



Midewin National Tallgrass Prairie

Wildflowers & Grasses of Midewin

Funding for this brochure was contributed by the National Forest Foundation, Recreational Equipment, Inc., Mobil Foundation, Midewin Tallgrass Prairie Alliance, and Illinois Department of Natural Resources.

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The Midewin National Tallgrass Prairie is a member of Chicago Wilderness, a coalition of more than 100 agencies, organizations, and institutions that have come together to help assure the future of the natural biological wealth of the region.



United States Department of Agriculture • Forest Service



Welcome to the Midewin National Tallgrass Prairie. Midewin was established in 1996 as the first national tallgrass prairie in the country. It is administered by the USDA Forest Service, in close cooperation with the Illinois Department of Natural Resources and the support of hundreds of volunteers and partner agencies, businesses, and organizations.

The Illinois Land Conservation Act mandated four guiding purposes for Midewin's management:

- To conserve and enhance native populations and habitats of fish, wildlife, and plants;
- To provide for scientific, environmental and land use education and research;
- To allow agricultural use to continue under certain conditions; and
- To provide a variety of recreation opportunities.

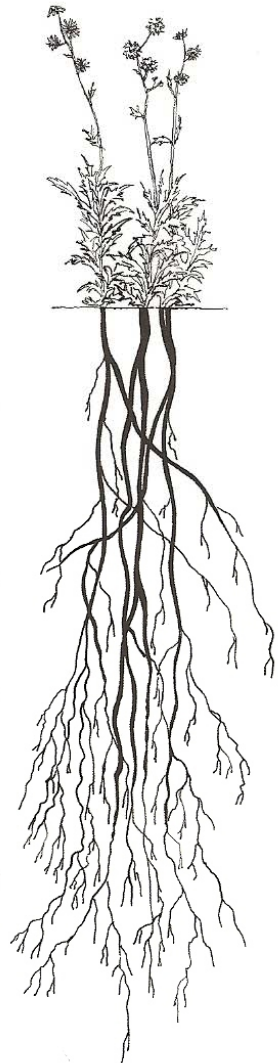
As the largest portion of the peacetime conversion of the former Joliet Army Ammunition Plant, Midewin represents the largest prairie restoration attempted in the United States. Located just 40 miles south of Chicago, it also represents an unprecedented opportunity for urban dwellers to experience the wide open spaces that characterized the Prairie State 200 years ago.

The Prairie

At one time, prairies dominated over 60% of the landscape in Illinois. Tallgrass prairie once covered millions of acres of land from Canada to Texas, and from Nebraska to the Great Lakes. Favored with more rainfall than the shorter, mixed-grass prairies and Great Plains to the west, tallgrass prairie was characterized by rich and diverse plant life. In some areas, the grasses grew nearly to the height of a horse and rider, while other areas featured shorter grasses and hundreds of species of wildflowers.

Most of the living material in a prairie ecosystem is below ground in roots, microbes, insects, and other burrowing animals. The activities of these organisms, over the millennia, created the deep, rich topsoil of the Midwest. Once the fertility of the soil was discovered, tallgrass prairie practically disappeared in the space of 50 years, converted to crops and to pastures for domestic livestock.

Today, less than one hundredth of one percent of true tallgrass prairie remains in Illinois. Pristine tallgrass prairie is the rarest of North America's major biomes.



Prairie Restoration at Midewin

The Midewin National Tallgrass Prairie is not currently prairie. In fact, less than 3% is in natural plant communities. Large areas of Midewin are used for cultivated row crops, hay, or cattle grazing, which maintain the land in good condition and provide grassland bird habitat until it can be restored to native plants. Aggressive, nonnative weeds are a problem in some areas. Other areas consist of grasslands, shrublands, and thickets.

Restoring prairie at this scale will require many years—decades—and a vast amount and variety of native plant seed. No one knows exactly how all the diverse components of a prairie ecosystem work together because we have only small pieces left to study. So much of what happens at Midewin will be an ongoing experiment, learning by trial and error how to gradually regain our natural heritage in Illinois.

