A GUIDE TO MISSOURI'S

ROADSIDE WILDFLOWERS

MISSOURI DEPARTMENT OF CONSERVATION

A Guide to Missouri's Roadside Wildflowers

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Front Cover: Pale purple coneflower and butterfly milkweed are two native wildflowers you might see blooming along mid-Missouri roadsides. Photo by David Stonner

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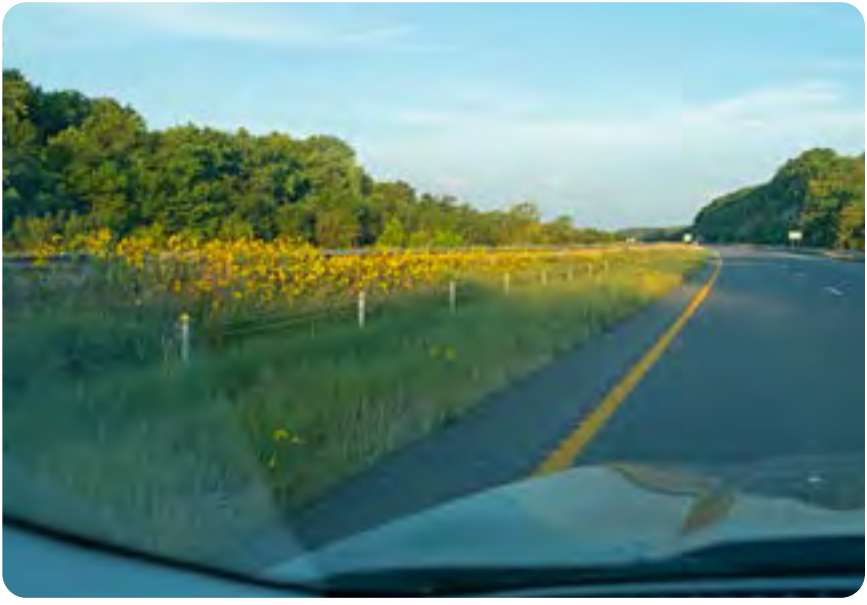
WELCOME TO WINDSHIELD BOTANIZING

This is not your typical field guide. Most plant field guides are written with the assumption that the user can closely observe the subject, has an opportunity to look at fine details, and can take their time observing those details. Unlike when trying to identify a bird, fish, snake, etc., we usually do not need to worry about plants "getting away." Except when we are in a moving car. The plant did not go anywhere, but we sure did. In a flash, our opportunity to identify the plant is over. Botanists have a term for this: *windshield botanizing*.

This booklet was written to help you identify plants from the windshield view. It focuses on characteristics that you can observe very quickly and at a distance. Some species noted as looking similar may not look alike when viewed up close. The plants described are 25 species you're likely to encounter while traveling highways in Missouri. It includes species that are native to Missouri, as well as nonnative and even invasive species.



NOPPADOL PAOTHONG

Sunflowers bloom along many Missouri highways in late summer.

DAVID STONNER

Black-eyed Susan is another yellow flower with a dark center that blooms along Missouri roadsides. It's shorter than most sunflowers, and it has a smaller, very dark-brown center

To help make identification fast, easy, and accurate, species are grouped by flower color and listed next to or near similar-looking flowers as much as possible.

Important Terms

The natural community terms below also appear in Show-Me Natural Communities: Your Guide to Missouri's World-Class Natural Diversity, *published by the Missouri Department of Conservation. See Free Publications on Page 64 for information about how to access and order this title.*

Glades

These hot, dry, and sunny mini-deserts occur in woodlands where the bedrock is close to the soil's surface. Glades feature a variety of native grasses and prairie wildflowers. Missouri has five different types of

glades, each of which occurs on a different type of bedrock: limestone, dolomite, chert, sandstone, and igneous.

Prairies and savannas

Prairies are native grassland communities that developed under the forces of drought, fire, and grazing by bison and elk. Missouri has two main types of native grasslands: tallgrass prairie and savanna. The latter is a transition community between grassland and woodland. Prairies feature native perennial grasses and wildflowers with few scattered trees and shrubs. Savannas feature prairie plants with a few more trees scattered widely across the landscape.

The definitions below appear courtesy of the Missouri Invasive Plant Council (***moinvasives.org***)

Invasive

An invasive plant is an aggressive, nonnative species whose presence causes or is likely to cause economic or environmental harm. These species grow and reproduce rapidly.

Native

Native plants originally occur within a region as the result of natural processes and are adapted to local climate and soils. They have co-evolved with native insects and wildlife and are critical to ecosystem functions, such as habitat maintenance, nutrient cycling, and water circulation and exchange.

Nonnative

Plants introduced (intentionally or accidentally) to a new place or new type of habitat are called nonnative. Historically, most of these introductions have resulted from human activities. Since introduced plants did not evolve locally over thousands of years, their presence can often have negative impacts on local, natural ecosystems. The words "exotic," "alien," and "introduced" are synonyms for "nonnative." Not all nonnative plants are invasive.

