch

Saturday, July 30, 9 am-12 noon

Registration required, space limited. See <https://vnps.org/potowmack/events/>

All events are free and open to the public. Walks require preregistration. For email notices of upcoming events, subscribe to <https://vnps.groups.io/g/potowmack>. Or send a blank email to [potowmack+subscribe@vnps.groups.io](mailto:potowmack+subscribe@vnps.groups.io)

## Manage your VNPS Membership Online

1. Go to <https://vnps.org/myaccount>
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## Bon Voyage to Dean Arkema

Dean Arkema has long been a fixture on Potowmack Chapter plant walks. For years, he was an interested participant who could even identify some grasses that left the grass bunch puzzled. Then in 2018 he took over organizing our plant walks, figuring out how to set up the sign-up process & bringing name tags for the participants, so that even if we didn't know what plants we were looking at, we could correctly name the person we were talking to. All that came to a screeching halt with covid. Now that we are returning to the field in northern Virginia, Dean is off farther afield with the State Department. We'll miss him on our local field trips. Here's hoping that in his travels he gets to see more than the insides of airports and conference rooms. Botanizing in other countries offers new challenges & joys. Best wishes, Dean!

—Alas! Another vacancy on the Potowmack Chapter Board of Directors. Anyone interested in organizing our walks (you don't have to be a walk leader yourself, though you certainly may lead as many as you want to) please contact Alan Ford at [amford@acm.org](mailto:amford@acm.org).

## New Members of Potowmack Chapter

Welcome to the many new members who have joined (or re-joined?) the Potowmack Chapter in recent months:

Ellen Armbruster, Mikki Atsatt, Donald Bobby, Debby Brown, Jacqueline DeScisciolo, Timothy Dowdy, Elisabeth Freed, Lynn Gethins, Jack Hadley, Judy Harris, Valerie Hauser, Ann Heinrich, John Heinrich, Kayla Hinrichs, Monica A Hoffman, Ina Jackson, Mary Jennings, Linda Jockers, Gary Johnston, Peter Knudtson, Jennifer Mock, Samantha Nelson, Janet Nuzum, Scott O'Brien, Diana Ottignon, Barbara Pace, Jane Pittman, Jeff Portemont, Suzanne Purvis, Stacey Remick-Simkins, Kathy Rice, Suzette Risacher, Rhiannon Rogstad, Joshua Rushman, Vera Rushman, Tina Sardinas, Erin Schultz, Lisa Staresina, Savannah Steblein, Shannon Sullivan, Julie Hanson Swanson, and Lauren Taylor.

We'll enjoy your company enjoying native plants!

Editor's note: It was very interesting to see what spell-check tried to turn some of your names into. I hope I derailed all its efforts to re-name those it didn't recognize, and I offer my profound apologies to anyone whose name did get changed in moving from one list to another.

## Potowmack Chapter Board Officers

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Submissions to *Potowmack News* may be sent to The Editor at [vnps.pot@gmail.com](mailto:vnps.pot@gmail.com)

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## POST OAK CONTINUED FROM PAGE 1

The species is extremely slow-growing, but can be long-lived, persisting for 200-400 years. And while Post Oak can attain heights exceeding 100 feet, most specimens are under 50 feet. Many of the trees I encounter are on the shorter end of the spectrum and are often overtopped by other faster-growing oaks.

In Fairfax County, I occasionally find Post Oak growing in association with White Oak (*Quercus alba*) and Red Oak (*Quercus rubra*), but more frequently, I find it in drier locations with Chestnut Oak (*Quercus montana*), Black Oak (*Quercus velutina*) and Scarlet Oak (*Quercus coccinea*) -



including in my own neighborhood in Springfield.

Post Oak has a rugged appearance compared to other oaks. The species tends to have fewer, but thicker-set twigs, and many of its upper branches can be twisted or gnarled in a dramatic fashion. Unlike White Oak which develops a light-colored bark that can form shaggy plates on the upper branches, Post Oak usually develops a dark-colored bark which is held tightly in shallowly furrowed blocks along both the trunk and branches.

