Rain Gardens Blog
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Many of us who live in Park Forest have a back yard that will hold water for days and weeks. Average annual precipitation for Park Forest is 41". What does this mean for our backyards? Quite a bit actually. One inch of rain from the roof of the typical homes in Park Forest equals 1,000 to 1,500 gallons. On one acre, this inch of rain equals about 27,000 gallons and on one square mile it equals 17.38 million gallons. Park Forest covers 4.96 square miles, so an inch of rain amounts to some 86.2 million gallons of water. That's 3,534 million gallons annually! For our backyards though, this annual rainfall of 41 inches, means that each of us must manage some 65,000 gallons of rain in our backyards.

Ironically, one of the best ways to manage rain water, is to collect it into one space, a "rain garden", and let it seep, or percolate into the soil. This can happen rather quickly, and be done rater beautifully, with the use of native plants. Native plants deserve an honored place in our gardens, as they are beautiful and well adapted to this environment. In large part, the mid-west looks the way that it does, or at least did, because of our native plants. Able to withstand fire, severe winters, drought and flood, native plants influenced the formation of soils forming our prairies, savannas and open woodlands. Native plants increase the soils resistance to erosion, its ability to hold water and improves the movement of water through the soils.

Some time ago, I began to develop a "rain garden" to collect and hold the excess surface water flowing through the yard. Over time, areas that used to take a week or more to drain, now do so in a few days and what used to be mud and bare earth is now a restful, beautiful habitat with a myriad of birds. My goal was to not only have plants that would tolerate the alternate wet and dry soil conditions but also be native to north east Illinois.

If you think a rain garden would help with wet, muddy areas of your yard and would like to develop a Rain Garden of your own, the Village of Park Forest has a *Rain Garden Incentive Program* to help residents get started.

For details on this program, visit the Village's web site.
https://www.villageofparkforest.com/Search?searchPhrase=Rain%20Garden%20Incentive%20Program

Things to Remember:

- Choose plants carefully, being mindful of how much sunlight the plants will receive. Most native plants want full sunlight but many are happy with partial to full shade.
- Choose plants that will tolerate both flooding and extended periods of drought. This reduces the need to irrigate after the plants are established.
- Do not mulch with leaves in the fall. It is ok to leave the leaves that fell naturally into the garden but do not add any. Thick layers of leaves can smother the plants and impede drainage.
- Once established, a garden of native plants requires little maintenance. Typically, cutting back the forbs and grasses in late fall or early spring.
- Be patient. Most native plants take two to three years to establish.
- The yard will still be wet at times but it's certainly more tolerable than it was.
- Buy plants from a good nursery, with staff that understand native plants and rain gardens.
- The U of I Extension and Master Gardeners/ Master Naturalists are a good reference.
- Birds love the natural environment
- Be willing to experiment and explore

Robert Gunther, Director of Recreation, Parks & Community Health
Village of Park Forest

Some Worth Considerations for Park Forest Gardens
All of these plants, and many other natives can be seen in the gardens around Village Hall, the Village Green and in various parks.

Ohio Spiderwort, *Tradescantia ohiensis*

Ohio Spiderwort is a 3 –4 foot, slender plant, adaptable to full sun or part shade and tolerates a variety of soil conditions. Most importantly for Park Forest gardens, it tolerates wet and boggy soils, making it a wonderful addition to native rain or bog gardens. Ohio Spiderwort is also important to pollinators and native bees and has a long flowering period. Blooms only last a day but new blooms open each morning. In my garden, new blooms have been opening daily for about a month and a half.

Queen-of-the-Prairie, *Filipendula rubra*

Queen-of-the-Prairie, as its name suggests, displays its regal pink, inflorescence well above the rest of the plants in the garden. In only its second season, one plant in my garden easily stands 6' tall. Queen-of-the-Prairie tolerates moist to wet soils, partial shade and prefers richer, organic soils. It can colonize in moist conditions, something I look for in my particular garden. The inflorescence last only about three weeks and attracts pollen seeking insects; something the House Wrens in our yard appreciate. This is an uncommon plant in nature, found mostly in the upper river basin of the Illinois River and is listed as *"threatened"* in Illinois. It is also indicative of high quality habitat.

Button Bush, *Cephalonthus occidentals*

Button Bush has become one of my favorites for its unique, delicately fragrant flowers that attracts bees, butterflies, and 24 different species of birds. Button Bush is a multi-stemmed shrub, native to the Chicago area and east. Native plants can grow 6 – 12' tall and tolerate shade as well as wet, boggy soils. I have seen Button Bush growing in standing water in wooded swamps in Illinois and northwest Indiana. I planted the cultivar, "Magical Moonlight" as it is a somewhat smaller shrub,5-6'and has a more ornamental flower. "Sugar Shack" is another popular variety that grows only 3-4'. As mentioned, the flower is unique and attracts a great number of birds and insects. Hardened balls or "nutlets' persist through the winter, providing seasonal interest and winter food for birds.

Swamp Mallow, *Hibiscus moscheutos*

The first blooms of Swamp Mallow opened today and will hold center stage through August and perhaps into September. The blooms are exotic and typically only 4" – 6", and sometimes reaching 10". Blooms can range from white to deep pink. The plants in my yard range from pale, pinkish white to a deep pink that blend from plant to plant in a gradient, as if chosen from a color wheel.

The flowers draw a variety of fauna seeking nectar. These include several species of bees, Ruby-Throated Hummingbird, and butterflies such as the Common Checkered Skipper and Painted Lady. The caterpillar stages of various other butterflies and moths also feed on various vegetative parts of the plant. Swamp Mallow grows 3' – 7' tall and prefers part shade and wet soils. The flowers can become so heavy that some support of the stems may be needed to prevent them from breaking.