WHITE FLOWERS

This section includes flowers that are predominantly white or off-white. For pale-colored flowers, consult the blue/purple and yellow sections of this booklet as well.

Pale Beardtongue

Penstemon pallidus

Origin: Native

Description: Pale beardtongue is a common plant found in various habitats in Missouri, but the white flowers are small, and the plant's short stature prevents it from being observed at a distance. Pale beardtongue grows 18–24 inches tall with an unbranched stem. The flowers at the top of the stems are about 1 inch long. A close-up look will reveal that the plant has short, dense hairs on the stem, leaves, and flowers. At the center of the flower is a structure referred to as a staminode. It is flat, appearing like a tongue and is "bearded" with orange-yellow hairs, hence the name beardtongue.

Habitat: Dry, upland sites that are open or shaded by the forest canopy are suitable for pale beardtongue. It is found in glades, rocky hillsides, upland prairies, pastures, and along roadsides in forested areas.

Flowering Season: April to July

Similar Species: There are two other common beardtongue species with white flowers in Missouri. They both have hairless stems but can be distinguished in other ways that make it possible to tell the difference

Pale beardtongue (P. pallidus)

while traveling along a roadway. Smooth beardtongue (*P. digitalis*) is a much larger plant reaching a height of 3 feet with larger showy flowers. Trumpet beardtongue (*P. tubaeflorus*) is also taller with more showy flowers. It also has a tightly packed group of flowers, whereas the flowers of smooth beardtongue are in more loosely arranged branches.

Smooth beardtongue (P. digitalis)

Queen Anne's Lace

Daucus carota

Origin: Nonnative (Europe and southwest Asia)

Description: Queen Anne's lace is a common roadside wildflower that looks like white, flat-topped umbrellas. It is a member of the carrot family and is the wild form of the cultivated carrot. Crushing the feathery leaves releases an aroma that smells like carrots. The plant typically grows 3–4 feet tall with the stem having multiple branches. The flowerheads can grow up to 6 inches wide and are found at the branch tips.

Habitat: This species can be found in a variety of open habitats. Pastures, rocky hillsides, glades, forest openings, fence rows, margins of crop fields, ditches, and streambanks provide habitat suitable for Queen Anne's lace. It is found throughout Missouri and in every state of the continental U.S. Although it's considered a nonnative weed, Queen Anne's lace adheres well to disturbed habitats and does not invade natural areas that have established stands of native flora.

Flowering Season: May to October

Similar Species: Other members of the carrot family have flowerheads that are similar to Queen Anne's lace. Several of these species flower earlier than peak flowering for Queen Anne's lace, which is June to July. **Caution: Poison hemlock** (*Conium maculatum*) and **water hemlock** (*Cicuta maculata*) are often mistaken for Queen Anne's lace. Poison hemlock has purple dots along the stem and the leaves are more

CLIFF WHITE

divided. Water hemlock can also be identified by looking at the leaves, which do not have the feather-like appearance of Queen Anne's lace. Both hemlock species are found in wet places such as road ditches or streambanks and are extremely toxic. They can cause skin irritation and poisoning if ingested.

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Late Boneset

Eupatorium serotinum

Origin: Native

Description: Late boneset is a weedy plant that often appears along roadsides in dense clusters. The stems are highly branched with white flowers at the branch tips. Late boneset is typically 2–6 feet tall when flowering. While the petals are white, male parts of the flower are black, giving the flowers a dingy gray appearance from a distance.

Habitat: A variety of open habitats can support late boneset. It spreads aggressively along roadsides from wet ditches to upland pastures and rocky areas. Missouri travelers might even recognize this plant as one of the weeds they pull in their garden or flowerbed.

Flowering Season: August to October

Similar Species: Late boneset is considered the most common boneset throughout Missouri, but there are a few other boneset species that can also be found along roadsides. Tall boneset (*E. altissimum*) has leaves that are attached more closely to the stem, which is a characteristic you would need a close-up view to observe. False boneset (*Brickellia eupatorioides*) has narrower leaves, and the clusters of flowers are less dense.

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Virgin's Bower

Clematis terniflora

Origin: Nonnative (eastern Asia)

Description: Virgin's bower appears as showy displays of white flowers along roadsides in the early fall. It is a vine often planted to grow along a trellis or fence, but it can rapidly escape by twining around adjacent vegetation. The abundant seed production also helps this plant to escape cultivation. Large populations of virgin's bower are occurring much more frequently along Missouri roadsides, and botanists consider it an invasive species.

Habitat: Because most populations of virgin's bower escape from a nearby landscaped planting, it appears primarily in urban areas along fence rows, hedges, and roadsides.

