Sedges for Everyone
By Laura Beaty

Native sedges or Carex species are growing in popularity, even sometimes replacing turfgrass lawns. A December, 2001, article from the Brooklyn Botanic Garden states: "Few breakthroughs in the history of turf have been as significant as the arrival of an entirely new kind of lawn—the sedge lawn." Current landscaping books and publications encourage homeowners to incorporate native grasses and sedges into their landscapes for their many wildlife benefits.

Then comes the question of how to actually achieve a natural lawn after your soil has been compromised by applying various chemicals to support turf grasses and discourage "weeds." Fertilizers and herbicides are not beneficial to native sedges and grasses that rely on micronutrients in the soil and seasonal leaf and needle fall for nutrients. Beyond the lawn, gardeners look to native sedges as they have to native grasses for a sense of place and natural movement in their landscape. Native sedges enjoy the company of native wildflowers in rock crevices, on stream banks or in dry forests.

Homeowners looking for the perfect sedges for their landscape can explore nearby natural areas with similar growing conditions in a wide variety of national, state and local parks and preserves in Northern Virginia to see what grows where. CAUTION: Be sure just to study those plants, as wild digging is illegal. You can take photos,

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Where You Can Whack Some Invasive Exotic Plants

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 learn about new invasive species. For more information, contact Erin Stockschlaeder at 703-324-8681 or Erin.Stockschlaeder@fairfaxcounty.gov

Earth Sangha
Earth Sangha not only propagates locally native plants, they also hold workdays to remove invasives from a variety of area sites. To get in on the fun, check out www.earthsangha.org

Where You Can Buy Some Lovely Native Plants

There’s a nice, long list of native plant sales for this spring at http://vnps.org/spring-2017-plant-sales/ Among this wealth of goodies, don’t forget your own Potowmack Chapter Native Plant Propagation Committee is open for sales 10-1 the first Wednesday of each month from April to October as well during Green Spring’s Garden Day May 20, 9-3. Other personal favorites: Lahr Symposium 3/25; Northern Alexandria 4/29; and Earth Sangha 5/7.

Word of the Month
By Margaret Chatham

Culm: a hollow or pithy stalk or stem, especially in the Poaceae (grasses), Juncaceae (rushes), and Cyperaceae (sedges). Shown below: mixed fertile culms and leaves of Carex radiata, Eastern Star Sedge, at Fraser preserve, 5/23/14. Culms don’t always stay upright.
of course, to use for plant identification. You might even find the very same sedges already growing on your property.

Native sedges are wildlife friendly, supporting significant numbers of caterpillars, including many skipper species, and other leaf-eaters. Birds seeking protein for their nestlings provide ecological checks on insect populations. Fibrous sedge roots help to stabilize soil and prevent erosion. The plants themselves help slow the flow of rainwater and aid in ground infiltration. They are adapted to many growing conditions, from shade or part shade to sunnier locations and a variety of moisture needs. Northern Virginia contains many species of Carex that will thrive in many growing conditions.

Native sedges are hardy; some are even evergreen. They are plentiful except where there's been extensive ground disturbance. Most sedges have a clumping growth habit, also described by the Flora of Virginia as "growing in dense tufts," while others have a more spreading nature. Both growth patterns are achieved by the underground internodes of rhizomes supporting plant expansion. In fact, new plants in relation to the parent are dependent on the spacing of those internodes. The result is the almost uniform spaces of some of the species.

Clumping forms that grow in dense tufts include the evergreen Carex plantaginea, or Plantain-leaved Sedge, a broad-leaved sedge that thrives in shady well-drained conditions. Another broad-leaved sedge with similar needs is Carex platyphylla, or Silver Sedge. These two are attractive additions to the shady garden. Another interesting sedge for shade or sun in wetlands or woodlands is the Carex grayi, or Gray's sedge with showy seed heads like one-inch Medieval maces. Like other sedges, their seed heads are a food source for songbirds and waterfowl. This plant does require more moisture and can often be spotted along stream banks.

