

The background of the entire image is a soft-focus photograph of several pink coneflowers (Echinacea) with prominent brown-orange centers. The flowers are in various stages of bloom, and the lighting is natural, creating a serene and botanical atmosphere.

Central Region

# **Seedling ID Guide for Native Prairie Plants**



# ABOUT THE GUIDE

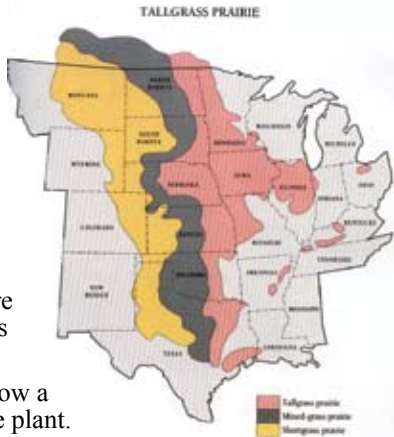
The goal of this guide is to help identify native plants at various stages of growth. Color photos illustrate seed, seedling, juvenile, and flowering stages, in addition to a distinguishing characteristic. Brief text provides additional identification help.

Images of the seedling stage depict the appearance of a single cotyledon (first leaf) in grasses and a pair of cotyledons in broad-leaved plants, followed by photos of the first true leaves within three weeks of growth in a controlled environment.

Images of the juvenile stage portray the continued development of a seedling with more fully formed leaves within the first eight weeks of shoot development .

Images of the distinguishing characteristics show a specific biological feature representative of the plant.

Please note that seed images do not represent the actual size of the seed. The scale is in 1/16-inch increments.



## Species List

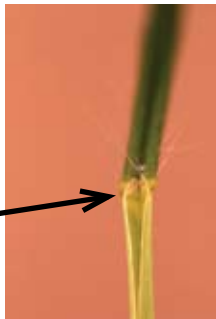
- Big Bluestem – *Andropogon gerardii*  
Black-Eyed Susan – *Rudbeckia hirta*  
Blue Lobelia – *Lobelia siphilitica*  
Butterfly Milkweed – *Asclepias tuberosa*  
Cardinal Flower – *Lobelia cardinalis*  
Compass Plant – *Silphium laciniatum*  
Culver's Root – *Veronicastrum virginicum*  
Flowering Spurge – *Euphorbia corollata*  
Foxglove Beard Tongue – *Penstemon digitalis*  
Golden Alexanders – *Zizia aurea*  
Gray-headed Coneflower – *Ratibida pinnata*  
Illinois Bundleflower – *Desmanthus illinoensis*  
Leadplant – *Amorpha canescens*  
Little Bluestem – *Schizachyrium scoparium*  
New England Aster – *Aster novae-angliae*  
Obedient Plant – *Physostegia virginiana*  
Ohio Spiderwort – *Tradescantia ohiensis*  
Oxeye False Sunflower – *Heliopsis  
helianthoides*  
Pale Purple Coneflower – *Echinacea pallida*  
Partridge Pea – *Chamaecrista fasciculata*  
Pitcher Sage – *Salvia azurea*  
Prairie Blazing Star – *Liatris pycnostachya*  
Prairie Coreopsis – *Coreopsis palmata*  
Purple Coneflower – *Echinacea purpurea*  
Purple Prairie Clover – *Dalea purpurea*  
Rattlesnake Master – *Eryngium yuccifolium*  
Rough Blazing Star – *Liatris aspera*  
Rough Dropseed – *Sporobolus compositus  
(asper)*  
Round-headed Bushclover – *Lespedeza capitata*  
Royal Catchfly – *Silene regia*  
Sensitive Briar – *Mimosa quadrivalvis* var.  
*nuttallii*  
Showy Goldenrod – *Solidago speciosa*  
Showy Tick Trefoil – *Desmodium canadense*  
Sideoats Grama – *Bouteloua curtipendula*  
Slender Lespedeza – *Lespedeza virginica*  
Slender Mountain Mint – *Pycnanthemum  
tenuifolium*  
Stiff Goldenrod – *Solidago rigida*  
Virginia Wildrye – *Elymus virginicus*  
White Prairie Clover – *Dalea candida*  
Wild Bergamot – *Monarda fistulosa*

# Big Bluestem

*Andropogon gerardii*

Distinguishing Characteristics:

- Leaves are up to 2 feet long and less than 1/2 inch wide, hairy at the base, stem, and leaves.
- There is a small, scale-like collar (ligule) with a fringed margin where the leaf blade joins the stem.



## Description:

- Height: 5 to 9 feet
- Blooms: June – September
- Flower heads resemble upside down turkey foot.
- Flower heads open red and turn darker with age.



## Comments:

- Found throughout tallgrass prairie region in glades, prairies, and savannas.
- Used as a warm-season forage for cattle and provides good wildlife cover.
- Forms large colonies that can out compete other native grasses and wildflowers.



*Big Bluestem Seedling*



*Big Bluestem - Juvenile*

# Black-eyed Susan

*Rudbeckia hirta*

## Distinguishing Characteristics:

- Basal leaves densely hairy – up to 5 inches long and 1 inch wide
- Leaf base narrowly tapers along the leaf stalk

## Description:

- Height: 1 to 3 feet
- Blooms: June – October
- This short-lived perennial has a single flower head at the top of each stem branch.
- Flower heads are 2 to 3 inches across with 10 to 20 ray flowers around a dome-shaped disk.