Flowering Season: August to September

Similar Species: Two closely related native species grow in Missouri. They are not as common and are often confused with the nonnative virgin's bower. All three species have vinelike stems with white flowers, yet they have unique leaf characteristics. Therefore, a close-up inspection is necessary to accurately decipher among the possibilities. Virgin's bower has single leaves alternately positioned along the stem. The native virgin's bower (*C. virginiana*) has a trifoliate leaf, where each leaf is broken into 3 leaflets (smaller leaf-like structures). The other native species called satin curls (*C. catesbyana*) has 5-foliate leaves, where each leaf is broken into 5 leaflets.

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BLUE/PURPLE FLOWERS

This section includes pale to deep blue and pale lavender to dark violet flowers. Because blue and purple flowers can grade to white, consult the white section of this booklet as well.

Henbit

Lamium amplexicaule

Origin: Nonnative (Europe, western Asia, and northern Africa)

Description: Henbit is often noticed as fields of purple color in the early spring. It is an annual plant that can re-sprout from small pieces of the stem. Mowing the plants enhances the spread of henbit. Like most plants in the mint family, it has a square-shaped stem. Henbit only grows to about 6 inches tall and quickly fades as summer heat approaches.

Habitat: Areas that are frequently mowed, tilled, or recently cleared provide ideal conditions for henbit. Aggressive growth is seen in yards, crop fields, and waste ground. It is commonly found throughout Missouri.

Flowering Season: February to November

Similar Species: From a distance, dead nettle (*L. purpureum*) looks like henbit. Both species flower primarily in the spring and are scattered throughout the state. One can easily make the distinction up close as the leaves of dead nettle overlap the flowers, making them less visible. It is therefore not as showy as henbit from a distance.

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Rose Verbena

Glandularia canadensis

Origin: Native

Description: Rose verbena is one of the early wildflowers commonly seen along roadsides in the spring. It stays low to the ground, only reaching a height of 12–18 inches and spreading more horizontally than vertically. Its bright purple flowers, extended flowering season, and hardy nature make it a popular plant for native gardening.

Habitat: Open, well-drained areas with sparse vegetation are suitable sites for rose verbena. It can be found on glades, rocky hillsides, forest openings, and bluff summits.

Flowering Season: March to November

Similar Species: From a distance, rose verbena can look like other phlox species (*Phlox* spp) that flower in the early spring. These species have a more ascending growth habit, and the leaves are not divided as are those on rose verbena.

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Common Milkweed

Asclepias syriaca

Origin: Native

Description: Common milkweed has pale purple flowers that are clustered together. At a distance, these clusters of flowers, called *inflorescences*, resemble purple tennis balls at the top of the stems. Milkweeds have opposite leaf arrangement on the stem. If you get close enough to pluck a leaf tip, you will find a milky latex oozing out that gives it the common name *milkweed*.

Habitat: Scattered throughout Missouri, common milkweed grows in a variety of open habitats such as prairies, pastures, margins of crop fields, ditches, and forest edges.

Flowering Season: May to August

Similar Species: Several other milkweed species are commonly encountered along Missouri roadways and grow in a variety of open habitats. Prairie milkweed (*A. sullivantii*) looks the most like common milkweed. It's found in the northern half of Missouri, is not as tall as

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common milkweed, and the leaves are smooth with very few hairs on the underside. Swamp milkweed (*A. incarnata*) is more slender-looking with narrow leaves and bright pink flowers. Purple milkweed (*A. purpurea*) typically has deep-purple flowers.

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Pale Purple Coneflower

Echinacea pallida

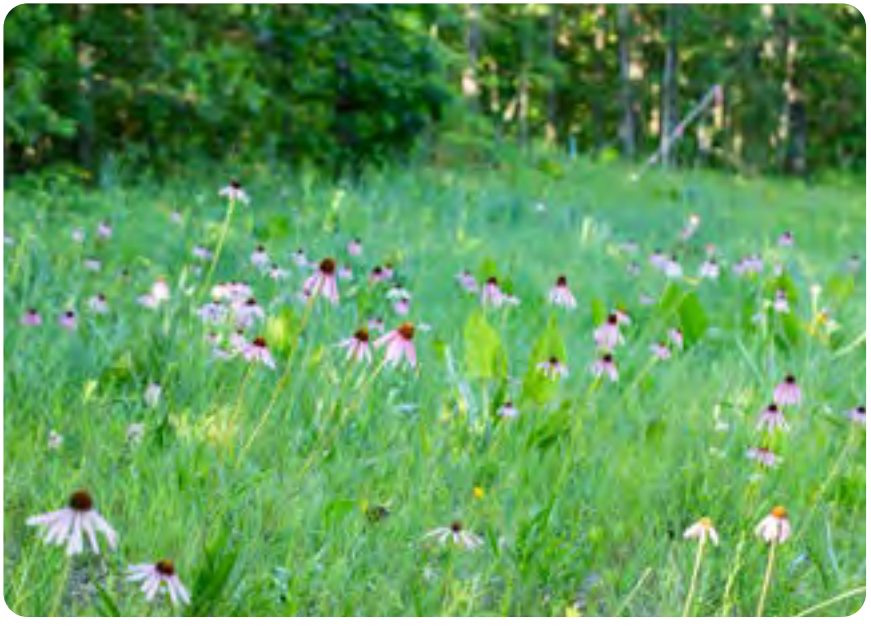
Origin: Native

Description: Pale purple coneflower has flowers that resemble badminton birdies, with petals that hang down, and long narrow leaves that are mostly at the base of the plant. It is found throughout most of Missouri but is more common on the western side of the state. Pale purple coneflower often appears along roadsides that were planted for highway beautification.

