Every March and April Riverbend Park staff are flooded with phone calls from people wanting to know, "Are the bluebells in bloom yet? When will they be at peak bloom?" I love the fact that people from the Washington region get excited each year to come out and witness one of the great colorful displays of springtime. What's even more exciting is when people ask what other flowers they might see. How do you explain to them that they are standing in one of the most biologically diverse ecosystems found along the East Coast of North America?

Riverbend Park is 419 acres located on 2 1/2 miles of the Potomac River shoreline in Great Falls, Virginia. Because it is on the inside of a very large bend in the river, floodwaters tend to slow down as they pass over, depositing soils and seeds from deep in the Appalachian mountains and valleys of West Virginia, Western Maryland, Pennsylvania and the Shenandoah Valley, introducing species to the park that might not otherwise be found in the region. Thus Riverbend shares in the Potomac Gorge's biological diversity as an East Coast ecological hotspot.

**continued on page 3**
My Favorite Graminoid

Eastern Gamagrass – *Tripsacum dactyloides* var. *dactyloides*

By Gaylan Meyer

As a frequent jogger along the W&OD Bike Trail and a proud member of the Grass Bunch, I was intrigued by a stand of tall stout grasses that I didn’t recognize. Closer examination revealed an inflorescence (flower) spike containing both staminate (male) and pistillate (female) spikelets; the latter being located lowest on the flower spike. Using this and other features I was able to identify the grass as Eastern Gamagrass. The *Flora of Virginia* further describes the plant as perennial with short, knotty rhizomes and growing from 10-40 dm tall. A USDA Fact Sheet says it is important for livestock forage as almost all grazing animals like it. According to a Wikipedia article, it is also suitable for wildlife habitat since the leaves growing from the rhizomes form clumps giving shelter to small animals and birds. The *Flora* waffles on whether it is native saying its origins are poorly understood. [For the metric-challenged, one decimeter is about 4 inches. Photo shows it in bloom, early July. Ed.]

![Image of Eastern Gamagrass](image-url)
Riverbend Park Continued from page 1

For more than 12,000 years what is now Riverbend Park was heavily used by American Indians. Riverbend contains more American Indian sites than any other park in Fairfax County. By sometime in the 1700's the American Indians vacated the land as settlers pushed in. In the early 1790's an enterprising character by the name of Hugh Conn purchased three parcels totaling about 150 acres on which he grew tobacco and corn and ran a ferry. After his death in 1806, his wife and sons continued to operate the ferry, which saw its moment of fame in August, 1814, when President James Madison fled to Virginia and used Conn's Ferry to cross back into Maryland to link up with his troops. (For more detail, see http://www.novahistory.org/Conns_Ferry/Conns_Ferry.htm) Parts of Riverbend were farmed as late as the 1950's. Other parts remained forested and were used as fishing camps and lodges for Washingtonians to escape to for recreation. In the early 1900's Riverbend became a haven for making moonshine. The local corn, deep hollows, and abundant creeks made this an ideal place for producing illegal liquor. Finally in the 1960's and 70's the various local and federal governments realized they needed to protect the Potomac River Watershed and began buying up the land along the river, or in some cases claiming it by eminent domain. This ultimately resulted in the park land now designated as Riverbend Park. Today the park is open year round for everyone to enjoy. It has approximately 10 miles of maintained trails, a visitor center that is open six days a week, being closed only on Tuesdays, a boat ramp, a boat marina and a large picnic area, and some of the most significant natural plant communities anywhere in the Washington region.

Today the large meadow that used to be Conn's Farm contains tall native grasses such as Indian Grass (Sorghastrum nutans), Little Bluestem (Schizachyrium scoparium), and a very rare grass in this region known as Sugarcane Plume grass (Saccharum giganteum). One year we bush hogged some invasive plants out in the middle of the large meadow. As I walked through the giant open swath to inspect what plants were growing I spied a diminutive orchid at the base of the six foot grasses. There are five species of milkweeds in the meadow: Common Milkweed (Asclepias syriaca), Swamp Milkweed (A. incarnata), Purple Milkweed (A. purpurascens), Blunt-leafed Milkweed (A. amplexicaulis) and Butterfly Weed (A. tuberosa). The meadow is also home to Wild Bergamot (Monarda fistulosa) and the diminutive small White Fringed Orchis (Platanthera blephariglottis, formerly Habenaria blephariglottis). The stand of naturally occurring Butterfly Weed is the largest I have seen in this region, a blaze of fiery orange in late June.

