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Introduction

As the summer draws to a close, prairies bloom with late-season wildflowers, and native grasses flower and set seed. As fall progresses, native grasses turn shades of tan, brown and russet, coloring the landscape with a muted mosaic of vegetation. This brief, non-technical guide is for the beginning enthusiast eager to explore the beauty and variety of native wildflowers and grasses.

Prairie plants can withstand the rigorous climatic growing conditions of central Kansas, including drought, high winds, and grazing by wildlife and livestock. These hardy plants can be found growing on rocky road cuts, high droughty plateaus, and in among thick, tall grasses. Wildflowers bloom at different times of the year, from March through frost, and many display interesting stems and seedheads even during the winter.

The native prairie ecosystem is unique and is rapidly disappearing. Most arable land has been plowed up for cropland. Development increasingly encroaches upon rangelands as large ranches are broken up into small homesites and urban sprawl spreads out from cities and towns. Prairie is too often seen as “empty land,” rather than as an environmentally sustainable factory producing not only meat, but also ecological and aesthetic services such as clean water, wildlife habitat, and open horizons.

Prairie health is maintained with grazing and with fire. Without these, an accumulation
of litter begins to smother the plants. Trees, brush, and other weeds are allowed to replace healthy prairie vegetation. Grasses die out, prairie plants and wildlife disappear, and eventually woody vegetation covers the landscape. Remediation is possible, but can be costly and time-consuming. Correct range management promotes healthy prairie with the use of sustainable stocking rates, periodic prescribed burns, and spot chemical treatment.

Choosing wildflowers for landscaping offers several benefits. Prairie plants generally need little water or fertilizer, are hardy, and withstand the hot, dry summers typical of Kansas. By choosing plants that bloom at different times of the year, a continuous display of color and form is possible.

Using native prairie plants also avoids the problem of accidentally introducing a non-native plant that may become a weed problem in rangeland. Some existing range weeds started as escapes from gardens. Transplanting existing plants from the prairie usually doesn’t work well, as their root systems are extremely difficult to excavate and the plant usually dies. Many wildflowers do well in gardens, and some plant centers routinely stock native plants and seeds.

This booklet is organized by flower color. Some flowers shade into another color and are difficult to categorize. For more complete guides, check the reference list at the back of the book.
White or Green Flowers

“White” flowers may also be light pink, yellow, lavender, or blue due to natural variation
White sagewort
*Artemesia ludoviciana*

**Where to find it:** Prairies, plains, mostly on dry soils; disturbed sites

**What to look for:** Woolly white-green leaves; margins of leaves toothed while base is smooth

**Cool characteristic:** Highly aromatic, used to treat coughs and stomach ailments; Native Americans used it as deodorant; Kiowa chewed the leaves to soothe sore throats.
Western ragweed
*Ambrosia psilostachya*

Where to find it: Drier prairies and plains, over-grazed rangelands and disturbed areas

What to look for: Forms in large patches via underground growth, bushy growth if by itself; deeply lobed bristly green leaves, leaves opposite each other on stalk

Cool characteristic: Commonly associated with hay fever allergies; if grazed by dairy cattle the milk will taste bitter.
Whorled milkweed
*Asclepias verticillata*

**Where to find it:** Dry prairies and plains, sandy and rocky limestone soils

**What to look for:** Whorl of short slender leaves; small white flowers composed of “hoods” and “horns”; leaves have milky sap when cut or torn; forms in colonies

**Cool characteristic:** Poisonous but unpalatable to livestock; Native Americans used it to treat snakebites and throat ailments.
False boneset  
*Brickellia eupatorioiides*

**Where to find it:** Prairies and plains, sandy soils, and rocky slopes

**What to look for:** Small, creamy white cluster of flowers; leaves numerous and blue-green with fine white hairs, small dots on the lower surface

**Cool characteristic:** Abundant on native prairies but seldom an aggressive weed. Taproot can extend to 16 feet down.
Hemp  
*Cannibus sativa*

