



Bioretention and Rain Garden Plant Guide

A listing of recommended plants for growing a
bioretention garden in the Omaha region.



From the authors of "Bioretention Gardens -
A Manual for Contractors in the Omaha Region
to Design and Install Bioretention Gardens"

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Plants for Bioretention Gardens

Bioretention gardens, also called rain gardens, are part of an overall Green Infrastructure approach to stormwater management in the Omaha region. The goal of Green Infrastructure is to manage stormwater where it falls through the use of soil, plants, and land features in a way that preserves and mimics natural processes. Bioretention gardens are one of the most effectual Green Infrastructure practices in urban environments. These gardens, in addition to their functional properties, also create attractive natural amenities for sites and for the surrounding community.

This plant list provides a good starting point to help you become familiar with some of the best plants for creating functional bioretention and rain gardens. Most of the plants listed are native to the Omaha region and Eastern Nebraska. There are some non-native plants listed in the guide that are ecologically well-adapted and non-invasive that will also work well in your garden.

This list is continually evolving with more and more plants experiences and new plants becoming available commercially. The plants selected for this guide were chosen for their ability to withstand fluctuating water levels in varying soil types and typographies and for their viability in full sun, partial sun, or mostly shaded environments.

For more comprehensive information about designing, planning, constructing and maintaining bioretention gardens, please refer to the following companion publication:

“Bioretention Gardens Manual - A Manual for Contractors in the Omaha Region to Design and Install Bioretention Gardens” by Ted Hartsig and Steven N. Rodie.



Bioretention Garden Plants

There is a broad range of plants suitable for use in bioretention gardens within the Omaha region. This chapter includes a series of tables that summarize plants by type and intended use in the garden, as well as individual plant summaries and images, section contributors, and references.

Plant availability can change from year to year so no single plant list should be considered as all-inclusive. The list found here gives a starting point for creative selection and use of plants for green infrastructure projects. For future reference, visit OmahaStormwater.org or water.unl.edu/stormwater for supplemental information to this list.

The following points have been considered for the plants listed in this section:

- Nebraska and regionally native plants comprise the bulk of the list due to the inherent benefits associated with their use. Plants that are native to the local environment greatly improve overall plant success, and as a result, improve project success.
- Adapted non-invasive, non-native plants that have proven themselves in regional green infrastructure projects are included to broaden plant diversity and availability. Plants with these first two points are referred to as Native or Ecologically Well-Adapted Non-Invasive Plants (NEWANIP) in the City of Omaha's Environmental Element.
- Cultivars and hybrids with specific ornamental characteristics, growth habits, and disease or drought resistances are commonly available for many plant species on the list. Selecting and breeding plants for specific characteristics may lessen genetic diversity, but attributes such as compact habit or disease resistance may be worth considering when expectations for garden aesthetics must be met. Do not assume similar growth habits between different cultivars or hybrids, as they can vary significantly.
- Consideration for the plant's tolerance for water inundation in the garden is critical and needs to be noted during the design stage.

Here are general tips to help ensure a successful bioretention garden:

- Shrub use should be carefully considered to ensure they blend in well with the function and look of the garden. Where space allows, they should be used to complement forbs and grass masses, frame and provide backdrops for gardens, and provide food and cover for wildlife.
- Garden locations beyond the top of berms do not require plants adapted to inundation so other well-suited landscape plants may be considered for selection. Always remember to consider soil conditions and maintenance requirements of the project when making planting choices.

This plant list includes forbs, grasses, sedges, rushes, and shrubs. Designers should consider all plant attributes and be sure to choose the right plant for the right location in the garden. Doing so will enhance seasonal interest and garden structure. Plants listed in this guide are generally available regionally. Less commonly known species should still be attainable through well-known physical and online sources. Many native plants are becoming more readily available due to increased interest and demand. This plant guide has been adapted into an interactive online plant resource, visit OmahaStormwater.org to take a look.

The following plant table has been developed to help you design your garden. The table includes the following information:

- **Common and Scientific Names** – Common names are easiest for public reference but scientific names are critical to ensure that plant selection and ordering is accurate.
- **Regional Native Status** – All listed states have been verified through the USDA Plant Database and the Flora of Nebraska, 2007. The region includes Nebraska, South Dakota, Minnesota, Iowa, Illinois, Missouri, Kansas, Wyoming, and Colorado. This list assigns native status based on plant species, which does not technically include cultivars or hybrids.
- **Exposure** – Full sun means a minimum of six to eight hours of sunlight per day. Part shade is three to six hours of direct sunlight per day or filtered sunlight all day. Full shade is less than three hours of direct sunlight per day.
- **Soil Type** – Categories include sand, loam, or clay. For use as a general factor in plant selection and indicator of plant adaptability to poor soil conditions.
- **Soil Moisture** – Ranges from wet to dry. For use as a general classification to match plants to conditions.
- **Recommended Garden Location** – Correlates to soil moisture information and ability to tolerate standing water in the garden. Ponding duration can vary widely. Plants recommended for garden sides may also be adaptable to bottom areas of the garden where water naturally infiltrates quickly.

- **Approximate Mature Height** – Plants are listed by categories ranging from groundcover to more than 60 inches for perennials and grasses, and from 2 to 3 feet to more than 15 feet for shrubs.
- **Bloom and Seasonal Interest** – Average bloom times and approximate colors for forbs are noted by month. Grasses, sedges, and rushes are noted for their growing periods as well as fall and winter interest., fall and winter interest. Shrubs are noted for flower season, fall color and winter interest.

Plant Summaries and Images

Information summaries and thumbnail images are provided for many plants. The summaries include the following categories and are intended to supplement the table information for more specific plant selection criteria:

- **Form** – Relative shape
- **Foliage** – Color, type, and overall texture
- **Flowers** – Color, size, shape, fragrance and average bloom season
- **Height and Spread** – Average size height and width of mature plants
- **Garden Exposure and Location** – Range of sun and shade conditions as well as designation of garden location relative to soil moisture and inundation tolerance. This includes the bottom of garden, sides of garden, or top of berm surrounding garden, which includes outside of water storage basin.
- **Comments and Cautions** – Additional information based on personal experiences of manual authors and contributors. In particular, carefully consider whether to use plants that lean or may be too tall for small gardens, or tend to appear weedy, aggressive or invasive.
- **Alternative Species and Cultivars** – Provides additional choices in plants that fill similar garden roles, expand flower colors or have special characteristics, may be easier to locate in the trade, etc.

Plant Table and Summaries Key		
 Exposure	 Location	 Bloom Color
 Soil Type	 Tolerance	 Foliage
 Soil Moisture	 Height	 Stem

Shrubs and Small Trees

Plant Names		Native Status	Exposure			Soil Type			Soil Moisture					Location				Approximate Height						Bloom and/or Interest Season												
Common Name	Botanical Name	Species Regionally Native (by State)	Full Sun	Part-Shade	Shade	Sand	Loam	Clay	Wet	Moist	Average	Dry	Moderate to High Salt Tolerance	Bottom	Sides	Top of Berm	Groundcover	6" - 12"	12" - 24"	24" - 36"	36" - 48"	48" - 72"	6' - 10'	10' - 15'	March	April	May	June	July	August	September	October	November	Dec. - Feb.		
red chokeberry	Aronia arbutifolia		x	x			x	x	x	x	x		x	x	x							x	x													
Erecta, Brilliantissima	Aronia arbutifolia cultivars		x	x			x	x	x	x	x		x	x	x							x	x													
black chokeberry	Aronia melanocarpa	IA	x	x			x	x		x	x	x	x	x	x							x	x													
Iroquois Beauty, Viking, Autumn Magic	Aronia melanocarpa cultivars		x	x			x	x		x	x	x	x	x	x							x	x													
buttonbush	Cephalanthus occidentalis	NE	x	x			x	x	x	x	x			x	x	x							x	x												
Sugarshack buttonbush	Cephalanthus occidentalis 'Sugarshack'		x	x			x	x	x	x	x			x	x	x						x														
redtwig dogwood, redosier dogwood	Cornus sericea	NE	x	x		x	x	x	x	x	x	x		x	x	x						x	x													
Isanti, Arctic Fire, Firedance	Cornus sericea cultivars		x	x		x	x	x	x	x	x	x		x	x	x						x	x	x												
American hazelnut	Corylus americana	NE	x	x			x	x		x	x	x			x	x																				
northern bush honeysuckle	Diervilla lonicera	IA	x	x	x	x	x	x		x	x	x			x	x						x														
southern bush honeysuckle	Diervilla sessilifolia		x	x	x		x	x	x	x	x			x	x																					
Butterfly, Copper	Diervilla spp. cultivars		x	x	x		x	x	x	x	x			x	x																					
smooth hydrangea	Hydrangea arborescens	IA, KS		x	x	x	x	x		x	x		x	x	x							x														
Annabelle, White Dome	Hydrangea arborescens cultivars			x	x	x	x	x		x	x		x	x	x																					
Virginia sweetspire	Itea virginica	MO	x	x	x		x	x	x	x	x		x	x	x																					
Henry, Little Henry, Merlot	Itea virginica cultivars		x	x	x		x	x	x	x	x		x	x	x																					
ninebark	Physocarpus opulifolius	NE	x	x			x	x		x	x	x			x	x																				
Diablo, Summer Wine, Coppertina	Physocarpus opulifolius cultivars		x	x			x	x		x	x	x			x	x																				
shrub rose	Rosa cultivars		x	x		x	x	x		x	x	x	x		x	x						x	x													
dwarf blue arctic willow	Salix purpurea 'Nana'	IA	x			x	x	x		x	x		x	x	x																					
elderberry	Sambucus canadensis	NE	x	x		x	x	x		x	x		x	x	x								x													
Ural false spirea	Sorbaria sorbifolia	IA	x	x			x	x		x	x	x			x	x																				
white meadowsweet	Spiraea alba	SD, IA	x	x			x	x		x	x		x	x	x							x														
arrowwood viburnum	Viburnum dentatum	IA	x	x			x	x	x	x	x		x	x	x																					
Blue Muffin, Autumn Jazz	Viburnum dentatum cultivars		x	x			x	x	x	x	x		x	x	x																					
American cranberrybush	Viburnum opulus var. americanum	NE	x	x			x	x		x	x		x		x																					
Hahs, Wentworth, Red Wing	Vib. opulus var. americanum cultivars		x	x			x	x		x	x		x		x																					
blackhaw viburnum	Viburnum prunifolium	IA	x	x			x	x		x	x		x		x																					

Achillea millefolium

common yarrow



Form: spreading mounds of low mat-like foliage; flowers on stalks above foliage

Foliage: bright green to slightly gray or dusty green; finely divided; fine texture; leaves to 12" long

Flowers: flat heads up to 4" across; millefolium white; cultivar colors range from white to pink, rose, yellow, gold, red or orange; June -Sept.

