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Front cover photos clockwise from top left: Platycodon 'Astro Blue', Rudbeckia fulgida, Belamcanda chinensis, Centaurea montana



Liatris spicata

Hundreds of perennials thrive in the bright light and accompanying heat that define sunny sites. Others prefer the protection offered by an east-facing location or some shade from other plants during the hottest time of the day.

If you are unsure how much light a garden location receives, place a stake or other object in the area and observe it throughout a sunny day. Note when the object is in direct light and when it is in shade.

Full sun sites typically receive at least 6 hours of intense, direct light per day.

Part sun sites may receive 4 to 6 hours of direct light per day. Most of the plants listed in this publication require at least 4 to 6 hours of direct light for peak performance.

The intensity of light from the sun changes throughout the day. Early morning light is less intense than mid-day light. For sun-loving perennials, mid-day or afternoon sun is usually best. These perennials thrive on the intense light for best growth and bloom.

PLANNING AND PLANTING

When designing and planting any perennial garden, a few simple guidelines can increase your satisfaction with the final result.

• Define the area for planting. Perennials grouped in beds will be easier to manage and maintain than a few plants scattered here and there. You don't have to dig the whole bed the first year, however, once you've planned what you want, it may be more manageable to dig and plant in sections by expanding the area each year.

- Call before you dig. If you are unsure about the location of utility lines, be sure to call Iowa One Call (800) 292-8989 before digging or amending the soil. You can find some utility lines only a few inches below the surface of the soil.
- Amend the soil lightly if necessary. Adding organic matter or compost prior to planting in a heavy clay type soil aids in plant establishment and performance.
- Find plants that will tolerate similar site and soil conditions. Try not to plant moisture-loving perennials in the same area as drought-tolerant perennials.
- At planting time, place the largest-maturing plants in the back or center of beds and borders and the smallest plants near the front or along the edge. This way all plants can be seen or viewed when they are blooming.

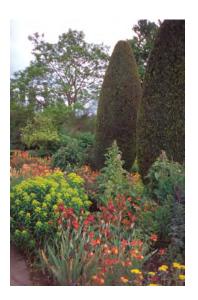




Paeonia 'Laura Magnusson'

- Space plants liberally, giving them plenty of room to reach their mature spread. Check the labels or a perennial guide. Many tall perennials that have mature heights of 5 feet will need to be spaced at least 2 to 3 feet away from other perennial plants.
- Create interest by using both specimen and mass plantings.
 Grouping 3 or 5 plants of the same type together allows them to be seen as a single mass. Scattering more expensive or interesting specimens singly throughout the bed provides variety and gives the eye specific places to stop.
- Repeat colors, shapes, textures, or a few specific plants throughout the area to help lead the eye and unify the planted area. This is most important in larger beds and less important in smaller areas.
- Consider optimum viewing times. Incorporate spring, summer, and fall-blooming perennials in garden areas for continuous bloom. Add bulbs and ornamental grasses to extend the blooming season. Consider plants with winter interest, such as sedum, Russian sage, and ornamental grasses. You might choose spring bloomers for one-fourth of the plants, fall bloomers for another fourth, summer bloomers for one-fourth, and fill the remaining fourth with groundcovers or annuals. Since early spring-blooming perennials and bulbs disappear or go dormant during the summer, place fall-blooming plants nearby to help disguise or cover any bare spots.

- Plan for maintenance. Adding organic mulch, such as bark, cocoabean hulls, pine needles, or wood chips after planting will help reduce weeding and watering chores. Even so, weeding and watering will be necessary until plants mature to their full size. Most perennials benefit from small amounts of fertilizer and/or compost added yearly. Some perennials also will need periodic division.
- Find some time to sit back and enjoy the results. Invite friends and neighbors to view your garden successes (and to help provide solutions to garden failures). Gardens are meant to provide pleasure, after all.





Achillea millefolium 'Salmon Beauty'



Achillea filipendulina



Achillea millefolium 'Summer Pastels'



Achillea filipendulina 'Coronation Gold'

Achillea filipendulina

Fernleaf Yarrow

Height 3 to 5 feet Zones 3–8 Full sun

Light green fern-like leaves complement the flat-topped yellow flowers. Flowers are excellent for drying. Regular deadheading extends the bloom period. Plants prefer well-drained to dry soils and are tolerant of summer heat. Overfertilization will generate excessive growth that will requiresupport.

