

Trailside Wildflower Guide 4
The Mid-summer Flora
mid-July through early August

Introducing some of the prairie and savanna species at Somme Prairie Grove.

Take a hike with this trail guide and see if you find this a happy way to learn the **wildflowers and grasses** that you'll find at points marked on the map. You may see these same species at many places in this diverse preserve, but they should be especially easy to find at the numbered stations. Keep track of where you are by watching for features on the map such as groves of trees, trail intersections, and wet areas (with log bridges). It may be easier and more rewarding if you bring along a plant identification book (such as those listed at the end of this guide).

1. The principal grass along the trail here is chest-high to head-high **big bluestem**. It is recognizable by its often brightly colored stems (blue, pink, orange, green and many other colors) and by its distinctive seed heads which gave the plant its other common name, "turkey foot." Shoulder-high plumes of purple flowers (that start blooming at the top, rather than the typical flowers that work their way up) are **gayfeather** or **marsh blazing star**.

2. A patch of chest-high **switchgrass** on the left shows delicate inflorescences six or eight inches in diameter, with flowers (and eventually seeds) held delicately far apart. Also notice scattered clumps of knee-high **prairie dropseed** grass – with its dense, fine, spreading leaves. **Wild bergamot** has lavender heads of "dragon-mouth" mint flowers. Leaves smell like Earl Grey tea. As with all mints, the stem is square and the leaves are opposite each other on it. The white flat-topped heads of cauliflower-like blooms are **wild quinine**. The yellow plumes are **early goldenrod** – which indeed is the only goldenrod that blooms this early.

3. As you enter the oak grove, notice **figwort**, head-high plants with big, toothed leaves and curious small flowers that are greenish outside and brownish-red inside. If you're lucky, you may see a hummingbird sipping nectar from them. Woodland grasses here include **bottlebrush grass** (looks like a bottlebrush) and **white grass** (sprawls ankle high; you can feel circles of bristles here and there on the stem).

4. The big, hairy, coarse, multi-lobed leaves (two feet long) and over-your-head sunflower-like flowers identify **compass plant**. The edges of its leaves point north and south. Bright purple cylindrical flower clusters and finely divided leaves belong to **purple prairie clover**. Yucca-like fringed leaves and blue-white spiny balls of flowers are **rattlesnake master**.

5. The plant with opposite leaves and yellow flowers is **rosinweed**, a relative of compass plant. If you take a closer look, you'll notice that although smaller and with paired simple leaves, the flowers have a similar look and the leaves a similar rough texture to its larger relative.

6. Here in the shrubby edge of the savanna, the typical prairie species are joined by plants associated with scattered shrubs and trees. **Mullein foxglove** is the one that's waist to chest-high with multi-lobed leaves and five-lobed, bilaterally symmetrical, somewhat melted-looking yellow flowers. **Starry campion** has radially symmetrical, five-petaled white flowers with long fringes on each petal. **Culver's root** (prairie or savanna) has leaves in whorls of five and white flower spikes often shoulder high. The beautiful knee-high grass with nodding seed heads that all hang in one graceful plane is **prairie brome** or **Kalm's brome**.

7. After you cross the log bridge, the tree with the peeling bark, medium-small apples and peg-like thorns is **Iowa crab apple**. This is still savanna shrubland, and the shrub on the other side of the trail is a viburnum called **black haw**. Blooming with five-petaled blue flowers in the viburnum patch is tall bellflower.

8. Then you walk through some undulating grassland with most of the prairie flowers we're already seen until you enter a little grove of bur and scarlet oaks. Here you'll find **sweet black-eyed Susan**, flowers similar to the familiar black-eyed Susan, but bigger and on a much larger and branched plant. The lower leaves have thumbs. The grass here with long awns that hang down a bit is **downy rye**. Notice that the tops of the leaves have a velvety surface (and that they're 'really' the bottom of the leaves, except that they all turn over just after they leave the stem. There's also a plant or two of another woodland or savanna grass, **Virginia rye**, which has more robust seed heads, with the awns shorter and pointing up.

9. Yellow 'petals' that droop to form a cone shape is the **yellow coneflower** or **gray-headed coneflower**. Note the thin-lobed leaves. The grass here with the wide bluish leaves is **Indiangrass**. If you don't get to recognize it this time of year, you'll have plenty of time to catch up in late summer, when its plume-like seedheads are the dominant visual over much of the site.

10. The twining waxy yellow vines with clusters of white flower (and no leaves, and no roots) is the parasitic morning glory named **dodder**. This native plant does seem to take a lot out of its victims (here they include Culver's root, sweet black-eyed Susan, rattlesnake master, and others), but it's a natural part of the ecosystem, and it only occasionally pops up here or there for a year or two. The main plant in this region is **Virginia mountain mint**, with fragrant narrow leaves and flat-topped heads of white and pink flowers.

