

## Planting & Establishment

Plant into a smooth, weed-free seed bed. Young plants or plugs can be planted anytime from late spring to early fall. They may need supplemental water if planted in the summer.

Seeds can be sown in spring or late fall. Many native plants need a period of cold moist conditions in order to germinate. If you plant them in fall this happens naturally during the winter. Sow seeds late enough that they won't germinate before winter. If planting in spring you will need to treat the seeds - instructions are usually included with them. You can also plant untreated seeds in the spring - they just won't germinate until the following year.

It's easiest to hand broadcast seed in small areas. For more even distribution make two passes, with the second perpendicular to the first. Wildflowers can be spread evenly throughout the area or in separate swaths between the grasses. To make small seeds easier to sow mix with a filler such as sand, sawdust, compost, or peat. Lightly rake in and tamp down or gently roll to ensure good seed to soil contact.

Keep moist until seeds have germinated or plants have begun to establish. The first year may require an occasional deep watering if rainfall is insufficient. Watering shouldn't be necessary the second year except in cases of extreme drought. After that plants should be well enough established that they will not need supplemental water - prairie plants have deep roots.

Don't add any fertilizer - prairie plants don't need it and it will only encourage weeds.

Many prairie plants spend the first year or two establishing roots, with very little top growth. You will need to control weeds so they don't shade out the prairie seedlings. Don't pull or dig weeds the first year, especially when starting from seed. Prairie seedlings are not yet well-rooted and may be damaged.

Mow (using a string trimmer may be easiest in a small area) just above the height of the prairie plants (about 6") three or four times the first year when weed height reaches 12-18". Don't let the weeds go to seed. Gently rake to remove residue. Leaving some weed cover at the end of the first season will help protect seedlings. Mow in spring if necessary. The second year you may only need to mow once or twice at a greater height. At the beginning of the third year, burn or mow before

growth starts in spring. Dig or pull any weeds that appear throughout the season.

Be patient. Prairies started from seed may take 3-5 years to establish. Take photos of your prairie every month, to see the progress from season to season and year to year. If using plants, take pictures when you put them in to help identify them next year.

## Maintenance Once Established

Maintenance will be easier once the prairie becomes established. You will need to mow or burn occasionally and keep weeds in check.

Prairie plants are adapted to occasional fires. Growing points and a large root mass are underground and are not damaged by fast moving prairie fires. Fire warms the soil, removes plant residue and opens up the ground to light and moisture. It helps keep woody plants and non-native weeds in check. Without fire or mowing, prairies in this part of the country would eventually transition into forests.

However, in most urban areas burning is not practical and may not be legal. Leave the plants to provide winter interest and shelter for insects and small mammals. Mow in late winter or early spring before growth begins. Mowing as close to the ground as possible mimics some of the effects of fire. Gently remove any residue. If you do choose to burn be aware of safety - become trained or hire someone to do it for you.

Mow or burn yearly the 3rd through the 6th years. After that every 2-3 years is sufficient unless you want a neater appearance. Consider mowing only part each year to help protect insects.

Monitor for weeds and pull, dig, or remove seedheads. Use herbicides only as a last resort on stubborn perennial weeds.

Prairies are dynamic - they change with time as plants mature and reseed. You can help maintain a balance of plants - control aggressive ones and transplant extra plants, add new varieties, or overseed in fall to promote diversity.

Planning and planting a prairie can be a lot of work in the beginning. Take it slow and learn all you can before you start. You will be rewarded with an attractive plot full of life that requires minimal maintenance.

For more information on gardening please visit:

<http://web.extension.illinois.edu/state/horticulture/index.php>

or

call University of Illinois Extension  
Knox County Office  
309-342-5108

Other information brochures can be found online at <http://web.extension.illinois.edu/hkmw/hort.html>

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# Backyard Prairies & Pollinator Meadows



## Garden Tips from Knox County Master Gardeners & Master Naturalists



## What is a Prairie?

A prairie is an ecosystem in North America consisting of mainly grasses with some flowering plants (referred to as forbs) and small shrubs, with few or no trees. At one time prairies covered the continent from southern Canada to Texas and from the Rocky Mountains east to Indiana. There are several types of prairies. Tallgrass prairies grew in the eastern portion of the area where moisture was more plentiful, transitioning to mixed grass and then shortgrass prairies as one moved further west and available moisture decreased. There were also different types of prairies within an area, depending on local moisture (wet, mesic, and dry prairies) and soil conditions. In 1820 prairie covered at least 60% of Illinois. Today only 1/100th of 1% of this original prairie remains, mainly along railroad tracks, and in cemeteries and areas inaccessible for farming, grazing, or other uses.

As we're using it here, the term pollinator meadow just refers to an area that contains fewer grasses and more flowering plants, especially those beneficial to pollinators.

Many people are now adding native plants to their flower beds. If you'd like to go a step further and have a more natural planting, but don't have the space or desire for a large prairie planting, you can mimic nature on a small scale. By replacing part of your lawn and setting aside a plot to plant native grasses and wildflowers, you can create a wild natural area in your own backyard.