Habitat: This plant is found in open and dry habitats. Rocky hillsides, prairie, glades, and highway rights-of-way often showcase this species.

Flowering Season: May to June

Similar Species: A species that looks almost identical but exhibits yellow pollen instead of white is glade coneflower (*E. simulata*). Purple coneflower (*E. purpurea*) is also very similar looking, but the petals are not quite as long and are wider, giving less open space between each petal. Yellow coneflower (*E. paradoxa*) is also commonly seen in rights-of-way plantings but is not easily confused with the other coneflowers as it has yellow petals.



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Prairie Blazing Star

Liatris pycnostachya

Origin: Native

Description: Along roadsides, prairie blazing star looks like stands of tall purple spikes. It is also easily identified by the dense arrangement of narrow, grasslike leaves along the stem. It can grow up to 5 feet tall, towering over other vegetation growing along the roadsides. It is a long-lived perennial plant that often does well in plantings meant for highway beautification.

Habitat: Upland and open habitats are most suitable for prairie blazing star. It grows well on glades, prairies, rocky hillsides, and bluffs. It is found scattered throughout most of Missouri.

Flowering Season: July to October

Similar Species: Other species of blazing star can look similar, flower at the same time, and occur in the same habitat. Rough blazing star (*L. aspera*) has purple flower clusters in separate clumps instead of one continuous spike. Scaly blazing star (*L. squarrosa*) has flower clusters that are less dense than prairie blazing star, and each cluster has a long-modified leaf known as a bract, giving it a scaly appearance.

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Western Ironweed

Vernonia baldwinii

Origin: Native

Description: Travelers often observe western ironweed as flashes of purple in late summer to early fall. While the plant is known to grow as tall as 5 feet, it is more commonly flowering at 3–4 feet high, but it still stands above fescue, a nonnative grass, that is often growing in association. It has a leafy stem with dense hairs giving it a grayish hue from a distance, hence the name ironweed.

Habitat: Found commonly throughout the state, western ironweed can occur in a variety of habitats. It most often occurs in dry and open sites such as pastures, upland prairies, fence rows, and waste ground. It is occasionally but less commonly found along streams, wet ditches, and pond banks.

Flowering Season: May to September

Similar Species: Western ironweed is the most common species of ironweed in Missouri. There are several other species that look very similar at a distance. Ironweed species are well known to hybridize, making identification more challenging. The unique characteristic that western ironweed has is soft, fuzzy hair on the leaves and stem, along

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with wider leaves than other ironweed species. These characteristics are not easy to observe at a distance. Other common ironweed species that grow along roadsides include prairie ironweed (*V. fasciculata*), Arkansas ironweed (*V. arkansana*), tall ironweed (*V. gigantea*), and Missouri ironweed (*V. missurica*).

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Aromatic Aster

Symphyotrichum oblongifolium

Origin: Native

Description: Aromatic aster has highly branched stems, and it can grow in such a dense arrangement of leafy stems that it looks like a small shrub. It produces abundant purple flowers that make it a popular plant for native landscaping and highway beautification. It can grow up to 2 ½ feet, and each flower is about 1 inch in diameter, with lavender ray petals and a center disk of yellow flowers. Aromatic aster releases a sweet smell, particularly when the leaves are crushed.

Habitat: This plant grows well in open and dry areas such as glades, bluffs, rocky hillsides, and upland prairies. It is found naturally to be more common south of the Missouri River but can be found more broadly along Missouri roadsides due to planting activities.

Flowering Season: July to November

Similar Species: Several other aster species have similar flowers, grow in the same habitats, and bloom about the same time. Close-up observation of the leaves would be necessary to confirm aromatic

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aster versus a similar species. The leaves and stem of aromatic aster are moderately to densely hairy. The leaves are attached directly to the stem but not clasping it. These characteristics and its pleasant aroma should be helpful in distinguishing aromatic aster from other asters.

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Chicory

Cichorium intybus

Origin: Nonnative (Europe)

Description: Chicory appears along Missouri roadways as bright blue flowers during the summer. Numerous flowers bloom up the stem that reaches 1–3 feet tall, with each flower measuring 1–2 inches wide. While chicory is a nonnative species, it tends to adhere closely to roadsides and other frequently disturbed locations, thereby reducing the negative impact on native fauna and flora. Chicory is known for many medicinal qualities. It has a long history of use as a laxative, diuretic, antiseptic, and more recently as a supplement for soluble fiber and fat substitute.

Habitat: This plant is most often seen near roadsides but also in pastures and open, disturbed sites.

