Designing and Planting Your Prairie Garden

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A garden composed of native prairie flowers and grasses can be as striking and showy as any English border garden. In fact, the English were growing our "exotic" prairie flowers in their gardens while we were busy plowing them up 150 years ago. By following a few simple design concepts and selecting the right plants to match your soil conditions, you can create stunning gardens using native prairie plants.

Not every prairie plant is a candidate for the garden. Some can be a tad bit aggressive, while others just aren't showy enough to make the cut. The best prairie flowers and grasses for the home garden are highlighted here, along with some great plant combinations. The concepts of plant ecology and garden design are melded together to create sustainable, low maintenance perennial prairie gardens that require no insecticides, fertilizers or irrigation.

I. Soil Conditions

The various prairie plants are divided here into four groups based upon the soil conditions in which they grow best: Dry, Medium, Moist and Wet. These are defined below:

Dry Soils are composed of extremely well-drained sandy or rocky soils that do not hold water and tend to dry out rapidly. A surprising variety of showy prairie plants will thrive in dry soils without the addition of topsoil, fertilization, or irrigation. Many low growing prairie plants do best on dry soils. They maintain a shorter stature due to reduced availability of moisture and nutrients on dry soils. Dry prairies tend to have a high proportion of spring and fall blooming flowers.

Medium Soils are loamy and clay-based soils with good drainage that do not experience standing water. A wide variety of both short and tall prairie flowers and grasses thrive in medium soils. The peak bloom time for medium soil prairie gardens is mid-summer.

Moist Soils tend to be regularly damp and may experience brief periods of standing water for a few days in spring or fall. The surface soil will usually dry out by late spring or early summer, but the subsoil will be moist at a depth of one to two feet. Rain gardens are designed to grow in moist soil conditions, where rainwater is captured in shallow depressions to encourage on-site infiltration and groundwater recharge. Peak bloom time for moist prairie gardens is late summer and early fall.

Wet Soils stay damp nearly year round, and moisture is generally available within one foot of the soil surface, even in mid-summer. Wet soils are often flooded in spring. They can experience standing water for a week or longer in early spring, and for a few days after a summer downpour. Only the most moisture tolerant plants will thrive in wet soils. Peak bloom time for wet soils is late summer and early fall.

II. Garden Location and Layout

Most prairie plants require a minimum of one half day of sun to develop and flower properly. A few prairie flowers will also grow well in shady conditions. However, to optimize your prairie garden's blooming potential, it should be planted in a sunny location. The east, south, and west sides of a building or woods are excellent locations for prairie gardens. Avoid north sides of buildings and woodlands, as these are too shady to support good growth of most prairie plants.

Planting a prairie "island garden" in a sunny lawn will create a strong focal point that draws the eye to the showy flowers and grasses. Some classic garden forms include circles, kidneys, and curvilinear flowing beds. Rectangular "border gardens" can also be created using prairie flowers and grasses. Planting a border against a high wall or fence that serves as a background is particularly effective for showing off taller plants. Some prairie flowers and grasses can reach six to twelve feet high, and can be used to great effect when planted against a backdrop in a border garden.

Large showy plants make for great specimens in the prairie garden. Some need plenty of room, such as White False Indigo (*Baptisia lactea*) and Blue False Indigo (*Baptisia australis*). These will occupy a three foot diameter at maturity. Lower growing flowers and grasses should be planted beneath these larger specimen plants to occupy the soil to prevent colonization by weeds. Other notable specimen plants include members of the genus *Silphium*, such as Compassplant (*Silphium laciniatum*) and Prairie Dock (*Silphium terebinthinaceum*). These plants have large unique leaves and flowerstalks up to ten feet tall. Please refer to the Section VII-F below for a list of specimen plants for the prairie garden.

III. Designing Gardens with Prairie Flowers and Grasses

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Ten Tips on Designing a Prairie Garden Using Live Plants

The following tips on designing your prairie garden combine the principles of plant ecology with garden design. You can select the ideas that you wish to apply in your garden and express your own style using wildflowers and native grasses.

1) Plant Flowers and Grasses Together to create a naturalistic meadow effect. The dense root systems of the grasses dominate the upper soil rooting zone and help squeeze out weeds. The grasses will actually do much of the "weeding" for you by eliminating the open soil in which weed seeds germinate. The grasses also help support the wildflowers and moderate soil nitrogen levels, preventing excessive flower stem growth and reducing the need for staking.

2) Select the Plants to Match the Scale of your landscape. Use short flowers and grasses (1-5 feet tall) in small prairie gardens. The short grasses, such as Little Bluestem, Sideoats Grama, and Prairie Dropseed are clump-formers that leave room between them for flowers. Use the tall flowers and grasses in back borders and areas where bold plants are desired. Tall prairie grasses and flowers can also be for screening undesirable views in late summer and fall when these plants are at their peak.