## Comments:

- Commonly found on prairies, savannas, glades, and other grassland habitats.
- Does best in dry to average soils.
- Mainstay in most wildflower seeding mixes and blooms the first year it is seeded.
- The seeds are generally too small to be of food value for wildlife.
- Attracts a variety of insects that are a critical food source for grassland wildlife.



*Black-eyed Susan - Seedling*



*Black-eyed Susan - Juvenile*

# Blue Lobelia

*Lobelia siphilitica*

## Distinguishing Characteristics:

- Milky sap in stem and leaves
- Basal leaves lack stalks
- Margin and upper leaf surface smooth or with short hairs
- Leaf margin with minute teeth



## Description:

- Height: Up to 3 feet
- Blooms: August – October
- Flower color is variable, light or dark violet, light or dark blue or lavender, rarely white.
- Leaves are alternate, light green, narrow lance-shaped





## Comments:

- A short-lived perennial, it occurs in moist habitats throughout the tallgrass region.
- Reseeds in wetland and riparian sites, prairie swales and along streams and seepage areas.



*Blue Lobelia - Seedling*



*Blue Lobelia - Juvenile*

## **Butterfly Milkweed**

*Asclepias tuberosa*

### **Distinguishing Characteristics:**

- Very hairy stem
- Long, narrow, hairy leaves
- Leaf margin lacking teeth
- Sap not milky like other milkweeds

### **Description:**

- Height: Up to 3 feet tall.
- Blooms: May – September.
- Flowers are displayed in terminal umbels.
- Many shades of orange to brick red, occasionally yellow.
- Long seedpods are as much as 4<sup>1/2</sup> inches long with tightly packed seeds in spirals and silky floss.



## Comments:

- Found throughout Missouri in upland habitats, open savannas, and sandy sites in tallgrass region.
- Occasionally used in seeding mixes, may take several years to bloom.
- Withstands overgrazing and is an excellent nectar source for insects, while the leaves are a food source for the monarch caterpillar.



*Butterfly Milkweed - Seedling*



*Butterfly Milkweed - Juvenile*

# Cardinal Flower

*Lobelia cardinalis*

## Distinguishing Characteristics:

- Milky sap in stem and leaves
- Basal leaves with short stalks and with minute teeth along the margin
- Lower surface often purplish

## Description:

- Height: Up to 5 feet, but usually shorter
- Blooms: July – October
- Stalks are, at first, unbranched, but later have many side branches.
- Flower color is cardinal-red, rarely vermilion and very rarely white.



## Comments:

- Short-lived perennial found in moist habitats. (Mostly in southern tallgrass region. Rare in northern region.)
- Because seed is expensive, it is rarely used in seeding mixes and never in large quantities.
- Occasionally reseeds in wetland and riparian habitats.
- Good nectar source for hummingbirds.



*Cardinal Flower - Seedling*



*Cardinal Flower - Juvenile*

# Compass Plant

*Silphium laciniatum*

## Distinguishing Characteristics:

- Very large basal leaves sometimes over 1 foot long
- Margin is entire in early leaf stages changing to deeply lobed margins as the plant matures
- Leaf surface covered with dense, short hairs



## Description:

- Height: 5 to 9 feet
- Blooms: July – September
- Tall and showy, each head is 2½ to 5 inches in diameter with 20 to 30 petal-like yellow ray flowers surrounding a yellow disk.
- Flowering heads range in number from a few to as many as 20 over the blooming period.



## Comments:

- Found on mesic and dry prairies in mid tallgrass prairie regions.
- Will take several years to bloom from seed.
- Large seeds are a good food source for upland wildlife.
- Leaves orientate north and south to maximize exposure to sunlight.



*Compass Plant - Seedling*



*Compass Plant - Juvenile*

# Culver's Root

*Veronicastrum virginicum*

## Distinguishing Characteristics:

- Juvenile leaves opposite, lacking stalks, with short hairs on both surfaces, margins toothed
- Older leaves in whorls of 3 or 4, up to 6 inches long and 1 inch wide, with toothed margins



## Description:

- Height: Up to 6 feet
- Blooms: June – September
- The flowers on this tall, erect plant are on terminal spikes that rise from a common axis – the center spike is larger.
- Individual flowers are minute and tightly spaced.
- They are white and rarely pink.





## Comments:

- Occasionally found in tallgrass prairie region, swales, savannas, and wet grasslands.
- The showy spikes have numerous flowers that are a good nectar source for insects.



*Culver's Root - Seedling*



*Culver's Root - Juvenile*

# Flowering Spurge

*Euphorbia corollata*

## Distinguishing Characteristics:

- Milky sap in stem and leaves
- Leaves lacking hairs except on the lower surface along the midrib
- The narrow, smooth-edged leaves are alternate on the lower stem but opposite or whorled near the flower clusters

## Description:

- Height: Up to 3 feet
- Blooms: May – October
- Few flowers when growing in poor ground



## Comments:

- Found in the central tallgrass prairie regions and Ozarks in prairies and glades. Rare to absent north of Iowa.
- Sometimes used in native forbs seeding mixes.
- Dry to moist prairie soils.
- Used in prairie restoration projects where it may take several years to become established.



*Flowering Spurge - Seedling*



*Flowering Spurge - Juvenile*

# Foxglove Beard Tongue

*Penstemon digitalis*

## Distinguishing Characteristics:

- Basal leaves on long stalks
- Leaf margin mostly smooth to slightly toothed
- Lower surface occasionally a faint purple

## Description:

- Height: Up to 4 feet, but usually shorter
- Blooms: May – July
- This is the tallest of four white-flowered *Penstemon* species in Missouri.
- Of the five stamens, one is modified into a hairy “tongue” and positioned centrally, likely to attract insects for pollination.