Comments and Cautions: straight species can spread aggressively by rhizomes; use cultivars and other species to lessen spreading

Additional Species and Cultivars: millefolium cultivars ('paprika,' 'summer pastels,' 'terra cotta,' and 'anquelique'); hybrid cultivars ('coronation gold,' 'moonshine')



Full Sun



Part Shade



Top



Side



24"

Height



36"

Spread

Amorpha canescens

leadplant



Form: small, semi-woody to woody, irregular

Foliage: fine-textured, compound leaves with small silvery green leaflets

Flowers: racemes 2 to 4 inches long, blue to red-violet, fragrant; June-July

Comments and Cautions: cut back to within 6 inches of base in early spring to encourage full growth; extensive deep roots enhance drought adaptability



Full Sun



Top



Side



36"

Height



36"

Spread

Amorpha nana

fragrant false indigo, dwarf wild indigo



Form: compact erect shrub; semi-woody to woody

Foliage: fine-textured, compound green leaves

Flowers: dense racemes of purple pea-like flowers; fragrant; June-July

Comments and Cautions: drought-resistant; known for fragrant flowers; rabbits may cause winter damage



Full Sun



Top



Side



12-36"

Height



24-36"

Spread

Amsonia hubrichtii

arkansas amsonia



Form: open upright vase

Foliage: very fine, needle-like leaves; excellent yellow fall color

Flowers: light blue, star-shaped; April-May

Comments and Cautions: deep root system holds soil; spreads readily but not aggressively; cut back after flowering



Full Sun



Part Shade



Top



Side



30"

Height



30"

Spread

Amsonia illustris

shining bluestar



Full Sun



Part Shade



Top



Side



Height 36"



Spread 36"



Form: erect to mounded

Foliage: shiny thick leathery leaves; excellent yellow fall color

Flowers: light blue, star-shaped; April to May

Comments and Cautions: deep root system holds soil; spreads readily but not aggressively; cut back after flowering

Additional Species and Cultivars: A. ciliata, A. tabernaemontana var. tabernaemontana

Anemone canadensis

windflower



Full Sun



Part Shade



Side



Bottom



Height 12-24"



Spread 24-36"



Form: spreading low foliage; flowers on stalks above foliage

Foliage: deeply lobed basal leaves; whorled 3- to 5-parted leaves on flower stems

Flowers: white 2-inch diameter flowers; May-June

Comments and Cautions: will spread aggressively by underground rhizomes to form colonies under good growing conditions; effective groundcover

Aquilegia canadensis

American columbine



Full Sun



Part Shade



Top



Side



Height 24"



Spread 24"



Form: rounded mound of basal foliage; flower stems erect, branching

Foliage: gray-green; compound leaves; medium texture

Flowers: nodding yellow (sepals) and red (spurs) blooms; April-June

Comments and Cautions: very vigorous and easily grown but short-lived; can spread quickly by reseeding and will hybridize with other columbines; hybrids and cultivars also appropriate

Additional Species and Cultivars: A. canadensis 'Corbett'; A. caerulea Rocky Mountain columbine; 'Dragonfly' hybrids, 'Music' hybrids, 'Songbird'

Aralia racemosa

spikenard



Part Shade



Shade



Side



Height 48"



Spread 36"



Form: Large, spreading

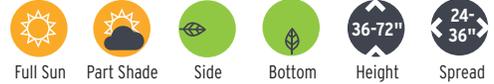
Foliage: compound leaves, bold texture

Flowers: large white plumes in July-August followed by clusters of dark purple fruit

Comments and Cautions: slowly spreads by underground rhizomes; highly organic soil beneficial

Arnoglossum atriplicifolium

pale Indian plantain



Form: upright

Foliage: thick, leathery, coarsely toothed basal leaves; stems and lower leaf surfaces covered with whitish bloom

Flowers: tiny, white, tubular-shaped, in flat-topped clusters; August-September

Comments and Cautions: will self-seed under good growing conditions; significant bee attractor

Additional Species and Cultivars: *Cacalia suaveolens* (false Indian plantain) is native to Iowa, adapted to similar garden conditions

Aruncus dioicus

white goat's beard



Form: rounded, shrub-like

Foliage: compound leaves; dark green; feathery bold texture

Flowers: small, cream-colored, in dense spikes up to 12" long

Comments and Cautions: use as backdrop or specimen plant, low moisture combined with wind and sun will cause foliage to burn

Additional Species and Cultivars: 'Child of Two Worlds,' 'Kneiffii' is a smaller cultivar

Asarum canadense

wild ginger



Form: spreading groundcover; rhizomatous

Foliage: dull green, heart-shaped to kidney-shaped, hugging the ground; bold texture

Flowers: urn-shaped, brownish purple; under the leaves and not showy; April-May

Comments and Cautions: tolerant of dry conditions in shade once established

Asclepias incarnata

swamp milkweed



Form: tall, rather open habit, usually unbranched except in upper part of stems

Foliage: dark green, narrow leaves with pointed tips; medium texture; milky sap when stems are broken, but not to the same extent as common milkweed

Flowers: Rounded terminal clusters 4" to 5" across; flowers dusty pink to rose, with the "skirt" darker pink, lightly fragrant; July-August

Comments and Cautions: excellent for attracting butterflies; will self-seed

Additional Species and Cultivars: 'Cinderella,' 'Ice Ballet'

Asclepias tuberosa

butterfly milkweed



Form: mounding upright to rounded, deep-rooted

Foliage: fine texture

Flowers: orange, flat-topped clusters followed by boat-shaped pods; June-August

Comments and Cautions: will not tolerate wet soils; excellent habitat plant with deep taproot and hardy once established; tends to emerge late in spring; susceptible to aphids; wonderful attractant for pollinators



Full Sun



Full Sun



Top



Side



Height



Spread

Aster dumosus 'Wood's Blue,' 'Wood's Pink,' 'Wood's Purple'

Wood's aster series



Form: compact rounded plants

Foliage: dark green; fine texture

Flowers: masses of single daisy-like flowers in blue, pink, purple; September-October

Comments and Cautions: excellent disease resistance (especially powdery mildew)

Additional Species and Cultivars: A. novae-angliae, New England Aster; 'Purple Dome,' 'Alma Potschke,' and 'September Ruby'; taller cultivars can be pinched or sheared to encourage branching and reduce height



Full Sun



Part Shade



Top



Side



Height



Spread

Astilbe chinensis var. pumila

dwarf Chinese astilbe



Form: low rounded mound; spreads slowly by stolons

Foliage: compound leaves, fine-textured; deep green with russet tones on margins and undersides

Flowers: conical, fluffy pink panicles in July-August; ornamental through fall if seed heads are allowed to remain

Comments and Cautions: excellent groundcover; best astilbe for drought tolerance, but performs poorly if allowed to dry out

Additional Species and Cultivars: A. chinensis 'Visions in Pink,' 'Visions in Red'



Part Shade



Shade



Sides



Bottom



Height



Spread

Athyrium filix-femina

lady fern



Form: mounding, vigorous; spreads very slowly by rhizomes

Foliage: deciduous; lacy lance-shaped leaves; fine-textured

Height/Spread: reaches largest size in consistently moist, shady soil

Comments and Cautions: relatively easy fern to grow, but slow to establish; tolerant of variable soil conditions; prefers high organic soils

Additional Species and Cultivars: A. filix-femina var. angustum 'Lady in Red;' smaller, more upright form with deep red stems



Part Shade



Shade



Side



Bottom



Height



Spread

Baptisia australis

blue false indigo



Form: woody base; bushy and upright to rounded

Foliage: compound leaves, blue-green to green changing to silver-dark gray in late fall and persisting through winter; medium texture

Flowers: indigo blue, pea-like on terminal spikes, May-June; followed by showy persistent gray-black seed pods

Comments and Cautions: effective in naturalized settings; extremely deep fleshy taproot makes relocation difficult; slow to establish

Additional Species and Cultivars: *Baptisia australis* var. *minor*, smaller in all its parts to a height and spread of 24 to 36 inches

Boltonia asteroides

boltonia



Form: strongly upright and slightly rounded; dense mass of self-supporting stems

Foliage: narrow gray-green leaves; medium-fine texture

Flowers: white, 1-inch "daisies" cover plant late August-September; attracts butterflies

Comments and Cautions: No staking required to hold form into winter

Additional Species and Cultivars: 'Snowbank,' more compact, heavier flowering; *Boltonia asteroides* var. *latisquama* 'Jim Crockett,' compact to a height and spread of 24 inches and pale violet flowers with yellow discs from June through September

Callirhoe involucrata

purple poppy-mallow, wine cups



Form: sprawling groundcover

Foliage: dissected leaves on stems up to 3 feet long

Flowers: bright magenta, cup-shaped blooms with white centers; very showy; June-September

Comments and Cautions: excellent for hot dry areas; shear or mow plants to rejuvenate tired foliage; avoid disturbing taproot

Chelone glabra

turtlehead



Form: dense and upright

Foliage: dark green shiny leaves, almost leathery

Flowers: terminal clusters of white tubular flowers resembling turtle heads; August-October

Comments and Cautions: attracts hummingbirds and butterflies; highly organic soil with good moisture is beneficial

Additional Species and Cultivars: *C. lyonii* 'Hot Lips,' smaller, more compact plant with deep pink flowers

Coreopsis verticillata

threadleaf coreopsis



Full Sun



Part Shade



Top



Side



18-24"

Height



<30"

Spread



Form: upright, spreading by stolons to form large dense colonies

Foliage: threadlike, dark green; fine texture

Flowers: bright yellow notched rays and yellow disc; loose bunches; June-August

Comments and Cautions: drought tolerant and carefree once established; sandy to loamy soil promotes spread; shear after blooming

Additional Species and Cultivars: 'Zagreb,' 'Golden Showers' are tallest and strongest cultivars

Dalea purpurea

purple prairie clover



Full Sun



Top



24"

Height



<24"

Spread



Form: clustered, branched stems; upright vase shape

Foliage: tiny, feathery, compound leaves; dense but fine texture

Flowers: tiny, red-violet to hot pink clustered in a hoop or donut shape; flowers open from base to tip for long season interest; June-August

Comments and Cautions: deep taproot and extremely drought tolerant; requires excellent drainage, should be located in relatively dry locations