Flowering Season: May to October

Similar Species: Some aster (*Symphyotrichum*) species have blue flowers that can appear similar to chicory. A simple characteristic to consider is the center of the flower. Chicory does not have disk flowers in the center; aster species do have center disk flowers.

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Musk Thistle

Carduus nutans

Origin: Nonnative (Europe and Asia)

Description: Musk thistle has been declared a noxious weed under the Missouri Noxious Weed Law since 1979. Accidentally introduced, and with roadways serving as dispersal corridors, musk thistle is now likely found in every county in Missouri and nearly throughout the United States. It's a tall plant, often towering over other vegetation at 6–8 feet high. The stem is often branched, with a solitary flowering head at the tip of each branch that looks like a nodding purple ball 1–2 inches wide. The leaves and bases of the flowers are armed with long, sharp spines. Unlike many other nonnative plants that are common along roadsides, musk thistle is not confined to disturbed areas but can aggressively invade important natural areas as well.

Habitat: The plant is most frequently seen along edges of crop fields, pastures, waste ground, and fence rows. It can also be found invading upland prairies.

Flowering Season: June to October

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Similar Species: Other thistles can resemble musk thistle as many also have spiny leaves, purple flowers, corresponding flowering seasons, and similar habitats. Musk thistle can usually be identified, even from a distance, by the tendency of the flower heads to nod downward and the lack of leaves along the upper part of the stems.

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Field Thistle

Cirsium discolor

Origin: Native

Description: Field thistle is a tall plant reaching a height of 5–8 feet. The stems are branched with round purple flowers at the tips. The leaves are deeply lobed with sharp spines along the edges. As a biennial plant, it produces a flower during the second year of growth. Once seeds are mature, the plant dies and leaves behind an abundant number of seeds. While thistle provides a food source for birds, much of the seed falls and germinates nearby, creating areas with dense stands of thistle.

Habitat: This plant is found in open and dry habitats. Field thistle frequently occurs in prairie, pastures, and rocky hillsides. Thistle does well with frequent mowing as it keeps the habitat open and spreads seed, making it thrive with common roadside management practices.

Flowering Season: July to November

Similar Species: Many species of thistle grow in Missouri and look like field thistle. A few that are also common along roadsides are musk thistle

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(*Carduus nutans*), tall thistle (*Cirsium altissimum*), and bull thistle (*Cirsium vulgare*). Musk thistle can be distinguished by flowers that tend to nod forward. Tall thistle is less spiny, with unlobed leaves. Bull thistle has dense spines on the stem as well as the leaves.

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Common Teasel

Dipsacus fullonum

Origin: Nonnative (Europe)

Description: Common teasel is a tall plant reaching heights of over 6 feet. It has interesting lavender flowers that occasionally appear in cut flower arrangements. A close look at the plant will reveal small prickles on the stems and leaves. It is classified as a noxious weed under the Missouri Noxious Weed Law. Teasel invasion has continued to expand in recent years and is frequently encountered by travelers, especially along major highways. The flowering stalks persist into the winter, making the plant clearly visible in the growing and dormant seasons.

Habitat: Throughout Missouri in open places, particularly along roadsides.

Flowering Season: June to October

Similar Species: A closely related species that is also found along roadsides throughout Missouri is cut-leaved teasel (*D. laciniatus*). It looks very similar to common teasel but has white flowers instead of lavender. The leaves are also deeply lobed while common teasel has no lobed

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leaves. Both species are nonnative, grow in similar habitat, flower about the same time, and are considered noxious weeds under the Missouri Noxious Weed Law.

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ORANGE FLOWERS

Butterfly Milkweed

Asclepias tuberosa

Origin: Native

Description: Butterfly milkweed shows up as flashes of orange color that are very easy to spot along roadsides. Few other roadside wildflowers with that bright orange color appear during mid-summer when butterfly milkweed is at peak of flowering. Several stems 18–30 inches tall and clustered together can make the plant look like a small bush from a distance. As one might guess, butterflies are attracted to the plant as a nectar source, which makes it a common species in native landscaping and butterfly gardens.

Habitat: Scattered throughout Missouri, butterfly milkweed can be found in open and dry habitats such as prairies, glades, and pastures. Butterfly milkweed is often included with native plantings along the highway rights-of-way.

Flowering Season: May to September

Similar Species: Native to China, Japan, and Korea, the orange daylily (*Hemerocallis fulva*) displays bright orange flowers along roadsides,

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in similar habitat, and at the same time of year butterfly milkweed is in bloom. However, that is about the only way to confuse these two species because their flowers and leaves look very different. Orange daylily has long, narrow, almost grass-like leaves. Another species that can be confused with butterfly milkweed is Indian paintbrush. This is also a native species with red-orange flowers, but it is shorter (about 8–12 inches). It often grows as single stems instead of a tight bunch like butterfly milkweed.

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YELLOW FLOWERS

This section includes flowers ranging from pale yellow to saffron. For cream-colored flowers, see the white flowers section.