**Where to find it:** Wet disturbed soils, typically along creeks in shaded areas; livestock pens and feedlots; rich, fertile soils

**What to look for:** Dark green 5-9 leaflets shaped like fingers on a hand, long tapering to a point, rough on the upper surface

**Cool characteristics:** Plant material used in ropes, nets, and paper. Seed oil used in soap, paint, varnish, and illuminating oils.
Field bindweed

*Convolvulus arvensis*

**Where to find it:** Roadsides, waste ground, cultivated ground, and other disturbed areas

**What to look for:** Arrowhead shaped leaves on trailing or climbing vines; typically grows in dense mats. White-pinkish petals fused together

**Cool characteristic:** This plant has deep root systems with seed viable for up to 50 years and is considered a weed.
9-anther dalea
*Dalea enneandra*

**Where to find it:** Prairies, plains, hillsides, and roadsides; preference for calcareous soils

**What to look for:** Many small green leaflets originating from red/yellow stems typically 2-3 foot tall; yellow taproot; small white flowers surrounded by feathery silky calyx

**Cool characteristics:** Named for the 9 anthers (male flower parts) of the flower. Kiowa made arrow shafts from the stem.
Snow-on-the-mountain
*Euphorbia marginata*

Where to find it: Prairie hillsides, ditches, damp swales

What to look for: Leaves are rounded and full of milky sap. Plant appears gray-green below the flowers and showy bracts.

Cool characteristics: Milky sap can be very irritating if it touches the skin. This plant is related to poinsettias.
Narrowleaf bluets
*Hedyotis nigricans*

Where to find it: Dry, rocky, prairie hillsides and rocky open bluffs and roadsides

What to look for: Short perennial plants with a short woody stem (caudex); leaves narrow and dark green with opposite arrangement; 4 parted flowers numerous, typically white to light blue in color

Cool characteristics: Very deep taproot system.
Chalk lily
Mentzelia decapetala

Where to find it: Rocky outcroppings

What to look for: Rough, narrow, pointed leaves; leaf margins frequently wavy; leaves may stick loosely to clothes; center part of flower is yellow.

Cool characteristics: A truly spectacular flower that opens in the late afternoon then closes at night. Found only on limestone soil.
Sand lily
*Mentzelia nuda*

**Where to find it:** Sandy soils

**What to look for:** Rough, narrow, pointed leaves; leaf margins frequently wavy; leaves may stick loosely to clothes; center part of flower is white

**Cool characteristic:** This plant occurs only on sandy soils. The flowers open during the late afternoon and close each night.
Tall stenosiphon
*Stenosiphon linifolius*

**Where to find it:** Rocky outcroppings, prairie hillsides, roadsides

**What to look for:** Very thin, narrow leaves; can be tall (greater than 3 feet), but very inconspicuous

**Cool characteristics:** During drought periods, this plant drops its leaves to conserve moisture and conducts photosynthesis through the stem.
Heathaster
*Symphyotrichum ericoides*

*Where to find it:* Prairie hillsides, road-sides

*What to look for:* Upright stems in clusters, rarely more than 1 foot tall; many very small leaves

*Cool characteristics:* Flowers develop into attractive small white “puffball” seedheads which can be used in dried flower arrangements.
Blue or Purple Flowers
Bull thistle  
*Cirsium vulgare*

**Where to find it:** Disturbed sites, prairie hillsides

**What to look for:** Leaves with many points, all having sharp spines; leaves are dense at the base of the plant (rosette)

**Cool characteristic:** Birds readily eat the seeds. This plant is not native to North America, but was most likely brought by European settlers unintentionally in with crop seed.
Dotted gayfeather
*Liatris punctata*

**Where to find it:** Rocky outcroppings, roadsides, prairie hillsides

**What to look for:** Very thin, narrow, tough leaves with tiny dots (glands); grows in clumps with numerous upright stems