Post Oak also develops distinctive cruciform leaves that are often compared to a Maltese Cross, though in my opinion, the shape more closely resembles that of an Orthodox Cross. The leaves are fairly stiff and leathery with 3-7 (though usually 5) lobes. The upper surfaces eventually develop a satin sheen with age, but the undersides remain densely pubescent with a mat of star-like hairs that give Post Oak its species epithet ('stellata' is Latin for 'star'). In Autumn, the leaves mostly turn brown, but many can be imbued with a reddish tint that is accentuated by their subtle sheen.



**LEFT: A RARE CANOPY POST OAK; ABOVE: STELLATE HAIRS ON POST OAK LEAF UNDERSIDE.**

Like other oaks, this species is monoecious with staminate and pistillate flowers occurring in separate catkins on the same tree. The flowers appear with the leaves, and in 2022, flowering in Fairfax County was noted in the last week of April. Unlike oaks in the Red Oak group, acorns of Post Oak and other species in the White Oak group mature in one growing season. The acorns measure about  $\frac{1}{2}$ " to  $\frac{3}{4}$ " long and are striate with alternating bands of dark and light along their lengths. Germination occurs shortly after the acorns drop in the fall.

The species is sometime planted as a street tree, and its rot-resistant wood has many uses. Post oak has been used for railroad ties, for various lumber products, and of course, as fence posts. Despite its reputation for growing slowly, I hope to plant a couple seedlings in my front yard. The unique leaves, the dramatic form, and its rarity in cultivated spaces make this species of oak appealing to me.

## Canada Mayflower (*Maianthemum canadense*):

A Late Pleistocene Relic Discovered in Arlington County

By R.H. Simmons



QUERCUS FALCATA ROOTS AMONG MAIANTHEMUM CANADENSE. PHOTO BY R.H. SIMMONS.

While searching this April for locations of naturalized Hellebores (*Helleborus* sp.) in upper Gulf Branch Park and Glebe Road Park reported by Alex Taylor of Invasive Plant Control (IPC) to collect samples for John Hayden at the University of Richmond Herbarium (URV), I came across a new record for Arlington County: Canada Mayflower (*Maianthemum canadense*) growing on the original rifle trench at the south end of Fort Ethan Allen at Fort Ethan Allen Park. Fort Ethan Allen was an earthwork fortification built by the Union Army in 1861 as part of the Civil War Defenses of Washington, D.C. (Wikipedia).

In the Fall Zone and inner Coastal Plain of the D.C. region, I've only seen this plant in and around acidic seepage wetlands and bogs - and in much greater profusion in the Laurel area of Maryland than anywhere in northern Virginia. Botanist Mark Strong and I found a few plants at the Franconia Bog 25 years ago and I some at the Franconia Park Bog years later.

It is long-extirpated in the City of Alexandria, where it was collected in the Lincolnia section of modern-day Alexandria by William Palmer on April 30, 1899. A very few plants were rediscovered at the edges of an acidic woodland seep in nearby Lincolnia years ago on a fern foray of the eastern branch of the Turkeycock Run stream valley (extreme northeastern Coastal Plain of Fairfax County). Canada Mayflower was evidently never documented in Arlington County.

According to the few collections of Canada Mayflower for the District of Columbia at the United States National Herbarium (US) at the Smithsonian Institution, most were collected from the "Reform School Bog" environs in northeast D.C., with the most recent being a May 2, 1990 Peggy Fleming collection from the "west slope" of Glover Archbold Park in "deciduous woods".

The habitat of the very old Reform School Bog collections is much the same as the Franconia bogs and Lincolnia sites, while the Glover Archbold Park site is just

due east of the Fort Ethan Allen Park population, with both being in the Potomac River corridor.

It is posited here that the Fort Ethan Allen Park population of Canada Mayflower is a relic of an ancient montane/late Pleistocene seedbank that was unnaturally unearthed and exposed by the digging into and refashioning of substrates from millennia ago. Some of the flora of Gulf Branch and the Potomac Gorge is relictual and ancient. Gulf Branch was formerly called "Rhododendron Run" in the late 19<sup>th</sup> century for its natural, unplanted stands of *Rhododendron maximum* at the rocky gorge where it flows into the Potomac River. These persist to this day.

It is not hard to imagine the *Maianthemum canadense* as an ancient, associated montane element with the *Rhododendron maximum*.