Additional Species and Cultivars: 'Stephanie' more compact, greater flower production

Echinacea angustifolia

narrow-leaved coneflower



Full Sun



Top



18"

Height



<36"

Spread



Form: narrowly upright; flower heads carried on single stems

Foliage: oblong leaves covered with stiff hairs; medium-bold texture

Flowers: pale purple to pink; small number of drooping petals surround dark cone; June-August

Comments and Cautions: upright stems show to advantage among grasses; cones provide winter bird food

Echinacea purpurea

purple coneflower



Full Sun



Part Shade



Top



Side



24-48"

Height



<24"

Spread



Form: basal mound of foliage; flowers on erect individual stalks

Foliage: rough-surfaced bright to dark green leaves; variable size

Flowers: purple-pink rays held flat around large brown-orange disk

Comments and Cautions: late season foliage may look rough but can be removed; reseeds and spreads readily; cones provide winter bird food

Additional Species and Cultivars: wide range of cultivars and hybrids with variable heights and bloom colors; orange and yellow hybrids have limited life span and hardiness

Eupatorium "Phantom"

phantom joe pye weed



Full Sun



Part Shade



Side



Bottom



Height 24-48"



Spread 12-24"



Form: clump-forming

Foliage: dark green leaves in whorls

Flowers: terminal, dome-shaped compound inflorescence; mid-summer to early fall; seed heads may persist into winter

Comments and Cautions: attractive to butterflies; hybrid cross between *Eupatorium maculatum* 'Atropurpureum' and *Eupatorium rugosum*

Eutrochium dubium 'Little Joe'

Little Joe pye weed



Full Sun



Part Shade



Side



Bottom



Height 36-48"



Spread 24-36"



Form: rounded to upright compact mound

Foliage: serrated dark green leaves whorled around stems; medium texture

Flowers: tiny mauve purple flowers in flat-topped inflorescences; August-September

Comments and Cautions: attractive to butterflies; compact form well-suited to smaller gardens; more open, less upright habit in full shade

Eutrochium purpureum

sweet joe pye weed



Part Shade



Shade



Side



Bottom



Height 48-72"



Spread 48"



Form: erect, mound-forming

Foliage: serrated whorled dark green leaves; bold texture

Flowers: tiny pinkish-purple flowers; vanilla-scented; in large compound inflorescences; July-September

Comments and Cautions: very attractive to butterflies; needs lots of space; good for back or center of larger gardens; can be cut back by one-third to reduce height and encourage branching

Additional Species and Cultivars: 'Little Red' more compact, 36 to 48 inches tall, better for small gardens

Eutrochium purpureum subsp. maculatum 'Gateway'

Gateway spotted joe pye weed



Full Sun



Part Shade



Side



Bottom



Height 48-60"



Spread 48"



Form: erect, mound-forming

Foliage: dark green whorled leaves on red stems

Flowers: tiny rose-pink flowers in 12- to 18-inch terminal inflorescences; July-September; seed heads persist into winter

Comments and Cautions: very attractive to butterflies; best for larger gardens or as a tall backdrop; tolerates more moisture than *E. purpureum* species (sweet joe pye weed)

Filipendula rubra

queen-of-the-prairie



Full Sun



Part Shade



Bottom



60-84"



36"



Form: rounded, flowering stems are upright and slightly arching, seeds to form colonies

Foliage: compound, divided, deep green; medium texture

Flowers: small, pink fragrant; in large terminal plumes; May-June

Comments and Cautions: consistently moist soils keep foliage looking good; staking usually not needed

Gaillardia grandiflora

gaillardia hybrids and cultivars



Full Sun



Top



Side



12-24"



12-24"



Form: rounded basal mounds of foliage; upright flowering stems

Foliage: gray-green leaves, lobed and covered with short hairs

Flowers: 3 to 4 inches composite flowers, rays banded with yellow, orange, red; June-September

Comments and Cautions: root rot potential in poorly drained soil; tends to be short-lived and should be allowed to reseed

Additional Species and Cultivars: *G. aristata*, blanket flower, is native to dry sites in the west; 'Baby Cole,' 'Bijou,' 'Fanfare,' 'Arizona Sun'

Geranium maculatum

wild geranium



Part Shade



Shade



Side



18-24"



18"



Form: mounding

Foliage: palmately lobed leaves, dark green; medium to bold texture

Flowers: 1 inch wide, pink to purple, five-petaled; April-May

Comments and Cautions: can spread aggressively through rhizomes; useful for naturalizing

Geranium sanguineum

bloody cranesbill



Part Shade



Shade



Side



18"



18-36"



Form: mounded, spreading

Foliage: small palmately lobed leaves, dark green turning red in fall; fine texture

Flowers: 1 inch wide, magenta, five-petaled; May-June with some rebloom

Comments and Cautions: spreads slowly and can produce seedlings; fairly drought tolerant once established

Additional Species and Cultivars: 'New Hampshire,' 'Alpenglow'

Helenium autumnale

Helen's flower, sneezeweed



Full Sun



Part Shade



Side



Bottom



36-60"

Height



30"

Spread



Form: erect, mound-forming; stems unbranched

Foliage: dark green; medium texture

Flowers: compound, with small notched yellow rays and a round, dull, yellow raised disk; July-October

Comments and Cautions: stake or cage plants to reduce flopping; shorter, more compact hybrids and cultivars with greater bloom color variety are available; maintain consistent moisture

Additional Species and Cultivars: Most are hybrids; 'Rotgold,' 'Rubinzweg,' 'Wyndley,' 'Mardi Gras'

Heliopsis helianthoides

ox-eye daisy



Full Sun



Part Shade



Side



Bottom



36-60"

Height



24-36"

Spread



Form: mound-forming, upright

Foliage: dark green, serrated leaves; bold texture

Flowers: daisy-like, 2 to 3 inches in diameter; yellow rays, brown centers; June-August

Comments and Cautions: species can reseed aggressively; plants require support if shade is excessive; aphids can be a problem

Additional Species and Cultivars: 'Summer Sun' and 'Summer Nights' recommended cultivars for better flower production; 'Summer Nights' has dark red-brown stems

Hemerocallis spp. (many cultivars)

daylily



Full Sun



Part Shade



Shade



Top



Side



6-36"

Height



60"

Spread



Form: low and spreading; arching mounds; groundcover

Foliage: long linear leaves; bright green; medium texture

Flowers: highly variable in bloom time and color; some fragrant; May-October; depending on selection, some are repeat bloomers

Comments and Cautions: foliage works for spreading groundcover and can be mowed to produce new leaves in midsummer; no winter interest

Additional Species and Cultivars: dozens of cultivars and hybrids available; consider length and season of bloom (choose different cultivars to extend bloom time), ability to re-bloom, fragrance, and height

Hibiscus moscheutos

rose mallow, hardy hibiscus



Full Sun



Part Shade



Top



Side



Bottom



36-60"

Height



24-36"

Spread



Form: broad and rounded; shrub-like

Foliage: lobed leaves up to 10 inches long; very bold texture

Flowers: up to 12 inches wide, overlapping petals; color range includes pinks, reds, white, yellow; July-October

Comments and Cautions: cut back only in late spring to protect crown in winter and encourage dense basal growth; flowers last only a day but are profuse; avoid windy locations

Additional Species and Cultivars: 'Disco Belle White,' 'Disco Belle Rosy Red,' 'Kopper King,' 'Luna' series, 'Plum Crazy,' 'Fireball,' 'Pink Cloud'

Hosta spp. (many cultivars)

hosta



Part Shade



Shade



Top



Side



Height



Spread

**Form:** mounded to arching; flower stems above foliage**Foliage:** long petioles, smooth or wavy margins; small and pointed to very large and rounded; green, chartreuse, variegated**Flowers:** bell-shaped, white to lavender, variable size on leafless stems; many fragrant; June-September depending on selection**Comments and Cautions:** some cultivars may tolerate sun if adequate moisture is present; most hostas are best planted in part shade to shade**Additional Species and Cultivars:** dozens of cultivars and hybrids available; choices for naturalized, spreading plantings include *H. lancifolia* 'Francee,' 'Ground Master'**Iris sibirica**

Siberian iris



Full Sun



Part Shade



Top



Side



Height



Spread

**Form:** upright mounds**Foliage:** swordlike narrow green leaves; effective yellow fall color; medium texture**Flowers:** three standards and three falls held on stems above foliage; purple to blue with yellow and white cultivars; May-June**Comments and Cautions:** nice foliage after bloom; less susceptible to borers and rot than tall bearded iris; divide in spring**Additional Species and Cultivars:** 'Caesar's Brother,' 'Butter and Sugar'**Iris versicolor**

blue flag iris



Full Sun



Part Shade



Bottom



Height



Spread

**Form:** mound-forming, arching and upright**Foliage:** blue-green narrow leaves**Flowers:** violet-blue with white and yellow markings; May-July**Comments and Cautions:** best grown in moist soil; will slowly naturalize**Liatris ligulistylis**

meadow blazing star



Full Sun



Part Shade



Side



Height



Spread

**Form:** upright and mound-forming**Foliage:** basal tufts of narrow green leaves; medium texture**Flowers:** fluffy, thistle-like, deep rose-purple flowers on columnar inflorescences; flowers open at same time within the flower head; July-September**Comments and Cautions:** excellent for butterflies and birds; tends to flop and may need staking; can be difficult to establish

Liatris pycnostachya

prairie blazing star



Form: mounded foliage, upright and curved flower stems

Foliage: narrow leaves, mostly at base of plant; medium texture

Flowers: fluffy, deep, rose-purple flowers crowded on dense spikes; bloom top to bottom; July-August

Comments and Cautions: tallest *Liatris* species, tends to flop and may need staking

Additional Species and Cultivars: *L. lancifolia* (lanceleaf blazing star) grows 24 to 36 inches tall; adapted to wet ditches and sand-loam soil; difficult to find in trade



Full Sun



Side



Bottom



36-48"



18"

Liatris spicata

dense blazing star



Form: mounded foliage; upright flower spikes

Foliage: narrow dark green linear leaves; medium-fine texture

Flowers: small magenta flowers on stems up to 18 inches; bloom top to bottom; July-September; seed heads effective into fall

Comments and Cautions: cultivars longer-blooming and/or more compact than the species; best performing *Liatris* in moist soils; slow to establish

Additional Species and Cultivars: 'Floristan White,' 'Floristan Violet,' 'Kobold'



Full Sun



Top



Side



Bottom



24-36"



18"