**Cool characteristic:** Roots can grow to a depth of 15 feet, making this plant extremely drought-tolerant.
Pitcher sage
Salvia azurea

Where to find it: Prairie hillsides, roadsides

What to look for: Slightly square stems; leaves opposite each other along the stem; gray-green appearance to leaves; smells strongly of sage when crushed

Cool characteristics: This plant was named for a U.S. Army surgeon and botanist, Dr. Z. Pitcher. Livestock find this plant highly palatable.
Hoary vervain
*Verbena stricta*

*Where to find it:* Prairie hillsides, roadsides

*What to look for:* Flowers bloom sequentially along the flower stalk; densely hairy leaves with toothed edges; frequently there are several flower stalks upon a single stem

*Cool characteristic:* This plant has an extended flowering period and is an excellent choice for growing in gardens.
Ironweed
*Vernonia baldwinii*

**Where to find it:** Prairie hillsides, roadsides, ditches

**What to look for:** Flower heads at top of stems composed of many tiny flowers; bushy plant; leaves have small teeth along the edges

**Cool characteristic:** This plant is frequently considered a pest in eastern Kansas, but rarely becomes so numerous as to be a problem in western Kansas.
Pink, Red or Orange Flowers
Indian blanketflower
*Gaillardia pulchella*

**Where to find it:** Sandy soils, roadsides, prairie hillsides

**What to look for:** Frequently grows in colonies; frequently found in reseeded Conservation Reserve Program fields

**Cool characteristic:** This is an excellent plant for the home garden. Seed heads are conspicuous, and can easily be found for collecting seed.
Velvety gaura

*Gaura mollis*

**Where to find it:** Prairie hillsides, road-sides

**What to look for:** Frequently tall (greater than 3 feet) when flowering; flower head composed of many small flowers on end of stalk

**Cool characteristic:** Leaves have a cool, velvety feel when slid through the fingers.
Bush morning-glory
*Ipomoea leptophylla*

**Where to find it:** Sandy prairies, disturbed areas, and roadsides

**What to look for:** Large bushy perennial, leaves slender and long; massive spindle shaped taproot (6-8 inches in diameter)

**Cool characteristic:** This plant can withstand long periods of drought; the plant was used by Pawnee Indians as a cardiac stimulant.
Pennsylvania smartweed
*Polygonum pennsylvanicum*

**Where to find it:** Roadside ditches, wet areas that hold water

**What to look for:** Several branches/stem; tiny pink flowers form a head about the size of a thimble; narrow leaves up to 6 inches long; leaf margins with tiny bristles

**Cool characteristic:** This plant indicates a site where the soil remains wet much of the time.
Devil’s claw
*Proboscidea louisianica*

**Where to find it:** Sandy waste grounds, roadsides, fields, and overgrown pastures

**What to look for:** Thick stemmed annual plant covered with ill smelling, clammy hairs; leaves large and wide, mainly heart-shaped; flower marked with yellow lines and red spots

**Cool characteristic:** Pioneers sometimes pickled the immature fruits while Native Americans made black dye from the seed pods.
Yellow Flowers
Curly-cup gumweed
*Grindelia squarrosa*

**Where to find it:** Disturbed sites

**What to look for:** Leaves sticky to the touch due to small glands on the leaves; bracts (green underside of the flower) are also very sticky; leaves are slightly pointed ovals

**Cool characteristic:** Leaves were used by numerous Native American tribes to concoct a tea for various illnesses from children’s coughs to tuberculosis.
Broom snakeweed

*Gutierrezia sarothrea*

**Where to find it:** Prairie hillsides

**What to look for:** Short bushy plant that grows in a small clump (1 ft. diameter or less) with small yellow flowers; pungent odor when crushed

**Cool characteristic:** Consumption of this plant by pregnant livestock can result in abortion; dense stands of this plant indicate livestock overgrazing.
Annual sunflower
*Helianthus annuus*

