



United States Department of Agriculture

Plants of the Sheyenne National Grassland

The Sheyenne National Grassland is located in southeastern North Dakota, comprising 70,200 acres of public land. It is characterized by sandy soils, originally deposited as the delta of an ancient river as it emptied into glacial Lake Agassiz. Since that time, wind and rain have shaped the topography into a unique landscape ranging from flat deltaic plains to choppy sand dunes. It is the only National Grassland in the tallgrass prairie region of the United States.

The area was homesteaded in the late 1800s and consequently much of the flat open land was farmed. After the Depression, land was left to revert back or in some cases was planted to native species during the 1940s to 1960s. Due to past disturbances and lack of fire the Grassland has a lot of invasive species such as Kentucky bluegrass and leafy spurge.

The Grassland is currently managed with prescribed grazing, fire, and mowing. Herbicide, bio-control, and sheep grazing are used to treat noxious weeds, the most common being leafy spurge. These programs are all managed in cooperation with the local grazing association and with the help of many other partners.

You can find nearly 800 plant species on the Grassland; however only 88 have been highlighted in this booklet. The Grassland contains one of largest populations of the western prairie fringed orchid, a Threatened Species under the Endangered Species Act. Other unique plants found on the Grassland include lady tresses, ferns, western wahoo, and tall blazing star.

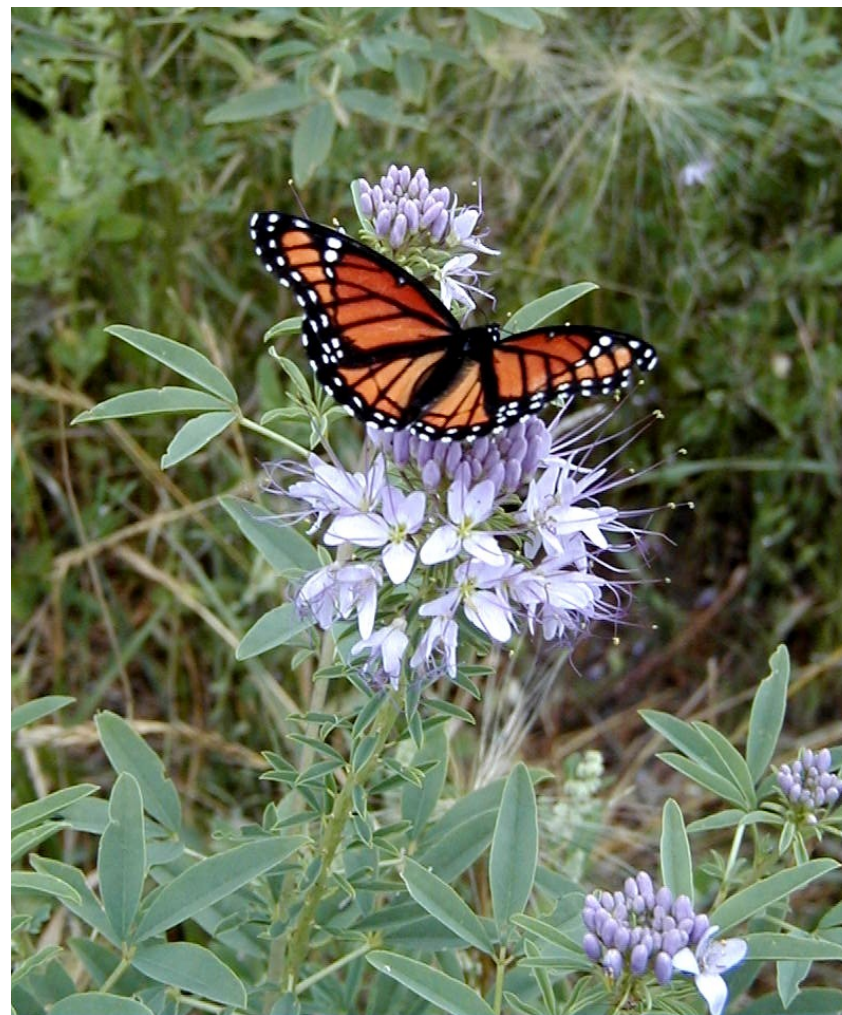
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The Sheyenne National Grassland is administered by the Forest Service from the Sheyenne Ranger District office in Lisbon, North Dakota.

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Dakota Prairie
Grasslands

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American Elm
Ulmus americana

American elms can be identified via the flat, alternate leaves, double serrated leaf margins, and asymmetrical leaf base. The base narrows as it approaches the petiole (leaf stalk). The trees reach heights of 60-125 feet and are popular in urban environments because of their umbrella shaped canopy.