Lobelia cardinalis

cardinal flower



Form: open, upright mounds of foliage

Foliage: dark green leaves; bold texture

Flowers: clustered, deep red tubular flowers on vertical stems; July-September

Comments and Cautions: can be relatively short-lived; must have consistent moisture; attractive to hummingbirds and butterflies

Additional Species and Cultivars: *L. 'Monet Moment'*; magenta late summer-fall bloom; grows 24 to 36 inches; well-adapted to moist/dry location; hybrid lobelia generally longer lived than species



Part Shade



Shade



Bottom



24-36"



24"

Lobelia siphilitica

great blue lobelia



Form: rounded to upright; mound-forming

Foliage: finely toothed, light green leaves; medium texture

Flowers: showy blue tubular flowers in dense racemes; July-September

Comments and Cautions: may be short-lived under stressed conditions; must have consistent moisture



Full Sun



Part Shade



Side



Bottom



24-36"



24"

Matteuccia struthiopteris

ostrich fern



Part Shade



Shade



Bottom



36-72"



60-96"



Form: mound-forming, upright and arching; spreads by rhizomes

Foliage: medium green, dissected, and feathery fronds; medium-fine texture

Flowers: n/a

Comments and Cautions: foliage quality declines over summer; maintain consistent moisture; goes dormant in early fall

Mimulus ringens

monkey flower



Full Sun



Part Shade



Side



Bottom



12-36"



9-12"



Form: rhizomatous growth habit; erect square stems

Foliage: oblong sharply-toothed leaves

Flowers: in pairs, each flower to 1" long; lilac-purple, two-lipped (resemble snapdragon or face of a smiling monkey); bloom June to September

Comments and Cautions: best in part shade; used for naturalizing

Monarda didyma

bee balm



Full Sun



Part Shade



Side



Bottom



36"



inf



Form: upright, spreads by aggressive stolons to form large colonies

Foliage: bright green, toothed, and aromatic; powdery mildew can be a problem on straight species; medium-bold texture

Flowers: tubular, two-lipped flowers up to 2 inches long in dense clusters; colors include pink, purple, red, and white

Comments and Cautions: select cultivars with mildew resistance and provide good air circulation; some may spread less aggressively; attractive to hummingbirds

Additional Species and Cultivars: *M. didyma* 'Jacob Cline,' 'Marshall's Delight,' 'Petite Pink,' 'Petite Delight,' *M. fistulosa*, wild bergamot

Oenothera fruticosa

sundrops



Full Sun



Side



12-18"



12-24"



Form: upright; clustered unbranched stems

Foliage: dull green, lance-shaped leaves

Flowers: bright yellow, four-petaled flowers bloom during day; June-July

Comments and Cautions: can spread rapidly but typically not invasive; can attract birds

Oenothera macrocarpa

Missouri evening primrose



Form: sprawling and spreading

Foliage: narrow silver-green leaves with ruby-red stems throughout growing season

Flowers: 3 to 5 inches across, solitary, mildly fragrant, bright yellow, open for one day; spring to late summer bloom followed by showy winged seed pods 2 to 3 inches long

Comments and Cautions: may self-seed in optimum growing conditions; has been shown to be highly adaptable in both dry and wet soils

Additional Species and Cultivars: 'Comanche Campfire'



Full Sun



Top



Side



12"



12-24"

Osmunda cinnamomea

cinnamon fern



Form: upright and arching; will form colonies

Foliage: bright green; finely divided fronds; fine texture; may turn golden in moist summers; rough and brown by August in drought conditions

Flowers: n/a

Comments and Cautions: tolerant of wide variety of soils; highly organic soil is beneficial



Part Shade



Shade



Bottom



36"



36"

Penstemon digitalis

smooth beardtongue, penstemon



Form: rosette of foliage; vertical flower stems

Foliage: thick, oblong leaves; medium texture, evergreen to semi-evergreen

Flowers: two-lipped, white to pink, tubular; seed heads are dark brown and showy; May-June

Comments and Cautions: good drainage promotes longevity; reseeds easily

Additional Species and Cultivars: 'Husker Red,' 'Dark Towers' have deep red-purple foliage



Full Sun



Part Shade



Top



Side



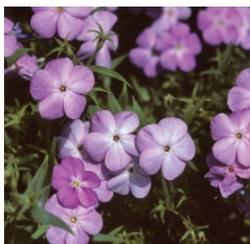
18-30"



18"

Phlox pilosa

prairie phlox



Form: weakly spreading groundcover; colonizes by underground stolons

Foliage: dark green linear leaves; fine-textured

Flowers: 1 inch wide, pale pink to lavender petals with tubular center; very fragrant; April-May, and sporadic rebloom

Comments and Cautions: higher drought-resistance than other phlox

Additional Species and Cultivars: 'Eco Happy Traveler' is more compact, stronger bloomer



Full Sun



Part Shade



Top



Side



18"



24"

Physostegia virginiana

obedient plant



Full Sun



Part Shade



Top



Side



36-48"

Height



24-36"

Spread



Form: upright habit, spreads

Foliage: sharp-toothed narrow leaves

Flowers: pinkish tubular flowers; July-September

Comments and Cautions: can be an aggressive spreader and tends to flop, especially in high fertility soils; can be cut back for denser habit

Additional Species and Cultivars: 'Miss Manners' has a clumping habit and pure white flowers; 'Vivid' has rosy-pink flowers and a compact form

Polygonatum biflorum

solomon's seal



Part Shade



Shade



Top



Side



24-36"

Height



24"

Spread



Form: unbranched arching stems, colonizes from rhizomes

Foliage: bright green leaves in flattened pattern on stems; yellow fall color; medium texture

Flowers: small, bell-shaped, white-green; hang under leaves; April-May, followed by blue-black berries

Comments and Cautions: long-lived once established; competes with tree roots

Polygonatum multiflorum 'Variegatum'

variegated Solomon's seal



Part Shade



Shade



Top



Side



24"

Height



24"

Spread



Form: unbranched arching stems, colonizes from rhizomes

Foliage: bright green leaves with white edges in flattened pattern on stems; yellow fall color; medium texture

Flowers: small, bell-shaped, white-green; hang under leaves; April-May, followed by blue-black berries

Comments and Cautions: long-lived once established; competes with tree roots

Pycnanthemum virginianum

virginia mountain mint



Full Sun



Part Shade



Top



Side



Bottom



24-36"

Height



18"

Spread



Form: erect to rounded, bushy

Foliage: narrow, tapered leaves; fine texture

Flowers: profuse flat-topped clusters of small white flowers; July-September

Comments and Cautions: mint-like fragrance from crushed foliage and flowers; excellent for attracting pollinators; can withstand drought

Additional Species and Cultivars: P. tenuifolium

Ratibida pinnata
grayheaded prairie coneflower



Form: upright, narrow, and sparse
Foliage: pinnately divided leaves; bold texture
Flowers: bright yellow, drooping rays; gray raised disk; June-August
Comments and Cautions: best massed or combined with grasses due to sparse habit of individual plants; tallest plants may need support

Rudbeckia fulgida var. sullivantii 'Goldsturm'
goldsturm rudbeckia



Form: upright and mound-forming; spreads by rhizomes
Foliage: dark green foliage, rough-surfaced; medium-bold texture
Flowers: daisy-like with yellow-orange rays and round dark brown center discs; June-September
Comments and Cautions: foliage diseases possible if soil is too wet or air circulation is poor

Rudbeckia laciniata (R. nitida)
goldenglow, green-head coneflower



Form: rounded mounds of foliage; upright and weakly vase-shaped in bloom
Foliage: large, dull green leaves, mitten-shaped lobes; bold texture
Flowers: limp yellow rays, raised green disc; July-September
Comments and Cautions: pinch back for bushier plants to reduce height; plants rarely need support; tolerates heat but not drought
Additional Species and Cultivars: 'Goldquelle,' 'Herbstonne'

Ruellia humilis
wild petunia



Form: open, spreading mound; groundcover
Foliage: bright green leaves, purplish stems and petioles; medium-fine texture
Flowers: small, petunia-like, violet-blue; each lasts one day; June-August
Comments and Cautions: reseeds prolifically; deep root system; nearly maintenance-free groundcover on difficult sites; can be very aggressive

Salvia nemorosa

meadow sage



Full Sun



Part Shade



Top



Side



18-24"

Height



12-18"

Spread



Form: mounded foliage, upright flower stems

Foliage: dull gray-green leaves; medium texture

Flowers: spike-like racemes of violet-blue flowers; May-August if deadheaded

Comments and Cautions: long-blooming if deadheaded; wide variety of hybrids and cultivars; attractive to pollinators

Additional Species and Cultivars: 'Cardonna,' 'Marcus,' 'Purple Rain,' *S. x sylvestris* 'Mainacht'

Sedum (groundcover hybrids and cultivars)

stonecrop, sedum



Full Sun



Part Shade



Top



Upper Side



3-6"

Height



12-24"

Spread



Form: low, sprawling, or creeping groundcover

Foliage: small, thick succulent leaves; variable colors and sizes; fine texture

Flowers: small, star-shaped; size and shape of inflorescences varies; white, pink, yellow; late spring through late summer

Comments and Cautions: best massed and used as groundcover in drier areas

Additional Species and Cultivars: *S. acre*, *S. sexangulare*, *S. kamschaticum*, many others

Sedum spp. (tall hybrids and cultivars)

showy sedum



Full Sun



Part Shade



Top



Side



18-24"

Height



18-30"

Spread



Form: upright to mounded

Foliage: medium leaves; thick and succulent; bright green, blue-green, variegated, purple; medium-bold texture

Flowers: star-shaped; inflorescences vary in shape and size; colors include white, pink, red, bronze

Comments and Cautions: highly drought tolerant; may flop in too much shade or moisture

Additional Species and Cultivars: *S. telephium*, 'Autumn Fire,' 'Carmen,' 'Frosty Fire,' 'Abbeydore,' many others

Silphium integrifolium

cup plant, rosinweed



Full Sun



Part Shade



Top



Side



Bottom



48-72"

Height



24-36"

Spread



Form: upright

Foliage: medium green; leaves vary in size, bold texture

Flowers: yellow rays and disks resemble small sunflowers; in clusters; July-September

Comments and Cautions: tolerates drought once established; naturalizes by reseeding; resinous, gummy sap

Solidago spp. cultivars goldenrod



Form: upright arching stems, many have rhizomes that form colonies

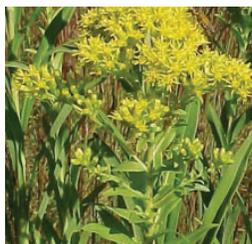
Foliage: dark green, sharply toothed; medium texture