## Comments:

- Common throughout tallgrass prairie region, it is found in habitats that range from fallow fields to native prairies to woodland edges.
- Grows in moist to dry soil conditions.
- Easy to establish from seed, it often colonizes areas being restored.



*Floxglove Beard Tongue - Seedling*



*Floxglove Beard Tongue - Juvenile*

# Golden Alexanders

*Zizia aurea*

## Distinguishing Characteristics:

- Leaves alternate, divided into 3 leaflets, sometimes divided again into 3 leaflets
- Margins densely toothed with tips of teeth rounded



## Description:

- Height: Up to 2 feet
- Blooms: April – June
- Flowers are open, multi-branched clusters, bright yellow, in a more or less flat-topped display.
- A member of the carrot family, it often is found in large colonies.



## Comments:

- Common throughout tallgrass prairie region in woodlands, savannas, prairies, glades, wet thickets and along streams.
- Grows in moist to dry conditions.
- Easy to establish from seed and flowers the second or third year from seeding.
- Preferred food source for some butterfly larva.



*Golden Alexanders - Seedling*



*Golden Alexanders - Juvenile*

# Gray-headed Coneflower

*Ratibida pinnata*

## Distinguishing Characteristics:

- Leaves divided into 3 to 7 leaflets with a few teeth or small side lobes along the margins.

## Description:

- Height: Up to 5 feet
- Blooms: June – September
- Each flower head has its own stalk.
- Before opening, the small disk flowers are ash gray – they turn brown as the flowers open.
- A slender, hairy-stemmed plant.
- Will bloom the second year after seeding.





## Comments:

- Throughout tallgrass prairie region, common on glades, woodland edges, and prairies.
- Easily established from seed, it does well in new warm-season grass and wildflower plantings.
- Good food source for wildlife and forage for livestock.



*Gray-headed Coneflower - Seedling*



*Gray-headed Coneflower - Juvenile*

# Illinois Bundleflower

*Desmanthus illinoensis*

## Distinguishing Characteristics:

- Numerous paired leaflets appearing fern-like.



## Description:

- Height: Up to 4 feet
- Blooms: June – August
- Each flower has fine, long stamens that provide a fuzzy appearance.
- Plants are smooth and bushy and produce small, round flower clusters.



## Comments:

- Western and central tallgrass prairie region.
- Found on roadsides, disturbed prairies, old fields, and other grassland habitats.
- Does well in a variety of soil types.
- Good forage for livestock.
- Easy to establish from seed and is common in native wildflower mixes.



*Illinois Bundleflower - Seedling*



*Illinois Bundleflower - Juvenile*

# Leadplant

*Amorpha canescens*

## Distinguishing Characteristics:

- Stem and underside of leaflets covered with dense gray hairs
- Leaf margin lacking teeth



## Description:

- Height: Up to 3 feet
- Blooms: May – August
- A multi-stem shrub that dies to the ground occasionally.
- Flowers are tiny and massed in tight spikes.



## Comments:

- Found on prairies, glades, savannas, and open woodlands in the tallgrass prairie regions and Ozarks.
- Slow to establish, takes several years to bloom from seed.
- Occasionally used in seeding mixes and commonly used in restoration projects.
- Does not do well in grazing systems.
- Good food source for upland wildlife and nectar source for insects.



*Leadplant - Seedling*



*Leadplant - Juvenile*

## Little Bluestem

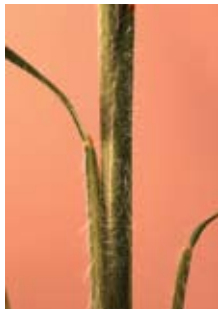
*Schizachyrium scoparium*

### Distinguishing Characteristics:

- Leaves are up to 12 inches long and less than 1/4 inch wide
- A small, scale-like collar (ligule) and a fringed margin where the leaf blade joins the stem
- Stems are very hairy and strongly flattened near the base

### Description:

- Height: 2 – 4 feet
- Blooms: August – September
- Purplish-bronze flowers appear along 3-inch long stalks on branched stems.
- Plants form upright clumps of green leaves, with trace of blue at base.



## Comments:

- Common throughout the Ozarks and tallgrass prairie regions, it is found on glades, savannas, and prairies.
- Often used in restoration and wildlife habitat projects.
- Does well in wildflower meadow plantings where it will not out-compete wildflowers.
- Used in mixed warm-season grass pasture plantings for livestock.



*Little Bluestem - Seedling*



*Little Bluestem - Juvenile*

# New England Aster

*Aster novae-angliae*

## Distinguishing Characteristics:

- Hairy stem and leaves with leaves clasping stem.

## Description:

- Height: Up to 6 feet
- Blooms: August – October
- Leaves are alternate and numerous, up to 4 inches long and 1 inch wide, hairy, with pointed leaf tips.
- Several flower heads are clustered along the upper stems.
- Flowers may also be pinkish purple or pale lavender.





## Comments:

- Found in tallgrass prairie region, wet prairies, and in moist open fields or road ditches.
- Does well in moist sites.
- Easily spreads from seed into favorable sites.
- One of the last native wildflowers to bloom in the fall.
- Excellent nectar source for butterflies and other insects.