A major strategy of the restoration process at Midewin is to produce our own plant seed. Three native seed production gardens and several grass fields have been established and are tended by a truly dedicated volunteer workforce. Eventually, we will be able to produce seed for hundreds of native plant species.

How to Use This Brochure

Although there are few native plant communities to study at Midewin today, you can use this identification guide in one of our native seed production gardens, or for individual plants here and at other natural sites in the Prairie Parklands or Chicago Wilderness.

Please enjoy all wildflowers and grasses where they are growing. Do not remove the plants, flowers, or seeds—they're needed to continue the task of restoring the prairie.

The wildflowers and grasses in this brochure are common in north-eastern Illinois, but this is not a comprehensive list of all tallgrass prairie plants.

The following listings begin with the average height of the plant, then its blooming season, followed by a description of its distinguishing characteristics.

A short glossary of terms that will be helpful includes:

Panicle:

A compound raceme.

Raceme: Elongated flower cluster.

Stamen: The pollen bearing organ of the flower.

Disk Flowers: Small, tubular flowers in the center of a flowerhead.

Ray Flowers:

Resemble one flower petal.

measurements

above each photo are the size of the plants

circles

above photos indicate relative size of flowers

- small
less than 1 inch wide or long
- medium
1-2 inches wide or long
- large
more than 2 inches wide or long

June-July

8in-2ft •

**PALE LOBELIA***Lobelia spicata*

Slender, erect stems, smooth near the top. Leaves alternate, narrow, shallowly toothed. Small pale blue tubular flowers in a raceme. Flower 2-lipped, with 2 erect lobes on the upper lip and lower lip deeply cleft into 3 lobes. Milky sap in stem and leaves.

Mid Aug-Mid Oct

1-3ft •

**SMOOTH BLUE ASTER***Aster laevis*

Erect stems, with distinctive bluish green cast to the leaves and stems. Leaves alternate, smooth, and almost waxy, with fine sawtooth edges as felt from tip to stem. Flowerheads numerous with blue-violet ray flowers and yellow disk flowers.

Mid May-June

4-10in •

**BLUE-EYED GRASS***Sisyrinchium albidum*

Slender, wiry, flattened stems. Grasslike foliage. Grows in tufts. Flowers attached to tips of stems, with blue petals and sepals sometimes notched at the tips with hairlike points.

Late May-July

1-3ft •

**TALL SPIDERWORT***Tradescantia ohimensis*

Smooth, bluish green, spindly stems with mucous-like sap. Leaves alternate, narrow, and long, folded lengthwise and curved downward. Deep blue flowers emerge in a cluster at the top of the stem, each with 3 round petals. Flowers close in bright sunlight.

May-Early June

8-16in •

**WILD HYACINTH***Camassia scilloides*

Leafless stems. Long basal grasslike leaves have a prominent midrib on the underside. Leaves disappear by early summer. Flowers with 3 petals and 3 sepals, all pale purple, are in a raceme.

July-Aug

2-4ft •

**WILD BERGAMOT-
(BEEBALM)***Monarda fistulosa*

Stems square and slightly hairy. Leaves opposite, lanceolate, and sharply toothed. Pale purple, two-lipped, tubular flowers are in dense, rounded heads. Stem and leaves secrete aromatic bergamot oil.

Early June-Early July

18"-3ft •

**PALE PURPLE CONEFLOWER***Echinacea pallida*

Multiple stout, bristly stems each with a single terminal flower. Large basal leaves are hairy and strongly 3-veined. Large pale purple flowerheads droop to form inverted cones.

Mid July-Aug

3-5ft •

**PRAIRIE BLAZING STAR***Liatris pycnostachya*

Slender, unbranched stems closely set with spirals of grasslike leaves near the base that progressively get shorter toward the flower spike. Stem and leaves are hairy. Topped with cylindrical spike crowded with small purple flowers.

Mid Aug-Sept.

2-5ft •

**ROUGH BLAZING STAR***Liatris aspera*

Unbranched stems are hairy. Leaves alternate and sparser than Prairie Blazing Star. Purple flowerheads are alternate, and larger than Prairie Blazing Star but not as numerous. Small leaves at the base of the flowers appear cup or button shaped.