The Canada Mayflower at Fort Ethan Allen Park is clearly not persisting in the surrounding, degraded, nutrient-altered forest and seepage fan - it is thriving *above* such conditions in a manmade microniche where it has the ability to persist. For example, the large, ca. 75-100 year old Southern Red Oak (*Quercus falcata*) clearly sprouted and grew amidst the Canada Mayflower colony, not the other way around. This is true for all the other trees on the berm as well.

## (One of my) Favorite Graminoids (What are yours?)

### Spreading Sedge - *Carex laxiculmis*

Margaret Chatham

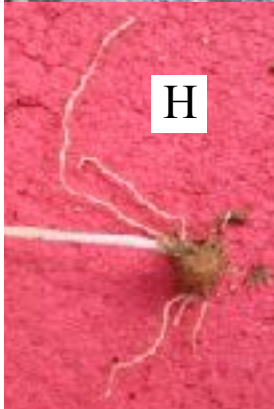
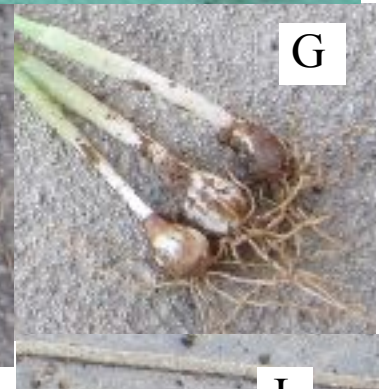
Until working through the *Flora of Virginia* with the grass bunch, I would have given one glance at these evergreen, bluish, slightly leathery leaves & called it Blue Wood Sedge, *Carex glaucoidea*. But the motto of the grass bunch applies: "We require an inflorescence!" All the specimens I've examined in the proper season in my own yard or at Fraser Preserve have sported a dangly female spikelet part way down the culm: the "laxiculmis" of Spreading Sedge's botanic name.



## Whose Roots?

While digging up some of the far-too-many Snow-Drops, Liriope, and Crocus in my front yard this spring, I was struck again by how few of our native plants grow from true bulbs. Onions, yes. Can anyone tell me some others? There are so many different non-bulb ways roots can store energy for a plant. How many do you recognize? Answers on page 6.

- 1 *Arisaema triphyllum* (Jack-in-the-Pulpit)
- 2 *Asarum canadense* (Wild Ginger)
- 3 *Claytonia virginica* (Spring Beauty)
- 4 \**Crocus* species unknown
- 5 *Erythronium americanum* (Trout Lily)
- 6 \**Ficaria verna* (Lesser Celandine, March)
- 7 \**Ficaria verna* (Lesser Celandine, April)
- 8 \**Galanthus nivalis* (Snowdrops)
- 9 \**Liriope spicata* (Creeping Lily Turf)
- 10 *Oxalis violacea* (Violet Woodsorrel)
- 11 *Sanguinaria canadensis* (Bloodroot)
- 12 *Viola sororia* (Common Blue Violet)



## POTOWMACK NEWS

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## Word of the Month: Corm

*Flora of Virginia's* definition: A short, solid vertical underground stem that is thickened as a



perennating food-storage organ but that lacks prominently thickened leaves. I learned the word when I used to grow Gladiolas & dig up the corms each fall to protect them from the winter cold. Only the Crocus and sometimes Jack-in-the-Pulpit corms remind me of Gladiolas.

**SPRING BEAUTY (CLAYTONIA VIRGINIANA) WITH ITS "GLOBOSE CORM" PEEKING OUT OF THE SOIL. PHOTO BY MARGARET CHATHAM.**

Recommended for further explorations of what plants look like underground: *Roots: an underground botany and forager's guide*, written and illustrated by Douglas B. Elliott.

Answers to quiz on page 5: 1-E; 2-L; 3-J Also called Fairy Spuds, the corm really looks like a small potato; 4-F A small, early bloomer that naturalizes very readily; 5-H *Flora of Virginia* calls this a corm; 6-I "roots fibrous and tuberous;" 7-C This one has used the extra 6 weeks making new bulbils to spread; 8-G This is a true bulb; 9-B; 10-K "Bases bulbous" It's hard to see here, but this bulbous base is tetrahedral rather than the usual tear-drop shape; 11-D "thick rhizome;" 12-A.