Basswood
Tilia americana

Also known as American linden. The leaves are serrated, almost heart-shaped, with an asymmetrical base and a finely pointed tip. It can be distinguished from American elm by its much broader leaf base. In the spring, the flowers are strongly aromatic. The fruit is a round, woody, nut-like berry. The tree can reach heights of 60-100 feet at maturity.



Bur Oak
Quercus macrocarpa

The leaves of bur oak are deeply and irregularly lobed. The nut (acorn) has a cap covered in bristly hairs. The tree grows to a height of 100 feet and has branches that spread in many directions. You can find this tree in both open, sunny and forested locations. In sunny areas, it is the "oak" of the oak savanna.



Plains Cottonwood
Populus deltoides

Leaves are alternate and triangular in shape with a sharply pointed tips. The leaf margins (edge of leaves) are toothed. Cottonwoods grow up to 120 feet tall and are found in a variety of habitats. The leaf stalk is flat (like quaking aspen), making the leaves shake in the wind. A fast growing species.

White Prairie Clover
Dalea candida

Perennial legume, 1-3' in height, with slender stems. Numerous small white flowers arranged in dense cylindrical spikes. Leaves alternate on stems, compound, with 3 to 9 narrow leaflets. Leaflets 1.5" long and thicker than purple prairie clover. Flowers bloom from bottom of spike to top. Drought tolerant, deep rooted. Dry to mesic prairie; less common than purple prairie-clover. Blooms June-July.



American Licorice
Glycyrrhiza lepidota

Plants to 3' tall. White to pale yellow, pea-type flowers in dense clusters. Pinnately compound leaves with 11 to 19 leaflets. Fruits about ¾ inch long, covered with hooked prickles, turning brown by late summer. Mesic and wet-mesic prairie. Related to the European commercial licorice plant. Blooms June-August.



Common Boneset
Eupatorium perfoliatum

A 2-4' forb which grows in wet areas such as the edge of wetlands. The flowers are white and arranged in flat-topped clusters. The leaves are opposite and connected which makes them look like one leaf. Occasionally, the leaves are in whorls of three. The leaves and stem are hairy. The plant can be confused with spotted joe-pye weed when not in flower, which has red stems and leaves that are not connected at the base. Blooms July-October.



Heath Aster
Symphyotrichum ericoides

Native perennial with stems erect or spreading, 1-2.5' high. Leaves linear 1-2" long, rough and hairy. Flowering heads numerous, white, 0.5" wide. It is best adapted to dry and medium wet, well-drained soils found in open areas like prairies with sandy, gravelly, or rocky substrates. It is drought hardy and does well in sun and partial sun. Blooms August-October.





Field Pussytoes

Antennaria neglecta

Perennial 4-16" tall. Basal leaves obovate or spatulate, 0.5-2.5" long, hairy. Flower stalks 1-3.5" high, elongating to 7-11" long when in fruit. This plant is one of the early spring flowers, the clusters first showing as little furry balls unfolding, hence the name "pussytoes". Found in sunny-part shade, dry locations. Blooms April-June.



Virginia Strawberry

Fragaria virginiana

Creeping perennial, reproducing via stolons. Leaflets dark green above, whitish below, 1-3.5" long. Flowers are white, five petals, and around 0.5-0.75" wide. Fruit is rounded, red, hardly longer than wide. Common both on low prairies and in woods. Usually not fruiting freely. Blooms April-June.



Western Prairie Fringed Orchid

Platanthera praeclara

This plant is classified as federally threatened species under the Endangered Species Act. Stem 1-2' tall, with narrowly oval lower leaves strongly clasping the stem, smaller upper leaves. Creamy white flowers in elongate clusters (racemes) of few to more than 20; lip divided into 3 fringed segments; spur up to 2" long; fragrant; moth pollinated. Wet to wet-mesic prairies. Blooms in July.



Prairie Larkspur

Delphinium carolinianum spp. *verescans*

A 1-3' perennial. The flowers are white to pale lavender, five petals, they are bilateral in shape, and arranged in a loose spike. The leaves are palmately compound, 3" across, and alternate. Basal leaves have a stalk. Found in sunny areas. Blooms June-July.

Green Ash

Fraxinus pennsylvanica

A very common tree in ND. The leaves are pinnately compound and the finely serrated leaflets are oval to lance-elliptical. Leaflet stalk very short. The dry fruit is a long and narrow winged samara which persist on the tree in the winter. The tree reaches heights of 50-110 feet and have a round-ish canopy.



Quaking Aspen

Populus tremuloides

Leaves are alternate and rounded with pointed tip. The leaf stalk is flat which makes the leaves "quake". The tree reaches 60-100 feet in height. Quaking aspen is a pioneer species, meaning it can become abundant in disturbed areas. The bark becomes white with maturity. Photo credit: Peter Dzuik.