3) Plant Flowers in Masses and Drifts of color to create drama and impact in the garden. It is recommended that masses and drifts of flowers be over-seeded with a non-competitive prairie grass such as Sideoats Grama to help keep weeds in check. Mass plantings of only one or two species of flowers will often experience weed problems due to a lack of grasses to squeeze out weeds. In a closely tended or heavily-mulched garden, this may not be a concern.

4) Inter-Plant Taprooted Flowers with Prairie Grasses and Fibrous Rooted Flowers. Tap-rooted flowers do not provide sufficient soil cover to prevent weed growth around them. Grasses and fibrous rooted flowers help provide soil coverage and fend off weeds when planted closely with taprooted flowers (please refer to the list of Taprooted Flowers in Section VII-G below).

5) Arrange Plants to Complement One Another, both texturally and in color combinations. For instance, plant the flowering spikes of the blazingstars (Liatris) in front of the bold foliage of Prairie Dock. Most prairie flowers mix well with the grasses, the green grass foliage serving as a background that highlights the flowers.

6) Select Plants for Succession of Bloom throughout the growing season. This ensures that something interesting is always going on in your garden. Remember that the prairie grasses will provide a great show in fall and winter after the flowers are long gone.

7) Plant Tall Plants in Back, Short in Front. This rather obvious principle is essential in successfully displaying and enjoying your plants. Tall plants can also be used quite effectively when planted against a wall, wooden fence, or similar background.

8) Include Spring Blooming Flowers in the garden. Many of the shorter, spring-bloomers are some of the most attractive and delicate of the prairie flowers. Most spring prairie flowers go dormant by mid-summer, and thus make good companions for a variety of other flowers and grasses, tall or short.

9) Use Large "Specimen" Plants as architectural focal points in the garden. Surround individual specimen plants with lower growing flowers and grasses to help them show off, and to control weeds by occupying the soil rooting zone.

10) Use Ground Cover Plants for inter-planting among taller flowers and grasses and in areas where low growing cover is desired. These creeping plants will fill in gradually by nature of the runners they send out from the main plant. Once established, occasional weeding is all that should be necessary to remove the few interlopers that find their way into the planting.

By integrating the principles of ecology with those of garden design, you can create attractive, ecologically sound prairie gardens. These gardens will require no fertilizers, pesticides, or irrigation to keep them healthy and vibrant. Even during severe heat and drought, prairie gardens continue to perform while other plants succumb to the weather. And that ensures you of "more flowers per hours" spent in the garden!

IV. Preparing the Site and Planting the Prairie Garden

Site Preparation

The area to be planted should be prepared for planting based upon the existing vegetation. This can include:

1) Manicured Lawn with no weeds
2) Lawn with weeds
3) Weedy infested area
4) Bare soil from new construction

A **Manicured Lawn** that contains no weeds can be prepared easily using one of the methods below:

1) Smother the grass with newspaper, cardboard, black plastic, old carpet, etc for two to three months during the growing season when lawn is green and actively growing
2) Spray once with '*Roundup*' (glyphosate) herbicide in spring or early fall when grass is green and actively growing
3) Dig out sod by hand and remove it, or rent a sod cutter and strip off the top two inches of grass

Weedy Lawns can be prepared by following one of the following procedures:

1) Smother grass and weeds with newspaper, cardboard, black plastic, old carpet, etc for one full growing season, starting in spring. Some weeds, such as dandelions, will not be killed with only two to three months of smothering, and require a full season of to be killed.
2) Spray two to three times during the growing season with '*Roundup'* (glyphosate) herbicide at intervals of six to eight weeks in spring, mid-summer and/or early fall when vegetation is actively growing. This will kill practically all weeds. Quackgrass will likely require a full three sprayings throughout the year to kill it completely. A few broadleaf weeds are not readily killed by '*Roundup'*, such as Canada Thistle, Field Bindweed, and Crown Vetch. If these are present on the site, a broadleaf herbicide will need to be added to the '*Roundup'* formulation in order to eliminate them.
3) Dig out sod and weeds by hand and remove everything. A sod cutter will not kill deep-rooted weeds, as it only removes the top two inches of soil and roots. Deep-rooted weeds and weeds with rhizomes will simply re-sprout and re-infest the new garden area. If quackgrass or other rhizomatous perennials weeds are present in the lawn, be sure to sift through the soil and remove every piece of root. A one inch long rhizome of quackgrass will readily re-sprout and can grow up to three feet long in one year!

Weed-Infested Areas are best prepared using one of the techniques below:

1) Smother vegetation with newspaper, cardboard, black plastic, old carpet, etc for one full growing season. Some deep-rooted rhizomatous weeds, such as Canada Thistle, Field Bindweed, and Crown Vetch can survive an entire year of smothering, and will require being covered for two years in order to assure control.