Aug-Sept

2-5ft •

**PRAIRIE IRONWEED***Vernonia fasciculata*

Stout, smooth stems, often reddish. Leaves alternate, finely toothed, and smooth on both sides. Red-violet flowerheads appear flat topped.

2-3ft •

June-July

**LEAD PLANT***Amorpha canescens*

Grayish shrubs with woody stems. Leaves alternate, divided into many small leaflets, and covered with fine hairs. Small purple flowers with orange stamens in dense, spikelike clusters along upper stems.

1-3ft •

July

**PURPLE PRAIRIE CLOVER***Dalea purpurea*

Stems slender, erect, and wiry. Leaves alternate and compound with usually 5 shiny, narrow segments. Firm, cylindric spike of crowded, small purple flowers at the tops of stems and branches.

2-4ft •

June-July

**MARSH PHLOX***Phlox glaberrima*

Stems slender, erect, and smooth. Leaves opposite, stiff, narrow, and tapered. Deep magenta tubular flowers with 5 broad lobes are in loosely branched clusters.

4-8in •

May-Early June

**VIOLET WOOD SORREL***Oxalis violacea*

Leaves are smooth blue-green on top and reddish purple beneath; divided into 3 heart-shaped leaflets with a center crease and a notch at the tip. Leaves fold downward at dusk. Stalks extend above leaves to carry several pink flowers.

2-4ft •

Aug-Oct

**NEW ENGLAND ASTER***Aster novae-angliae*

Tall leafy stalks protrude in all directions. Leaves alternate, lanceolate, and hairy. Pinkish purple or pale lavender flowerheads are in open, rounded clusters at tops of main stem branches.

3-5ft •

Aug-Sept

**OBEDIENT PLANT***Physostegia virginiana arenaria*

Stems square, smooth, and stout. Leaves opposite, thick, narrow, and sharply toothed. Pink or lavender tubular flowers are borne in terminal leafless spikes.

12-18in •

July-Aug

**NODDING WILD ONION***Allium cernuum*

Stems are smooth, tubular, and leafless, nodding at the top and with several shorter, grasslike, flattened leaves at the base. Pale pink flowers are borne at the tip of the stalks in rounded, drooping clusters. Mild onion fragrance and taste.

1-2ft •

May-Early June

**SHOOTING-STAR***Dodecatheon meadia*

Stems stiff and green, rising from a rosette of long, straplike pale green basal leaves with reddish midribs. Pink, white, or purplish flower clusters are each on a long stalk and are uniquely shaped with five recurved petals.

1-2ft •

June-July

**PASTURE ROSE***Rosa carolina*

Stems slender, woody, and with weak prickles. Leaves alternate, and divided into 5-7 oblong leaflets with toothed edges. Pink flowers are fragrant, with 5 showy petals. Red hips develop below the sepals.

2-5ft •

June-July

**PRAIRIE MILKWEED***Asclepias sullivantii*

Stems thick and smooth. Leaves opposite, thick, and point upwards, with conspicuous pink veins and midrib. Reddish pink flowers are in large, rounded clusters. Milky sap in stems and leaves.

Late June- Mid July

2-5ft ●

**TURK'S CAP LILY***Lilium michiganense*

Stems stout, smooth, and erect. Leaves smooth, tapered at both ends, and grow in whorls of 4-12 encircling the stem.

The large orange flowers have several purplish spots and face downward, with both petals and sepals strongly recurved.

2-10ft ●

July-Sept.

**PRAIRIE DOCK***Silphium terebinthinaceum*

Tall smooth stalks rise from basal cluster of very large leaves. Leaves are thick, coarsely toothed, spade shaped, and rough and cool to the touch. Flower buds appear as small green balls opening to yellow flowerheads in open clusters at tops of stalks.

3-8ft ●

July-Aug.

**COMPASS PLANT***Silphium laciniatum*

Stems stout and bristly. Basal leaves very large, deeply divided, and rough to the touch. Leaf edges often aligned north-south, so that leaf surfaces face the sun throughout the day. Large yellow ray flowers with central yellow disk flowers grow at the tops of the stalks.