11. Here among the Indian grass, look for **Canada milk vetch** – with creamy columns of yellow pea flowers. Like other legumes (plants in the bean family), this one has specialized nitrogen-fixing bacteria in its roots that produced nitrate fertilizer from atmospheric nitrogen – to the benefit of this plant and all its neighbors.

12. In this area, rosinweed is joined by the third member of the Silphiums – **prairie dock**. This one's huge flat, vertical leaves are

the roughest of all, and feel strangely cool on hot days, and they pump out water to cool themselves.

13. As you cross another log bridge back across the central swale, note the prairie's two major wetland grasses, **prairie cordgrass** on the edges (sometimes higher than your head, harsh cutting surfaces on the edges of its very erect leaves). And out in the center of the swale, **blue-joint grass**. It has kind of a generic look, with no striking features, but it's characteristically in nearly solid stands in the wettest areas.

14. Two interesting phenomena here. Back when this site was a savanna pasture, most of the high quality (conservative) plants were eaten into oblivion by the livestock. In this situation, some of the wetland species survive better, and when the Forest Preserve District bought the land and took the cows off, cordgrass survived in the swale down slope from this high ground. Because there was no competition from other native grasses, one clone of cordgrass colonized this drier-than-usual-for-this-species site. Better adapted prairie grasses should replace it slowly over the years, but in the meantime something remarkable has happened. When deer became severely overpopulated in the mid 1990s, they eliminated a number of species of plants from the site. One species, Canada milk vetch was wide spread, but survived well in this cordgrass patch, probably because the deer didn't want to subject their sensitive mouths to the cutting edges of this grass. Since then, culling has brought down the deer numbers sufficiently for us to gather seed here and restore milk vetch to many parts of the preserve.

15. Although it's mostly finished blooming, **leadplant** is so abundant at this spot that you should be able to still find a few of its clusters of purple spikes at the tips of woody branches of small oval leaflets. Like most of our legumes, the whole leaves are compound, with many leaflets on each leaf's stem.

16. Where the trail branches, look for a few plants of **white prairie clover** (*Petalostemum candidum*) mixed in with the

purple (*Petalostemum purpureum*). This white is a rarer and more conservative species than the purple, though both are indicators of quality prairie. Note that the white has somewhat larger and bluer leaves. The plant with five-petaled white flowers is **flowering spurge**. The branches of its inflorescence rise out of a whorl of leaves, but the rest of the leaves alternate on the stem.

17. As you leave the open grassland and enter the partial shade of some **scarlet oaks**, notice a plant of two of bright orange **butterfly weed** still in bloom. The many plants of this species out in the open have already started making pods, but the plants in the shade are later. Then turn right at the fork and notice many plants of **black-eyed Susan** (*Rudbeckia hirta*) – smaller and without the lobed lower leaves of sweet black-eyed Susan (*Rudbeckia subtomentosa*).

18. Here on the left is a weedy area where the brush was recently cut, but where you can compare **white vervain** (generally a woodland plant) with **blue vervain** (generally a wetland plant). Both have paired leaves and spikes of small flowers, the open ones of which move up the inflorescence like a napkin ring.

19. More plants of open moist woods, **great St. Johnswort** has large five-petaled yellow flowers with centers of bushy stamens and **spotted Joe-pye-weed** has big domed heads of small violet-purple flowers.

20. Under the big old **bur oaks**, notice **woodland brome** with drooping inflorescences that reach out in many directions (unlike the Kalm's brome, where the flowers and seeds all hang in one plane).

21. In a sunny wet opening where the trail crosses a swale, find **false sunflower** or **ox-eye** – yellow flowers on smooth stems with opposite leaves. These woods were filled with wildflowers in spring and early summer, and will be again in the late summer and fall, but they seem to be mostly doing their green work at this time.

Should we do an alphabetized list of common and scientific names at this point? If so, is there someone who'd be willing to type it up? Or is it good enough to leave that to the reference books.

For example:

bergamot, wild – *Monarda fistulosa*

bluestem, big – *Andropogon gerardii*

Good field guides:

Wildflowers – Northeastern/North-central North America by Roger Tory Peterson and Margaret McKenny. Excellent drawings and descriptions. Organized by color.

Newcomb's Wildflower Guide by Lawrence Newcomb. A key guides you quickly to the right group of plants.

Tallgrass Prairie Wildflowers by Douglas Ladd. Excellent photographs of the prairie species and many of the savanna species. Excellent summary of prairie ecology.

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Somme Prairie Grove