Flowers: tiny yellow flowers in curving, plume-shaped inflorescence; July-September

Comments and Cautions: select shorter, dense cultivars to reduce flopping; excellent plants for attracting pollinators

Additional Species and Cultivars: 'Golden Baby,' 'Cloth of Gold,' 'Crown of Rays,' 'Little Lemon,' 'Wichita Mountains'

Solidago riddellii Riddell's goldenrod



Form: upright, will spread to form colonies

Foliage: dark green; medium texture

Flowers: tiny, bright yellow flowers in dense flat-topped inflorescences; September-October

Comments and Cautions: relatively late-blooming; unusual goldenrod; not tolerant of any dry condition

Solidago rugosa 'Fireworks' Fireworks goldenrod



Form: upright, will spread slowly to form colonies

Foliage: green; medium texture

Flowers: open flat sprays of tiny bright yellow flowers like a shower of sparks; late August-October

Comments and Cautions: tolerates moist to dry soils; one of the latest to bloom; attractive to bees and butterflies

Solidago speciosa showy goldenrod



Form: upright, will spread to form colonies

Foliage: green; medium texture

Flowers: tiny, bright yellow flowers in club-shaped clusters; August-October

Comments and Cautions: very showy flower; attracts bees and butterflies

Symphyotrichum ericoides

heath aster



Form: bushy, compact with many stems

Foliage: long narrow leaves

Flowers: daisy-like, white with yellow centers; September-October

Comments and Cautions: attractive to butterflies; mildew-resistant



Full Sun



Top



Height



Spread

Symphyotrichum novae-angliae

New England aster



Form: clump-forming; upright

Foliage: rough, hairy leaves and stems

Flowers: 1.5" wide, bright purple or light lavender petal-like ray flowers surrounding a central yellow disk; blooms August-September

Comments and Cautions: may self-seed in optimum growing conditions; can flop if allowed to grow to full height; prolific late summer/early fall blooms; species susceptible to powdery mildew; recommend cultivars for shorter, more compact habit and disease resistance

Additional Species and Cultivars: 'Purple Dome'; 'Alma Potschke', Kickin Series cultivars



Full Sun



Top



Side



Height



Spread

Symphyotrichum oblongifolium

aromatic aster



Form: bushy, compact, rounded; spreads slowly by rhizomes to form large mounds

Foliage: small oblong leaves, blue-green to gray-green, covered with short hairs and fragrant when crushed

Flowers: small, daisy-like; violet-blue with yellow center; September-October

Comments and Cautions: attractive to butterflies; rarely needs attention; excellent mildew resistance

Additional Species and Cultivars: 'October Skies,' a shorter cultivar; *A. laevis* fall-blooming, violet rays with yellow centers



Full Sun



Part Shade



Top



Side



Height



Spread

Thalictrum dasycarpum

meadow rue



Form: dense, mound-forming

Foliage: fine-textured foliage, medium green

Flowers: sprays of tiny purplish-white flowers; May-July

Comments and Cautions: intolerant of hot sun and dry soils; may flop and need staking



Part Shade



Shade



Side



Bottom



Height



Spread

Tradescantia bracteata
prairie spiderwort



Form: compact, mound-forming

Foliage: dark green, grass-like leaves; grooved; medium texture

Flowers: rose to purple, three petals and three sepals; each lasts one day; May-July

Comment and Cautions: foliage declines after flowering, cut back for new growth and later flowering

Additional Species and Cultivars: many *T. x andersonii* hybrids for rain gardens, including 'Concord Grape,' 'Purple Dome,' 'Sweet Kate,' 'Blue and Gold'

Tradescantia ohioensis
Ohio spiderwort



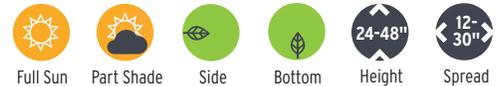
Form: mounded to slightly arching

Foliage: blue-green, arching grass-like leaves; can sprawl by late summer; medium texture

Flowers: open clusters with three rounded petals and three sepals, blue to rose; each lasts one day; May-July

Comments and Cautions: can self-seed and become aggressive

Verbena hastata
blue vervain



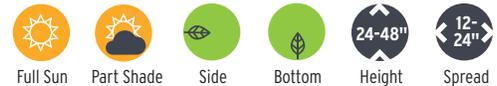
Form: mounded and upright; slowly forms colonies

Foliage: sharply toothed green leaves up to 6 inches long

Flowers: purplish-blue small flowers on slender spikes; July-September

Comments and Cautions: spreads slowly by rhizomes and self-seeding; attracts butterflies

Vernonia fasciculata
common ironweed



Form: erect, fibrous stems

Foliage: smooth narrow leaves with serrated edges; medium texture

Flowers: small, fluffy, purple flowers in clustered heads; July-September

Comments and Cautions: can reseed; cut back in late spring to reduce height; attractive to butterflies

Veronicastrum virginicum

Culver's root



Full Sun



Part Shade



Side



Bottom



48-60"

Height



24-48"

Spread

**Form:** upright to slightly vase-shaped**Foliage:** narrow whorled leaves; medium-bold texture**Flowers:** tiny, white, tube-shaped flowers in slender spikes; bloom from top down; June-August**Comments and Cautions:** may flop and require support; may be too large for small gardens; maintain consistent soil moisture**Waldsteinia fragarioides**

barren strawberry



Full Sun



Part Shade



Shade



Top



3-6"

Height



12"

Spread

**Form:** mat-forming groundcover spreads by rhizomes**Foliage:** small-toothed leaflets; fine texture**Flowers:** small, yellow, five-petaled flowers on separate stems; April-June; fruits resemble small strawberries**Comments and Cautions:** use for shade groundcover; non-native *W. ternata* species is more aggressive and considered invasive**Zizia aptera**

meadow parsnip, heart-leaved alexanders



Full Sun



Part Shade



Side



12-30"

Height



12-18"

Spread

**Form:** upright, mounded**Foliage:** heart-shaped basal leaves, divided stem leaves**Flowers:** tiny yellow flowers in flat-topped clusters resembling carrot flowers on tall stems; May**Comments and Cautions:** tends to be short-lived; foliage declines in summer**Additional Species and Cultivars:** *Z. aurea* (golden alexander) adapted to sun and part shade; grows in small colonies; compound leaves with toothed leaflets and tiny yellow flowers; workhorse plant for some gardens

Andropogon gerardii big bluestem



Form: mound-forming; upright; warm-season native prairie grass

Foliage: green to green-blue; excellent coppery, orange-red fall color

Flowers: terminal, red at emergence; inflorescence resembles turkey's foot

Comments and Cautions: can flop; best away from manicured edges; slower to establish; may self-seed

Additional Species and Cultivars: 'Pawnee,' 'Silver Sunrise' (a hybrid with distinct banding on stems)

Andropogon glomeratus bushy bluestem



Form: clump-forming

Foliage: flattened blue-green leaf blades; coppery-orange fall color persists into winter

Flowers: club-shaped flowers and bushy inflorescences; showy; September bloom

Comments and Cautions: generally intolerant of dry soils; can aggressively self-seed in optimum growing conditions

Bouteloua curtipendula sideoats grama



Form: warm-season native prairie grass; mound-forming with arching flower stems

Foliage: light green to blue-green; fine texture

Flowers: slender arching stems hold individual spikelets in June-July; seed resembles small oats, mostly arranged on one side of stem

Comments and Cautions: very drought tolerant; seeds are fairly persistent

Additional Species and Cultivars: 'Trailway'

Bouteloua gracilis blue grama



Form: warm-season native prairie bunchgrass

Foliage: slender, slightly curled leaves, blue-green color; tan fall color; fine texture

Flowers: thin wiry stems hold flowers and seeds above foliage; inflorescence resembles small comb or moustache; turning to straw in fall and fairly persistent

Comments and Cautions: will self-seed to form low maintenance turf

Additional Species and Cultivars: 'Hachita'

Calamagrostis acutiflora

feather reed grass



Full Sun



Part Shade



Top



Side



48-60"



18-30"



Form: cool-season grass; mounds of foliage and vertical flower stems

Foliage: bright green; emerges early spring; light tan through winter; medium texture

Flowers: June; vertical inflorescence to 12 inches on long stems; tight narrow seed heads; sterile seeds; persistent into mid-winter

Comments and Cautions: upright, long-standing ornamental grass; the straight species is rarely available in the trade; divide every 3 to 4 years

Additional Species and Cultivars: 'Karl Foerster' is a commonly available hybrid; 'Overdam,' 'Avalanche' are variegated; *C. brachytricha* is fall-blooming and not as hardy; *C. stricta* (slimstem reedgrass) grows 12 to 36 inches; adapted to wet sandy soils

Calamagrostis brachytricha

Korean feather reed grass



Full Sun



Part Shade



Side



Bottom



36-48"



24-36"



Form: clump-form, slowly spreading

Foliage: mounded, narrow stiff green leaves

Flowers: pinkish tinged plumes late summer; appear above foliage to 4'

Comments and Cautions: does well in heavy clay soils; prefers moist soil

Calamagrostis canadensis

bluejoint grass



Full Sun



Part Shade



Shade



Side



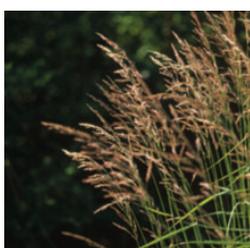
Bottom



24-60"



24-36"



Form: clump-forming; grows from rhizomes and can form a coarse sod

Foliage: numerous slender stems

Flowers: nodding branched inflorescence; purplish turning to tan

Comments and Cautions: stands up well in winter; frequently found with sedges in natural settings; can spread aggressively; broad pH tolerance; resembles reed canary grass

Carex annectens

yellowfruit large (yellow fox) sedge



Full Sun



Part Shade



Side



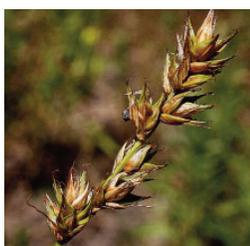
Bottom



12-36"



12-24"



Form: dense clumping

Foliage: narrow grass-like leaves to 24" long

Flowers: green/yellow/brown spikes in late spring

Comments and Cautions: best massed for foliage in moist/wet areas; effective accent; will naturalize

Carex bicknellii
prairie (copper-shouldered) sedge



Form: clump-forming; can colonize

Foliage: narrow and grass-like

Flowers: yellowish green, insignificant, April to July; on stalks up to 36" long; seed heads not showy