**Where to find it:** Disturbed sites, roadsides, prairie hillsides

**What to look for:** Broad oval to triangular leaves that feel rough to the touch; frequently branching, with flowers located at the end of the branches

**Cool characteristic:** Commercial sunflowers grown for edible seed and oil were developed from this plant.
Maximilian sunflower
*Helianthus maximilianii*

**Where to find it:** Rocky outcroppings, roadsides, prairie hillsides

**What to look for:** Leaves that curl downward from the stem; leaves feel rough; flowers up and down the stem; one stem/plant

**Cool characteristic:** German botanist Prince Maximilian von Wied-Neuwied was the first European to discover this plant.
Wild lettuce
*Lactuca ludoviciana*

**Where to find it:** Disturbed areas, road ditches

**What to look for:** Single unbranched stem; large leaves at the base with prickles along the underside of the leaf; brown, sticky sap

**Cool characteristics:** Flowers are open only in the morning.
Rigid goldenrod
*Oligoneuron rigidum*

**Where to find it:** Prairie hillsides, roadsides

**What to look for:** Large, oval-shaped, basal leaves, with smaller, more pointed upper leaves; very rough feel to the upper leaves

**Cool characteristic:** Increasing amounts of stiff goldenrod can indicate that a pasture is being overgrazed.
Compass plant
*Silphium laciniatum*

Where to find it: Dry prairie slopes and hillsides, areas of mild disturbance

What to look for: Large, lobed basal leaves; several flowers arranged alternately along stalk

Cool characteristic: Basal leaves typically orientate their edges north-south. When wounded, the plant will exude a balsamitic resin often used by children as chewing gum.
Missouri goldenrod
Solidago missouriensis

Where to find it: Prairie hillsides and bottoms, roadsides

What to look for: Leaves 2-4 inches long that taper to a point with toothed margins; frequently grows in colonies (several plants close together)

Cool characteristic: This plant is one of the earliest blooming goldenrods.
Plains goldenrod
*Solidago mollis*

**Where to find it:** Dry prairies and open woods; common in fence rows, usually on sandy or rocky soils

**What to look for:** Hairy elliptical shaped leaves, 3 veins, margins of leaves smooth and serrate toward the tip; leaves smaller towards the inflorescence

**Cool characteristic:** Typically found in large colonies.
Big bluestem

*Andropogon gerardii*

**Where to find it:** Prairies, plains, dry soils, and open woods

**What to look for:** Finger-like seedheads like a turkey-foot; lower stems purplish, flat, and hairy

**Cool characteristics:** This grass provides high quality forage for livestock and wildlife eat the seeds. The Chippewa used the roots for stomach pain.
Silver bluestem  
*Bothriochloa laguroides*

**Where to find it:** Prairies, plains, rocky slopes, disturbed areas, abandoned fields, and roadside ditches

**What to look for:** Silver colored seed heads with fine silky hairs. Slender stems typically crooked and grow outward before growing upward

**Cool characteristic:** Kiowa used the stems as toothpicks.
Sideoats grama
*Bouteloua curtipendula*

**Where to find it:** Open prairies and rocky hillsides; found on limestone or chalk soils but can range from deep to shallow soils

**What to look for:** Small “oat-like” seeds hang at an angle on one side of the stalk

**Cool characteristic:** When the seeds drop from this plant, a zig-zag stalk is left behind.
**Hairy grama**

* Bouteloua hirsuta *

**Where to find it:** Prairies and plains with shallow, sandy, or rocky soils

**What to look for:** Seeds are arranged like the bristles of a toothbrush and end in a prominent needle-like point (rachis); leaves are mostly basal (near the ground)

**Cool characteristic:** Cures well and furnishes over-winter grazing.
Blue grama
*Bouteloua gracilis*

**Where to find it:** Dry, sandy, gravelly soils and open plains

**What to look for:** Seeds are arranged like bristles on a toothbrush, seeds appear purplish; leaves are mostly basal (near the ground)