Yellow Rocket

Barbarea vulgaris

Origin: Nonnative (Europe and Asia)

Description: Yellow rocket is one of the first roadside wildflowers to appear in the spring. As an annual plant, it produces abundant seed and establishes well on areas with bare soil or that are frequently disturbed by mowing, tilling, or heavy livestock use. Yellow rocket is a nonnative species but fortunately does not invade areas that already have established stands of native flora. It grows 24–36 inches tall and has four bright yellow petals for each flower. Numerous flowers are arranged in tight clumps on a branched stem. Large populations of this plant can look like a blanket of yellow along roadsides and adjacent areas in the spring.

Habitat: Dense stands of yellow rocket are common in waste grounds, crop fields, and stream banks. It can be found frequently or sporadically along any roadway in Missouri.

Flowering Season: April to June

Similar Species: Yellow rocket is not easily confused with other species when considering the bloom season, flower color, and habitat.

Lanceleaf Coreopsis

Coreopsis lanceolata

Origin: Native

Description: Lanceleaf coreopsis (aka tickseed coreopsis) has a showy flower with bright yellow petals. The leaves are long, narrow, and mostly at the base of the plant. Flowers appear at the top of unbranched and mostly leafless stems. An encounter with lanceleaf coreopsis along highway rights of way is commonly due to introduced seed. This plant is often used for native gardening and highway beautification.

Habitat: Once restricted to the Ozarks, lanceleaf coreopsis can now be found along roadsides and landscape gardens throughout Missouri due to extensive planting. It grows well in open and dry habitats such as glades, prairies, rocky hillsides, and bluffs.

Flowering Season: April to July

Similar Species: Big flower coreopsis (*C. grandiflora*) and finger coreopsis (*C. palmata*) grow in open habitats throughout much of the state. The best way to decipher between the three species is to look at the leaves.

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Tickseed Sunflower

Bidens aristosa

Origin: Native

Description: Tickseed sunflower produces a striking gold color in autumn along roadsides and adjacent areas. It grows 18–36 inches tall with a stiff, rusty colored stem. It is an annual plant that produces abundant seed, often resulting in large, dense colonies. Another common name for this species is bur marigold. Perhaps this name is derived from the appearance of the leaves, which resemble marigold leaves.

Habitat: Tickseed sunflower is abundant in open and wet places such as road ditches, wet prairie and marshes, pond margins, and low crop fields. It is found commonly throughout Missouri.

Flowering Season: August to October

Similar Species: Another tickseed species that looks similar at a distance is nodding bur marigold (*B. cernua*). The difference between tickseed sunflower and nodding bur marigold appears in the leaves. Nodding bur marigold has entire leaves while the leaves of tickseed sunflower are divided, compound leaves.

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Black-Eyed Susan

Rudbeckia hirta

Origin: Native

Description: Black-eyed Susan is a common plant found throughout Missouri, both in the wild and in native landscaping. The flowers have bright yellow-orange petals with dark centers. Its flowering stems can grow up to 3 feet tall and, along with the leaves, are covered with short, bristly hairs. As an annual plant, it produces abundant seed, often resulting in well-established populations. Black-eyed Susan is commonly included in native plantings for highway beautification.

Habitat: Open and well-drained habitats such as prairies, glades, pastures, forest openings and edges, as well as rocky hillsides are suitable for black-eyed Susan. It can be found scattered in rare prairie remnants and is abundant in areas frequently disturbed by mowing, haying, or grazing.

Flowering Season: May to October

Similar Species: Brown-eyed Susan (*R. triloba*) is another common species but differs in having smaller and more numerous flowers on

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each stalk. Orange coneflower (*R. fulgida*) adheres closely to wet areas like streambanks, gravel bars, and pond edges. Sweet coneflower (*R. subtomentosa*) grows much taller (up to 6 feet) and has lobed leaves.

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Yellow Sweet Clover

Melilotus officinalis

Origin: Nonnative (Europe and Asia)

Description: Yellow sweet clover is a nonnative weed that frequently occurs along Missouri roadsides. It will often establish thick stands reaching up to 5 feet high. The yellow flowers are arranged in spikes up to 6 inches long at the stem tips. The leaves consist of 3 leaflets, which is common among clover species. They also release a sweet, vanilla-like aroma when crushed.

Habitat: This species occurs in every county in Missouri, but it is uncommon in the Bootheel Region. It is widespread beyond Missouri, occurring in every state of the continental U. S. Yellow sweet clover occurs in a variety of open habitats regardless of whether they are typically wet or dry areas. It can be found in pastures, prairie, rocky hillsides, forest openings, ditches, pond margins, and streambanks.

Flowering Season: May to September

Similar Species: White sweet clover (*M. alba*) is almost identical except that the flowers have white petals instead of yellow. Sweet clover that is not flowering can resemble cultivated alfalfa (*Medicago sativa*).