2) Spray three times during the growing season with '*Roundup*' (glyphosate) herbicide at intervals of six to eight weeks in spring, mid-summer and early fall when vegetation is actively growing. This will kill practically all weeds. Canada Thistle, Field Bindweed, and Crown Vetch will require the addition of a broadleaf herbicide to the '*Roundup*' formulation to eliminate them.
3) Digging out grass sod and weeds by hand or using a sod cutter is <u>not</u> recommended for areas that have grown up to weeds over many years. It is virtually impossible to remove all the weeds by hand, and the sod cutter will only remove those on the surface.

Bare Soil from New Construction, if weed-free, can be planted immediately. However, soil and backfill from construction often contains little topsoil or organic matter. It may also contain live roots of perennial weeds and lots of weed seeds, depending upon its origin. If perennial weeds and plant roots are evident, these must be eliminated before planting.

For small areas, the roots of perennial weeds can be sifted out from the soil using a ¼" screen stapled onto a 2' x 2' square frame constructed of 2x4's. Once the weeds have been removed, the area to be planted immediately. If sifting out the weeds is not feasible, allow the weeds to re-sprout and grow to a height of about 12 inches and apply glyphosate herbicide ('*Roundup*'). Wait one week after spraying to allow the herbicide to translocate down to the roots to kill them before tilling, planting, or otherwise disturbing the soil and plant roots.

If time is not a factor, weeds can be smothered for one full year, as outlined above for **Weed Infested Areas.**

A note about smothering methods: If you have lots of deer in your area, black plastic may not be a good choice for smothering weeds to kill them. Deer will invariably walk on the plastic, and their hooves easily puncture it. The holes will allow light to reach the soil, and weeds will come up through them. Use a heavy, non-puncturable material when smothering weeds in high deer areas.

<u>Improving Your Soil</u>

If the soil is low in organic matter, it pays to add lots of garden compost, peat moss, rotted leaves or grass clippings, composted manure, or other non-weedy organic material. Avoid sawdust, wood chips, and straw, as these rob the soil of nitrogen. Till the organic material thoroughly into the native soil to a depth of at least six inches. The addition of organic matter is particularly important in clay and sandy or rocky soils. Organic matter helps open up clay soils to facilitate good air and water transfer, and greatly improves the water and nutrient holding capacity of sandy soils.

It is also a good idea to check the pH of your soil. The pH is a measure of the soil's acidity or alkalinity. A neutral pH is 7.0. The optimum pH for a garden soil is 6.5, as major nutrients such as Phosphorus and important micronutrients are optimally available to plants. Most prairie plants will grow in a pH range between 5.5 and 7.5, although some do best in slightly acid or slightly alkaline soils. If your pH is below 5.5, it is recommended that you increase it by adding the appropriate amount of "80/90 Dolomitic Lime" to bring the pH up to the 6.5 range. If the pH is approaching 8.0 or higher, the soil can be acidified by adding elemental sulfur or gypsum (Calcium sulfate) to help neutralize the excess alkalinity. Soil amendments should be thoroughly tilled into the soil to a depth of at least six inches.

Planting the Garden

The planting method you use will depend upon the type of soil you have and the site preparation method you used. If you have heavy clay soil or compacted soil, it will have to be tilled to break it up before planting. Tilling is also required when adding soil amendments and/or organic matter. Light sandy soils are usually loose enough that they do not require tilling prior to installing transplants.

If the area to be planted was in sod before being killed by spraying or smothering, the site may require tilling in order to break up the mass of grass roots. One of the advantages of smothering a lawn or grassy area for a full growing season is that the sod deteriorates during the summer, making planting easier that fall, or in the following spring. If you smothered the area with cardboard or layers of newspaper all season long, the plants can be installed by simply digging small holes through the smothering material. If you covered the newspaper or cardboard with organic matter, leave it in place after planting and it will serve as mulch for the newly installed plants.

Watering and Weed Control

Make sure to mark each plant with a stake when you install it, so you can identify it later in the year of the following year as it emerges in spring (so you don't accidentally pull it out). Immediately after planting, water the area deeply and thoroughly. This will minimize transplanting shock and encourage rapid root development.

To reduce weed germination and growth in your new garden, you can apply a pre-emergent herbicide, such as '*Preen*'. This will prevent germination of weed seeds, but will not affect the new transplants when applied at the recommended rate. Always apply pre-emergents AFTER all the plants have been installed. If the herbicide is applied prior to planting, it can filter down into the planting holes and cause a condition called "clubroot." Pre-emergent herbicides operate by halting cell division at the growing points of plants, particularly the root tip. When a plant's roots come in contact with this herbicide, the roots stop growing and the plant will be stunted or can die.