Comments and Cautions: relatively tolerant of variable soil moisture (dry to wet); foliage may die back during hot, dry summers; can naturalize

Carex brevior
shortbeak (plains oval) sedge



Form: short rhizomes forming tufts and clumps

Foliage: narrow and grass-like; fine-textured

Flowers: April to July; seeds are unique flat discs, tan when mature

Comments and Cautions: active growth spring and fall during cooler temperatures; adaptable to all conditions (especially dry and/or disturbed)

Carex comosa
longhair sedge



Form: erect, dense growth

Foliage: narrow light green leaves; medium-fine texture

Flowers: insignificant; fruit a nutlet that is showy and bristly

Comments and Cautions: also known as bottlebrush sedge; may be difficult to find

Carex crinita
fringed sedge



Form: mound-forming

Foliage: grass-like, bright green, medium-fine texture

Flowers: insignificant; pendulous seed heads provide habitat value for birds

Garden Exposure and Location: full sun to part shade; bottom

Comments and Cautions: also known as nodding or caterpillar sedge; may be difficult to find

Carex grayii

gray's sedge



Form: clump-forming

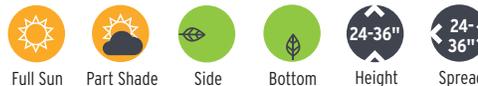
Foliage: semi-evergreen to evergreen; grass-like

Flowers: May-August; interesting showy spiked clustered seed heads; green turning brownish gray and persistent into winter

Comments and Cautions: adequate moisture required in full sun

Carex hystericina

bottlebrush (porcupine) sedge



Form: tuft-forming; rhizomatous colonies

Foliage: narrow, grass-like

Flowers: May-July; green prickly spikelets turning brown

Comments and Cautions: almost always naturally occurs in wetlands; growth during cool seasons, dormant when hot; seed valued by wetland birds

Carex morrowii cultivars

Ice Dance, Old Gold



Form: mounding and spreading slowly to form open colonies

Foliage: narrow, with a distinct V-shape; dark green with white edges; evergreen to semi-evergreen; medium-fine texture

Flowers: insignificant; May; seed heads rarely produced

Comments and Cautions: not native; needs protection from drying winds in winter and consistent moisture

Additional Species and Cultivars: Other Japanese sedge cultivars include 'Old Gold' and 'Variegata'

Carex muskingumensis

palm sedge, muskingum sedge



Form: mounded, dense, clump-forming; spreads by rhizomes and seed; groundcover

Foliage: light green, grass-like leaves; yellow after frost; medium-fine texture

Flowers: insignificant; arching tan seed heads persist through summer

Comments and Cautions: will flop in full shade; performs best with consistent moisture; not widely available commercially

Carex rosea rosy sedge



Form: thick clumps; short rhizomes may form sod

Foliage: very fine-texture; softly-arching, grass-like leaves

Flowers: spikes of reddish flowers/seed heads in May-June

Comments and Cautions: valued for use in dry shade; adaptable to wet and dry conditions; cool-season growth

Carex scoparia broom sedge



Form: tight bunching; vertical

Foliage: alternate narrow leaves; bright green; medium-fine texture

Flowers: insignificant; 1-inch spikelets

Comments and Cautions: also known as pointed broom sedge; not widely available commercially

Carex sprengeii sprengel's (long-beaked) sedge



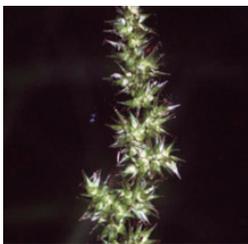
Form: clumping

Foliage: fine, grass-like

Flowers: June-August

Comments and Cautions: native to woodlands

Carex stipata common fox sedge



Form: slender, open tufts or bunches

Foliage: grass-like; blades tend to arch and flop; medium-fine texture

Flowers: clusters of brown seed capsules

Comments and Cautions: also known as awlfruit or owlfruit sedge

Carex stricta

tussock sedge



Form: rhizomatous to clump-forming

Foliage: evergreen; narrow and grass-like

Flowers: reddish-brown blooms May-June; not showy

Comments and Cautions: forms tussocks (clumps) in wet conditions; spreading into large colonies under drier conditions; good groundcover for light shade areas



Full Sun



Part Shade



Side



Bottom



Height
12-36"



Spread
12-24"

Carex texensis

Texas sedge



Form: rhizomatous; grows in mat-like clumps

Foliage: fine-textured, grass-like; semi-evergreen

Flowers: small green spikes in May

Comments and Cautions: a good shade groundcover for naturalizing; adaptable to full sun with irrigation



Part Shade



Shade



Top



Side



Bottom



Height
3-6"



Spread
12-18"

Carex vulpinoidea

brown fox sedge



Form: dense mounds or clumps

Foliage: grass-like, arching; bright green; fine texture

Flowers: golden-colored seed heads effective May-July

Comments and Cautions: may be weedy and can spread rapidly



Full Sun



Part Shade



Side



Bottom



Height
12-24"



Spread
12-24"

Eleocharis palustris

spikerush



Form: spreads by rhizomes

Foliage: leafless green stems grow from base of plant

Flowers: greenish-brown, inconspicuous spikelets on stems, June-September; yellow-brown seed heads

Comments and Cautions: may self-seed



Full Sun



Part Shade



Bottom



Height
24-48"



Spread
12-24"

Juncus balticus

baltic rush



Form: rhizomatous; dense growth
Foliage: tall wiry stems; bladeless leaves at plant base
Flowers: panicles in May-July; brown capsule fruit
Comments and Cautions: typical in wet spring/dry fall conditions; highly tolerant of soil moisture conditions and drought

Juncus effusus

common rush, soft rush



Form: clump-forming and spreading by rhizomes and seed
Foliage: cylindrical, dark green stems; no actual leaves; yellow in fall before frost; fine texture
Flowers: insignificant small, greenish-brown, scaly; July-September
Comments and Cautions: can be somewhat aggressive in good growing conditions; restrict root zone to control spread
Additional Species and Cultivars: J. effusus 'Spiralis,' spiral rush, is widely available but not well-suited to large naturalized plantings

Juncus tenuis

path rush



Form: mounded or tufted with arching flower stems
Foliage: narrow, bright green, grass-like leaves in basal tufts; turns brown with frost; fine texture
Flowers: not significant; small greenish or brownish flowers in dense spikes or heads; May-July
Comments and Cautions: may naturalize readily and become weedy; more tolerant of drought and compaction than other rushes

Panicum virgatum

switchgrass



Form: broad dense upright mounds; warm season native; spreads by rhizomes and seed
Foliage: bright green to blue-green; medium texture
Flowers: airy, cloudlike panicles above foliage; red, silver, white, or blue appearance; July-August; panicles persist into fall
Comments and Cautions: can reseed aggressively; consider planting after establishment of other garden plants to help limit spreading; may flop in rich soils
Additional Species and Cultivars: 'North Wind,' 'Shenandoah,' 'Rehbraun,' 'Prairie Fire,' 'Cloud Nine,' 'Dallas Blues,' 'Cheyenne'

Schizachyrium scoparium

little bluestem



Full Sun



Part Shade



Top



Side



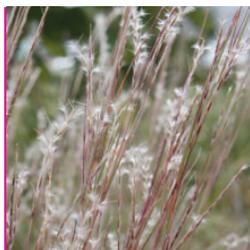
24-36"

Height



18-36"

Spread



Form: clump-forming warm-season native grass; upright to somewhat vase-shaped

Foliage: narrow, thin blue-green to gray-green leaves; excellent orange, red, gold, or tan fall color; medium-fine texture

Flowers: reddish racemes at ends of slender peduncles; September; seed heads fluffy, white, and curled; remain through winter months

Comments and Cautions: excellent drought-tolerant plant; will flop in shade or too much moisture; cut back by half in late spring to reduce flopping; spreads by seed to form dense stands

Additional Species and Cultivars: 'Blaze,' 'The Blues,' 'Blue Heaven'

Sorghastrum nutans

Indiangrass



Full Sun



Part Shade



Top



Side



Bottom



48-84"

Height



48"

Spread



Form: clump-forming warm season native grass; broadly upright; blooms rise above foliage

Foliage: green, rough-textured leaves; yellow to gold fall color; medium texture

Flowers: copper-colored panicles open August-September; bright yellow pollen sacs evident; copper-tan seed heads remain through winter

Comments and Cautions: will self-seed; shorter cultivars available

Additional Species and Cultivars: 'Indian Steel,' 'Sioux Blue'

Sporobolus heterolepis

prairie dropseed



Full Sun



Part Shade



Top



Side



15-18"

Height



24"

Spread



Form: mounded, slightly arching, and vase-shaped; warm-season native prairie grass

Foliage: very fine, light green leaves; fall color can be brilliant orange to tan; foliage persists through winter; fine texture

Flowers: open panicles, 2 to 5 inches long on slender stalks; vanilla-scented; August-September; delicate seed heads

Comments and Cautions: extremely drought tolerant once established; may take years to bloom

Aronia arbutifolia red chokeberry



Form: vase-shaped; may sucker to form colonies
Foliage: glossy green leaves; red fall color; medium texture
Flowers: small; white to pale pink in open clusters; May
Fruit: abundant glossy bright red fruit persistent into winter; showy on some cultivars
Comments and Cautions: best fruit production in full sun; remove root suckers to control spread
Additional Species and Cultivars: 'Elegantissima' more compact than species, with better fall color and larger, more numerous fruit; 'Erecta' has an upright habit

Aronia melanocarpa black chokeberry



Form: rounded; may sucker to form colonies in good growing conditions
Foliage: glossy green leaves; red fall color; medium texture
Flowers: small; white to pale pink in open clusters; May
Fruit: blackish-blue, berry-like fruit persistent into winter; showy on some cultivars; edible
Comments and Cautions: best fruit production in full sun
Additional Species and Cultivars: 'Morton' (Iroquois Beauty) and 'Autumn Magic' are compact selections; 'Viking' and 'Nero' have showy large fruit; var. elata is larger by several feet

Cephalanthus occidentalis buttonbush



Form: open and rounded
Foliage: large glossy green leaves; bold texture
Flowers: tiny white flowers packed into 1-inch round flower heads; fragrant; June-July
Fruit: rounded, stalked balls, persistent through winter
Comments and Cautions: attracts bees and butterflies
Additional Species and Cultivars: 'Sputnik' is a compact form, 'Sugarshack' (compact, 4 to 6' ht.)

