

## **SPECIFICATIONS FOR TALLGRASS PRAIRIE**

**Site Conditions/Description:** on till plain, typically mollisols; grass dominated plant communities with a variety of broad-leaved forbs; wetter sites may have more sedges and rushes; virtual absence of trees; herbaceous cover maintained by periodic fire; dominant species vary, primarily depending on wetness; includes wet, mesic and dry prairies; similar to barrens and oak savannas;

**Geographic Area:** Part or all of Champaign, Clark, Crawford, Darke, Erie, Fayette, Franklin, Greene, Huron, Logan, Lucas, Madison, Marion, Mercer, Pickaway, Union, Van Wert, Wood, Wyandot counties; other areas in western Ohio; scattered remnants in eastern Ohio

### **Restoration Methods:**

Degraded systems (some remnant species still present)

- Prescribed burning to encourage prairie species and eliminate undesirable trees.
- Cut or chemically treat unwanted brush; remove brush after it is killed.
- Remove excessive or unwanted trees.
- Plant areas opened by burning or tree/brush removal with desirable grasses and forbs.
- Plant characteristic species, if missing. Use the following list to select species.
- Restore natural hydrology, if possible.

Bare ground

- Establish appropriate grass and forb species
  - use following lists for species;
  - mixes should be as diverse (or nearly so) as original community and based on typical species
  - numbers of species may vary but typically at least 4 species of grass should be included
  - include wide range of site adapted forbs to cover varied blooming periods
  - relatively low rates of grasses (no more than 4-5 lbs PLS per acre)
  - initially, forbs should be seeded at least 1 lb/acre
- Species selected must be adapted to site conditions, particularly drainage class; local genotypes are best
- Restore natural hydrology, if possible.
- Initial management using fire, herbicides, mowing or combinations

## Management:

Fire is very important to maintaining these systems. If they cannot be burned, tall grass prairie establishment should not be seriously considered. Initially, burn every year (if sufficient fuel); then every 3-4 years; Low intensity fires are best. Burning should be done during the dormant season. Burn areas may be rotated around the site after establishment is complete. Mowing or grazing are very poor alternatives, but can be used with intense management. If mowing is used, plant residue must be removed.

## Recommended Species

Species will be selected based on adaptation to site conditions and likelihood that they were part of original plant community in that area. Sources of information may include local or regional experts, published information on tallgrass prairies in the area and species present on remnant sites in the area.

### Grasses

Big Bluestem	<i>Andropogon gerardii</i> (mesic sites)
Little Bluestem	<i>Schizachyrium scoparium</i> (drier sites)
Indiangrass	<i>Sorghastrum nutans</i>
Switchgrass	<i>Panicum virgatum</i>
Sideoats Grama	<i>Bouteloua curtipendula</i> (drier sites)
Canada Wildrye	<i>Elymus canadensis</i>
Prairie Cordgrass	<i>Spartina pectinata</i> (wetter sites)
Bluejoint	<i>Calamagrostis canadensis</i> (wetter sites)
Prairie Dropseed	<i>Sporobolus heterolepis</i>

### Forbs

This is a partial list of species commonly expected to occur on tall grass prairies. More species may be selected based on other available information.

Nodding Wild Onion	<i>Allium cernuum</i>
Indian Hemp	<i>Apocynum cannabinum</i>
Sullivant's Milkweed	<i>Asclepias sullivantii</i>
Butterfly Weed	<i>Asclepias tuberosa</i>
Whorled Milkweed	<i>Asclepias verticillata</i>
Aster	<i>Aster ericoides</i>
Smooth Aster	<i>Aster laevis</i>
New England Aster	<i>Aster novae-angliae</i>
Large White False-Indigo	<i>Baptisia leucantha</i>
Partridge-Pea	<i>Cassia fusciculata</i>
Water Hemlock	<i>Cicuta maculata</i>
Tall coreopsis	<i>Coreopsis tripteris</i>
Tick-trefoil	<i>Desmodium canadense</i>

Illinois Tick-trefoil	<i>Desmodium illinoiense</i>
Purple Coneflower	<i>Echinacea purpurea</i>
Rattlesnake-master	<i>Eryngium yuccifolium</i>
Spotted Joe-pye Weed	<i>Eupatorium maculatum</i>
Flowering Spurge	<i>Euphorbia corollata</i>
Giant Sunflower	<i>Helianthus giganteus</i>
Saw-toothed Sunflower	<i>Helianthus grosseserratus</i>
Stiff-haired Sunflower	<i>Helianthus hirsutus</i>
Downy Sunflower	<i>Helianthus mollis</i>
Bush Clover	<i>Lespedeza capitata</i>
Dense Blazingstar	<i>Liatris spicata</i>
Savanna Blazingstar	<i>Liatris scariosa</i>
Michigan Lilly	<i>Lilium mihiganense</i>
Pale Striped Lobelia	<i>Lobelia spicata</i>
Wild Bergamot	<i>Monarda fistulosa</i>
Common Sundrops	<i>Oenothera fruticosa</i>
Foxglove Beardtongue	<i>Penstemon digitalis</i>
Obedient Plant	<i>Phytostegia virginiana</i>
Slender-leaved Mountain-mint	<i>Pycnanthemum tenuifolium</i>
Virginia Mountain-mint	<i>Pycnanthemum virginianum</i>
Prairie Coneflower	<i>Ratibida pinnata</i>
Black-eyed Susan	<i>Rudbeckia hirta</i>
Royal Catchfly	<i>Silene regia</i>
Prairie Dock	<i>Silphium terebinthinaceum</i>
Whorled Rosinweed	<i>Silphium trifoliatum</i>
Gray Goldenrod	<i>Solidago nemoralis</i>
Ohio Goldenrod	<i>Solidago ohioensis</i>
Stiff Goldenrod	<i>Solidago rigida</i>
Purple MeadowRue	<i>Thalictrum dasycarpon</i>
Glaucous Spiderwort	<i>Tradescantia ohioensis</i>
Blue Vervain	<i>Verbena hastata</i>
Western Ironweed	<i>Vernonia fasciculata</i>
Culver's-root	<i>Veronicastrum virginicum</i>
Golden Alexanders	<i>Zizia aureus</i>