*New England Aster - Seedling*



*New England Aster - Juvenile*

# **Obedient Plant**

*Physostegia virginiana*

## **Distinguishing Characteristics:**

- Basal leaves in a whorl
- Smooth, narrow, with a long stalk
- Margin smooth or with small teeth



## **Description:**

- Height: Up to 4 feet
- Blooms: May – September
- A member of the mint family with flowers tightly spaced in vertical rows, in shades that range from pink to pale lilac.
- The flowers are funnel-shaped with a hood-like upper and a three-divided lower lip.
- Leaves are opposite, narrow, lanceolate.



## Comments:

- Found in mesic and wet prairies, glades, and savannas throughout the Ozarks and tallgrass prairie regions.
- Occasionally used in seeding mixes.
- Easy to establish from seed.
- Blooms the second year after seeding.



*Obedient Plant - Seedling*



*Obedient Plant - Juvenile*

# Ohio Spiderwort

*Tradescantia ohiensis*

## Distinguishing Characteristics:

- Juvenile stem and leaves with long, fine hairs
- Bluish to silvery-green
- Base of leaves tapering to a sheath that wraps around the stem



## Description:

- Height: Up to 3 feet
- Blooms: May – July
- Flowers are in clusters.
- Size of petals varies and flowers may be 3/4 to 1½ inches across in a triangular shape.
- Flower color may be blue, rose, purple, lavender or rarely white.



## Comments:

- Common in prairies and savannas ranging from dry to mesic.
- Variety of habitats from prairies and old fields to woodland edges.
- Blooms for more than a month, despite individual flowers lasting only a day.
- Seeds mature at various times, making seed harvest difficult.
- Easy to establish from seed when used in restoration projects.



*Ohio Spiderwort - Seedling*



*Ohio Spiderwort - Juvenile*

# Oxeye False Sunflower

*Heliopsis helianthoides*

## Distinguishing Characteristics:

- Leaves opposite on stalks, shaped like arrowheads with small paired leaves at the base of the leaf stalk.



## Description:

- Height: Up to 6 feet
- Blooms: May – October
- Flowers resemble a small sunflower, more than 10 yellow ray flowers surrounding a head of yellow disk flowers.
- A spreading, branched plant, its flower head is 2 – 4 inches across on a long stalk.
- Will bloom the second year from seed.

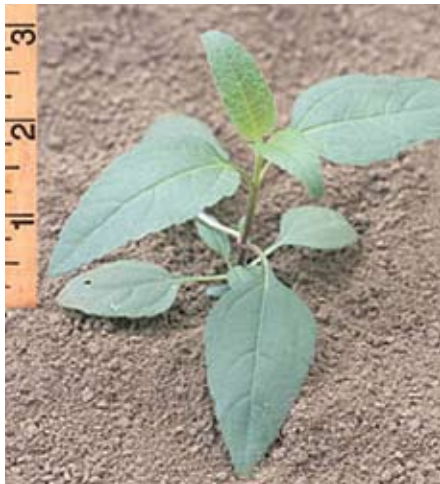


## Comments:

- Found in moist to mesic areas on prairies and savannas throughout the tallgrass prairie region.
- Blooms sporadically throughout the entire summer.
- Seeds are a good food source for wildlife.
- False sunflower has a tendency to form colonies.



*Oxeye False Sunflower - Seedling*



*Oxeye False Sunflower - Juvenile*

# Pale Purple Coneflower

*Echinacea pallida*

## Distinguishing Characteristics:

- Hairy leaves with parallel veins and long-tapering leaf base.



## Description:

- Height: Up to 3 feet
- Blooms: May – August
- Pollen on the anther is white
- Single showy flower head at the top of each stem, with many drooping pale purple petal-like ray flowers up to 3<sup>1/2</sup> inches long.
- Surrounding a broad, purplish brown, cone-shaped disk.
- A stout-stemmed plant, it has coarse, bristly hairs on the stems and leaves.





## Comments:

- Found on glades, savannas, and prairies in the central tallgrass prairie region.
- Best in dry to average soils.
- May take three years to bloom after seeding.
- Common in wildflower seeding mixes and is easy to establish from seed.



*Pale Purple Coneflower - Seedling*



*Pale Purple Coneflower - Juvenile*

# Partridge Pea

*Chamaecrista fasciculata*

## Distinguishing Characteristics:

- Pinnately compound leaf divided into about 20 pairs of leaflets
- Single bristle at the tip of each leaflet
- Single gland at base of leaf stalk that attracts native species of ants.



## Description:

- Height: Up to 2 feet
- Blooms: June – October
- An annual plant with alternate leaves, there are 1 – 6 flowers on slender stalks that emerge at the axil of the leaf and stem.
- Each flower has 5 yellow petals, with 3 slightly smaller than the other 2.
- There is a tinge of red at the base of each petal and 10 dark red stamens.



## Comments:

- Found in tallgrass prairie region in disturbed areas, old fields, glades, and prairies and along roadways.
- Easy to establish from seed and often found in native wildflower mixes.
- Good food source for wildlife and livestock.
- Annual plant that easily reseeds.



*Partridge Pea - Seedling*



*Partridge Pea - Juvenile*

# Pitcher Sage

*Salvia azurea*

## Distinguishing Characteristics:

- Stems square with short, dense hairs
- Leaves opposite, short-stalked
- Up to 4 inches long and 1 inch wide
- Hairy, with a few teeth along the margins

## Description:

- Height: 3 to 5 feet
- Blooms: July – October
- The blue flowers with white centers are held in densely packed whorls at stem ends, above dark green, linear foliage.
- Plants form many upright, branching stems from the base.