Fringed Sagewort

Artemisia frigida

Also known as cudweed sagewort, prairie sagewort, and fringed sage. Flower heads inconspicuous, yellowish. Leaves often grayish on upper sides. Stems frequently branching, up to 30 inches tall, leafy. Commonly found in patches in dry prairies, old fields, and along roadsides. Often aromatic. Identified from other sages by their feathery, finely segmented leaves. Flowers August-September.



Leadplant

Amorpha canescens

Dense spikes of tiny violet flowers, each flower with 10 protruding orange stamens. Stems single or branching. Shrubby, to 3 feet tall. Leaves divided into narrow, elliptical leaflets. Leaves and stems covered with fine hairs, giving plant a whitish-gray appearance. Dry to mesic prairies, savannas. Leaves used medicinally by American Indians. Very common. Flowers June-August.





Western Poison Ivy
Toxicodendron rydbergii

Leaves of three, leave it be! This plant causes skin irritations in some people that can persist for weeks. The three leaves on poison ivy are sparsely toothed and bend toward the ground. They are a waxy green in the summer and turn a yellow then red in the fall. The fruit is bunched on the woody stem in green, round berries that eventually turn white.



Prairie Wild Rose
Rosa arkansana

Shrubby plant grows up to three feet tall. Flowers pink or deep rose, fragrant, 2 to 3 inches across, with 5 petals. Blooms June-July. Fruit (hips) fleshy, shiny red, containing many hard seeds. Stems smooth to prickly. Leaves compound with 5 to 11 leaflets. Found in open prairie, uncultivated fields, roadsides. Hips high in vitamins A and C. State flower of North Dakota.



Red-osier Dogwood
Cornus sericea

A common shrub ranging from three to five feet in height. Easily identified by the leaf veins which curve inward at the leaf margins and the opposite leaf arrangement. There are four white petals on each flower in the spring. The fruit is a white, berry-like drupe in clusters. The bark is red which only occurs in this species and willows, adding color to the landscape in the winter. Photo credit Peter M. Dziuk.



Red Raspberry
Rubus idaeus

A common, edible woody plant, often weedy and vine-like. There are three or five leaflets sometime with lobes. Easily identified by the distinct red fruit in late summer. The stems are covered in fine bristles. In the spring, the flowers have five white petals. Photo credit Peter M. Dziuk.

False Gromwell
Onosmodium molle

Rough perennial with a flat mat of coarse hairs. Several stout stems 1.5-3.5' high. Leaves elliptic, 1.5-3.5" long with strong venation. Flowers are 0.5" long and yellowish white in color. Flowers grow in clusters at the end of the stems. Nutlets are white, smooth, and rounded, about 3-4mm long. Generally found in dry sites. Blooms June-July.

False Solomon's seal
Maianthemum stellatum

Perennial growing between 12-30". Up to 20 flowers with 6 white tepals (petals and sepals) in a spike at the top of the stem. The leaves are alternate, clasp the stem, and up to 6". Strong parallel venation are on leaves. The flowers mature to a red-purple berry. Found in forested areas. Fairly common. Blooms from May-June.

Candle Anemone
Anemone cylindrica

Perennial 1-2' feet in height. Basal leaves 1-2" wide, divided into lobes 0.25" wide. Midway up the stem there is a whorl of 3-10 leaves. Flowers are cylindrical, 0.75" across, with small greenish-white petals. Commonly found on open prairies. Blooms June-August. Photo credit Katy Chayka.

Meadow Anemone
Anemone canadensis

Perennial, 1-2' tall, basal leaves on petioles nearly as long as flowering stem. Leaves rounded in general outline, 2-6" wide, deeply lobed; usually three lobes. On upper part of stem a group of leaves similar to basal ones in a whorl of three leaves, at which point the stem often divides into 1 to 3 stalks, each bearing a simple white flower. Common in low prairies, woods and coulees, often forming large beds. Blooms May-July.





Yellow Salsify
Tragopogon dubius

Also known as yellow goat's beard and giant dandelion. A 1-3' biennial. Flowers are singly borne, 2" across, and yellow. In summer/fall they form a giant seed head that resembles dandelion. The leaves are grass-like with a clasping base. The bracts extend just beyond the petals (rays) of the flowers. This plant was originally introduced from Europe, but is rarely very weedy. Blooms May-September.



Sunflowers
Helianthus spp.

Mostly perennials, to 6' tall. Varies depending on species from stiff erect leaves to drooping, long leaves. Distinguished by the yellow ray flowers and brown to yellow disk flowers. Common species include stiff sunflower (stiff, rough leaves, opposite) and Maximilian sunflower (drooping, long leaves). Both are found in open areas, but other species of sunflowers may be found in wooded and wet areas. Blooms most commonly from July-August.