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Compass Plant

Silphium laciniatum

Origin: Native

Description: Compass plant is one of many sunflowers that travelers encounter on Missouri roadsides in late summer to early fall. The characteristics of this plant that make it unique are the height and leaf shape. Compass plant can reach up to 8 feet tall. Its leaves are deeply lobed and resemble that of an oak tree. The name *compass plant* is said to have derived from the way the basal leaves orient to point north and south to maximize exposure to the sunlight. It's also told that pioneer travelers through tallgrass prairie would tie cloth on the tall flower stalks to mark a trail. Compass plant is commonly included in native plantings for highway beautification.

Habitat: This species can be found in dry and open habitats such as glades, prairies, rocky hillsides, and forest openings. It is found throughout Missouri except for the southeastern quarter.

Flowering Season: July to September

Similar Species: Many other sunflower species (aka composites) can look similar to compass plant. There is a phrase used to describe this

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dilemma: *darned yellow composites*, or *DYC*s. Perhaps the easiest way to distinguish compass plant from all the other DYCs is to look at the arrangement of flowers on the stem. Instead of solitary flowers at the stem tips, compass plant often displays multiple flowers along an unbranched stem.

Prairie Dock

Silphium terebinthinaceum

Origin: Native

Description: Prairie dock is recognized by its tall, branched stalk with yellow flowers at the branch tips. It can grow up to 10 feet tall. The flowering stalk is nearly leafless and has basal leaves that can be as large as dinner plates. The roots of prairie dock are known to grow so deep that the cool water transported up to the leaves make them feel cool even on a hot summer day. They also allow the plant to be long-lived and extremely tolerant to dry conditions. Due to its beauty and resilient qualities, prairie dock is commonly planted along highways for beautification.

Habitat: Suitable habitat for prairie dock includes glades, rocky hillsides, tops of bluffs, dry prairies, and openings in upland forests. In Missouri, prairie dock naturally occurs more frequently in the Ozarks and the central to eastern part of the state. However, it can be found more broadly in the state due to roadside and native landscape plantings.

Flowering Season: July to October

Similar Species: Many other sunflower species (aka composites) can look similar. There is a phrase used to describe this dilemma, *darned yellow*

composite, or *DYC*s. Perhaps the easiest way to distinguish prairie dock from all the other DYCs is to note the lack of leaves on the stem. A tall, leafless stem with a showy sunflower at the top signals prairie dock, even if viewed from a distance.

Tall Goldenrod

Solidago altissima

Origin: Native

Description: Tall goldenrod is usually regarded as a weed that grows abundantly in fallow places. It exhibits extensive underground growth that gives rise to multiple unbranched, leafy stems. Tall goldenrod has yellow flowers at the top of the stem that are grouped in a way that resembles a pyramid. The first blooms of tall goldenrod serve as a reminder that the autumn season is approaching.

Habitat: Tall goldenrod can be found in open areas that are dry to moderately wet. It is commonly found throughout the state but most abundant in fallow fields, edges of crop fields, waste ground, fence rows, and roadsides.

Flowering Season: August to November

Similar Species: Over 20 different species of goldenrod grow in Missouri, and from a distance most of them look similar. Tall goldenrod is considered the one with the most aggressive growth along roadsides, and it establishes dense stands. Goldenrod plants that occur sporadically could be another species closely related to tall goldenrod.

NOPPADOL PAOTHONG

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Missouri Evening Primrose

Oenothera macrocarpa

Origin: Native

Description: Missouri evening primrose is a short plant reaching only 12–18 inches tall. What it lacks in height, it makes up for in floral display. The four bright yellow petals can make a flower roughly the size of a teacup saucer. It is a popular plant for native landscaping and is often included in plantings for roadside beautification.

Habitat: This species does well in dry, rocky, open habitats that are often unsuitable for many other plant species. The lack of other plant growth helps Missouri evening primrose stand out, particularly on steep rocky hillsides, glades, and bluffs.

Flowering Season: May to August

Similar Species: It is difficult to confuse Missouri evening primrose with other species when observing the plant up close. However, the bright yellow flowers of prickly pear (*Opuntia humifusa*) can resemble Missouri evening primrose at a distance. Both species thrive in similar habitats and flower at the same time of year. Taking notice of the prickly pear's flat cactus pads and the orange tinge in the center of its flowers is an easy way to distinguish it from primrose.