## Comments:

- Found southwestern tallgrass prairie region, south of the Missouri River on prairies and glades.
- Does well on drier sites, often in rocky or sandy soils.
- Common component of many native wildflower mixes, as this species is easy to establish and may bloom the first year from seed.
- Conspicuous blue flowers are a favorite of bees.



*Pitcher Sage - Seedling*



*Pitcher Sage - Juvenile*

# Prairie Blazing Star

*Liatris pycnostachya*

## Distinguishing Characteristics:

- Leaves long, narrow, up to 1/2 inch wide, grass-like with parallel veins.

## Description:

- Height: Up to 5 feet
- Blooms: July – October
- The long, dense flower heads often are over a foot long.
- Individual plants usually have 3 to 10 flower stalks.
- Leaves are alternate.



## Comments:

- Found throughout the central and southern tallgrass prairie region.
- Found in average to moist prairies, roadsides and open fields, often occurring in large colonies.
- Non-flowering plants look like a clump of grass.
- May take up to 5 years to bloom after seeding.
- An excellent nectar source for insects.



*Prairie Blazing Star - Seedling*



*Prairie Blazing Star - Juvenile*

# Prairie Coreopsis

*Coreopsis palmata*

## Distinguishing Characteristics:

- Leaves divided into three 2-3 inch long, narrow segments.



## Description:

- Height: 1 to 2 ½ feet
- Blooms: June – August
- Flower heads are on individual stalks and each has eight petal-like ray flowers around a central disk.
- Ends of the ray flowers are notched or toothed.
- Narrow, rigid-stemmed plants.
- Leaves are opposite on the stem.





**Comments:**

- Throughout all but the northern tallgrass prairie region.
- Found on dry prairies, savannas, and glades.
- Usually does best in dry, rocky, or sandy areas.
- Forms loose colonies by rhizomes.



*Prairie Coreopsis - Seedling*



*Prairie Coreopsis - Juvenile*

# Purple Coneflower

*Echinacea purpurea*

## Distinguishing Characteristics:

- Basal leaves on long, partly-winged stalks
- Leaf margin smooth on early leaves, becoming coarsely toothed on later leaves
- Leaves broadest at the base and tapering to a pointed tip

## Description:

- Height: Up to 3 feet
- Blooms: May – October
- Flower heads are showy and quite large.
- The orange disk is surrounded by 10 to 20 long, minute flowers in various shades of magenta.



## Comments:

- Commonly found throughout the tallgrass prairie region in open woodlands and savannas.
- Does well in a variety of soils from full sun to light shade.
- Commonly used in native forbs seeding mixes and is easy to establish from seed.
- Often blooms the second year after establishment and is a good food source for wildlife and nectar source for insects.



*Purple Coneflower - Seedling*



*Purple Coneflower - Juvenile*

# Purple Prairie Clover

*Dalea purpurea*

## Distinguishing Characteristics:

- Leaves divided into 3 to 9 shiny, narrow leaflets, each about 1 inch long and 1/8 inch wide.



## Description:

- Height: Up to 2 feet
- Blooms: June – September
- A slender, leafy plant that has one or more stems arising from a common base.



## Comments:

- Found through the tallgrass prairie region on glades, savannas, and prairies.
- It often forms large colonies on glades.
- Intolerant of overgrazing.
- Easy to establish from seed if the seeds have been scarified – a process of scratching the hard seed coat which allows air and moisture to the seed.
- Common in native seed mixes.



*Purple Prairie Clover - Seedling*



*Purple Prairie Clover - Juvenile*

# Rattlesnake Master

*Eryngium yuccifolium*

## Distinguishing Characteristics:

- Yucca-like leaves with pointed tips and small, soft, needle-like bristles scattered along the margins.

## Characteristics:

- Height: Up to 5 feet
- Blooms: July – August
- Tiny flowers are tightly packed in round balls up to 1 inch across.
- Whitish bracts stick out sharply from the flowers, which gives the flower head a rough, prickly feel and appearance.
- Stout-stemmed plant with bluish-green leaves at base.



## Comments:

- Found on glades, savannas, and prairies throughout the tallgrass prairie region.
- Does best in dry to average soils.
- Easy to establish from seed.
- Seed heads remain intact well into late November.
- This yucca-like plant competes well with taller native grass species.



*Rattlesnake Master - Seedling*



*Rattlesnake Master - Juvenile*

# Rough Blazing Star

*Liatris aspera*

## Distinguishing Characteristics:

- Basal leaves are short-stalked and up to 16 inches long and 2 inches wide, with short hairs on upper and lower leaf surfaces and along the leaf margin.
- Bracts rounded, somewhat spreading.

## Description:

- Height: usually 2 to 3 feet, but may be taller under favorable conditions
- Blooms: August – November
- Heads, 3/4 – 1 inch wide, have 16 – 35 tiny flowers.
- Unbranched stalks.
- Bracts rounded, somewhat spreading.
- Button-sized clusters of flowers are spread along the upper third of the flowering spike.





## Comments:

- Common throughout the tallgrass prairie region on dry prairies, glades, and savannas.
- Occasionally used in native forbs seed mixes, especially for custom mixes for drier soils.
- May take several years to bloom from seed, and plants may not bloom every year.
- An excellent nectar source for insects.