In drier locations in Northern Virginia different Carex species thrive, like Carex swanii, or Swan's Sedge, often seen under oak trees in partially sunny conditions. This sedge forms a loose tuft of narrow leaves from one to two feet tall. Other local sedges with very fine texture are Carex radiata, Eastern Star Sedge, and Carex appalachica, Appalachian Sedge. These closely related sedges along with Carex rosea, Rosy Sedge, are found in similar woodland conditions and are under closer examination by botanists to determine exactly where they are historically found in Virginia. Regardless, they are attractive and thrive in well-drained floodplain forests as well as dry upland forests and woodlands, according to the Flora of Virginia, and, like other sedges, support wildlife diversity.

These are only a few of the many Carex species native to Northern Virginia, but that just means that there are lots of interesting species for you to discover as you explore your yard and nearby parks for sedges hard at work providing for wildlife, stabilizing banks and slowing storm runoff. These plants are often overlooked and merit further appreciation by the discerning explorer.

Laura Beaty and Donna Murphy speak on Your Landscape as Habitat: The Case for Native Plants

Monday, April 17, 2017
1:30 to 3 pm

Patrick Henry Library
101 Maple Ave., East
Vienna, VA 22180

Register online or by phone starting March 18. www.fairfaxcounty.gov/library 703-938-0405, x4
Introduction to Grasses and Sedges
by John Dodge

“Sedges have edges; Rushes are round;
“Grasses have joints that go all the way down (or when the cops aren’t around.)”

Practically speaking, what IS the difference between a grass and a sedge? For plants that are all around us here in Northern Virginia, they remain mysteries to many of us. Most of us have mown a lawn at some point in our lives, but this is a poor starting place for learning about grasses, let alone sedges, since the act of mowing deprives us of the flowering and fruiting culms that help us identify different species.

Many grasses and sedges can be found in our open conserved areas that include naturally growing plants. Both are of interest to garden and landscape designers, and to those interested in conservation. Grasses have been of interest for many years; sedges only recently. Another reason to pay attention to the grasses and sedges is that many outdoors-focused folks do not.

We’ll start with the family of grasses, which botanists have named the Poaceae Family. There are grasses growing on every continent on earth, including even Antarctica. (The Antarctica grass is Poa annua, Annual Bluegrass, which also grows as a weed in practically every yard in Fairfax County.) In the worldwide grass family, according to our Flora of Virginia, there are “…about 700 genera and 11,000 species.” Practically all the grains we eat are seeds from grasses, including wheat, rice, corn, rye, sorghum, and barley. A lot of non-native grasses have been imported for human food, for cattle forage, for lawns, and more recently for ornamental landscaping, with the result that a large portion of the grasses in our unintended areas are non-native.

The genus and species of a grass (or sedge) plant will be determined by the size and placement of the several parts of the plant, e.g., leaves, stems, branches, flowers, and seeds. In general, grasses grow their leaves alternately on opposite sides of the stalk producing a “two-ranked” arrangement, while sedges grow their leaves in three directions, sometimes around a triangular culm. While grass leaves may be flat, sedge leaves often form a V or even a W shape in cross section. Sometimes, the several parts of the flowers must be examined to be certain about its species. Flowers, you say? You bet – these are flowering plants that can produce the grains just mentioned. As wind-pollinated flowers, they almost completely lack the perianth (petals and sepals) that

Three-sided Carex lupulina grows above two-ranked Arthraxon hispidus (non-native grass) we think of when we picture a flower, but the essential stamens and pistils are there. It’s producing and spreading enough pollen to make wind-pollination work that causes hay fever.

In looking at grass flowers, one speaks of glumes, palea and lemma (the bracts that grow around the grass flower and later the seed) and awns (thin bristles

Elymus virginicus, Virginia Wild Rye, grows substantial awns.
growing out of one of those bracts – think Bottlebrush grass, *Elymus hystrix*.)