3-5ft ●

July-Aug.

**YELLOW CONEFLOWER***Ratibida pinnata*

Stems slender, clustered, and branching. Leaves are alternate, smooth, and deeply dissected into 3-7 leaflets. Flowerheads appear at tips of stalks with drooping yellow ray flowers and central brown or greenish-gray disk flowers.

1-3ft ●

May-June

**GOLDEN ALEXANDERS***Zizia aurea*

Stems erect, smooth, and branched. Basal and lower leaves alternate, compound with 3 leaflets and finely toothed edges. Tiny golden yellow flowers grow in bouquet arrangements.

2-4ft ●

Sept-Oct.

**RIDDELL'S GOLDENROD***Solidago riddellii*

Stems stout and smooth. Leaves shiny, somewhat folded lengthwise, tend to curve away from the stem, and have rough edges. Yellow flowers in a short, dense, domed cluster at the tops of the stems.

3-7ft ●

July-Sept.

**TALL COREOPSIS***Coreopsis tripteris*

Stems tall and smooth, branching at the top. Leaves opposite, smooth, and divided to the midrib into 3 leaflets. Yellow ray flowers with brown central disk flowers are very showy at the tips of the stems. Foliage turns reddish orange in the fall.

1-4ft ●

Aug-Sept.

**PARTRIDGE PEA***Chamaecrista fasciculata*

Leaves alternate, numerous, and compound, each divided into as many as 20 pairs of leaflets with small, bristle-like tips. Flowers with 5 bright yellow petals and 10 dark red stamens. Fruits are small flat pods.

1-2ft ●

June-Sept.

**BLACK-EYED SUSAN***Rudbeckia hirta*

Stems stiff, hairy, and highly branched. Leaves are alternate, parallel veined, and shallowly toothed, with stiff hairs. Orange-yellow ray flowers with central brown-black disk flowers grow at the tips of multiple stems.

1-2ft ●

June-July

**PRAIRIE SUNDROPS***Oenothera pilosella*

Stems slender, stout, and softly hairy. Leaves alternate and hairy. Bright yellow flowers have 4 petals. Distinctive crosses appear at tips of stalks extending from center of flower.

May-June

4in-2ft •

**BALSAM RAGWORT***Senecio pauperailus*

Stems erect and unbranched. Leaves alternate. Basal leaves are long stalked and toothed. Upper leaves have deeply jagged and serrated lobes. Flat topped flower clusters at top of stems have yellow ray and central disk flowers.

May-June

1-2ft •

**HOARY PUCCOON***Lithospermum canescens*

Stems single or multiple, and hairy. Leaves alternate, covered with short stiff hairs, with a prominent midrib. Small golden yellow tubular flowers have 5 rounded lobes, carried in flattened clusters at the top of the plant. Seeds like tiny pieces of polished ivory.

Aug-Sept.

2-5ft •

**PRAIRIE SUNFLOWER***Helianthus rigidus*

Stems rigid, erect, rough, and often tinged with purple. Leaves opposite, stiff, rough, and 3-veined. Flowerhead with yellow ray flowers and purplish-brown disk flowers.

Aug-Sept.

1-2ft •

**SULLIVANT'S CONEFLOWER***Rudbeckia fulgida sullivantii*

Leaves concentrated at the base and bristly. Leaves smooth edged or toothed. Rich yellow ray flowers surround dark brown disk flowers. Stems smoother than Black-Eyed Susan.

June

1-3ft •

**PRAIRIE ALUM ROOT***Heuchera richardsonii*

Leafless stems are hairy and rise from dense basal cluster of scalloped, hairy, geranium-like leaves. Small, green, bell shaped flowers are in elongate clusters at the top of the stems, and have orange tipped stamens.

1-2ft •

May-July.

**SHORT GREEN MILKWEED***Asclepias viridiflora*

Leaves opposite with wavy edges. Rounded, stalked clusters of small green flowers grow from junctions of leaves with the stem. Milky sap in stems and leaves.