Mulching is strongly recommended for new gardens. On spring planted gardens, apply two to three inches of clean, weed-free organic material, such as winter wheat straw, cocoa hulls, or finely shredded hardwood bark. Do not use bark chips, especially those of pine or other conifers. These have been shown to negatively affect native flowers and grasses, and can actually kill them. Cocoa hulls are not recommended for areas frequented by dogs, as they can cause allergic reactions.

Mulch helps hold in water and reduce weed germination by preventing light from reaching the soil. Most weed seeds are triggered to germinate by sunlight. Depriving them of this stimulus with a cover of mulch significantly reduces weed germination. Mulch also helps to conserve soil moisture by reducing surface evaporation. This reduces watering requirements, and also makes it easier to pull out any weeds that do appear. A combination of pre-emergent herbicides and mulch will result in a virtually weed-free garden in the first year. The first growing season is when most weeds appear and become established, so controlling them out the outset will yield long term benefits of reduced maintenance in future years.

Fall Planting Tips

Fall can be an excellent time to install transplants when done correctly. Fall planting allows plants to become established prior to the onset of winter, resulting in rapid growth the following spring. Fall planting is recommended for early spring flowering plants, since they begin growth early in the season. Their roots become established in fall, pre-positioning them for rapid spring growth.

Fall planting can result in winter losses if not done properly. Plants should be installed when the soil is still warm, at least one month before the soil normally freezes, so the roots can become well established. Do not mulch fall transplants at the time of installation. Allow them to keep growing until they go dormant. Very few weeds germinate in fall, so pre-emergent herbicides are not effective and mulching is not required to prevent weed germination.

Let the plants grow until the weather becomes cold and their leaves turn brown and go dormant. When the plants are completely dormant or nearly dormant, cover the entire planting with four to six inches of clean straw, or three inches of cocoa hulls or finely shredded bark mulch. Make sure that each plant is well marked with a stake so you can find it in spring.

In early spring, before the plants begin new growth, remove the mulch around each plant in a circle about three inches in diameter. This will encourage soil warming and plant emergence. If left uncovered, some plants may be smothered by the thick layer of mulch. The surrounding mulch that was applied in fall can be left in place to retain soil moisture and prevent weed germination.

V. The Prairie Grasses

A prairie is a grassland ecosystem, and is typically dominated by grasses. However, natural prairies usually have many more species of flowers than grasses. This provides the gardener with a wide variety of native flowers to mix with the best of the prairie grasses.

Grasses are essential to the prairie garden for a number of reasons:

1) Their thick fibrous roots occupy the soil and help squeeze out weeds.
2) They provide fall and winter color and interest after the flowers have gone.
3) Grasses help to physically support the flowers. They also compete for soil nitrogen, preventing the flowers from getting too leggy and falling over.
4) Grasses provide the fine fuel required to burn the prairie garden in spring (if so desired)

It is generally recommended that grasses compose at least one third of the prairie garden. This allows plenty of room for the flowers, while maintaining a sufficient grass component. A 50:50 ratio is commonly used to create a nice balance between the grasses and flowers. Although it is possible to create prairie gardens composed entirely of flowers and no grasses, these gardens will be lacking the late season impact of the prairie grasses. They also may require a little more maintenance, since weeds can more readily become established between the flowers in the absence of the dense root systems of the grasses. The ratio of grasses to flowers that you use in your prairie garden will depend upon your personal preferences, which flowers and grasses you wish to use, and in what proportions.

Prairie grasses are typically divided into tall grasses and short grasses. The most common prairie grasses are listed below. Please note that not all of these might be considered garden worthy, due to aggressiveness, short-lived nature, or other reasons.

Tallgrasses (4 to 8 ft)	**Latin Name**	**Ht.**	**Soil Types**
Big Bluestem	*Andropogon gerardi*	5-8'	Dry, Medium, Moist
Canada Wild Rye	*Elymus canadensis*	4-5'	Dry, Medium, Moist
Switchgrass	*Panicum virgatum*	3-6'	Dry, Medium, Moist
Indiangrass	*Sorghastrum nutans*	5-7'	Dry, Medium, Moist
Prairie Cordgrass	*Spartina pectinata*	6-9'	Moist, Wet

Shortgrasses (1 to 4 feet)	**Latin Name**	**Ht.**	**Soil Types**
Sideoats Grama	*Bouteloua curtipendula*	2-3'	Dry, Medium
Junegrass	*Koeleria macrantha*	2-3'	Dry Soil: Northern Climates
Little Bluestem	*Schizachyrium scoparium*	2-3'	Dry, Medium
Prairie Dropseed	*Sporobolus heterolepis*	2-4'	Dry, Medium

VI. The Prairie Flowers

Prairie flowers provide the fabulous color show for which the prairie garden is renowned. Since most prairie plants are "warm season" plants that do best after the air and soil warm up, the peak bloom time for prairie gardens in medium soils is from early July into August.

