

Self Guided Tour of the River Road Seedbeds

A Guide to the River Road Seed Beds:

Using this pamphlet with the wildflower brochure will help you identify many of the common prairie plants growing out here. The beds are numbered from north to south (1 through 36). There is an east set of beds and a west set of beds; use the signs to help you identify your location.

Many of the beds feature companion plantings. We use native grasses to exclude weeds and provide fuel for burning; periodic fires helps the prairie wildflowers grow and produce seed. This area is always a work in progress, so don't be surprised by weedy patches or places where there are no prairie plants. We are constantly renewing older plantings and adding new types of grasses and forbs to seed production.

Because seed production can be easily damaged by trampling, please do not walk through the beds, but stay on the mowed pathways. If you have questions, please call or visit our welcome center.

The following native plants of interest are easily identified throughout most of the growing season; they are present both here and in prairie restorations on Midewin National Tallgrass Prairie.

Plants of Interest at River Road Seed Beds:

E1. Prairie Dock

(*Silphium terebinthinaceum*)

This plant is a relative of the sunflower, and produces yellow flowers on tall stalks in late July

and August. Prairie dock has a deep root system, reaching down to at least ten feet. Because the plants get their water from deep in the soil, their big leaves are cool; feel them on a hot day!

E2. Prairie Dropseed

(*Sporobolus heterolepis*)

This grass forms large clumps with fine leaves. The flower heads appear in late July and August, when they have a strong scent. Some people think the flowers and seeds smell like cilantro, others think it smells like movie-theatre popcorn. What do you think it smells like?

Prairie dropseed is one of the shorter prairie grasses, rarely growing more than three feet tall. It's large clumps are characteristic of undisturbed prairies. This grass is fairly difficult to establish in prairie restorations, so we try to produce lots of seed of this grass. There are several other beds of prairie dropseed in this field. Prairie Dropseed is also viewable at E16, E 25, and E30.

In the spring look for flowers of **Wild Hyacinth** (*Camassia scilloides*) and **Glade Onion** (*Allium lavendulare*) in this bed (E2). More than a few prairie dock seedlings have moved in from the adjacent bed.

Other beds feature different companion plants: Cream Wild Indigo (*Baptisia leucophaea*, E16); Shooting-star

(*Dodecatheon meadia*, E25), and Hoary Puccoon (*Lithospermum canescens*, E30).

E3 Pale Purple Coneflower

(*Echinacea pallida*)

Here at the east end of the bed, the soil is well-drained and suitable for pale purple coneflower. This wildflower blooms in June, but the dark-brown seed heads need the entire summer to ripen. This plant is related to the **Common Purple Coneflower** (*Echinacea purpurea*), a native plant often grown in garden plants.

Further west in this bed are plantings of **Purple Prairie Clover** (*Dalea purpurea*) and **White Prairie Clover** (*Dalea candida*). They have finer leaves than pasture clovers; they flower in late June and July. Like other plants in the bean family, they help enrich the soil with nitrogen, largely through the action of microbes that grow in their roots.

E10. Compass Plant

(*Silphium laciniatum*)

This tall member of the sunflower family has yellow flowers in late June and July, and has a deep taproot like its relative, the prairie dock. But compass plant has deeply dissected leaves that tend to orient themselves with their edges north and south. Thus, during the middle of the day, the flat sides of the leaves are in their own shade, helping to keep the leaves cool and reduce water loss. When grown in garden situations, however, the leaves often point in other directions (like here!).

When compass plant is in flower, look for wilting flower heads; this wilting is caused by a small black beetle called the clipper weevil; they live in the wilted flowers. This is a native insect that feeds only on compass plant and species, like prairie dock and sunflowers.

E 17 Rattlesnake Master

(*Eryngium yuccifolium*)

This interesting plant is a relative of the carrot! In bloom the flowers on this plant look like white prickly balls, and are attractive to wide variety of insects. There are many native insects that only feed on this plant; if rattlesnake master disappears, so do all the different types of insects that depend upon it for food. Although the leaves look similar to a desert plant, this plant requires evenly moist soil. Native Americans and pioneers thought that this plant could be used to counteract rattlesnake bites, but there is no evidence that it actually works.

E36. Prairie Cordgrass

(*Spartina pectinata*)

Cordgrass, also called sloughgrass, was once the dominant grass of wet prairies in Illinois. This beautiful grass has long, arching leaves that seem to twinkle in the sun. But watch out! The edges of the leaves are sharp. The mid-summer flowers can reach 9 feet tall and the seeds are eaten by birds and insects.