Sedges are named the Cyperaceae Family. This family has some 100 genera and 5,000 species worldwide. Sedges are just beginning to be appreciated as desirable in gardens and landscapes. They do not have attractive flowers, nor are they cultivated as a food crop. Perhaps this is why so few of the sedges we find in our landscape are invasive exotic species. They are good on variety; their genus count in Virginia is 21. Within that group of 21 genera *Carex* stands out, with 125 species in Virginia. Since you and I don’t know the *Carex* well, we could expect to find and identify only one or two species on a single botanizing trip. The challenge is greater because the different species mature at different times. (Grass Bunch motto: “We require an inflorescence!”)

Give us a season with some emphasis on sedges, and a dozen or so outings, and I believe we could make some progress.

In looking at *Carex* flowers, one speaks of staminate (male) and pistillate (female) spikes, and the size and shape of perigynia (bracts that form a complete sac around the pistils).

[Image of *Carex baileyi* sports large perigynia]

As a practical matter, much of the learning about specific grasses and sedges occurs indoors with a hand lens or microscope, and a detailed book or two, such as the *Flora of Virginia* (Weakley, Alan S., J. Christopher Ludwig, and John F. Townsend; Bland Crowder, editor. Botanical Research Institute of Texas, 2012) for detailed descriptions both of the plants and of where to expect to find them and *The Illustrated Companion to Gleason and Cronquist’s Manual* (Noel Holmgren. The New York Botanical Garden, 1998) to help you visualize what the Flora’s descriptions are supposed to look like. Or you can go all modern on us and turn to the web for your identification assistance. Fortunately, dry samples of grasses and sedges are usually fine for examining the various plant parts required for identification. Don’t forget the usual rules against collecting plants in gardens and parks.

The Potomack Chapter of the VNPS has an unusual and informal group that has emphasized learning to ID grasses and sedges. You may have heard of it; it is the Grass Bunch. Started with a focus on grasses, the Grass Bunch has done well with grasses, and has expanded their activities into sedges. The primary effort has been on these two families. A frequent outing of the Grass Bunch has been to visit the power line right-of-way in Wakefield Park in Annandale. In the Spring through Fall seasons, 10-30 species of grass might be seen and recognized on each 2- to 3-hour walk. We have only seen and identified a few species of sedges there; we’ve found more sedges at sites like Dora Kelley Park in Alexandria, Runnymede Park in Herndon, and Fraser Preserve in Great Falls.

The Grass Bunch plans at least some outings this spring, mostly on Thursday mornings at 10 am. If that time of week works for you and you would like to join the adventure of identifying grasses and sedges (and sometimes the odd wildflower that gets in the way), contact Alan Ford at amford@acm.org.

[Image of *Carex gracilima* spreads smaller perigynia along longer spikes.]

With some knowledge of grass plants, there are three things you can do; one, grow food (corn, for example); two, decorate your yard with grass plants since there are a large number of decorative varieties of grasses available in plant nurseries; three, enjoy being outside most of the year and entertaining yourself and others by identifying the genera and/or species of a few naturally growing grasses.

**All Photos in this article by Margaret Chatham.**
Sedge in Bloom!

Seersucker Sedge, *Carex plantaginoides*

By Margaret Chatham

All right, many books, including the *Flora of Virginia*, call this “Plantain-leaved Sedge,” but what good does that name do you? It’s just a translation of the botanic name, while “Seersucker Sedge” tells you to look for those puckered leaves, always assuming you’re old enough to remember summers of wearing seersucker fabric.

Here you can also see the “leaves of the fertile culm reduced to bladeless purple sheathes,” as the *Flora of Virginia* puts it. This is what my plant looked like on April 2, 2015, but who knows how early it may bloom this year?

Photo by Margaret Chatham

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