Western Wallflower
Erysimum asperum

Stiff widely branched biennial, 8-32" high. Leaves 1-2.5" long, oblong with a few teeth, rough with short hairs. Fruiting branches are thickly covered with stiff, widely spreading pods 4-6" long. Often found along roadsides and open slopes and flats. Blooms May-June.



Yellow Lady's Slipper
Cypripedium parviflorum

Perennial 8-19" high. Stems single or in clumps, lip of flower 0.75-2" long, deep yellow. Sepals are green or yellowish, striped with purple. A native plant that can be found growing in bogs, shady swamps and wet woods. Two varieties, small (*makasin*) and greater (*pubescens*). Blooms May-July.

Smooth Sumac
Rhus glabra

A shrub growing from 3-18 feet tall. Leaves are pinnately compound and alternate. The fruit is a berry-like drupe in somewhat erect, pyramidal clusters which turn a deep red. Smooth sumac forms dense stands in open areas. In the fall, the leaves turn red, providing a gorgeous color to the landscape.



Western Snowberry
Symphoricarpos occidentalis

Also known as buckbrush. Low shrub. Forms dense colonies. Oval, opposite leaves that are white-pubescent beneath. Flowers pinkish, bell-shaped. Berries white but blacken with age; persist over winter; eaten by Sharp-tailed Grouse and Prairie Chickens. Berries can be used as a lotion. Dry prairies. Blooms June-August.



White Meadowsweet
Spiraea alba

A low shrub which grows 2-4 feet tall. Flowers have five white petals with a pink center arranged in densely packed branching clusters. Leaves are alternate, oval-elliptical, and toothed. Often found in sunny, moist areas. The plant often becomes fairly branched. Blooms from June-September. Flowers are fragrant.



Willows
Salix species

Shrubs-trees. Willows often have narrow leaves. The plants are dioecious with male flowers on one plant and female flowers on another plant. Willows are often found near wetlands and other bodies of water.





Big Bluestem

Andropogon gerardii

Stout perennial, sometimes with short rhizomes, grows 2-7 ft. Blades with prominent midrib but not strongly keeled up to 18" long. Native warm season begins growth in May and flowers July through October. Grows in prairies, moist soils, and roadsides. Especially abundant in lowland prairies.

Blue Grama

Bouteloua gracilis



Mat forming perennial 8-18" tall, forming short rhizomes. Stems slender, often bent sharply below. Leaf blades C-shaped in cross section in the bud, flat at maturity to rolling inward 1-5" long. Blooms in late July. Flowering stems remain for the summer. Most abundant grass on the short grass prairie, prefers dryer sites. Easily identified by the comb-like inflorescence.

Canada Wildrye

Elymus canadensis



A tufted perennial normally lacking rhizomes. Stems erect, hollow, 1-5' tall. Leaf blades ascending to spreading, flat to rolled inward, green or covered with a whitish waxy bloom, 4-10" long. Blooms June through August. Found in sparse stand along rivers, streams, lakeshores, open prairie and disturbed ground. The inflorescence is a drooping spike that appears hairy due to their long awns.

Indiangrass

Sorghastrum nutans



A tall, perennial grass that grows 3-7 feet in height. The ligule is 2-6 mm long, firm, and golden brown. The florets have an awn with some bends and tend to be 3/4" long. The inflorescence is narrowly spreading and red-purple in color. The leaves are 2-24" long with a white midvein that is prominent near the base. One of the most common grasses in the tallgrass prairie.

Narrow-Leaf Puccoon

Lithospermum incisum

Petals yellow, joined to form a tube .75-1.25" long with five, frilled petals. Plants hairy, up to 1.5' tall. The leaves are narrow and linear with a strong midvein, 1-3" long. Pale nutlets sacred to some indigenous people, and roots used by some as source



Yellow Marsh Marigold

Caltha palustris

Stems are hollow, erect, usually 8-24" tall. Leaves are dark green, smooth, mostly basal on long petioles, blades rounded, 2-8" wide with short rounded teeth. The upper leaves are narrower and sometimes elliptic. Flowers are yellow, 1-2" wide and found at the ends of the few stem branches. A native perennial that can be found in marshes, fens, ditches and wet woodlands. Blooms April-May.



Prairie Buttercup

Ranunculus rhomboideus

Perennial growing 2-10" in height. A single, yellow flower at the end of a stalk. Five yellow petals with many yellow stamens. Compound leaves on stalks that resemble whorled leaves. Basal leaves very different, egg-shaped with a long stalk, 2-4 leaves. Sandy prairie, open woods, shade-sunny habitats. Blooms April-May.



Prairie Coneflower

Ratibida columnifera

Perennial 1-2' tall. Alternate leaves divided into narrow lobes making it appear compound. Flowering heads with bright yellow ray flowers that are usually reflexed and an elongate, columnar disk 0.5-1.5" high with small brown flowers. Dry prairies. Blooms June-September.





