

Switchgrass – Reprinted from Friends of Hagerman NWR Weekly Blog, December 14, 2017 (Written by Linn Cates)

Switchgrass, *Panicum virgatum*, is a fast-growing, tall, warm weather perennial grass. It forms large, open, feathery looking, finely textured seed heads that transform it from a pleasing, but plainer look, (while the nearby spring and summer flowers demand the limelight) to an impressive, dressy fall showing. This continues, though somewhat subdued, right through the winter, until mid-spring when things warm up and a whole new chorus of green leaves emerge from the switchgrass crown to begin the show anew.



Native to the North American prairie, switchgrass's large range is east of the Rocky Mountains (south of latitude 55°N,) from Canada south through the United States and into Mexico. In Texas, it grows in all regions (below left in Comfort, TX) but is rare in the Trans-Pecos area of west Texas.



In our part of Texas, North Central, you can see it at Clymer Meadow (above right), a large prairie remnant nearby in Hunt County, in native haying meadows near St. Jo in Montague County, at Austin College's Sneed property in Grayson County, and at Hagerman National Wildlife Refuge among other places. But you could see it easily and up close by driving out to Hagerman NWR Visitor Center and taking a look in the Butterfly Garden right behind the parking area. You won't miss it; one of the garden's switchgrass specimens (below) has a plaque hanging in front of it, identifying it as "Switchgrass, Plant of the Month."



The repertoire of this performer, *Panicum virgatum*, is extensive.

Switchgrass is used today in many ways. Conservationists use it in prairie restoration and erosion prevention. Farmers and ranchers use it in forage production, haying operations, and establishing game cover. Landscapers and gardeners use ornamental switchgrass cultivars appropriate for those settings. Agricultural research institutions have studied switchgrass for decades and developed commercial agricultural applications. Further study has included phytoremediation projects, fiber manufacture, electricity production, biofuel production, and biosequestration of atmospheric carbon dioxide. Could switchgrass help halt global warming?! I see all this as an amazing repertoire for a plant that grows all around us, one which I have enjoyed seeing in prairies I've visited and in gardens I've worked in, but I'm increasingly awed by Switchgrass as I learn more about it.

Grow it, but do your homework first!

Switchgrass has two growth forms: upland switchgrass and lowland switchgrass, varying from one another in several significant ways. The taller (6'+) lowland type requires more moisture, has a more extensive root, and has a more aggressive growth pattern than the shorter (waist high) not so aggressive upland switchgrass with a different root system. Some lowland varieties, such as "Alamo," are so aggressive that they can grow to be a virtual monoculture (Wasowski 1999: 135) when you may have the goal of a lovely diversified prairie. George Cates, prairie plant expert of Native American Seed, Inc., cautioned, "Know your purpose. Match your goals and objectives to the seed or plants you buy or acquire for your project." Do you want to stabilize soil to prevent erosion or grow good forage for cattle? Are you doing a prairie restoration or diversification in existing acreage and want additional food and cover for birds and other wildlife? Are you growing biomass for market? Or are you working on

public, commercial or personal landscaping? Cates summarizes his advice, “Do your homework before buying your plants or seeds!

Love your garden? – Think about adding switchgrass to it.

Switchgrass will grow in many soil types; it’s not finicky. Sand, loam, clay, caliche all work for it. It likes full sun, but does well in part shade (half day full sun, half day shade.) Switchgrass can grow in medium to moist soils and after establishment does not need watering in addition to rainfall, but also will tolerate poorly drained soils. It can be propagated by root division while dormant if you know someone willing to divide theirs and share. Here is a link to a short video on how to do it. (The Garden Gate. 2016) Susan Mahr recommends that one divide the roots every three years. (Mahr 2015). Ornamental Switchgrass cultivars are not too hard to find in local and nearby nurseries. Twin Oaks on the Sherman/Denison border carried two attractive cultivars last year: “Heavy Metal” and “Shenandoah.” “Heavy Metal” is a tightly upright switchgrass with blue-green leaves that turn rich amber in the fall and to lighter tan by winter. See the first photo of this blog. It is 3’ tall with pink toned flower spikes that make it a foot or more taller. The tiny seeds of “Heavy Metal” are a dark burgundy color. “Shenandoah;” grows to 4’ and has variegated leaves with red leaf tips early. In the fall it shows burgundy foliage and a burgundy seed head.

Ornamental switchgrass cultivars are bred to have properties that work well aesthetically in gardens. They are tall and remain upright; even if knocked over by heavy rain or snowfall they will often stand back up. They have year-round interest, so they function much like an evergreen shrub would. You can use them in attractive ways, in pairs to set off a park bench, in groups at the back of deep flower beds or in mixed plantings with other tall or mid-size prairie grasses and spring, summer, or fall flowers. You can use Switchgrass plants singly or in a row close together (4’) to create a visual barrier or to hide an unsightly area. The above plant suggestions are all native to our North



Central Texas area and will do much to provide nectar and host plants for our region’s



butterflies. Switchgrass is the host plant for four Texoma butterflies: the Least Skipper, the Delaware Skipper, the Dotted Skipper and the Broad-wing Skipper. The Delaware Skipper has been sighted at Hagerman by Laurie Sheppard who writes the Friends of Hagerman NWR monthly “Beyond the Butterfly Garden,” in which she chronicles her

butterfly sightings with photos and observations of what she sees on the Refuge. Planting species native to one’s region, whether trees, shrubs, vines, grasses, flowers or ground covers, will definitely bring more butterflies and birds your way and most importantly you will be playing a positive role in helping nature do its job to provide for us all, all the interconnected web of life of which we are a part.



What's your favorite prairie plant?

This summer and fall as I worked as a gardener and docent in Hagerman's Butterfly Garden, I thought my favorite was Gregg's Mistflower because every time I looked from late spring to late fall (7 +months) I would see many butterflies (Queens, Monarchs, Painted Ladies, Gulf Fritillaries, Variegated Fritillaries, Bordered Patches, ETC!! nectaring on the large clusters of its pretty, fuzzy light purple flowers. But today, I may have a new favorite: Switchgrass! Tell me yours?

A Final Thought: Keep learning! Me learning with my son George.



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