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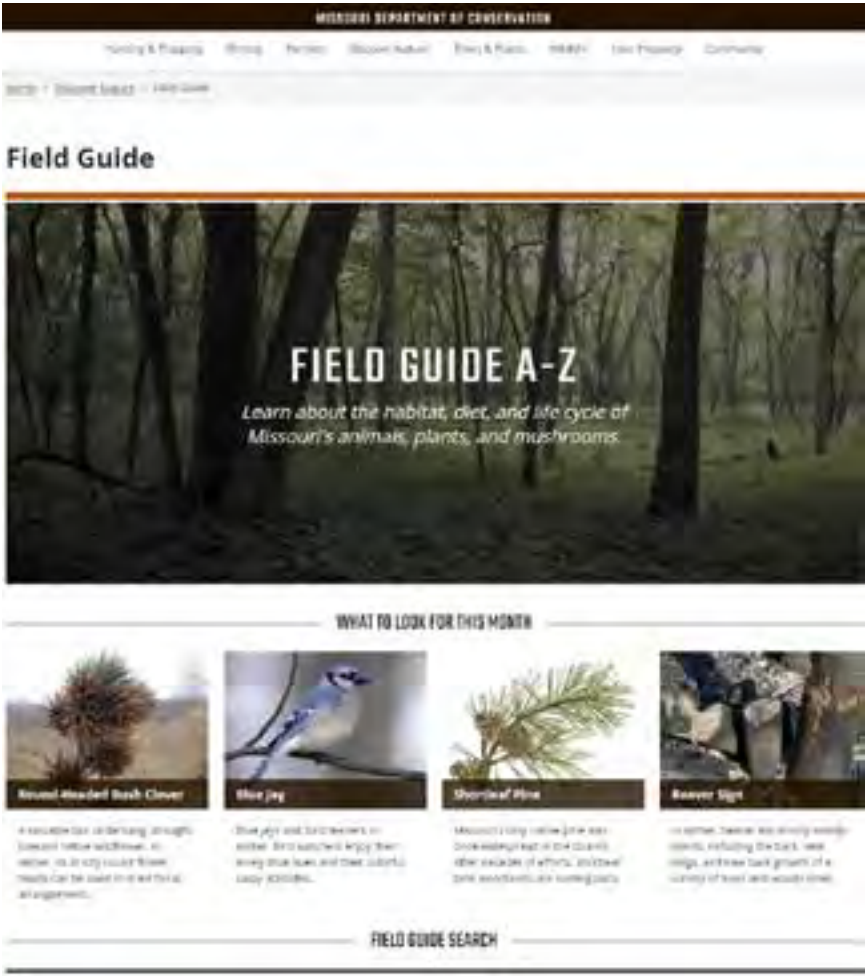
NOPPADOL PAOTHONG



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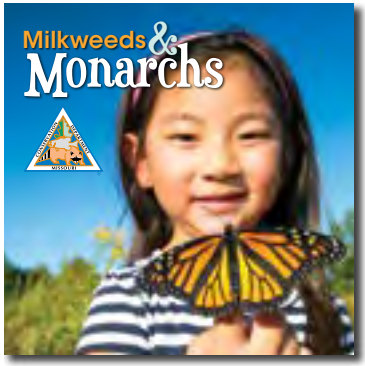

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This 16-page booklet helps you conserve the endangered monarch butterfly by planting beautiful native Missouri milkweeds on your property.

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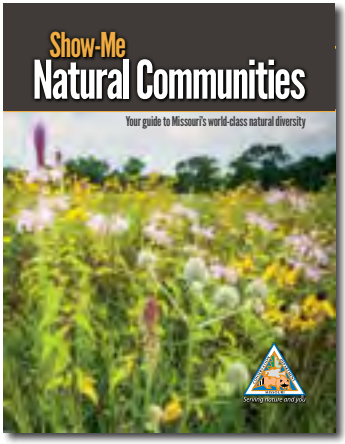
Twelve pages of color photos and landscape designs for sun, shade, and rain gardens will help you choose the right native Missouri wildflowers, grasses, and shrubs for your yard.



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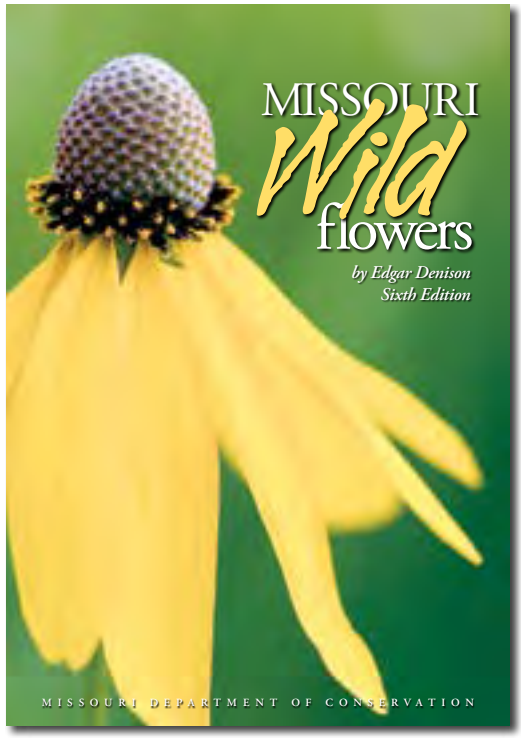
If you enjoy identifying roadside wildflowers, you will treasure the revised sixth edition of *Missouri Wildflowers* by Edgar Denison. The 2008 update includes colored tabs for easy browsing of species grouped by color. 297 species pictured; a total of 460 species described. Softcover, 296 pages.



Roadside wildflowers like tall goldenrod support native pollinators.
Photo by Noppadol Paothong

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