Blackeyed Susan

Rudbeckia hirta

Short-lived perennial, 1-2' tall. Coarsely hairy plants in the Aster Family with alternate, lance-shaped leaves, 2-7" long. Flower heads with yellow ray flowers and small, dark brown disk flowers. Dry to mesic prairies and roadsides. Parts of plants used historically for medicinal teas. Blooms June-September.



Goldenrods

Solidago spp.

Rather coarse plants to 3 feet tall with broad, thick, alternate to spiral, strongly clasping to no clasping stem leaves and long-stalked basal leaves. Showy heads of yellow flowers most commonly open in late summer and form a flattened to pyramidal cluster at top of plant. Found in a variety of habitats. Blooms June-August.



Heart-Leaved Alexanders

Zizia aptera

Up to 3 feet tall. Tiny yellow flowers in slightly domed clusters (double umbels). Stems leaves are alternate, compound leaves, with three leaflets or just deeply lobed. Basal leaves are simple and heart-shaped. Blooms May-July. Wet to dry-mesic prairies. Named after German botanist Johann Ziz.



Hoary Puccoon

Lithospermum canescens

Perennial from a thick root growing 6-18" in height. Few curved, flowering branches at the top. Leaves are soft and hairy, oblong shaped, and 2.5" long. Flowers are 0.5" wide and very yellow to orange in color. Habitat includes dry black soil prairies, sand prairies, hill prairies, and Bur Oak savannas. Blooms May-August.

Kentucky Bluegrass

Poa pratensis

Strongly rhizomatous, mat forming perennial 4-39" tall. Leaves are flat to folded with boat-like keel shape on end. Most commonly classified as an introduced species that has become naturalized and weedy in North America. Cool-season emerging in late March and maturing by late June. Occurs in moist, well drained soils, in meadows pastures and open woods. The most common grass species in the mixed grass prairie.



Little Bluestem

Schizachyrium scoparium

Tufted perennial, sometimes with short rhizomes, 1.5 -3' tall. Grows in tight clumps. Stems slightly flattened. Blades folded sometimes rolled inward, 1.5 -11" long, usually hairless. Native warm season grass, begins growth in May and flowers August through November. Grows in prairies and open woodlands, abundant on dry ridges. Retains a slight purple-red color in the winter.



Needle and Thread

Hesperostipa comata

Strongly tufted or mat growing perennial 1-2.5' tall. Stems are smooth to variously hairy at the nodes. Distinct white ligule, 2-6 mm long. Awns unique and spiraled 4-7.5" long. Native cool-season grass which begins growth in late April, matures in early July, and drops seeds by September. Frequent on dry ridges and roadsides of prairies and pastures. Photo credit Peter Dziuk.



Northern Reedgrass

Calamagrostis stricta

A rhizomatous perennial 1.5-3' tall. Stems are smooth to somewhat rough, erect. Leaf blades are rolled inward, rough to finely haired above and smooth to rough below, 1.5-14" long. Native cool season grass that begins growth in late April and flowers in June until August or September.





Porcupinegrass
Hesperostipa spartea

Strongly tufted perennial (bunchgrass) 1.5-3' tall. Stems usually nearly smooth, but somewhat pubescent on the nodes. Blades C-shaped in cross section in bud, involute to flat at maturity, .5-1.5' in length. Native cool-season grass which begins growth in May and matures in mid July. Frequently found on open hillsides and prairies in good moisture sites. Photo credit Peter M. Dziuk.



Prairie Cordgrass
Spartina pectinata

Sod forming perennial 3-6.5' tall from stout, sharp-pointed rhizomes. Stems sturdy, circular. Blades flat to involute, rough to touch on margins, strongly ridged above, 1-3' long. The inflorescence contains 5-50 raceme-like clusters (comb-like) on each plant. Begins growing in late May and June. Heads appear in late July through August maturing in September. Moist areas, very common in ditches and drainageways.



Prairie Junegrass
Koeleria macrantha

A strongly tufted, perennial bunchgrass, 8-23" tall. Stems hollow, erect, with minute hairs in the inflorescence and near the nodes. Leaves mostly basal; blades folded in the bud 1-7" long. Leaves have strong parallel venation. Native cool-season grass starting growth in mid April, flowering by late June, producing seed through September. Found in dry prairies and open woodlands.



Prairie Sandreed
Calamovilfa longifolia

Perennial plant often smooth to touch. 2.5-4.5' tall. Leaf blades smooth, mostly 4 to 23" long. When blade is broken in half, it appears hairy. Sheath mostly smooth often having long soft hairs at collar. Native warm season grass beginning growth in early to mid-May, flowering in late July and setting seed through September. Grows on prairies and plains, often dominating sandhill prairie regions.