Dry prairies have a higher proportion of early spring blooming flowers than the other prairie types. Since these extremely well-drained soils dry out rapidly in summer, spring blooming flowers take advantage of the cooler, moister conditions that occur early in the growing season to avoid heat and drought stress.

Moist and Wet prairies warm up slowly in spring and early summer due to the large amount of water contained in their soils. Plant activity is a function of both soil temperature and air temperature, so the peak bloom period for these prairies is late summer and early fall when the soil is warmest. The largest and grandest of the prairie flowers and grasses grow in Moist and Wet prairies, where they have nearly unlimited access to water to sustain their growth.

Each prairie flower not only has its own recognizable bloom, it also possesses distinctive foliage. Many prairie flowers have truly unique foliage, providing the gardener with great opportunity to show off individuals, as well as combining complementary foliage types. The bold foliage of large-leafed plants makes a great foil for vertical flowerstalks, acting as a natural background. Some of the most dramatic perennials available to the American gardener are prairie flowers. Please refer to the list of Specimen Plants in Section VII-F below for some excellent candidates for creating focal points and foliage displays in the prairie garden.

VII. Best Prairie Flowers and Grasses for Gardens

When it comes to selecting plants for your prairie garden, the same criteria can be applied as one would apply to any other garden plant:

Characteristics of a Good Garden Plant

- Showy flowers
- Attractive foliage
- Good form
- Non-aggressive
- Long-lived (regular re-planting not required)
- Disease and pest resistant
- Adapted to local climatic extremes (drought, heat, cold, etc)
- Attract birds, butterflies, and other desirable wildlife

The following plants have been selected for prairie gardens based upon the criteria listed above.

A. Prairie Plants for Dry Soils (Dry Sandy, Gravelly, and Rocky Soils)

Latin Name	Common Name	Ht.	Color	Soil Types
Flowers				
Allium stellatum	Prairie Onion	1-2’	Lavender	Dry, Medium
Amorpha canescens	Leadplant	2-3’	Purple	Dry, Medium
Asclepias tuberosa	Butterflyweed	2-3’	Orange	Dry, Medium
Aster laevis	Smooth Aster	2-4’	Blue	Dry, Medium
Baptisia bracteata	Cream False Indigo	1-2’	Cream	Dry, Medium
Campanula rotundifolia	Harebell	1-2’	Blue	Dry, Medium
Ceanothus americanus	New Jersey Tea	2-3’	White	Dry, Medium
Coreopsis lanceolata	Lanceleaf Coreopsis	1-2’	Yellow	Dry, Medium
Dalea purpurea	Purple Prairie Clover	1-2’	Purple/Yellow	Dry, Medium
Geum triflorum	Prairie Smoke	6”	Pink	Dry, Medium
Liatris aspera	Rough Blazingstar	2-5’	Purple/Pink	Dry, Medium
Liatris squarrosa	Scaly Blazingstar	1-2’	Purple/Pink	Dry, Medium
Lupinus perennis	Lupine	1-2’	Blue	Dry Sand Only
Ruellia humilis	Wild Petunia	1-2’	Violet	Dry, Medium
Salvia azurea	Blue Sage	3-5’	Blue	Dry, Medium
Solidago rigida	Stiff Goldenrod	3-5’	Yellow	Dry, Medium
Solidago speciosa	Showy Goldenrod	1-3’	Yellow	Dry, Medium
Tradescantia bracteata	Prairie Spiderwort	1-2’	Blue	Dry, Medium
Tradescantia ohiensis	Ohio Spiderwort	2-4’	Blue	Dry, Medium
Viola pedata	Birdsfoot Violet	4”	Blue/Purple	Dry
Grasses				
Bouteloua curtipendula	Sideoats Grama	2-3’	Straw	Dry, Medium
Panicum virgatum	Switchgrass	3-6’	Gold	Dry, Medium, Moist
Schizachyrium scoparium	Little Bluestem	2-3’	Crimson-Red	Dry, Medium
Sorghastrum nutans	Indiangrass	5-7’	Gold	Dry. Medium, Moist
Sporobolus heterolepis	Prairie Dropseed	2-4’	Gold	Dry, Medium