Cornus sericea redtwig dogwood



Form: upright, multi-stemmed, and spreading or suckering; stoloniferous red stems provide winter interest
Foliage: smooth green leaves with distinct veins; reddish-purple to yellow fall color; medium texture
Flowers: small white flowers in flat-topped clusters; May-June and intermittently through summer
Fruit: whitish to purple drupe fruit clusters in late summer, taken readily by birds
Comments and Cautions: bird habitat value; multi-season interest; best stem color produced on new stems; cultivars are smaller, more dense, or variegated; some disease and insect issues
Additional Species and Cultivars: 'Isanti,' 4 to 6 feet and finer texture; 'Allemands,' compact and dense; 'Cardinal,' large with brilliant red winter twigs; 'Farrow' (Arctic Fire), 3 to 4 feet, 'Firedance' (compact, 3 to 4' ht.)

Corylus americana

American hazelnut



Full Sun



Part Shade



Top



Side



10-12'



8-10'



Form: rounded; suckering to form spreading colonies

Foliage: medium to large, toothed, dark green leaves; good fall color potential; bold texture

Flowers: showy male catkins, tiny female flowers in April

Fruit: nut in papery husk; late summer into fall

Comments and Cautions: high habitat value; tough and interesting plant

Diervilla lonicera

northern bush honeysuckle



Full Sun



Part Shade



Shade



Side



Bottom



3'



3'



Form: mounded; suckering to form loose colonies

Foliage: dark green leaves; yellow to red fall color; medium texture

Flowers: small, bell-shaped, fragrant flowers, yellow changing to orange; June-August

Fruit: brown, not showy

Comments and Cautions: can be relatively short-lived but rejuvenates by suckering

Additional Species and Cultivars: 'Copper' grows to 3' x 3'; *D. sessilifolia* 'Butterfly,' Butterfly southern bush honeysuckle, profuse yellow flowers, grows to 3'-6' height and width.

Hydrangea arborescens

smooth hydrangea



Part Shade



Shade



Side



Bottom



6-8'



6-8'



Form: rounded; erect, usually unbranched stems that sucker to form colonies

Foliage: large, dull green leaves with pointed tips; bold texture

Flowers: symmetrical rounded heads 4 to 6 inches across; buds are chartreuse, opening to small white fertile flowers and persisting through winter; June-September

Fruit: none

Comments and Cautions: species has been all but replaced by showy cultivars but reversion often occurs; cut close to ground each spring for best flowering and foliage

Additional Species and Cultivars: 'Annabelle,' with round heads 8 to 12 inches across; 3 to 5 feet by 5 feet or more; 'Dardom' (White Dome) with showy sterile flowers sprinkled into domes of fertile flowers; 3 to 5 feet; 'Invincibelle Spirit,' deep pink

Itea virginica
Virginia sweetspire



Form: arching, somewhat rounded; suckering roots form loose colonies
Foliage: dark green leathery leaves; dark red fall color lasts into November; medium texture
Flowers: drooping, elongated clusters of tiny, white, fragrant flowers; June-July
Fruit: not showy
Comments and Cautions: will naturalize in ideal conditions; may be chlorotic in alkaline soils; cultivars have better flowering and fall color than species
Additional Species and Cultivars: 'Henry's Garnet,' 'Merlot,' 'Sprich' (Little Henry) is a dwarf

Physocarpus opulifolius
ninebark



Form: rounded to vase-shaped, and broadly spreading with exfoliating bark; species has rather coarse appearance
Foliage: dull green leaves with large marginal teeth; medium texture
Flowers: small white to pink flowers in flat clusters; May-June
Fruit: reddish seed capsule clusters late summer into fall
Comments and Cautions: very hardy and deep-rooted; can be rejuvenated by cutting to ground
Additional Species and Cultivars: 'Monlo' (Diablo), 'Summer Wine,' 'Copper Glow,' and 'Coppertina' all have various shades of deep wine-red or red-copper foliage and are less prone to suckering than the species; 'Nanus' is dwarf

Rosa cultivars
shrub rose



Form: highly variable, groundcover to large rounded or arching shrub
Foliage: compound leaves, shiny, leathery, or rough; potential for fall color
Flowers: highly variable in structure, color, bloom season, and fragrance
Fruit: variable fruit (hips) size, color, and persistence
Comments and Cautions: select disease-resistant hardy cultivars; not tolerant of poor drainage

Salix purpurea 'Nana'
dwarf purpleosier willow



Form: compact, rounded; fine-textured, dense, pale purple to silver winter twigs
Foliage: narrow blue-green leaves; fine texture
Flowers: showy grayish-white catkins in early spring before foliage; April-May
Fruit: not showy
Comments and Cautions: susceptible to many disease and insect problems, especially if drought-stressed; works well in a naturalistic setting; not long-lived

Sambucus canadensis

elderberry



Form: rounded and suckering to form large colonies; coarse plant with thick, mostly unbranched, weak stems

Foliage: bright green compound leaves; bold texture

Flowers: small, fragrant, white flowers in large flat clusters; June-July

Fruit: small, edible, purple berry-like fruit in large clusters; late summer through fall

Comments and Cautions: high habitat value (flowers, fruit); produces better flowers and fruit in full sun; spreads by seed

Additional Species and Cultivars: 'Laciniata,' cut foliage and smaller habit; 'Aurea,' gold foliage

Sorbaria sorbifolia

Ural false spirea, sorbaria



Form: upright, semi-woody or suffrutescent; suckering rapidly or form indefinite colonies

Foliage: compound, doubly serrate, almost fernlike bright green leaves; medium texture

Flowers: small white flowers in 10-inch long pointed panicles; June-July and sporadically throughout summer

Fruit: not effective

Comments and Cautions: extremely effective for erosion control; showy during growing season; cut to ground in early spring

Additional Species and Cultivars: 'Sem' is a dwarf selection that grows with less suckering

Spiraea alba

white meadowsweet



Form: upright, numerous unbranched stems; mounded overall form

Foliage: narrow-toothed green leaves; medium-fine texture

Flowers: cone-shaped terminal clusters of tiny white flowers; June-August

Fruit: small pod-shaped follicles; late summer into fall

Comments and Cautions: more adaptable to wet soil than other spireas; do not allow to dry out

Viburnum dentatum

Arrowwood viburnum



Form: upright, rounded to vase-shaped, multi-stemmed; may sucker weakly

Foliage: shiny green leaves, distinctly toothed; good fall color potential

Flowers: flat-topped clusters of small white flowers; no fragrance; May-June

Fruit: blue-black, berry-like fruit clusters late summer; rapidly taken by birds

Comments and Cautions: use cultivars for best fruiting, size, and fall color

Additional Species and Cultivars: 'Autumn Jazz,' fall color, good fruit set; 'Blue Muffin,' compact habit, dense fruit; many others

Viburnum opulus var. americanum (V. trilobum)

American cranberrybush



Form: upright, rounded, spreading; may sucker or root from prostrate stems

Foliage: lobed green leaves; red to yellow fall color; medium texture

Flowers: showy flat-topped flower structures composed of tiny white fertile flowers surrounded by large sterile flowers; May-June

Fruit: clusters of edible red drupe fruit; very showy in late summer through fall

Comments and Cautions: generally fewer problems than with European cranberrybush (*V. opulus*); cultivars valuable for compact growth and prolific fruiting

Additional Species and Cultivars: 'Wentworth,' 'Hahs,' 'JN Select' (Red Wing)



Full Sun



Part Shade



Top



Side



8-12'



8-12'

Viburnum prunifolium

blackhaw viburnum



Form: upright, multi-stemmed shrub or small tree

Foliage: glossy dark green leaves; reddish purple fall color

Flowers: small white flowers in flat-topped clusters, non-fragrant; May-June

Fruit: showy, edible, blue-black, berry-like fruit; persists fall into winter

Comments and Cautions: may sucker in ideal conditions; excellent plant for larger gardens

Additional Species and Cultivars: 'Summer Magic,' foliage emerges with bronze edge; *V. rufidulum*, rusty blackhaw or southern blackhaw



Full Sun



Part Shade



Top



Side



12-15'



6-12'