Some of the greatest plant diversity in the park lies in the forests of the floodplain, uplands, and hollows. Riverbend's floodplain has many rare and unusual plants along with one of the largest displays of Virginia Bluebells (Mertensia virginica) in the region. Unusual plants along the river include stands of Black Maple (Acer nigrum), Basswood (Tilia americana), White Trout Lily (Erythronium albidum), Harbinger of Spring (Eriogonum bulbosa), Toadshade Trillium (Trillium sessile), and very rare plants such as Large Flowered Valerian (Valeriana pauciflora), Sweet-scented Indian Plantain (Hasteola suaveolens). If you look along the river's edge you may see very rare species such
as Dwarf Bulrush (*Hemicarpha micrantha*), Stalkless Yellowcress (*Rorippa sessiliflora*) and Western Beakgrain (*Diarrhena obovata*). Or look in the wet areas of the floodplain for Lizard’s Tail (*Saururus cernuus*) nodding its flowering head. And anywhere you walk along the river's edge you will likely see American Elm (*Ulmus americana*), Slippery Elm (*Ulmus rubra*) or Shumard Oak (*Quercus shumardii*).

As you climb up from the river into the steep hollows you discover a whole other world of plants in the thick shaded forests, where Chestnut Oak Forests and Basic Mesic Forests have stands of Mountain Laurel (*Kalmia latifolia*), the delightfully fragrant Pinxter Flower (*Rhododendron periclymenoides*), and wonderful little surprises like Showy Orchis (*Orchis spectabilis*). Witch Hazel (*Hamamelis virginiana*) blooms in patches along the ridges and native Hydrangeas cling to rocky bluffs and cliffs. If you know where to look you may even catch a glimpse of one of the Washington region’s rarest of all plants Mountain Spleenwort (*Asplenium montanum*). You may also notice some interesting diversity among the hardwood trees such as Chinkapin Oak (*Quercus muehlenbergii*), Chestnut Oak (*Quercus montana*) and Laurel Oak (*Quercus hemisphaerica*).

No matter where you walk at Riverbend Park there are interesting and unusual native plants that help you understand why the parks of the Potomac Gorge represent some of the greatest biodiversity on the East Coast.

Photos preceding page: Zebra swallowtail on *Asclepias tuberosa*, Black maple *Acer negra*. This page: not so rare Ramps, *Allium tricoccum*. Photos by Margaret Chatham

**Are you interested in expanding your skills in plant identification?** Huntley Meadows Park is seeking a volunteer to act as an herbarium laboratory assistant. This person will aid in plant processing, data entry, and maintaining accurate paper records. The time commitment is approximately 12 hours a month, working on Tuesdays or Friday afternoons. For more information, please contact the volunteer coordinator via email: [Kathleen.Lowe@fairfaxcounty.gov](mailto:Kathleen.Lowe@fairfaxcounty.gov)

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**Word of the Month: Guttation**

The exudation of liquid from an uninjured plant surface, most often seen as droplets at the tips of leaf veins on moist mornings. Look for it on your unmown grass tips or the leaves of Honewort, Strawberry, or Impatiens and others.

**Fall is the Time to Plant! Some Local Native Plant Sales**

- **Wednesdays, Sept 3 and Oct 1, 10-noon** [VNPS first-Wednesday sales](#): come to the propagation beds while the Propagation Committee is at work and pick up your favorite natives. Behind the Horticulture Center at Green Spring Gardens, 4603 Green Spring Rd, Alexandria
- **Saturday, Sept 13, 9 am-4:30 pm** [VNPS Fall Sale](#) as part of Green Spring Fall Garden Day. VNPS sale behind the Horticulture Center. VNPS offers over 100 species of native wildflowers, shrubs, vines, trees, ferns, sedges, & grasses. Lots of other vendors, some of them with native plants, bake sale, music, other activities.
- **Sunday, Sept 14, 9 am-3 pm** [Loudoun Wildlife Conservancy Fall Native Plant Sale](#), Morven Park, 17263 Southern Planter Lane, Leesburg, VA. Native plants by Nature By Design, Hill House Farm & Nursery, & Watermark Woods.
- **Saturday, Sept 20, 1-4 pm** [Long Branch Fall Native Plant Sale](#) at Long Branch Nature Center, 625 S. Carlin Springs Rd, Arlington
- **Saturday, Sept 27, 9 am-2 pm** [Northern Alexandria Fall Native Plant Sale](#) (formerly Parkfairfax Native Plant Sale) at St. Clement Episcopal Church, 1701 Quaker Lane, corner of Quaker & Oakcrest.
- **Sunday, Sept 28, 10 am-2 pm** [Earth Sangha Fall Plant Sale](#) at the Nursery, end of Cloud Drive, Springfield
**VNPS Potomac Walks**