B. Prairie Plants for Medium Soils (Well-Drained Loam, Sandy Loam, and Clay Loam)

Latin Name	Common Name	Ht.	Color	Soil Types
Flowers				
Allium cernuum	Nodding Pink Onion	1-2’	White/Pink	Medium, Moist
Asclepias sullivantii	Sullivant’s Milkweed	3-5’	Pink/Yellow	Medium
Asclepias tuberosa-Clay	Butterflyweed for Clay	2-3’	Orange	Dry, Medium
Aster laevis	Smooth Aster	2-4’	Blue	Dry, Medium
Aster novae-angliae	New England Aster	3-6’	Pink/Purple/Blue	Medium, Moist
Baptisia australis	Blue False Indigo	3-5’	Blue	Medium
Baptisia bracteata	Cream False Indigo	1-2’	Cream	Dry, Medium
Baptisia lactea	White False Indigo	3-5’	White	Medium, Moist
Ceanothus americanus	New Jersey Tea	2-3’	White	Dry, Medium
Dalea purpurea	Purple Prairie Clover	1-2’	Purple/Yellow	Dry, Medium
Dodecatheon meadia	Shootingstar	1-2’	White/Pink	Medium, Moist
Echinacea paradoxa	Ozark Coneflower	3-5’	Yellow	Dry, Medium
Echinacea pallida	Pale Purple Coneflwr	3-5’	Purple	Dry, Medium
Echinacea purpurea	Purple Coneflower	3-4’	Purple	Dry, Medium
Eryngium yuccifolium	Rattlesnake Master	3-5’	White	Dry, Medium
Liatris pycnostachya	Prairie Blazingstar	3-5’	Purple/Pink	Medium, Moist
Parthenium integrifolium	Wild Quinine	3-5’	White	Medium, Moist
Penstemon digitalis	Smooth Penstemon	2-3’	White	Medium, Moist
Ratibida pinnata	Yellow Coneflower	3-6’	Yellow	Dry, Medium, Moist
Rudbeckia fulgida	Orange Coneflower	2-4‘	Yellow	Medium
Rudbeckia subtomentosa	Sweet Blk Eye Susan	4-6’	Yellow	Medium, Moist
Silene regia	Royal Catchfly	2-4’	Red	Medium
Silphium laciniatum	Compassplant	3-10’	Yellow	Dry, Medium
Silphium terebinthinaceum	Prairie Dock	3-10’	Yellow	Medium, Moist
Solidago ohioensis	Ohio Goldenrod	3-4’	Yellow	Medium, Moist
Solidago rigida	Stiff Goldenrod	3-5’	Yellow	Dry, Medium
Tradescantia bracteata	Prairie Spiderwort	1-2’	Blue	Dry, Medium
Tradescantia ohiensis	Ohio Spiderwort	2-4’	Blue	Dry, Medium
Vernonia fasciculata	Ironweed	4-6’	Red/Pink	Moist
Grasses				
Panicum virgatum	Switchgrass	3-6’	Gold	Dry, Medium, Moist
Schizachyrium scoparium	Little Bluestem	2-3’	Crimson-Red	Dry, Medium
Sorghastrum nutans	Indiangrass	5-7’	Gold	Dry. Medium, Moist
Sporobolus heterolepis	Prairie Dropseed	2-4’	Gold	Dry, Medium

C. Prairie Plants for Moist Soils (Soils that are wet in spring & do not dry out in summer)

Latin Name	Common Name	Ht.	Color	Soil Types
Flowers				
Allium cernuum	Nodding Pink Onion	1-2’	White/Pink	Medium, Moist
Amsonia tabernaemontana	Common Bluestar	2-3’	Blue	Medium, Moist
Asclepias incarnata	Red Milkweed	3-5’	Red/Pink	Moist, Wet
Aster novae-angliae	New England Aster	3-6’	Pink/Purple/Blue	Medium, Moist
Baptisia lactea	White False Indigo	3-5’	White	Medium, Moist
Camassia scilloides	Wild Hyacinth	1-2’	White	Medium, Moist
Chelone glabra	White Turtlehead	2-4’	White	Moist, Wet
Eupatorium fistulosum	Tall Joe Pye Weed	5-8’	Purple/Pink	Medium, Moist
Eupatorium maculatum	Joe Pye Weed	4-6’	Pink	Moist, Wet
Filipendula rubra	Queen of the Prairie	4-5’	Pink	Medium, Moist
Gentiana andrewsii	Bottle Gentian	1-2’	Blue	Moist, Wet
Hibiscus palustris	Rose Mallow	3-6’	Pink	Moist, Wet
Iris shrevei	Wild Iris	2-3’	Blue	Wet
Iris versicolor	Blue Flag Iris	2-3’	Blue	Wet
Liatris spicata	Dense Blazingstar	3-6’	Purple/Pink	Medium, Moist
Lobelia cardinalis	Cardinal Flower	2-5’	Red	Moist, Wet
Lobelia siphilitica	Great Blue Lobelia	1-4’	Blue	Medium, Moist
Phlox glaberrima	Marsh Phlox	2-4’	Red/Purple	Medium, Moist
Solidago ohioensis	Ohio Goldenrod	3-4’	Yellow	Medium to Moist
Spiraea tomentosa	Steeplebush	2-3’	Pink	Wet
Vernonia altissima	Tall Ironweed	5-8’	Red/Pink	Moist, Wet
Veronicastrum virginicum	Culver’s Root	3-6’	White	Medium, Moist
Zizia aurea	Golden Alexanders	1-2’	Yellow	Medium, Moist, Wet
Grasses, Sedges and Ferns				
Carex comosa	Bottlebrush Sedge	2-4’	Green	Moist, Wet
Carex hystericina	Porcupine Sedge	1-3’	Green	Moist, Wet
Carex muskingumensis	Palm Sedge	2-3’	Golden-Brown	Medium, Moist
Carex vulpinoidea	Fox Sedge	1-3’	Golden-Brown	Moist, Wet
Hierochloe odorata	Vanilla Sweet Grass	1-2’	Straw	Medium, Moist