Photo Citations

- Achillea millefolium* Steven N. Rodie
Amorpha canescens Steven N. Rodie
Amorpha nana Sally and Andy Wasowski,
Lady Bird Johnson Wildflower Center
Amsonia hubrichtii Courtesy Missouri Botanical Garden PlantFinder
Anemone canadensis Mrs. W.D. Bransford, Lady Bird Johnson
Wildflower Center
Andropogon glomeratus Robert H. Mohlenbrock, @ USDA-NRCS PLANTS
Database/ USDA SCS. 1989. Midwest wetland
flora: Field office illustrated guide to plant
species. Midwest National Technical
Center, Lincoln
Aronia arbutifolia Sally and Andy Wasowski,
Lady Bird Johnson Wildflower Center
Arnoglossum atriplicifolium Sally and Andy Wasowski,
Lady Bird Johnson Wildflower Center
Asarum canadense Albert Vick, Lady Bird Johnson
Wildflower Center
Aster dumosus 'Wood's Blue'
(Pink and Purple) Weston Nurseries, www.WestonNurseries.com
Astilbe chinensis 'Pumila' Steven N. Rodie
Athyrium filix-femina Sally and Andy Wasowski,
Lady Bird Johnson Wildflower Center
Baptisia australis Steven N. Rodie
Boltonia asteroides Steven N. Rodie
Bouteloua curtipendula Steven N. Rodie
Bouteloua gracilis Steven N. Rodie
Calamagrostis acutiflora Steven N. Rodie
Calamagrostis brachytricha Courtesy Nebraska Statewide Arboretum
Calamagrostis canadensis Robert H. Mohlenbrock, @ USDA-NRCS PLANTS
Database/ USDA SCS. 1989. Midwest wetland
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Callirhoe involucrata Steven N. Rodie
Carex bicknellii Photo by John Hilty, Illinois Wildflowers
Carex comosa Robert H. Mohlenbrock, @ USDA-NRCS PLANTS
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Carex crinita Robert H. Mohlenbrock, @ USDA-NRCS PLANTS
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Carex grayi Photo by John Hilty, Illinois Wildflowers
Carex hystericina Photo by John Hilty, Illinois Wildflowers
Carex morrowii Courtesy Missouri Botanical Garden PlantFinder
Carex muskingumensis Courtesy Missouri Botanical Garden PlantFinder
Carex scoparia Robert H. Mohlenbrock, @ USDA-NRCS PLANTS
Database/ USDA SCS. 1989. Midwest wetland
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Carex sprengei Courtesy Nebraska Statewide Arboretum
Carex stipata Robert H. Mohlenbrock, @ USDA-NRCS PLANTS
Database/ USDA SCS. 1989. Midwest wetland
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species. Midwest National Technical
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Carex stricta Photo by John Hilty, Illinois Wildflowers
Carex texensis Courtesy Nebraska Statewide Arboretum
Carex rosea Courtesy Nebraska Statewide Arboretum
Carex vulpinoidea Robert H. Mohlenbrock, @ USDA-NRCS PLANTS
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Cephalanthus occidentalis Courtesy Missouri Botanical Garden PlantFinder
Chelone glabra Steven N. Rodie
Coreopsis verticillata Sally and Andy Wasowski,
Lady Bird Johnson Wildflower Center
Cornus sericea 'Isanti' Courtesy Missouri Botanical Garden PlantFinder
Corylus americana Sally and Andy Wasowski,
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Dalea purpurea Mrs. W. D. Bransford, Lady Bird
Johnson Wildflower Center
Diervilla lonicera Sally and Andy Wasowski,
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Diervilla sessilifolia Sally and Andy Wasowski,
Lady Bird Johnson Wildflower Center
Echinacea angustifolia Steven N. Rodie
Echinacea purpurea Steven N. Rodie
Eleocharis palustris Robert H. Mohlenbrock, @ USDA-NRCS PLANTS
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species. Midwest National Technical
Center, Lincoln
Eupatorium dubium 'Little Joe' Steven N. Rodie
Eupatorium 'Phantom' Weston Nurseries, www.WestonNurseries.com
Eupatorium purpureum George Bruso, Lady Bird Johnson
Wildflower Center
Eupatorium purpureum subsp. *maculatum*
..... Courtesy Missouri Botanical Garden PlantFinder
Filipendula rubra Sally and Andy Wasowski,
Lady Bird Johnson Wildflower Center
Gaillardia xgrandiflora Courtesy Missouri Botanical Garden PlantFinder
Geranium maculatum Mrs. W. D. Bransford, Lady Bird
Johnson Wildflower Center
Geranium sanguineum Courtesy Missouri Botanical Garden PlantFinder
Helenium autumnale Steven N. Rodie
Heliopsis helianthoides Sally and Andy Wasowski,
Lady Bird Johnson Wildflower Center
Hemerocallis (various species and hybrids) Steven N. Rodie
Hibiscus moscheutos Courtesy Missouri Botanical Garden PlantFinder
Hosta (various species and hybrids) Steven N. Rodie
Hydrangea arborescens 'Annabelle' Steven N. Rodie
Iris sibirica Steven N. Rodie
Iris versicolor Sally and Andy Wasowski, Lady Bird Johnson
Wildflower Center
Itea virginica Steven N. Rodie
Juncus balticus Robert H. Mohlenbrock, Robert H. Mohlenbrock,
hosted by the USDA-NRCS PLANTS Database /
USDA NRCS. 1995. Northeast wetland flora: Field
office guide to plant species. Northeast National
Technical Center, Chester
Juncus effusus Courtesy Missouri Botanical Garden PlantFinder
Juncus tenuis Robert H. Mohlenbrock, @ USDA-NRCS PLANTS
Database/ USDA SCS. 1989. Midwest wetland
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species. Midwest National Technical
Center, Lincoln
Liatris ligulistylis Bernie Bengston, Lady Bird Johnson
Wildflower Center

<i>Liatris pycnostachya</i>	Sally and Andy Wasowski, Lady Bird Johnson Wildflower Center
<i>Liatris spicata</i>	Stefan Bloodworth, Lady Bird Johnson Wildflower Center
<i>Lobelia cardinalis</i>	Sally and Andy Wasowski, Lady Bird Johnson Wildflower Center
<i>Lobelia siphilitica</i>	Steven N. Rodie
<i>Matteuccia struthiopteris</i>	Sally and Andy Wasowski, Lady Bird Johnson Wildflower Center
<i>Mimulus ringens</i>	Photo by John Hilty, Illinois Wildflowers
<i>Monarda didyma</i>	Sally and Andy Wasowski, Lady Bird Johnson Wildflower Center
<i>Oenothera fruticosa</i>	Albert F. W. Vick, Lady Bird Johnson Wildflower Center
<i>Oenothera macrocarpa</i>	Sally and Andy Wasowski, Lady Bird Johnson Wildflower Center
<i>Osmunda cinnamomea</i>	Sally and Andy Wasowski, Lady Bird Johnson Wildflower Center
<i>Panicum virgatum</i>	Steven N. Rodie
<i>Penstemon digitalis</i>	Sally and Andy Wasowski, Lady Bird Johnson Wildflower Center
<i>Phlox pilosa</i>	Sally and Andy Wasowski, Lady Bird Johnson Wildflower Center
<i>Physocarpus opulifolius</i>	Sally and Andy Wasowski, Lady Bird Johnson Wildflower Center
<i>Physostegia virginiana</i>	Stephan Bloodworth, Lady Bird Johnson Wildflower Center
<i>Polygonatum biflorum</i>	Steven N. Rodie
<i>Polygonatum multiflorum</i> 'Variegatum'	Courtesy Missouri Botanical Garden PlantFinder
<i>Pycnanthemum virginianum</i>	Steven N. Rodie
<i>Ratibida pinnata</i>	Sally and Andy Wasowski, Lady Bird Johnson Wildflower Center
<i>Rosa</i> cultivars	Steven N. Rodie
<i>Rudbeckia fulgida</i> var. <i>sullivantii</i> 'Goldsturm'	Steven N. Rodie
<i>Rudbeckia laciniata</i> (nitida)	Steven N. Rodie
<i>Ruellia humilis</i>	Sandy Smith, Lady Bird Johnson Wildflower Center
<i>Salix purpurea</i> 'Nana'	Courtesy Missouri Botanical Garden PlantFinder
<i>Salvia nemorosa</i>	Courtesy Missouri Botanical Garden PlantFinder
<i>Sambucus canadensis</i>	Joseph A. Marcus, Lady Bird Johnson Wildflower Center
<i>Schizachyrium scoparium</i>	Steven N. Rodie
<i>Sedum</i> (groundcover hybrids and cultivars)	Steven N. Rodie
<i>Sedum</i> (tall hybrids and cultivars)	Steven N. Rodie
<i>Silphium integrifolium</i>	Sally and Andy Wasowski, Lady Bird Johnson Wildflower Center
<i>Solidago</i> cultivars	Steven N. Rodie
<i>Solidago riddellii</i>	Courtesy Missouri Botanical Garden PlantFinder
<i>Solidago rugosa</i> 'Fireworks'	Steven N. Rodie
<i>Solidago speciosa</i>	Sally and Andy Wasowski, Lady Bird Johnson Wildflower Center
<i>Sorbaria sorbifolia</i>	Courtesy Missouri Botanical Garden PlantFinder
<i>Sorghastrum nutans</i>	Steven N. Rodie
<i>Spiraea alba</i>	Mrs. W. D. Bransford, Lady Bird Johnson Wildflower Center
<i>Sporobolus heterolepis</i>	Steven N. Rodie
<i>Symphyotrichum oblongifolius</i>	Courtesy Missouri Botanical Garden PlantFinder
<i>Symphyotrichum novae-angliae</i>	Jennifer Anderson, hosted by the USDA-NRCS PLANTS Database
<i>Thalictrum dasycarpum</i>	Sally and Andy Wasowski, Lady Bird Johnson Wildflower Center

<i>Tradescantia bracteata</i>	Mrs. W. D. Bransford, Lady Bird Johnson Wildflower Center
<i>Tradescantia ohioensis</i>	Sally and Andy Wasowski, Lady Bird Johnson Wildflower Center
<i>Verbena hastata</i>	Mariann Watkins, Lady Bird Johnson Wildflower Center
<i>Vernonia fasciculata</i>	Steven N. Rodie
<i>Veronicastrum virginicum</i>	Steven N. Rodie
<i>Viburnum dentatum</i>	Courtesy Missouri Botanical Garden PlantFinder
<i>Viburnum opulus</i> var. <i>americanum</i>	Courtesy Missouri Botanical Garden PlantFinder
<i>Viburnum prunifolium</i>	Courtesy Missouri Botanical Garden PlantFinder
<i>Waldsteinia fragarioides</i>	George Bruso, Lady Bird Johnson Wildflower Center
<i>Zizia aptera</i>	Sally and Andy Wasowski, Lady Bird Johnson Wildflower Center
Front Cover	Andy Szatko
Back Cover	Andy Szatko
Pages 3	Andy Szatko
Pages 4	Steven N. Rodie
Pages 18	Steven N. Rodie
Pages 40	Steven N. Rodie
Pages 48	Steven N. Rodie
Pages 52	Steven N. Rodie
Pages 60	Andy Szatko
Pages 64	Steven N. Rodie

Plant Information Resources

University of Nebraska-Lincoln NebGuides

Available online at extension.unl.edu/publications; applicable information includes:

- G1759, Stormwater Management: Plant Selection for Rain Gardens in Nebraska
- G1060, Black Spot of Roses (recommended disease-resistant roses for Nebraska)
- G1074, Wildflowers for the Home Landscape: Perennials for Sunny Sites

Publications

- Flora of the Great Plains by Robert B. Kaul, Steven Rolfsmeier, and David Sutherland, published by University Press of Kansas, 2007.
- The Blue Thumb Guide to Raingardens—Design and Installation for Homeowners in the Upper Midwest by David Dods, Rusty Schmidt, and Dan Shaw, published by Waterdrop Innovations, LLC, 2007.

Wildlife damage prevention information

- Voles: www.icwdm.org/wildlife/voles.asp
- Deer: www.icwdm.org/wildlife/deer.asp
- Rabbits: www.icwdm.org/wildlife/rabbit.asp

Plant Database websites

- USDA (plants.usda.gov)
- Missouri Botanical Garden (www.mobot.org)
- Lady Bird Johnson Wildflower Center (www.wildflower.org)



Form, Function, Benefits

Simply defined, a bioretention garden is a shallow, man-made depression of nearly any size that uses amended soils and a sub-drain system to collect stormwater runoff and conveys it slowly to the nearest outflow or channel.

Bioretention gardens add beauty and function regardless of location – whether it be a park or parking lot. It is the management of water, soil and plants that gives us a beautiful amenity and proven method for controlling stormwater flow where it's needed most.

This manual provides guidance for siting, designing, building, and maintaining bioretention gardens that are specific to the Omaha region, bringing new strategies and ideas for building beautiful gardens that will be successful in Omaha for generations to come.



Environmental Quality Control

OmahaStormwater.org