Saturday, August 23, 9 am-noon  
**Mason Neck State Park with Lisa Bright**  
One of Lisa Bright’s favorite places, this beautiful park is bordered by Pohick Bay, Belmont Bay and the Potomac River. We hope to see an amazing variety of Coastal shrubs, including some great patches of lowbush and highbush blueberry, black huckleberry, swamp doghobble, serviceberry, possumhaw, and VA sweetspire. We may also find pickerel weed, arrow arum, three squares, rose mallow, cardinal flower, smooth beggarticks, fringed and shallow sedge, sneezeweed, and many others. State parking fee of $5 on entry.  
Space limited: register at https://vnps20140823.eventbrite.com/

Sunday, September 21, 1-4 pm  
**Merrimac Farm: Exploring the Flora and Fauna of a Piedmont Wildlife Management Area with Charles Smith**  
Explore the site’s field complexes, upland depression swamp forest and high-quality shrub wetland. Merrimac Farm hosts an impressive diversity of birds, amphibians and reptiles. Space limited; registration required.

**All Chapter Programs and Walks are Free and open to the public**

**JOIN OUR LISTSERVE AT HTTP://GROUPS.YAHOO.COM/GROUP/VNPS-POT TO RECEIVE NOTICES THAT CONTAIN WALK REGISTRATION LINKS.**

**Flora of Virginia Errata**

It was great having the brand-new *Flora of Virginia* hot off the press. But in spite of all their proofreading, some errors weren’t caught (the editor of this newsletter can identify with that experience). Now you can download 17 pages of errata and make corrections to your first edition-first printing copy of the *Flora* from http://floraofvirginia.org/errata-3/

**How You Can Help in The Community**

**Falls Church Habitat Restoration Team**

Help restore the local ecosystem in city parks. Remove invasives and plant natives that will benefit local birds and butterflies. For more information contact Melissa Teates at 703-538-6961 or melanite@verizon.net

**Arlington County’s Remove Invasive Plants (RiP) Program**

Help Rescue Arlington parks from alien plant invaders! Please bring your own tools. For more information, contact Sarah Archer at 703-228-1862 or sarcher@arlingtonva.us

**Reston Association’s Habitat Heroes Program**

Help restore local wildlife habitat through invasive plant removal and replanting with native plants For more information, contact Ha Brock at 703-435-7986 or ha@reston.org

**Fairfax County’s Invasive Management Area (IMA) Program**

Help remove invasive plants and plants and learn about new species. For more information, contact Erin Stockschlaeder at 703-324-8681 or erin.stockschlaeder@fairfaxcounty.gov
Botanic Names: Some of these plants are like one another; some of these plants are kind of the same

By Margaret Chatham

Or at least some plants are named after other plants. Specific epithets (the second words of binomial names) that end in “oides” often call attention to similarities to another genus of plants. So Acer platanoides (Norway Maple) is named after the Sycamore genus Platanus because Norway Maple’s leaves are wide like Sycamore’s. Heliopsis helianthoides (Ox-eye Sunflower) is named after the genus of true sunflowers Helianthus. Boltonia asteroides (common names not well agreed upon: White Doll’s Daisy, Starwort, False Aster, or Thousand-flower Aster) does indeed resemble a small Aster. Geum fragarioides (formerly Waldsteinia fragarioides, Barren Strawberry) shares the three-parted leaves & growth habit of Fragaria, the true Strawberries. And Penthorum sedoides (Ditch Stonecrop) looks at least a little like members of the genus Sedum.

Some of these similarities are not very helpful locally: Polystichum acrostichoides (Christmas fern) and Deparia acrostichoides (Silvery Spleenwort) are named for the genus Acrostichum. When Linnaeus first created this genus, it was an extensive genus of ferns in which the sori form a solid mass on the back of the frond. Better samples & clearer views have reduced the genus Acrostichum to four species of swamp ferns, only one of which is found in the US, and that no nearer to us than Florida, Hawaii, & Puerto Rico.

The vagaries of taxonomic shifts have given us some oddities: Rue Anemone, formerly Anemonella thalictroides, is now Thalictrum thalictroides, “the Thalictrum that looks like a Thalictrum.” Similarly Southern Mountain-mint, formerly Tullia pycnanthemiae, is now Pycnanthemum pycnanthemiae. “Pycnanthemum” translates as densely flowered, which suits the mountain mints well, but Southern Mountain-mint is no more densely flowered than the others.