Note: Vanilla Sweet Grass creeps by rhizomes and can be aggressive

D. Early Spring Blooming Prairie Flowers

There are a number of wonderful spring blooming flowers to choose from for early season interest in the prairie garden. These appear in their full glory in April and May while the summer bloomers are just awakening from their winter slumbers.

Latin Name	Common Name	Ht.	Color	Soil Types
Baptisia bracteata	Cream False Indigo	1-2’	Cream	Dry, Medium
Camassia scilloides	Wild Hyacinth	1-2’	White	Medium, Moist
Dodecatheon meadia	Shootingstar	1-2’	White/Pink	Medium, Moist
Geum triflorum	Prairie Smoke	6”	Pink	Dry, Medium
Lupinus perennis	Lupine	1-2’	Blue	Dry Sand Only
Viola pedata	Birdsfoot Violet	4”	Blue/Purple	Dry
Zizia aurea	Golden Alexanders	1-2’	Yellow	Medium, Moist, Wet

E. Great Prairie Plant Combinations

There are some wonderful flower and texture combinations that can be used in the prairie garden. A few are listed below:

Dry Soils

Smooth Aster & Heath Aster (blue and white)
Lanceleaf Coreopsis & Beardtongue (yellow and lavender)
Lanceleaf Coreopsis & Lupine (yellow and blue)

Dry to Medium Soils

Butterflyweed & Pale Purple Coneflower (orange and purple)
Butterflyweed & Purple Prairie Clover (orange and purple/yellow)
New Jersey Tea & White False Indigo (complementary foliages)
Prairie Smoke & Harebell (Pink and Blue)
Rough Blazingstar & Blue Sage (Purple/Pink and Blue)
Cream False Indigo & Prairie Dropseed Grass (contrasting foliage of two “mounding” plants)

Medium to Moist Soils

Prairie Blazingstar & Rattlesnake Master (Purple/Pink and White)
Prairie Blazingstar & Wild Quinine (Purple/Pink and White)
Smooth Penstemon & Ohio Spiderwort (White and Blue)
Queen of the Prairie & Prairie Blazingstar (Pink and Purple/Pink)
Obedient Plant & Great Blue Lobelia (Pink and Blue)
White Turtlehead & Great Blue Lobelia (White and Blue)
Sweet Black Eyed Susan & New England Aster (Yellow and Pink/Purple/Blue)
Tall Joe Pye Weed and Switchgrass (complementary foliages)
Culver’s Root and Prairie Dropseed Grass (complementary foliages)

F. Specimen Plants – "The Showoffs"

Certain plants possess great stature, unusual foliage, striking flowers, or a combination of these attributes. Some of the more unusual and showy prairie "specimen plants" are listed below. They can be used to create strong focal centers in the garden. Plants with particularly notable foliage are noted with an (F) after the Latin Name.

Latin Name	Common Name	Ht.	Color	Soil Types
Amorpha canescens (F)	Leadplant	2-3'	Purple	Dry, Medium
Aster novae-angliae	New England Aster	3-6'	Pink/Purple/Blue	Medium, Moist
Baptisia australis	Blue False Indigo	3-5'	Blue	Medium
Baptisia lactea	White False Indigo	3-5'	White	Medium, Moist
Cassia hebecarpa	Wild Senna	4-6'	Yellow	Medium, Moist, Wet
Ceanothus americanus (F)	New Jersey Tea	2-3'	White	Dry, Medium
Eryngium yuccifolium (F)	Rattlesnake Master	3-5'	White	Dry, Medium
Eupatorium fistulosum (F)	Tall Joe Pye Weed	5-8'	Purple/Pink	Medium, Moist
Eupatorium maculatum	Joe Pye Weed	4-6'	Pink	Moist, Wet
Filipendula rubra	Queen of the Prairie	4-5'	Pink	Medium, Moist
Lobelia cardinalis	Cardinal Flower	2-5'	Red	Moist, Wet
Rudbeckia subtomentosa	Sweet Black Eye Susan	4-6'	Yellow	Medium, Moist
Silene regia	Royal Catchfly	2-4'	Red	Medium
Silphium laciniatum (F)	Compassplant	3-10'	Yellow	Dry, Medium
Silphium perfoliatum	Cupplant	3-10'	Yellow	Medium, Moist, Wet
Silphium terebinthinaceum (F)	Prairie Dock	3-10'	Yellow	Medium, Moist
Vernonia altissima	Tall Ironweed	5-8'	Red/Pink	Moist, Wet
Veronicastrum virginicum (F)	Culver's Root	3-6'	White	Medium, Moist