*Rough Blazing Star - Seedling*



*Rough Blazing Star - Juvenile*

# Rough Dropseed

*Sporobolus compositus (asper)*

## Distinguishing Characteristics:

- Leaves up to 20 inches long and less than 1/4 inch wide tapering to thread-like tip, commonly with enrolled margins and often hairy at the base
- Scale-like collar (ligule) barely visible, with tufts of long hairs



## Description:

- Height: Up to 4 feet
- Blooms: August – October
- Flowers are densely packed at the top of the stem along a terminal stalk up to 15 inches long.
- Much shorter lateral spikes are found wrapped in the leaf sheath below the long spike.
- Plants forming small clumps with few leaf blades scattered along slender stems.



## Comments:

- Commonly found throughout the Ozarks and tallgrass prairie regions on dry prairies, glades, and open woodlands.
- Would be a good species to include on drier sites, frequent in sandy or rocky soils.
- Colonizes glades and dry savannas after restoration work has been completed.
- Provides good wildlife cover throughout the year.



*Rough Dropseed - Seedling*



*Rough Dropseed - Juvenile*

# Round-headed Bushclover

*Lespedeza capitata*

## Distinguishing Characteristics:

- Leaves and stem covered with fine, silvery hairs.
- Leaves divided into 3 narrow leaflets.



## Description:

- Height: Up to 5 feet
- Blooms: July – October
- A slender legume, its flowers occur in dense, rounded and reddish brown heads up to 1½ inches in diameter.
- Each flower has an upper petal, two side petals and a lower lip.
- Flower is insignificant.



## Comments:

- Found in all but northern portions of the tallgrass prairie region on prairies and savannas.
- Commonly used in native wildflower seed mixes.
- Easily established from seed if seeds have been scarified.
- Good food source for wildlife and forage for livestock.



*Round Headed Bushclover - Seedling*



*Round Headed Bushclover - Juvenile*

# Royal Catchfly

*Silene regia*

## Distinguishing Characteristics:

- Leaves opposite, gradually tapering to the stem
- Margin with short hairs
- Stems smooth on lower part, with sticky hairs near the top of the mature flowering plant

## Description:

- Height: 3 to 4 feet
- Blooms: July – August
- A clump-forming perennial, it has long, slender, often reclining stems
- Each stem has 10 – 20 pairs of downy, lance-shaped leaves that are up to 5 inches long.



## Comments:

- Found in the southern tallgrass prairie region to northeastern region on savannas and dry to mesic prairies.
- Rarely used in seeding mixes, even restoration projects, as the seed is extremely small and expensive.
- The cardinal-red flowers are a good nectar source for hummingbirds.



*Royal Catchfly - Seedling*



*Royal Catchfly - Juvenile*

## Sensitive Briar

*Mimosa quadrivalvis* var. *nuttallii*

### Distinguishing Characteristics:

- Juvenile stem smooth with paired fern-like leaflets
- Older stem with numerous hooked prickles
- Fern-like leaflets close when touched



### Description:

- Height: Trailing or creeping plant
- Blooms: May – September
- Flowers on long stalks arising from leaf axils in ball-shaped heads of many funnel-shaped pink to rose-colored minute flowers with stamens protruding.





## Comments:

- Found in central and western tallgrass prairie region in savannas, glades, and prairies.
- Occasionally used in seeding mixes, cattle readily forage this deep-rooted perennial that will withstand some grazing.
- Good food source for wildlife and nectar source for insects.



*Sensitive Briar - Seedling*



*Sensitive Briar - Juvenile*

# Showy Goldenrod

*Solidago speciosa*

## Distinguishing Characteristics:

- Basal leaves large, up to 12 inches long and 4 inches wide, withering at flowering time
- Leaves finely hairy on both surfaces and margin
- Margin with short rounded teeth

## Description:

- Height: Up to 3 feet
- Blooms: August – November
- This unbranched plant is likely the showiest of Missouri goldenrods.
- The flowers are densely arranged on branches in an elongate, cylindrical cluster at the top of the stem.



## Comments:

- Found throughout the tallgrass prairie region, less common south of Missouri.
- Found in prairies and savannas, it is sometimes used in native seed mixes.
- Excellent seed source for wildlife and nectar source for insects.



*Showy Goldenrod - Seedling*



*Showy Goldenrod - Juvenile*

# Showy Tick Trefoil

*Desmodium canadense*

## Distinguishing Characteristics:

- Leaflets two to three times longer than broad on short stalks
- Stem striated
- Leaves are alternate along the stem and divided into three leaflets.
- Stems have long, soft hairs.

## Description:

- Height: Up to 6 feet
- Blooms: July – September
- Fruit pods are in 3 to 5 hairy segments (resembling flattened chained beads) that attach easily to clothing.
- Branched inflorescence with large flowers, rose-purple.



## Comments:

- Found throughout tallgrass region.
- Common in moist to dry prairies.
- An excellent food source for wildlife and livestock. Quail relish tick trefoil seeds.
- Not commonly used in wildflower seeding mixes because of the difficulty in removing the fruit pod.
- Spread easily into new grass plantings because of the “sticky” nature of the fruit pod.



*Showy Tick Trefoil - Seedling*



*Showy Tick Trefoil - Juvenile*

# Sideoats Grama

*Bouteloua curtipendula*

## Distinguishing Characteristics:

- Leaves are up to 12 inches long and less than 1/4 inch wide, with long, pointed tips.
- Widely-spaced long, pale hairs along the edges of the leaves, especially near the leaf collar.



## Description:

- Height: Up to 3 feet
- Blooms: July – September
- Small reddish-orange flowers dangle along one side of slender stems.