## Why Plant a Backyard Prairie

- Interesting and educational; connects you with your natural heritage and increases awareness of prairies.
- Provides shelter and food for pollinators and other wildlife.
- Less maintenance once established.
- More environmentally friendly - use fewer chemicals, water, and fossil fuels.
- Native plants are easy to grow and often more disease and drought resistant.

## Planning Your Backyard Prairie

There's not much difference between creating a prairie and a pollinator meadow. The process is much the same and many of the same plants will be used. For a pollinator meadow, you'll want fewer grasses and more flowering plants that attract pollinators. In this brochure we usually use the word prairie, but most statements will apply to any mix of native grasses and wildflowers.

While native plants and prairie plantings are becoming more popular, many municipalities and homeowners' associations have weed ordinances and other restrictions that might affect your planting. Find out about these before you plan or plant. You might also want to talk to your neighbors and explain what you're doing and why. And, as with any planting, be sure to locate any underground utilities that might be affected.

To help your planting blend in with your landscape, you might consider adding mowed edges, rustic fences, birdbaths and birdfeeders, benches, or informational signs.

You can make it any size you want and can manage. Consider starting small - it will be less work initially and you can then collect seed from your existing plants if you want to expand.

For a more natural look, use curved lines and irregular shapes. Avoid straight lines and rows. For easier maintenance and more enjoyment, add a path or two winding through your plot. Add a bench to sit and observe the wildlife you attract.

Most prairie plants require full sun and well-drained soil. Prairies can thrive on a variety of soils and may actually do best on slightly lean soils. Just match your plants to your particular conditions.

If you're using a lot of grasses (and especially if you plan to do any burning) you'll want to keep your plot away from buildings to minimize fire hazard. Surround the planting with a mowed or gravel strip as a firebreak.

Be patient throughout the process. Thorough preparation of the site is essential and will eliminate a lot of work in the long run. Many native plants may be slow to become established and bloom, especially if started from seed, but will be tough and long-lived.

## Deciding What to Plant

Using native plants is most authentic and best for pollinators and other wildlife. Visit local prairies or prairie gardens. This will help you recognize prairie plants and decide what you might want in your plot. Tours of prairies are sometimes offered - your guide can be a great source of information. Local experts and enthusiasts are often eager to share their experiences.

There are lots of plants to choose from. Specific plants will depend on your conditions and the purpose you want to accomplish. If you want to attract specific wildlife such as butterflies and pollinators, find out what they prefer.

Plant a wide variety of species. Diverse plantings can support more wildlife and also provide more interest and variety throughout the season. Plan for season long bloom - try to have at least three species in bloom at all times. Use a variety of colors, heights, and forms.

Even if you are primarily interested in attracting pollinators, include some grasses in your planting. Grasses add interest, provide nesting places for wildlife (including pollinators), help support wildflowers, and provide movement in the breeze. Traditionally tallgrass prairie was 60-80% grasses. Grasses (especially tall varieties such as big bluestem and Indian grass) may eventually crowd out flowering plants. You might want to plant mainly short grasses and just use a few taller ones for accent. Cutting back grasses periodically to mimic grazing can also help keep them in check.

For a few suggested plants see the following brochures:

[Using Native Plants in the Garden](#)  
[Flying Flowers: Attracting Butterflies](#)  
[Protecting Our Pollinators](#)

Check online for other suggested prairie, native, and pollinator plants.

You can start with seeds or plants or a combination. Seeding is less expensive and easier for larger areas but slower to establish. Using plants makes it easier to distinguish desired plants from weeds and may be the best option for species that are hard to start from seed. You also have more control over placement using plants. Use a few plants to provide immediate interest and fill in with seeds.

Be careful with packaged "wildflower" or "meadow" mixes - many contain non-native varieties, some of which can be aggressive. There are high quality mixes available from companies that specialize in native plants and seed. Use seed mixes developed for your area and conditions. You can also purchase seeds of individual species.

Although it isn't always easy, try to get seeds and plants from sources as close to your location as possible. Look for local nurseries specializing in native plants. Your local Extension, USDA, or DNR offices may be able to suggest sources.

You can also gather seed from local prairie remnants or reconstructions. Always ask permission of the landowner first and only take a small portion of the seed.

## Preparing the Site

It's extremely important to try to eliminate all grass and weeds before you plant. This will make the first few years of prairie establishment much easier. There are two issues - the weeds that are currently growing and all the weed seeds in the soil (the seed bank) available for future growth.

There's no single best method to prepare the seedbed but, whichever you choose, it's important to take your time and be thorough. If possible, take a full year to make sure as many weeds as possible are eliminated. Options include:

- Use a non-selective herbicide with a short residual time. Read and follow all label directions. You may need several applications to kill weeds that regrow.
- If planting where lawn is growing, physically remove the sod.
- Smother with plastic or with newspaper covered with mulch or compost. This takes time - leave in place at least two months or ideally for a full season.
- Deep cultivation in the fall will bring up perennial weed roots and expose them to the elements. Repeated shallow cultivation (1-2") throughout the following growing season will eventually deplete the seed bank.
- A combination of herbicide with cultivation after weeds have died.