G. Taprooted Flowers for Inter-Planting with Grasses

Many of the longest-lived and most drought tolerant prairie flowers have taproots that reach deep down into the soil. The plant stores energy and water in these taproots, and can reach moisture in the subsoil during droughts. Taprooted plants make excellent companions for prairie grasses and fibrous rooted prairie flowers that occupy the surface soil. It is recommended that taprooted flowers be planted in association with grasses and fibrous-rooted flowers to help cover the soil and reduce weed growth around taprooted species.

Latin Name	Common Name	Ht.	Color	Soil Types
Amorpha canescens	Leadplant	2-3'	Purple	Dry, Medium
Asclepias tuberosa	Butterflyweed	2-3'	Orange	Dry, Medium
Baptisia australis	Blue False Indigo	3-5'	Blue	Medium
Baptisia bracteata	Cream False Indigo	1-2'	Cream	Dry, Medium
Baptisia lactea	White False Indigo	3-5'	White	Medium, Moist
Callirhoe triangulata	Poppy Mallow	1-2'	Magenta	Dry
Dalea candida	White Prairie Clover	1-2'	White	Dry, Medium
Dalea purpurea	Purple Prairie Clover	1-2'	Purple/Yellow	Dry, Medium
Echinacea pallida	Pale Purple Coneflwr.	3-5'	Purple	Dry, Medium
Echinacea paradoxa	Ozark Coneflower	3-5'	Yellow	Dry, Medium

Eryngium yuccifolium	Rattlesnake Master	3-5’	White	Dry, Medium
Lupinus perennis	Lupine	1-2’	Blue	Dry
Parthenium integrifolium	Wild Quinine	3-5’	White	Medium, Moist
Ratibida pinnata	Yellow Coneflower	3-6’	Yellow	Dry, Medium, Moist
Silene regia	Royal Catchfly	2-4’	Red	Medium
Silphium integrifolium	Rosinweed	2-6’	Yellow	Medium, Moist
Silphium laciniatum	Compassplant	3-10’	Yellow	Dry, Medium
Silphium terebinthinaceum	Prairie Dock	3-10’	Yellow	Medium, Moist
Tradescantia ohiensis	Ohio Spiderwort	2-4’	Blue	Dry, Medium

H. Prairie Groundcover Plants

Certain native prairie plants creep by underground rhizomes to form a solid or nearly solid ground cover. Some spread rapidly, others more slowly. A few can be downright aggressive! These plants can be used in the appropriate locations to stabilize hillsides, wet swales, and disturbed soils. Western Spiderwort is excellent for covering dry sandy and rocky hillsides. Canada Anemone, Obedient Plant, and Vanilla Sweetgrass are tolerant of damp soils, and spread rapidly to stabilize moist swales. Prairie Smoke and Prairie Spiderwort spread gradually, and serve as well behaved groundcovers in more formal situations.

Latin Name	Common Name	Ht.	Soil Type	Characteristics
Anemone Canadensis	Canada Anemone	1-2’	Medium, Moist	Spreads rapidly
Geum triflorum	Prairie Smoke	6”	Dry, Medium	Spreads slowly
Physostegia virginiana	Obedient Plant	1-2’	Medium, Moist	Spreads rapidly
Tradescantia bracteata	Prairie Spiderwort	1-2’	Dry, Medium	Spreads slowly
Tradescantia occidentalis	Western Spiderwort	1’	Dry, Medium	Spreads rapidly
Hierochloe odorata	Vanilla Sweetgrass	1-2’	Medium to Moist	Spreads rapidly

Summary

Native prairie flowers and grasses can be used in a multitude of settings, and for a variety of purposes. By selecting plants to match your growing conditions and garden design concept, you can create beautiful, sustainable, low maintenance gardens that are pleasing to the eye and attract a diversity of birds and butterflies to your property. The possibilities are unlimited, so let your imagination run free in the prairie!