



Landowner \_\_\_\_\_

### Definition

Restoring and conserving native plant communities to benefit pollinators and associated wildlife species.



Establish and/or manage sites >1/2 ac. in size that contain a diversity of native grasses, wildflowers, and shrubs.

Plantings shall contain species from each flowering group – early, mid and late flowering season. Plant must remain undisturbed, and be available throughout the growing season.

Seed mixes will consist of at least 15 native species. Minimum grass seeding rate will be 5.0 PLS lb/ac. Minimum forb seeding rate will be 2.0 PLS lb/ac. At least one forb shall be a legume. The mixture will result in a 50:50 grass to forb ratio based on seeds per square foot.

### Grass/Forb Establishment

Prepare a firm seedbed for all planting methods.

**Conventional Tillage** - Prepare a fine firm seedbed to a minimum of 3 inches. The seedbed should contain enough fine soil particles for uniform shallow coverage of the seed as well as contact with moisture and nutrients. If possible, use specialized native grass drills with depth bands designed to handle a wide variety of seed. For conventional drills, as a minimum, cultipack before seeding. Cultipack after seeding if possible.

Do not use heavy drills on conventionally prepared seedbeds as heavy drills tend to sink in the soil and depth control is difficult.

Plant seed between one-quarter and one-half inch deep. Some seed may be seen on the surface of the ground after seeding. Tillage should only be used on flatter slopes or in conjunction with erosion control measures.

**No-Till** - No-till drilling reduces the exposure of the newly seeded site to erosion. A no-till drill must be used to seed these sites. A drill

### Where used

On landscapes which once supported the habitat to be restored and managed, including land retired from agricultural production entered in retirement programs.

### Specifications

Follow NRCS practice standard 645 – Upland Wildlife Habitat Management for design recommendations. To attract native pollinators, an area must have adequate sources of food, shelter, water, and nesting sites. A variety of wildflowers and grasses will provide native pollinators with food (nectar, pollen, and /or larval host plants). Optional shrubs can provide important shelter, nesting, and over wintering areas for pollinators, especially early in the growing season when tree buds and flowers can supply almost all of the food for the early emergent pollinators until the forbs and grasses start to develop.

should be selected that can handle a wide variety of seed (fluffy, smooth, large, and small) and low seeding rates. Plant seed to a depth of one-quarter to one-half inch deep.

Use of a herbicide is essential in order to kill existing vegetation. Land that has been in grass for many years usually has a thick residue layer on the soil surface. To allow for the best no-till seedbed, this residue must be removed. Three options are (1) grazing, (2) mowing with residue removed, and (3) prescribed burn. In the fall a burndown herbicide can be applied to prepare for a spring no-till seeding. An additional spring herbicide application may be required, depending on plant growth.

**Broadcast** - Prepare a fine firm seedbed to a minimum of 3 inches. Use a roller, cultipacker or similar implement prior to seeding. The seedbed should contain enough fine soil particles for uniform shallow coverage of the seed as well as contact with moisture and nutrients. Broadcast seed at a rate of 1.5 times the normal seeding rate and roll or cultipack again after seeding. Do not harrow in the seed.

During the establishment year, mow weeds after they have reached 12" in height. Mow 2 to 3 times, generally on 30 day intervals from the date of seeding. Mow to a 6-8 inch height. Use a rotary mower or remove the clippings so as not to smother the seedlings. This will slow the weeds but won't harm the prairie plants.

The second year, evaluate the stand to determine if weed control is necessary. If it is, spot mow weeds at a height of six inches. If there is enough material for a prescribed burn, this may be an effective method to control weeds.

## **Nutrients**

Lime and fertilizer are usually not required for establishment of native grasses and forbs.

## **Use of Pesticides**

Only those pesticides which are labeled for the specific use will be recommended. University and Extension publications and specific label

instructions will be used for guidance on herbicide selection and use.