June-Aug.

1-3ft •

**WILD QUININE***Parthenium integrifolium*

Stems sturdy and rough. Leaves alternate, rough, firm, toothed. Large basal leaves. Flowerheads are in a nearly flat, branching cluster at the top of the plant. Tiny white flowers each have five petal-like ray flowers in a dense head of disk flowers.

June-Aug.

18in-3ft •

**WHITE PRAIRIE CLOVER***Dalea candida*

Stems few to several, smooth, and upright. Leaves alternate, delicate, and compound with 5-9 narrow leaflets. Firm cylindric spike of crowded, small white flowers at the tops of stems and branches.

June-July.

3-5ft •

**WHITE WILD INDIGO***Baptisia leucantha*

Stems smooth, stout, and widely branched at the crown. Leaves are smooth, with short stalks and 3 leaflets. White pea flowers grow on elegant raceme standing tall above the bushy plant. Entire plant turns black when dry.

July-Aug.

3-5ft •

**CULVER'S ROOT***Veronicastrum virginicum*

Stems tall, erect, with leaves whorled around each node. Leaves long and pointed with sawtoothed edges. Tiny white flowers are in dense clusters of tapering candle-like spikes at the top. Fragrant.

2-4ft •

July-Aug.

**RATTLESNAKE-MASTER***Eryngium yuccifolium*

Solitary stem. Waxy straplike leaves resemble yucca, with weak spines along the edges. Tiny white flowers carried in open, flattened clusters of dense, prickly ball-like flowerheads.

2-5ft •

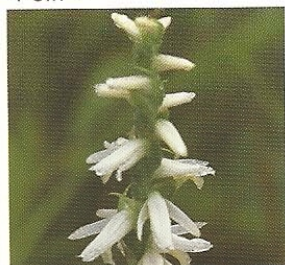
Aug-Sept.

**ROUND-HEADED BUSH CLOVER***Lespedeza capitata*

Stems erect and silvery pubescent. Leaves alternate, compound with 3 narrow leaflets, and silvery pubescent beneath. White pea flowers are in clustered, rounded heads at the top of the stems. Brown seedheads persist.

4-8in •

July-Aug.

**GREAT PLAINS LADIES TRESSES***Spiranthes magnicamporum*

Stems erect. Leaves smooth, strap shaped, and all basal. Tubular white flowers in a spiral along the upper part of the stem. Extremely fragrant.

4-12in •

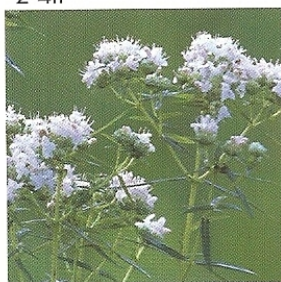
May-June

**FALSE TOADFLAX***Comandra umbellata*

Stems smooth and erect. Leaves smooth, thick, and leathery, with a prominent midrib beneath. Numerous small white flowers with 5 "petals" grow in clusters at the tips of the stems.

2-4ft •

July-Aug.

**MOUNTAIN MINT***Pycnanthemum virginianum*

Stems square and hairy along the edges. Leaves opposite, narrow, and numerous. Tiny white flowers have purple spots and grow in dense heads in clusters near the tops of branches. Strong mint odor when crushed.

3-5ft •

June-July.

**PRAIRIE INDIAN PLANTAIN***Cacalia plantaginea*

Stems smooth, erect, and abundantly branched at the top. Basal leaves rubbery and thick with prominent parallel veins. Upper leaves alternate and toothed toward the tip. Flat-topped clusters made up of flowerheads each with 5 tubular white flowers

1-4ft •

July-Aug.

**FLOWERING SPURGE***Euphorbia corollata*

Stems slender and smooth. Leaves in a whorl at the base, and scattered alternately along the stem or in whorls of 3 near the flower branches. Flower clusters are abundant at the tops of multiple branches, carrying little white flowers with 5 "petals" surrounding tiny yellow center flowers. Milky sap.

18in-3ft •

Sept.