Showy milkweed
Asclepias speciosa

Perennial, 2-3 feet high, with milky sap. Leaves opposite, often pubescent. Two-four clusters of pink to white, fragrant flowers with reflexed petals and 5-part crown. Fruit an elongate pod filled with silky-plumed seeds. Leaves are essential food for monarch butterfly caterpillars. Named after Asclepios, Greek god of medicine. Prairies, old fields, ditches. Blooms June-August.



Wild columbine
Aquilegia canadensis

Perennial with few stems 1.5-2.5' high and much divided leaves; leaflets up to 2.5" long and wide, broader than long, partly divided into 3 blunt lobes; flowers 1-2" wide, scarlet and yellowish, pendent on slender, upper branches. Flowers in late May and June. Plants can be easily destroyed and are partial to shade.



Wood lily
Lilium philadelphicum

Perennial. Large, bright reddish-orange, upward-facing flower at top of 1-3' tall stem. There are six tepals (petals and sepals) are spotted and often yellow toward the base. Six large stamens. Numerous narrow leaves, 2-4" long, the upper ones arranged in whorls. Stem is smooth. Blooms June-July. Moist prairies, openings, woodland edges, roadsides.



Yellow flax
Linum rigidum

Short annual growing from 6-20" tall. Yellow flowers with five petals, .75-1" across. Alternate, leaves .75-1.25" long. Found in dry, open, sandy soil. Blooms from June-August.





New England aster

Symphyotrichum novae-angliae

Perennial to 4' tall with stout, bristly stem and numerous strongly clasping leaves. Purple-rayed flower heads with yellow disks up to 1.5" across. There are often around 100 purple rays. Wet prairie, ditches. Blooms August-September. Very common. One of the showiest prairie asters. Leaves used historically to cure skin rashes.



Wild mint

Mentha arvensis

Perennial which grows from 6-24" in height. Twenty flowers are clustered at the nodes in multiple locations. The purple flower has two small upper lobes and three larger lower lobes. The leaves are 2.5" long and elliptical with hair on the underside. The stem is hairy and square shaped. Found in shaded and wet areas. Blooms from July to September.



Narrow-leaved purple coneflower

Echinacea angustifolia

Perennial, bristly stems to 2' tall. Elongate basal leaves; prominent veins appear parallel. Single showy flower head with purplish, drooping ray flowers and brown, dome-shaped disk. Echinacea comes from the Greek echos for sea urchin, which the prickly disk resembles. Medicinal plant of indigenous people. Dry to mesic or gravelly prairies. Blooms in July. Resembles Eastern purple coneflower (*Echinacea purpurea*) which is used in some prairie reconstructions, but not native to North Dakota.



Prairie smoke

Geum triflorum

Low perennial, often in patches. Fuzzy leaves; lower leaves pinnately compound, with 7 or more leaflets. Flowers in groups of 3 on stalks held above leaves. Nodding flowers are red and petal-like. True petals are pale. Fruits are 2" long, feathery plumes that resemble smoke. Dry, gravelly prairies. Blooms April-May.

Sand Bluestem

Andropogon hallii

A strongly rhizomatous perennial that is covered with a white waxy bloom that rubs off easily. 2-5' tall. Stems are solid, grooved on one side. Leaf blades with prominent midribs, flat to rolled inward or outward 1-15" long, often hairy. Native warm season, starts growth in early May, flowering in late July, dispersing seed in October. Commonly associated with sandy soils.



Sand Dropseed

Sporobolus cryptandrus

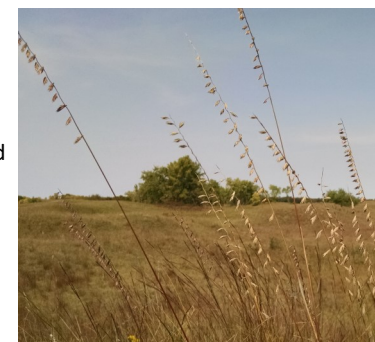
A grass which grows from 1-3.5' in height. Often found in very sandy soils. The florets contain no awns and are hairless. The panicle is very loosely spreading. The sheath has a dense fringe of hairs on the edges, otherwise smooth. The ligule is also a dense fringe of hairs. The basal leaves range from 6-10" long, while the stem leaves are 3-6" long. Plant can be quite variable. Photo credit Peter M. Dziuk.



Sideoats Grama

Bouteloua curtipendula

A rhizomatous perennial 1-2.5' tall. Stems are solid, erect, arising in clumps or almost solitary. Leaf blades are rolled in the bud, flat, usually smooth beneath and rough above 1-11" long. The inflorescence contains a series of spikes which hang off one side of the stem. Native warm season, begins growth in early May and flowers in July through August. Commonly found on fine textured soils and weakly developed soils of steeper slopes.