**Cool characteristic:** Highly palatable grass for livestock that is drought tolerant.
Sandbur
*Cenchrus longispinus*

**Where to find it:** Recently disturbed sandy soils along roadsides, ditches, and crop fields

**What to look for:** Grows horizontally before vertically, seed head composed of many burs each with 20-60 spines

**Cool characteristic:** The burs will cling to clothing and can cause eye, nose, and mouth injuries to livestock.
Windmill grass
*Chloris verticillata*

**Where to find it:** Prairies, plains, abused and overstocked rangelands, and disturbed areas (including lawns)

**What to look for:** Numerous spikelets of seeds arranged in whorls around central axis; leaves like those of little bluestem

**Cool characteristic:** Often called “ticklegrass” because seed heads get inside of pant legs.
Inland saltgrass
*Distichlis spicata*

**Where to find it:** Low prairies, along road-sides, creeks, alkaline and highly saline soils

**What to look for:** Straw colored seed heads, sharply pointed leaf blades, C-shaped in a cross section; grows via rhizome forming mats

**Cool characteristic:** Will tolerate heavy trampling and is an indicator of saline soils.
Canada wildrye  
*Elymus canadensis*

**Where to find it:** Prairies, stream banks, ditches, open areas; adapted to a wide variety of dry and moist soils

**What to look for:** Erect or arching seed head, thick and bristly (3-12 inches long); leaf blades taper to a point, rough surface, with margins finely toothed

**Cool characteristic:** Grows as far north as Alaska.
Switchgrass

*Panicum virgatum*

**Where to find it:** Bottomlands, prairies, open woods, and seasonally or occasionally wet areas

**What to look for:** Seedheads feathery and pyramid shaped; triangular patch of hair on the upper surface of the leaf base

**Cool characteristic:** Currently being investigated for its potential to produce biofuel.
Western wheatgrass  
*Pascopyrum smithii*

**Where to find it:** Prairies and disturbed areas with dry soils; most abundant on heavy, alkaline soils

**What to look for:** Leaves rolled inward when drought stressed; prominent leaf veins feel like ridges when scraped with a fingernail; blue green color

**Cool characteristic:** Produces pure stands via aggressive rhizome growth.
Little bluestem
*Schizachyrium scoparium*

**Where to find it:** Prairies, dry hills, open woods, and sand hills

**What to look for:** Lower stems and leaves are bluish-green to purple and waxy; mature seed head has a zig-zag form; mature plants have a reddish cast after frost

**Cool characteristic:** Currently being considered for the state grass of Kansas as it occurs in every county.
Indian grass
Sorghastrum nutans

Where to find it: Bottomlands, prairies, open woods, and deep moist soils

What to look for: Yellow to gold seed head with long bent awns; leaf base with prominent claw-like ligule

Cool characteristic: Popular tall grass used in home landscapes.
Tall dropseed
*Sporobolus compositus*

**Where to find it:** Prairies and plains on dry soils; typically abundant on overgrazed rangeland with higher annual precipitation

**What to look for:** Stem partially enclosed within the leaf; long, thin, wispy leaves that are flat or rolled inward and tapered to points

**Cool characteristic:** Leaves and stems bleach white with the winter.
Sand dropseed
*Sporobolus cryptandrus*

Where to find it: Dry prairies and plains, mostly in disturbed areas. Not tolerant of wet soils, common on sandy open soils

What to look for: Ring of white, short stiff hairs around base of leaf; leaves mostly flat; seed head either totally or partially enclosed in the stalk

Cool characteristic: Increases in numbers following drought or abusive grazing.
Information Sources

Information for this booklet was obtained from the following sources:

Books:


Websites:
USDA Plants database http://plants.usda.gov

Kansas Wildflowers and Grasses http://kswildflower.org/
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