## **Operation and Maintenance**

Operation and maintenance will include but not be limited to the following:

1. Control annual weeds and other competition the year of establishment, with early and timely clipping before seed heads appear, or timely application of herbicides.
2. Prevent unmanaged disturbance of the planting.
3. After the seeding is established control all noxious weeds as identified by state and local laws, by: (a) treating with chemicals per label directions, or (b) spot mow before seed heads form. When possible delay use of control measures until after August 1st to protect nesting wildlife.
4. Manage grasses and forbs periodically to rejuvenate grass quality and vigor. Management should occur within 4-5 years of adequate vegetative establishment. Refer to practice 647 - Early Successional Habitat Management for recommendations. Management activities must take place prior to May 15 or between August 1 and September 1. No more than 50% of the field may be manipulated in a given year.
5. Prevent animal damage and browse by rodents, mice, rabbits, deer, gophers and other wildlife which adversely affect woody vegetative cover.
6. Replace dead trees and shrubs as necessary, and control undesirable vegetative competition to promote a fully functional tree planting. Control weed and grass competition around trees and shrubs for a minimum of 2 to 4 feet using cultivation, mulch, or chemical control measures.
7. Under dry conditions consider supplemental watering. Young shrub seedlings require extra water until roots fully develop. When you water give each tree 5-15 gallons of water.

<b>RECOMMENDED FORB SPECIES</b>		<b>Value to Pollinators</b>	<b>Flowering Season</b> Early = April – June Mid = June – August Late = August - October
<b>DRY</b>			
Bush Clover	(Lespedeza capitata)	G	July - August
Dotted Blazingstar	(Liatris punctata)	EX	July - September
Purple Coneflower	(Echinacea angustifolia)	EX	June - July
Showy Penstemon	(Penstemon grandiflorus)	EX	May - June
Silky Aster	(Aster sericeus)	EX	August - October
White Prairie Clover	(Petalostemum candidum)	EX	June - September
<b>DRY to MESIC</b>			
Butterfly Weed	(Asclepias tuberosa)	G	June - August
Culvers Root	(Veronicastrum virginicum)	EX	June - August
Leadplant	(Amorpha canescens)	EX	July - September
Rough Blazingstar	(Liatris aspera)	EX	July - September
Showy Goldenrod	(Solidago speciosa)	G	August - September
Smooth Aster	(Aster laevis)	EX	August - October
Stiff Tickseed	(Coreopsis palmata)	EX	July - August
<b>MESIC to WET</b>			
Canada Tick Trefoil	(Desmodium canadense)	G	July - August
Common Ox-eye	(Heliopsis helianthoides)	EX	June - August
Giant Sunflower	(Helianthus giganteus)	EX	July - October
Partridge Pea	(Chamaecrista fasticulata)	EX	July - September
Tall Blazingstar	(Liatris pycnostachya)	EX	July - September
Wild Bergamot	(Monarda fistulosa)	EX	July - August
Yellow Coneflower	(Ratibida pinnata)	EX	July - September
<b>WET</b>			
Boneset	(Eupatorium perfoliatum)	EX	August - September
Cup Plant	(Silphium perfoliatum)	G	July - September
Joe-pye Weed	(Eupatorium maculatum)	G	July - September
New England Aster	(Aster novae-angliae)	EX	September - October
Panicled Aster	(Aster lanceolatus)	G	August - October
Swamp Milkweed	(Asclepias incarnata)	G	June - July
<b>DRY to WET</b>			
Illinois Bundleflower	(Desmanthus illinoensis)	G	June - August
Purple Prairie Clover	(Petalostemum purpureum)	EX	July - August
Maximillian Sunflower	(Helianthus maximiliani)	EX	July - October
Stiff Goldenrod	(Solidago rigida)	EX	August - September
<b>RECOMMENDED WOODY SPECIES</b>		<b>Value to Pollinators</b>	<b>Flowering Season</b>
American Plum	(Prunus americana)	EX	April - May
Button Bush	(Cephalanthus occidentalis)	EX	June - August
Chokecherry	(Prunus virginiana)	EX	April - May
Dogwoods	(Cornus spp)	G	May - July
False Indigo	(Amorpha fruitcosa)	EX	June - August
New Jersey Tea	(Ceanothus americanus)	EX	June - August
Wild Rose	(Rosa spp)	EX	June - July
Willow, Pussy or Black	(Salix spp)	EX	April - May
<b>RECOMMENDED GRASSES</b>		<b>Value to Pollinators</b>	
Big Bluestem		EX	
Indiangrass		EX	
Little Bluestem		EX	
Prairie Dropseed		EX	
Sideoats Grama		EX	