## Comments:

- Found throughout tallgrass prairie region.
- Commonly found on glades, dry prairies, and savannas.
- Provides excellent wildlife cover and is easy to establish from seed
- Does not compete well with taller native grasses.



*Sideoats Grama Seedling*



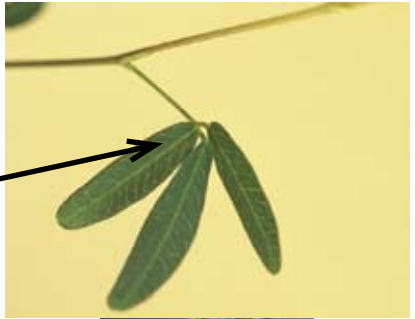
*Sideoats Grama - Juvenile*

# Slender Lespedeza

*Lespedeza virginica*

## Distinguishing Characteristics:

- Hairy stems with stalked narrow leaflets in threes
- Leaf margin lacks teeth



## Description:

- Height: Up to 3 feet
- Blooms: May – September
- Flowers are on very short stalks arising from leaf axils, flowers pink to rose-purple.
- Leaves are profuse.





## Comments:

- Found throughout the Ozarks and southern half of tallgrass prairie regions in open woodlands, savannas and prairies.
- Species found in upland habitats.
- Excellent seed source for wildlife.



Slender Lespedeza - Seedling



Slender Lespedeza - Juvenile

# Slender Mountain Mint

*Pycnanthemum tenuifolium*

## Distinguishing Characteristics:

- Smooth, square stem
- Numerous pairs of slender leaflets
- Branching occurs at the leaf axils
- Leaves have mint aroma when crushed.

## Description:

- Height: Up to 2½ feet
- Blooms: June – September
- Flowers, in dense, half-round heads, are usually white and, but are occasionally a light lavender.
- The upper lip is not lobed, while the lower lip has three distinct lobes.



## Comments:

- Found in tallgrass prairie region in glades, savannas, and open woodlands.
- Commonly used in seeding mixes and is easy to establish from seed.
- Good nectar source for insects.



*Slender Mountain Mint - Seedling*



*Slender Mountain Mint - Juvenile*

# Stiff Goldenrod

*Solidago rigida*

## Distinguishing Characteristics:

- Large basal leaves on long stalks, up to 10 inches long and 5 inches wide
- Leaf margin slightly to heavily toothed
- Leaves mostly smooth



## Description:

- Height: 3 to 5 feet
- Blooms: August – September
- Bright yellow, daisy-like flowers in dense, erect, flat-topped terminal clusters, atop stiff, broad-leafed, hairy stems



## Comments:

- Found on prairies, glades and pastures, throughout the tallgrass prairie region and in the Ozarks of Missouri.
- Able to withstand grazing better than many other forbs.
- Seeds are a good food source for upland wildlife, especially songbirds.
- One of the last wildflowers to bloom in the fall.



*Stiff Goldenrod - Seedling*



*Stiff Goldenrod - Juvenile*

# Virginia Wildrye

*Elymus virginicus*

## Distinguishing Characteristics:

- Leaves up to 12 inches long and up to 3/8 inch wide, green to bluish green, sometimes with a whitish coating
- Base of leaves commonly with a pair of small, purple, ear-shaped appendages (auricles).
- Relatively stiff, erect spikes are up to 5 inches long.
- Lower part of spike is often enclosed by the sheath.



## Description:

- Height: 2 to 3 feet
- Blooms: May – September

## Comments:

- Found throughout Missouri in variety of habitats – most common in river bottoms.
- Occasionally used in seeding mixes or as a cover crop in riparian or wetland restoration.
- Stem at base deep purple color.
- Glossy light green in color in early stages of growth.



*Virginia Wildrye - Seedling*



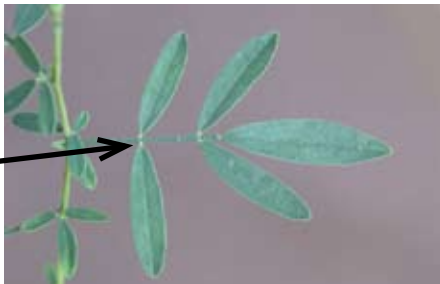
*Virginia Wildrye - Juvenile*

# White Prairie Clover

*Dalea candida*

## Distinguishing Characteristics:

- Leaves divided into typically 7 dull, narrow leaflets, each up to  $1\frac{1}{4}$  inches long and less than  $\frac{1}{4}$  inch wide.



## Description:

- Height: Up to 2 feet
- Blooms: May – October
- The white flowers, crowded into cylindrical spikes, bloom first at the bottom and progress upwards along the column.
- This finely leaved plant has a single or, perhaps, a few stems rising from a common base.





## Comments:

- Common on glades, savannas, and prairies throughout the tallgrass prairie region.
- Plant is taller and more open in appearance than purple prairie clover.
- Blooms slightly later than purple prairie clover.
- Seed needs to be scarified.
- Prairie clovers are common in native seed mixes.



*White Prairie Clover - Seedling*



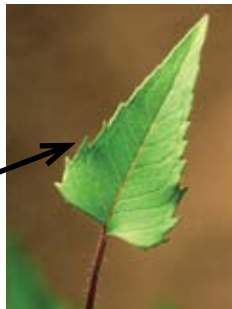
*White Prairie Clover - Juvenile*

# Wild Bergamot

*Monarda fistulosa*

## Distinguishing Characteristics:

- Square stem with fine hairs
- Leaves opposite, on short stalks, up to 5 inches long and 2 inches wide
- Leaves toothed along the margin
- Lower surface sometimes a faint purple
- A fragrant aroma when crushed



## Description:

- Height: Up to 4 feet
- Blooms: May – August
- Much branched and pleasantly scented, it is prominent in summer.
- Flowers may be lavender, lilac or rose



## Comments:

- Found throughout tallgrass prairie region in a variety of grassland habitats that include native prairie and disturbed pastures.
- Easy to establish from seed and is often used in native forbs mixes.
- Blooms the second year from seed and readily spreads in new plantings.
- A good nectar source for insects.