River Road Seedbeds Q&A

Is this a Prairie?

No, but most of the native plants growing here are wildflowers and grasses that occur in prairies. Because they are planted in large stands separated by mowed lanes, it's easier to see the distinctive growth form and flowers of each plant species. This arrangement makes it easier to efficiently harvest all the seeds of each plant species.

What's going on here?

Like most of Illinois, very little of Midewin consists of natural prairie – less than 200 acres, scattered in little remnants across the site. To restore the remainder of Midewin to tallgrass prairie and other native habitats (>19,000 acres) will take considerable time and plant materials, including seed. Today, just leaving the land alone will not result in a return of the native grasses and wildflowers; instead it will grow up in weedy plants, most not native to this region. So as we start restoring a given field to native habitats (such as prairie), during the first winter we spread a seed mixture on the fields. These mixtures usually consist of 60-170 different kinds of grasses, sedges, and wildflowers. We make custom mixes for each site, usually those most appropriate for a specific soil type and moisture level.

Although some types of wild seed are available from specialized native plant nurseries, many are not. That's one major purpose of these beds; to produce seeds of native grasses and wildflowers that we cannot get from other sources. Many of these plant species are not commercially available, or if available, are not in the amounts we need to restore prairie to Midewin. Even with our production of seed and plants, it will still take many decades to restore much of the native habitats to Midewin.

Why not just collect seed and plants from remnant prairies?

First, there aren't enough prairie remnants to provide sufficient seeds for Midewin's restoration needs. Second, continual harvesting of most native seed produced by small prairie preserves is likely to have negative effects on the wild plant populations and the wildlife that depends on these plants.

Do the wildflowers and grasses need to be replanted every year?

Most prairie grasses and wildflowers are perennials. They have a root system in the ground that survives year after year. In the spring, new growth develops from the top of the root. Many prairie plants are long-lived; clumps of prairie dropseed live for decades, perhaps even a century or more. Other prairie plants, although perennial, live only for a decade at most. Some of the established seed production beds have been producing seed continuously for more than a decade with little care other than weeding and burning. We burn off dead material during winter or early spring. This stimulates growth and flowering in prairie grasses and wildflowers.

Why is there a tall fence around this field?

This is a deer exclusion fence. Because we have dense concentrations of certain prairie plants that are palatable to deer, they treat this as a buffet. Some of the "deer candy" plants out here include alumroot, smooth blue aster, prairie clover, and shooting star. Although some of these plants were long-established at this site, effective seed production of these wildflowers did not begin until after the fence was installed. In a prairie, the plants are more dispersed and less vulnerable to deer, unless there is a large deer population. The fence is not perfect and deer do occasionally get inside; we periodically chase them out. The fence is designed to allow other wildlife to enter and leave as they please, so be alert for turkeys, coyotes, rabbits, skunks, and foxes.

I am hearing and seeing lots of birds here — don't they take some of the seeds you are growing?

Yes, the birds do eat small amounts of seed we are producing. We usually time our harvests to collect seed before bird depredations are serious. Because of the size of the seed production field, and the

diversity of habitat around the field, there are many types of birds present. Listen and look for grasshopper sparrow, savanna sparrow, eastern meadowlark, dickcissel, eastern kingbird, and Henslow's sparrow in the open field. Around the edges, there are often indigo buntings, house wrens, rose-breasted grosbeaks, Baltimore orioles, eastern bluebirds, and American goldfinches. Look up, and you might see a red-tailed hawk, a turkey vulture, or a great blue heron flying overhead.

Where can I see some restored prairie?

Walk north from the seedbeds and parking lot on Boathouse Rd. When you come to the gate in the deer exclusion fence, walk to the left or right- there are pedestrian gates at the corners. After you go through the gates, continue north on Boathouse Rd. On your right (towards the east) is the South Patrol Road restoration project. There are over 400 acres of restored prairie and wetlands in this tract. Please walk out into restoration; as you get further from the edge, you will see more native plants and weedy patches disappear. There are large stands of native grasses and wildflowers throughout this area. Many of these plants are illustrated in the wildflower pamphlet.

Midewin National Tallgrass Prairie
30239 S. State Route 53
Wilmington, IL 60481
(815) 423-6370
www.fs.fed.us/mntp/



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