**HEATH ASTER***Aster ericoides*

Stems hairy and very branched and leafy. Leaves alternate, small, and hairy. Tops of plants in pyramidal arrangements of flowerheads and tiny leaves. Tiny flowers have white ray flowers around center yellow disk flowers.

1-2ft •

June.

**MEADOW ANEMONE***Anemone canadensis*

Leaves have deep irregular lobes and prominent veins. Basal leaves grow in whorls of 3 on long stalks, while upper leaves are paired and clasp the stem. Single white flowers appear at the tips of the stalks, with 5 white sepals and numerous yellow stamens.

3-5ft •

June-July.

**ILLINOIS BUNDLE FLOWER***Desmanthus illinoensis*

Stems tough, slender, and grooved. Leaves alternate and doubly compound, with a fern-like appearance. Tiny white flowers are in spherical heads. Long yellow-tipped stamens shoot out beyond the 5 small white petals, creating a powder puff effect.

GRASSES

4-8ft •

Aug-Sept.

**BIG BLUESTEM**

Andropogon gerardii
Numerous leaves, often hairy. Coarse, slightly fuzzy flower branches radiate from the top of the stem. Also called Turkey Foot because its seed spikes frequently branch to resemble a bird's foot. Stem turns bluish-purple, then reddish-purple in the fall.

18in-3ft •

Aug-Sept.

**LITTLE BLUESTEM**

Andropogon scoparius
Leaves smooth, slender, and more wiry than Big Bluestem. During the fall, the pinkish colored stems have fluffy, white-silvery seed spikes intermingled with the leaves. Turns pinkish to wine-red in the fall.

3-6ft •

Aug-Sept.

**INDIAN GRASS**

Sorghastrum nutans
Leaves are stiff and spread at 45-degree angles to the stem. Small twisted bristles and showy yellow stamens on the slightly fuzzy flowers. Soft, silky-textured plumes turn golden brown in fall.

3-6ft •

Aug-Sept.

**SWITCH GRASS**

Panicum virgatum
Strong glossy leaves, with inverted V-shaped wedge of fine, wavy hairs along upper surface where blade joins the sheaf. Small flowers in large, open panicles have reddish-purple stamens, then teardrop-shaped seeds.

2-4ft •

Aug.

**PRAIRIE DROPSEED**

Sporobolus heterolepis
Leaves slender and smooth, growing in fountain-like tufts. Flowers have purplish stamens and grow in a large panicle. Fragrant while flowering.

3-8ft •

July-Aug.

**PRAIRIE CORD GRASS**

Spartina pectinata
Stems thick and tough. Leaves coarse with sharply serrated edges capable of cutting skin. Flowers aligned on one side of widely spaced stiff branches, and have showy yellow stamens. Turns golden yellow in fall. Fragrant while flowering.

3-7ft •

July-Aug.

**CANADA WILD RYE**

Elymus canadensis
Long, wide leaves with green waxy color, rough surface on top, curling inward toward the tip. Large, bushy seed spike, usually straight, sometimes nodding, with bristles that curve outward. Seed spikes and leaves turn russet to tan in the fall.

2-4ft •

June

**PORCUPINE GRASS**

Stipa spartea
Long tapering leaves are corrugated on top and smooth beneath. Also called Needle Grass for its sharp, long, twisting awns. Turns bleached tan when mature.

18in-3ft •

July-Aug.

**SIDE-OATS GRAMA**

Bouteloua curtipendula
Leaves flat, with stiff hairs along the bases of their edges. Small, oat-like flowers hang from one side of the zigzag-shaped seed stalk. Scarlet stamens very showy.

1-2ft •

June-Aug.

**TUFTED HAIR GRASS**

Deschampsia caespitosa
Large tufts of straight, wiry basal leaves, strongly parallel veined. Delicate panicked clusters of purple-tinged flowers, turning straw tan as they ripen.

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Illinois Plant Information Network
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Acknowledgements

All photos courtesy of Bill Glass.

Our thanks to Russ Kirt for review
of this brochure.

Our thanks to Denise Wurl for her work
in developing the Midewin logo.

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