*Wild Bergamot - Seedling*



*Wild Bergamot - Juvenile*

\*\*Scale = 1/16 inch increments



Big Bluestem  
*Andropogon gerardii*



Black-eyed Susan  
*Rudbeckia hirta*



Blue Lobelia  
*Lobelia siphilitica*



Butterfly Milkweed  
*Asclepias tuberosa*



Cardinal Flower  
*Lobelia cardinalis*



Compass Plant  
*Silphium laciniatum*

\*\*Scale = 1/16 inch increments



Culver's Root  
*Veronicastrum virginicum*

Flowering Spurge  
*Euphorbia corollata*

Foxglove Beard Tongue  
*Penstemon digitalis*



Golden Alexanders  
*Zizia aurea*

Gray-headed Coneflower  
*Ratibida pinnata*

Illinois Bundleflower  
*Desmanthus illinoensis*

\*\*Scale = 1/16 inch increments



Leadplant  
*Amorpha canescens*



Little Bluestem  
*Schizachyrium scoparium*



New England Aster  
*Aster novae-angliae*



Obedient Plant  
*Physostegia virginiana*



Ohio Spiderwort  
*Tradescantia ohiensis*



Oxeye False Sunflower  
*Heliopsis helianthoides*

*\*\*Scale = 1/16 inch increments*



Pale Purple Coneflower  
*Echinacea pallida*



Partridge Pea  
*Chamaecrista fasciculata*



Pitcher Sage  
*Salvia azurea*



Prairie Blazing Star  
*Liatris pycnostachya*



Prairie Coreopsis  
*Coreopsis palmata*



Purple Coneflower  
*Echinacea purpurea*

*\*\*Scale = 1/16 inch increments*



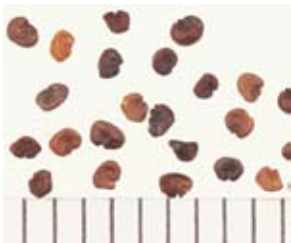
Purple Prairie Clover  
*Dalea purpurea*



Rattlesnake Master  
*Eryngium yuccifolium*



Rough Blazing Star  
*Litris aspera*



Royal Catchfly  
*Silene regia*



Round-headed Bushclover  
*Lespedeza capitata*



Rough Dropseed  
*Sporobolus compositus (asper)*



*\*\*Scale = 1/16 inch increments*



Sensitive Briar  
*Mimosa quadrivalvis var.  
nuttallii*



Showy Goldenrod  
*Solidago speciosa*



Showy Tick Trefoil  
*Desmodium canadense*



Sideoats Grama  
*Bouteloua curtipendula*



Slender Lespedeza  
*Lespedeza virginica*



Slender Mountain Mint  
*Pycnanthemum tenuifolium*



Stiff Goldenrod  
*Solidago rigida*



Virginia Wildrye  
*Elymus virginicus*



White Prairie Clover  
*Dalea candida*



Wild bergamot  
*Monarda fistulosa*

*\*\*Scale = 1/16 inch increments*

<i><b>COMMON NAME</b></i>	<i><b>SEEDS/LB</b></i>	<i><b>COMMON NAME</b></i>	<i><b>SEEDS/LB</b></i>
Big Bluestem	130,000	Pitcher Sage	149,000
Black-eyed Susan	1,500,000	Prairie Blazing Star	136,000
Blue Lobelia	7,320,000	Prairie Coreopsis	200,000
Butterfly Milkweed	7,000	Purple Coneflower	115,000
Cardinal Flower	4,800,000	Purple Prairie Clover	275,000
Compass Plant	10,600	Rattlesnake Master	177,770
Culver's Root	12,000,000	Rough Blazing Star	191,000
Flowering Spurge	160,000	Rough Dropseed	1,500,000
Foxglove Beard Tongue	2,000,000	Round-headed Bushclover	159,000
Golden Alexanders	176,000	Royal Catchfly	368,000
Gray-headed Coneflower	625,000	Sensitive Briar	38,400
Illinois Bundleflower	60,000	Showy Goldenrod	1,675,200
Leadplant	123,000	Showy Tick Trefoil	88,000
Little Bluestem	225,000	Sideoats Grama	190,000
New England Aster	1,300,000	Slender Lespedeza	160,000
Obedient Plant	240,000	Slender Mountain Mint	6,048,000
Ohio Spiderwort	128,000	Stiff Goldenrod	656,000
Oxeye False Sunflower	103,900	Virginia Wildrye	75,000
Pale Purple Coneflower	106,000	White Prairie Clover	292,992
Partridge Pea	50,000	Wild Bergamot	1,200,000

## USDA-NRCS

Elsberry Plant Materials Center

2803 North Highway 79

Elsberry, Missouri 63343

Phone: 573-898-2012

<http://plant-materials.nrcs.usda.gov>



Missouri Department of Conservation

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Phone: 573-751-4115

<http://mdc.mo.gov/grownative/plantID/>



Photography by: Don Kurz

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