Chestnut Oak’s botanic name has shifted from Quercus prinus to Quercus montana, but the older name is still recalled in Quercus prinoa, the Dwarf Chinkapin Oak.

And yes, there are “oides” that are general descriptors rather than references to other plant genera, as Populus deltoides (Eastern Cottonwood, with triangular or delta-shaped leaves) and Populus tremuloides (Quaking Aspen, with trembling leaves). But whenever you see a plant name that contains “oides,” start looking for what that plant is being compared to.
Notes on the Grass Genus Setaria, Common Names Bristlegrass and Foxtail
By John Dodge

What I look for in grasses are those that are kind to the student: ones that can be identified in the field without a 30-year career as a field botanist. The genus Setaria is kind to the student and common in this region. Look for a cylindrical inflorescence, with fine bristles that looks like a foxtail. Each stem or culm will have only one inflorescence, which will be fairly uniform in diameter, often erect but sometimes arching. There will be a few leaves on the culm, but usually the inflorescence will not be hidden.

There are 7 species in our new Flora of Virginia, but we usually will see only four in this region. These four are Setaria faberi aka Nodding Bristlegrass, S. parviflora aka Knotroot Bristlegrass, S. pumila aka Yellow Bristlegrass, and S. viridis aka Green Bristlegrass. Among these four, only Knotroot Bristlegrass is perennial and native; the rest are annuals and exotic. Incidentally, the “bristles” are short hairs protruding from the inflorescence usually in an upward direction and with a whitish, greenish or yellowish hue at maturity. You will often find foxtails growing in “waste areas”, land that has been cleared of its native vegetation but is not being cultivated or cared for. Some refer to these plants as weeds, so you will often find them in the weed handbooks.

We’ll start with Nodding Bristlegrass as the easiest one to identify in the field; when mature its inflorescence is noticeably larger than those of the other three: larger in diameter, longer, and usually curled over or droopy. You will want to look at several plants, to be sure that your plant is mature and thereby fully grown.

Now for the three remaining candidates. If your mature foxtail bristles are yellowish with 4-20 bristles per seed, you probably have yellow bristlegrass (S.pumila); if greenish and 1-3 bristles per seed, you probably have green bristlegrass (S. viridis).

Our last candidate, Knotroot Bristlegrass (S. parviflora) is our perennial, with the “knotroot” referring to the “thick, knotty” perennial roots and rhizomes. The distinction is technically correct but not easy to use, even if you are looking at the roots on an extracted plant. Perhaps the timing of the inflorescence can be a clue; the annual bristlegrasses flower July-October, while the Knotroot Bristlegrass flowers May-October. Second clue: this grass was formerly named S. geniculata; “geniculate” is defined in our Flora as “having abrupt kneelike bends or joints,” these bends found at the base. So the leafy part of the plant can look different from the other Bristlegrasses.

There is one more Foxtail or Bristlegrass you should know about: Setaria magna. With the following few facts, you are guaranteed to recognize it as Giant Foxtail or Giant Bristlegrass. It is a native of Eastern North America, but is not native to this area. It has been found in 14 Virginia counties; I discovered it this past summer while hiking along a marsh in Henlopen State Park north of Rehoboth, DE. It has the form of the Foxtails we are familiar with, but is much larger. The inflorescence can be about 2 feet long and 3 inches in diameter in the center. It tapers to the ends. The culm can be 18 feet tall; the one I saw was about 8 feet tall.

This season, see if you can ID the Bristlegrasses or Foxtails you see here and there.

Know More Grasses
If you cannot face the grass keys in the Flora of Virginia, or just want to supplement them with more pictures, take a look at Grasses of Washington, D.C. by Kamal M. Ibrahim and Paul M. Peterson, Smithsonian Contributions to Botany, No. 99. It takes a field-guide approach, and can be downloaded for free from opensi.si.edu/index.php/smithsonian/catalog/book/66
Take a Closer Look -- Late Summer

Elephantopus carolinianus

By Margaret Chatham

Carolina Elephant’s-foot at first glance looks like a fairly ordinary many-petalled flower, small, lavender, unremarkable. But if you seek it out in Flora of Virginia, you find it listed with Asteraceae: what is it doing there? John Dodge points out that closer examination turns what appears to be a single flower into four or so disc flowers, each with a single petal divided into five or so deeply cut lobes. And if you think it too small to be worth a second glance, you may be looking at it too early in the morning. Carolina elephant’s-foot is a late riser that doesn’t fully open until sometime around noon.

If you would like to receive this newsletter (in full color!) electronically, contact Alan Ford at: amford@acm.com

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