'Coronation Gold'—shorter hybrid (2 to 4 feet) with golden yellow flowers, aromatic gray-green leaves, excellent heat tolerance



Achillea millefolium 'The Beacon' ('Fanal')

Common Yarrow

Height 2 to 3 feet Zones 4–8 Full sun

Flat-topped clusters of small white, pink, or red flat-topped flowers are 2 to 3 inches in diameter. The aromatic foliage of common yarrow is smaller and more finely divided than fernleaf yarrow. Plant in well-drained soils and deadhead for repeat bloom. Common yarrow is an aggressive spreader that makes an excellent groundcover.

'Cerise Queen' – bright red flowers; 18 inches in height
'Paprika'—red and yellow flowers
'Summer Pastels'—seed-grown plants are a mix of pastel colors
'Appleblossom'—hybrid with pinkish white flowers
'The Beacon' ('Fanal')—hybrid with rich, dark red flowers



Achillea 'Moonshine'

Moonshine Yarrow

Height 1 to 2 feet Zones 3–7 Full sun

A hybrid cultivar with dense, lemon yellow flower clusters and gray-green leaves. Plants prefer well-drained soils and sunny locations. 'Moonshine' is a popular, easy-to-grow variety.



Alcea rosea

Hollyhock

Height 3 to 8 feet Zones 3–7 Full sun

The brilliant blossoms of hollyhock have been gracing gardens for centuries. Flowers can be single or double and are available in various colors. Hollyhocks are biennials and often reseed to colonize garden areas for decades. Staking is normally required for taller cultivars. Plants prefer well-drained soils and good air circulation for best performance and fewer problems with pests and disease. Also shown on back cover.

'Chater's Double'—pink, red, violet, white, and yellow peony-like flowers 'Nigra'—single, dark purple (almost black) flowers 'Powder Puffs'—double red, white, yellow, and rose flowers



Anthemis tinctoria

Golden Marguerite

Height 2 to 3 feet Zones 3–7 Full sun

Plants produce single yellow, 1- to 2-inch diameter, daisy-like flowers above parsley-like foliage. Plants bloom brightly for short periods in late spring and early summer. Cut back plants severely after blooming. Plants prefer well-drained, infertile soils and may become floppy in rich soils.

'E.C. Buxton'—creamy white flowers with yellow centers 'Kelway's Variety'—bright yellow flowers and centers



Arabis caucasica 'Snowcap'

Arabis caucasica

Rockcress

Height 8 to 15 inches Zones 4–7 Full sun

Excellent rock garden plant with cascading or open mat-like habit. Flowers are usually white and borne above succulent, basal foliage in spring. Plants prefer cool locations and well drained soils. Plants often require pruning in summer to remove bare, spindly stems.

var. flore-plena—double white flowers (mostly sterile)
'Pink Pearl'—deep pink flowers
'Snowcap'—large white flowers



Armeria maritima

Sea Thrift

Height 4 to 12 inches Zones 4–8 Full sun

Globe-shaped flower heads of pink, lilac, or white appear atop mounds of dark green, grass-like leaves.

Deadheading encourages repeat bloom. Plants adapt well to dry, infertile soils or rock walls. Sea thrift is also salt tolerant; it is native to seaside cliffs in many parts of England and Europe.

'Alba'—white flowers 'Bloodstone'—deep pink flowers



Artemisia schmidtiana 'Nana'

Silver Mound Artemisia

Height 1 to 2 feet Zones 3–8 Full sun

Silver mound is noted for its finely cut dissected silver foliage. Flowers are insignificant and often removed. The center of the plant often opens up by summer. Plants thrive in hot, sunny areas.

Artemisia stelleriana 'Silver Brocade'

Beach Wormwood

Goundcover-type plants have lobed, silvery foliage.

Artemisia ludoviciana

White Sage

Plants are 2 to 4 feet in height and spread rapidly by underground roots. Frequent division is needed to control growth. 'Silver King' and 'Silver Queen' are two commonly available cultivars.



Asclepias tuberosa

Butterfly Weed

Height 2 to 3 feet
Zones 4–9
Full sun

Clusters of brilliant orange (sometimes red or yellow) flowers atop the 2- to 6-inch lanceolate leaves. Deadheading encourages repeat bloom and prevents seed production. Stems have a milky sap. Monarch caterpillars often eat leaves. Plants abhor wet or overly fertile soils. Plants are extremely slow to emerge in spring, and plantings should be marked. Transplanting is difficult because of the long taproot.

Asclepias incarnata

Swamp Milkweed

This is a variety to use in moist to wet soils. Flowers are pink or creamy white.



Aster novae-angliae 'Alma Potschke'

Aster novae-angliae

New England Aster

Height 4 to 6 feet Zones 4–8 Full sun

Pink, white, and purple flowers with yellow centers brighten the late summer and fall landscape. The dark green, elongated leaves are hairy and clasp the stems. Flowers are long lasting in the garden and as cut flowers. Taller cultivars require staking and are often more suspectible to foliar diseases. Sunny sites and good air circulation between plants can reduce the severity of foliar diseases.