Sun Sedge

Carex heliophila

Strongly rhizomatous perennial, rootstock short or prolonged. Stems 4-16" tall. Leaves 1-2.5 mm wide. Native cool-season sedge starting growth in mid-April and flowering from June through August. The male and female flowers are separated on the plant, making the top appear brown and the lower half like white threads. Found growing mostly in drier open prairies.





Switchgrass

Panicum virgatum

Strongly rhizomatous perennial 1.5-4.5' tall, often forming large clump. Stems are firm, hollow. The panicle is airy and pyramidal. Leaf blades are flat to slightly rolled inward, triangular, patch of hair at base, 6-21" long. Native warm season grass starting growth in May and flowering through September. Most common in moist soils.

Woolly Sedge

Carex pellita

Woolly sedge grows from 1-3' in height. It is named woolly sedge because of the hairy perigynia (female flower). The male flowers are above the perigynia forming two types of spikes. The stems are triangular in cross section. The base of the sedge (sheath) is reddish and papery. Woolly sedge is commonly found in low, moist habitats.

Horsetails

Equisetum species

Also known as puzzle plants. The stems are stiff, rough, and hollow with strong ridges running up the plant. The joints easily separate. The leaves are flattened and inconspicuous ranging from white, translucent, and black, right along the stem. Branches occur in some species in whorls along the node. Used for cleaning pots and pans by early settlers because of the rough texture (silica). Most commonly found in moist prairies.

Absinth Wormwood

Artemisia absinthium

Flowers August-September. Flower heads inconspicuous, yellowish. Leaves often grayish on upper sides, lobed, rounded at tips, and 3-5" long. Often only basal leaves are present. Stems frequently branching, to 30" tall, leafy. Commonly found in patches in dry prairies, old fields, and along roadsides. Strongly aromatic. Photo credit Katy Chayka.

Silky prairie clover

Dalea villosa

A rare woody perennial reaching 18" in height. The compound leaves are 1" long with 21 leaflets and fuzzy. The stem is fuzzy and pink-orange in color. The flowers are arranged in dense spikes 1-5" long. The flowers are most often lavender with very tiny five petaled flowers. Blooms from July-August. Found in sandy soils of prairies and open woodlands.

Slender penstemon

Penstemon gracilis

A somewhat common perennial ranging from 12-18" in height. Flowers in whorls or opposite on upper half of the stem. The flowers are pale violet to purple with two upper lobes and three lower lobes. The leaves are narrow and pointed reaching up to 3" long, opposite, with tiny teeth along the edge. Often found in open areas. Blooms from May-July.

Ground plum

Astragalus crassicaarpus

Sprawling low perennial with numerous trailing stems and pinnately compound leaves. Leaflets slightly folded, hairy beneath. Large violet to white flowers clustered at branch tips. Fruit 1" across, purplish, juicy, edible when immature in July, dries to brown husk. Dry calcareous prairie. Blooms May-June. Important food of prairie-dwelling humans and other animals. Not common. Photo credit: Peter M. Dziuk.

Wild bergamont

Monarda fistulosa

Also known as Bee Balm. Perennial plant 2-4' tall with tubular pinkish or lavender flowers arranged in dense, globe-shaped heads at tops of stems. Leaves opposite, up to 5 inches long, toothed, lance shaped. The stem is somewhat woody and a waxy reddish-brown and square. All plant parts have a minty fragrance. Dry prairie, thickets, old fields; often forms colonies. Blooms July -August.





Prairie violet

Viola palmata var. *pedatifida*

A short perennial 3-6" in height. Five petals purple to violet, three lower petals with white, and two upper petals with hair. Basal leaves up to 3" long, very deeply lobed, can be up to 6" wide. Blooms April-June. Found in variable habitats of the grasslands. Closely resembles birdfoot violet (*Viola pedata*) which has no hairs on the flowers.



Purple prairie clover

Dalea purpurea

A common perennial legume with slender stems, 1-3' tall, rising from a woody crown. Flowers July-September. Flower heads dense, cylindrical, made up of numerous magenta flowers, each flower with 5 protruding orange stamens. Flowers bloom from bottom of spike to top. Leaves alternate, compound, with 3 to 9 very narrow leaflets. Dry to mesic prairies. Intolerant of grazing. Used by indigenous people for food, tea, and medicine.



Rocky mountain beeplant

Peritoma serrulata

Erect, branched annual, 2-5' tall; leaves of 3, narrowly oblong leaflets 1-4" long. Flowers are a lavender, in long, terminal clusters. A very showy flower frequently grown as an ornamental. This flower is common on sandy soils on prairies and rangelands, or foothills of lower mountains. It is known to attract pollinators such as bees and hummingbirds. Not common.