Swamp Milkweed, *Asclepias incarnate*

Swamp Milkweed is the only milkweed that tolerates wet soils. The 2' -6' tall, unbranched stems terminate in umbels of flowers comprised of a whitish hood surrounded by pink petals. The flower umbels are 2 – 3 ½ inches across and wonderfully fragrant. While biking a trail in Chain O'Lakes State Park in Northeastern Illinois, I passed a large stand that perfumed the air so heavily, I had to stop and enjoy the moment. The experience was reminiscent of my boyhood days in the deep south, with the fragrance of honeysuckle and magnolia filling the night air. Swamp Milkweed tolerates partial shade and is found naturally in forested flood plains, swamps and low wet areas. It begins to bloom in mid-July and blooms for about one month. Swamp Milkweed is an important plant to pollinators, nectar-seeking insects and is even visited by the Ruby-Throated Hummingbird. Watch for Swallowtail, Greater Fritillaries and Monarch butterflies to visit as well.

Swamp Milkweed is the host plant for Monarch caterpillars and it is amazing to watch them feed. Last season, the plants in my garden were completely defoliated by these caterpillars. Please let them be. The reward is the Monarch Butterfly, and the plants recover just fine.

Marsh Blazingstar, *Liatris spicata*

Marsh Blazingstar is the exclamation point in the prairie and like Swamp Milkweed, is the sole member of this species that tolerates wet soils. It can grow up to 5 feet tall and has a wand-like spike of purplish flower heads. The bloom period is relatively short but I enjoy the unique spikes of color in the garden. Somewhat uncommon in the wild, it prefers marsh edges, bogs and prairie swales. Bees and various butterflies are attracted to the flowers.

Indian Grass – *Sorghastrum nutans*

Historically, Indian Grass was one of the dominant grasses of the Illinois, pre-settlement, tallgrass prairie and was the predominant forage for bison. As pioneers began to move west, they found Indian Grass to be good feed for their cattle as well. Today, Indian Grass is a major part of any tallgrass prairie restoration. It is adaptable to full sun or part shade and tolerates moist or dry soils and flooding. The leaf blades grow up to 2' long and the plant itself to 8' tall. Indian Grass comprises a significant part of the Central Park Wetlands and I have often wondered, while walking through these areas, what it must have been like to travel for weeks on end through grass that grew over one's head and that could only be seen over when seated on a horse or from a wagon bed.

We don't often think of grass as having a "flower" but the flower of Indian Grass has a quiet beauty all its own, and the mature, feathery seed head is stunning when backlit by the sun. The flower is a panicle of "spikelets" up to 14" long with bright yellow seeds. These seeds are in striking contrast to the wonderful, golden brown of the panicle. The panicles persist into the winter developing a deep, russet bronze color.

Indian Grass in Winter - Central Park Wetlands

Indian Grass is the preferred host of several species of grasshopper, which in turn, are an important food source for insectivorous song birds and upland game birds. Its upright habit makes it an important nesting habitat and protective cover for birds and small mammals.

Prairie Cordgrass – *Spartina nutans*

Prairie Cordgrass is one of the tallest of the North American prairie grasses and is thought to have led to the pioneer's descriptions of grass that was as "high as a horses back". Prairie Cordgrass grows to 8'and more. I have seen it in native habitat in Northeast Illinois at well over 10'. The individual grass blades grow to 2 ½' long, arching gracefully up and back down, with a slight twist that reveals both the upper and underneath sides at the same time. Sunlight reflects differently from each surface, making for an interesting pattern of highlight and shadow. The 6" flowers add late summer interest as the seed is delicately suspended from its attachment to the flower spike. In the garden, Prairie Cordgrass can be used instead of a fence, as an attractive screen around things like a backyard hot-tub ☺.

Prairie Cordgrass is adaptable to full or partial sun and wet soils. It is native to most of North America, from Canada to the southern US, and typically found in prairie swales, edges of swamps, ponds and other poorly drained areas. It was the dominant Illinois, wet prairie grass and one reference noted that Prairie Cordgrass was important to the settlers as both a resource for building their sod houses and as a source of fuel. The sod was cut into "blocks" to construct their sod homes and the grass would be harvested, twisted into bundles, dried and used as firewood.

Prairie Cordgrass is an important source of protective cover and nesting habitat for many wetland birds and the larvae of several species of moth feed exclusively on Prairie Cordgrass. Today, because it forms a dense sod, thrives in marginal soils and is salt tolerant, it is used as an effective erosion control. The *Energy Biosciences Institute* is promoting it as a Biofuel source plant.

Brown Fox Sedge – *Carex vulpinoidea*

Sedges (Carex spp.) might be one of the most often overlooked garden plant that deserves much more respect. Similar in to appearance to grasses, sedges have a "three cornered" blade and a distinctive inflorescence or flower. While some species of sedge can be quite showy, they also work well as a backdrop for the garden, providing continuity of both season and place.

Unlike true grasses, sedges green up in early spring and maintain this green through the summer. Though usually ignored, green is the predominant color in almost any garden and east of the Mississippi, the dominant color of the natural landscape. We, as gardeners, need to pay attention to green as a design element and as a useful tool in our gardens. Green is a peaceful, restful color that reduces stress.

Sedges are host to innumerable insects and their larvae, including moths, skippers, grasshoppers and katydids. As a species, sedges are adaptable to a wide variety of soils and exposure and tolerate flood and runoff, making them an ideal plant for rain gardens.

Brown Fox Sedge is one of the most attractive sedges, maintaining a fountain like habit through the season. It colonizes as a mas and will set off interspersed native forbes quite nicely. In its native habitat, colonies of Brown Fox Sedge provide cover for the Sedge Wren.