PRAIRIE SEED MIXES

SELECTING NATIVE SEED MIXES

Prairie seed mixes can be custom designed or purchased pre-mixed. Either way, the options are so varied it can seem overwhelming. Just remember: Any mix that matches your site's moisture requirements and contains tested, local-ecotype native seed* will provide durable, perennial cover that holds soil in place, improves water quality and provides year-round habitat.

HOW MUCH DO MIXES COST?

It varies. Prairie seed can be expensive, but here's the good news: Mixes are available in a *variety of prices*. Lower diversity mixes (those with fewer species) are usually less expensive than those with high diversity. The least expensive mixes contain grasses only.

While grass-only mixes may be appropriate in some cases, adding forbs (flowers) creates better habitat for pollinators, birds and other wildlife, and makes the planting more resilient in the long term.



Diverse plantings are adapted to a wide range of growing conditions.

WHY DOES DIVERSITY MATTER?

Diverse prairie plantings include many species, each with its own adaptability to soil, moisture and light conditions. That means diverse mixes tolerate most site and weather conditions, *ensuring the planting's long-term success*.

Other benefits of diverse mixes:

- Each species fills a niche both above and below ground, leaving less space for weeds to invade.
- Well-designed, diverse mixes will include flowers that bloom from spring through fall, providing seasonlong food for pollinators.

ARE ALL DIVERSE MIXES EXPENSIVE?

Not necessarily. Even diverse mixes have a variety of price points, partly because the cost of each individual species in the mix varies. While supply and demand affects the price of all species, some are simply harder to grow and therefore consistently more expensive than others.

To create a diverse mix that's relatively inexpensive, a high rate of easy-to-grow, less-expensive species will be included. This kind of mix is often well suited for sites that won't receive regular maintenance.

WHAT'S THE BEST GRASS:FORB RATIO?

The Tallgrass Prairie Center recommends a 50:50 ratio. While it may be tempting to use more flowers, prairie grasses provide the reliable, season-long matrix around which the forbs grow. And more importantly, grasses are needed to help keep weeds at bay.

Note: "50:50" may appear as "20/20" in CRP and commercial seed mix lists. That means 20 grass seeds + 20 forb seeds per square foot. 40 seeds/sq. ft. is the industry standard for a prairie seeding rate. If the planting site is on a slope, or if it's being broadcast-seeded (as opposed to being seeded with a drill), the seeding rate may be increased.

IF GRASSES ARE SO IMPORTANT AND ARE LESS EXPENSIVE, WHY NOT INCREASE THE GRASS RATE?

Grasses (especially the tall species) are more aggressive than forbs. When grasses exceed 50% of a prairie seed mix, over time they will dominate the planting, crowding out forbs.

THAT'S A LOT TO CONSIDER!

And yet there's more. The optimal amount of seed (oz., lbs. or seeds/sq. ft.) for each individual species still needs to be determined. Factors like seed size (number of seeds per oz. or lb.), species characteristics (e.g., aggressiveness) and current seed prices all play a role.

OPTIONS FOR DESIGNING YOUR MIX

Do it yourself

If you want to learn more or even try designing a mix on your own, visit the Tallgrass Prairie Center's Prairie Seed Calculator (<u>tallgrassprairieseedcalculator.com</u>). Along with the online calculator, which helps you design your own mix, you'll find additional information about species selection and seeding rates at this link.

Get some help

If you'd like help creating a custom mix, contact your Watershed Coordinator. He/she will get you in touch with the Tallgrass Prairie Center for help designing a mix that meets your specific site, cost and other specifications.

Buy pre-mixed seed

The easiest alternative is to simply purchase a pre-mixed prairie mix from one of Iowa's native seed dealers. They often sell their own mixes, as well as mixes designed to NRCS specifications.

*Native seed is tested by independent seed labs for a variety of criteria including viability and the presence of weed seeds. Seed dealers can provide this information. Local ecotype seed – which can be certified ("yellow-tag") or non-certified – is of Iowa or nearby origin and likely well-adapted to local growing conditions.

For more information visit www.tallgrassprairiecenter.org



The following species are among those typically found in diverse prairie seed mixes FOR MESIC (medium-moisture) SITES. Many other native species are available and may appear in mixes specified by the NRCS or in pre-mixed packages from prairie seed dealers.

Grasses		May	Jun	Inl	Aug	Sep	Oct
Andropogan gerardii	Big bluestem	~~~~				0)	0
Bouteloua curtipendula	Sideoats grama						
Elymus canadensis	Canada wild rye						
Panicum virgatum	Switchgrass						
Schizacrium scoparium	Little bluestem						
Sorghastrum nutans	Indiangrass						
Sporobolus asper	Rough dropseed						
Forbs	1		1	1			
Asclepias incarnata	Swamp milkweed						
Asclepias tuberosa	Butterfly milkweed						
Aster novae-angliae	New England aster						
Astragalus canadensis	Canada milkvetch						
Chamaecrista fasciculata	Partridge pea						
Dalea purpurea	Purple prairie clover						
Desmodium canadense	Showy tick trefoil						
Echinacea pallida	Pale purple coneflower						
Eryngium yuccifolium	Rattlesnake master						
Helenium autumnale	Sneezeweed						
Heliopsis helianthoides	Ox-eye sunflower						
Lespedeza capitata	Roundheaded bushclover						
Liatris aspera	Rough blazingstar						
Liatris pycnostachya	Prairie blazingstar						
Monarda fistulosa	Wild bergamot						
Oligoneuron rigidum	Stiff goldenrod						
Penstemon digitalis	Foxglove penstemon						
Pycnanthemum virginianum	Mountain mint						
Ratibida pinnata	Yellow coneflower						
Rudbeckia hirta	Black-eyed Susan						
Rudbeckia subtomentosa	Sweet Black-eyed Susan						
Silphium laciniatum	Compass plant						
Tradescantia ohiensis	Ohio spiderwort						
Verbena stricta	Hoary vervain						
Zizia aurea	Golden Alexanders						









Big Bluestem

Side Oats Grama

Canada Wild Rye

Switchgrass



Little Bluestem



Indiangrass



Rough Dropseed



Leadplant



Swamp Milkweed



Butterfly Milkweed

New England Aster



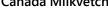




Purple Prairie Clover



Showy Ticktrefoil







Rattlesnake Master





Leadplant

Ox-eye sunflower



Pale Purple Coneflower

Round-headed Bush Clover



Rough Blazingstar



Prairie Blazingstar





Foxglove Beardtongue



Mountain Mint



Yellow Coneflower



Black-eyed Susan



Sweet Black-eyed Susan



Compass Plant





Stiff Goldenrod

Ohio Spiderwort



Hoary Vervain



Golden Alexanders