Silky aster

Symphyotrichum sericeum

Perennial up to 2 feet tall with widely branching stems and alternate leaves covered with silvery hairs. Lower stem is leafless by late summer. Flower heads to 1 inch across with purple rays and yellow disks. Dry calcareous prairie. Blooms August-September.

Canada Thistle

Cirsium arvense

Canada thistle is a common, noxious weed in North Dakota growing 3-5' tall. The flowers are lavender to pink, small, and urn-shaped. There are many flowering heads per plant. The leaves are stalkless with small white spines on the leaf edges. Found in sunny and/or marginal habitat. Photo credit Katy Chayka.



Houndstongue

Cynoglossum officinale

Course biennial, 1.5-3' tall; leaves alternate, oblong and lanceolate, 4-12" long, velvety; entire top of plant becoming a large, branching flower cluster; flowers dark red 7-10 mm wide. An introduced weed known to be a nuisance because of its burs. Has a pronounced "doggy" odor. Houndstongue prefers disturbed areas and is common on gravelly, alkaline soils. Photo credit Bernd Haynold.



Leafy Spurge

Euphorbia esula

Deep rooted perennial; stems are erect, smooth and high usually between 16-32" tall. Leaves linear to oblong or lanceolate 1-3" long. Flowering branches often forming an umbel at the tip of the stem, later branching from farther down. Flowers are yellowish green. When leaves or stem are cut, it produces a milky latex. Common in fields and along roadsides, a very persistent weed.



Yellow Toadflax

Linaria vulgaris

Invasive species which may form dense colonies. The flowers are snapdragons with a cream color and orange center. They are short, ranging from 1-2' tall. The leaves are linear and up to 2.5" long arranged in densely packed spirals. Blooms June-October. Photo credit Katy Chayka.





Blue-eyed grass

Sisyrinchium angustifolium

Light green, delicate members of the Iris Family up to about a foot tall with grass-like leaves. Star-like flowers about ½ inch wide with six blue tepals (petals and sepals look alike) and a yellow center. Fruit is a small, round capsule. Several species found in prairies. Blooms from May-June.



Closed bottle gentian

Gentiana andrewsii

Perennial to 2' tall. Stout stems. Shiny, opposite, pointed leaves 4" long and 2" wide. Bottle-shaped, bluish violet to white flowers at top of stem measuring between 1-1.5" long. Found in wet areas, not very common. Pollinated by bumblebees. Wet prairies, edges of woods. Blooms August-September.



Bracted spiderwort

Tradescantia bracteata

Plants up to 1 foot tall. Small clusters of inch-wide, medium purple flowers at top of stem, three petals, subtended by two leaf-like bracts. Long, narrow, alternate, somewhat keeled leaves. Found in sandy or gravelly prairies. Blooms May-June. Once considered a cure for spider bites. The grasslands also have spiderwort (*Tradescantia occidentalis*) which is stiffer and taller than bracted spiderwort.



Dotted blazing star

Liatris punctata

A common perennial plant that stems 1-2' high. Leaves are linear 2-6" long, and 1/8" wide and often twisted. Flowers are in rounded pink to purple heads that are 5-10 mm wide in a dense cluster 4-8" long. Found in very dry and especially stony prairies. Often has resinous dots on the leaves which differentiate it from prairie blazing star.

Prairie blazing star

Liatris pycnostachya

Stems 1.5– 4' in height. Leaves are lanceolate, narrowed at both ends, and usually about 4-11" long. Heads are 5-10 mm wide in a dense cluster 7-16" long. Flowers are violet to lavender colored. Grows in moist well drained soils that receive a lot of sunlight.

Hoary verbena

Verbena stricta

Perennial between 1-3' tall. Hairy, opposite leaves, 2-3" long, oval in shape, and toothed. The flowers are densely packed into multiple spikes that branch outward. Stems are square in cross section and hairy. Flowers are blue-purple, rarely white with five purple petals. Common in dry, open prairie. Blue vervain (*Verbena hastata*) is also found in the grasslands, but is not hairy and frequently found in wet locations.

Marsh hedge nettle

Stachys palustris

A perennial, 1-3' in height. The flowers are in multiple whorls around the stem with up to six flowers in a whorl. The flowers are pink to lavender with spots in the middle. The leaves are opposite, 4" long, 1.5" wide, toothed on the edges, covered in short hairs, and in a pointed tip at the top. The stem is square in cross section and covered in hairs. Blooms from June-August. Found in wet areas.

Large beardtongue

Penstemon grandiflorus

Stout, perennial plant to 3.5' tall. Flowers up to 2" long, purple, tubular, flaring into 2 upper and 3 lower lobes. Arranged in groups of 2 to 6 at upper part of stem with a pair of small leafy structures below each group. Leaves rounded, opposite, clasping. Leaves and stems waxy, bluish-green. Blooms July-August. Upland prairies, often sandy soil. Indigenous people's tooth ache remedy.