'Alma Potschke'—fuchsia pink flowers on plants that are 3 to 4 feet in height 'Purple Dome'—Dark blue-purple flowers on plants that are 18 to 24 inches in height



Aster novae-belgii 'Woods Dwarf'

Aster novi-belgii

New York Aster

Height 1 to 6 feet Zones 4–8 Full sun

The 2-inch diameter, daisy-like flowers herald the coming of fall. Flower colors include purple, pink, and white. The leaves are dark green, hairless, and up to 5 inches long. Pinching and staking may be required for taller cultivars. Plants prefer well-drained soils and good air circulation between plants.

'Patricia Ballard'—semi-double rose pink flowers

'Prof. Kippenburg'—plants are 9 to 12 inches in height with semi-double lavender-blue flowers

'Woods Dwarf'—blue-purple or pink flowers on plants that are 8 to 12 inches in height



Baptisia australis

False Indigo

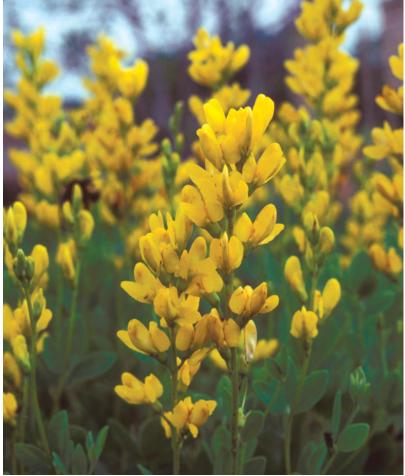
Height 3 to 4 feet Zones 3–9 Full sun

Indigo-blue, pea-like flowers appear in terminal racemes for 2 to 3 weeks in spring. A blue dye can be extracted from the flowers. After flowering, 2- to 3- inch long pea-like pods develop on plants. Smooth, blue-green leaves are divided into three leaflets that resemble pea foliage. Plants prefer well-drained soils and are slow to establish, but are long-lived. A long tap root makes transplanting and division difficult.

Baptisia virdis

Yellow Indigo

Bright yellow pea-like flowers cover plants that are 2 to 4 feet in height.



Baptisia virdis





Belamcanda chinensis
Blackberry Lily
Height 2 to 3 feet
Zones 5–10
Full sun

Star-shaped orange flowers are dotted with dark red spots. The common name comes from the cluster of black seeds in fall that resemble blackberries. The iris-like leaves are up to 10 inches long. Plants prefer well-drained soils and may require mulch in winter. Also shown on front cover.

'Hello Yellow' - pure yellow flowers



Boltonia asteroides

Boltonia

Height 3 to 6 feet Zones 4–9 Full sun

Small white daisy-like flowers are borne profusely in late summer and fall. The linear, grayish-green leaves are rarely seen beneath the hoards of blossoms. Plants are easy to grow and quick to establish in a variety of soils. Staking may be required.

'Pink Beauty'— pale pink flowers 'Snowbank'—pure white flowers



Campanula puntata 'Cherry Bells'



Campanula carpatica 'Blue Clips'

Campanula carpatica

Carpathian Bellflower

Height 6 to 12 inches Zones 3–7 Full sun to part sun

Flowers are blue, upward-facing and bell-shaped, hence the common name. Leaves are oval to triangular and medium to dark green. Plants are low-growing and do best as edging. Carpathian bellflower prefers well-drained, moist soils rich in organic matter. However, plants often tolerate poor conditions as well. Because plants have shallow roots, they should be mulched heavily the first winter to prevent frost heaving.

'Blue Clips' (Blue Chips)—
compact, blue flowers
'White Clips' (White Chips)—
compact, white flowers



Campanula glomerata

Clustered Bellflower

Height 1 to 2 feet
Zones 3–8
Full sun to part sun

Terminal clusters of blue-purple or white flowers are showy for several weeks in midsummer. Slightly toothed and hairy oval leaves complement flowers in leaf axils. Plants prefer moist, well-drained soils but are adaptable to a wide range of sites and soils.

'Joan Elliot'—deep violet-blue flowers 'Superba'—violet flowers on stems that are 2 ½ feet high; heat tolerant



Campanula persicifolia

Peachleaf Bellflower

Height 1 to 3 feet Zones 3–7 Full sun to part sun

Bell-shaped blue, lavender, or white flowers appear for several weeks in 1 foot long racemes in summer. The elongated basal foliage resembles peach leaves; hence its common name. Plants prefer moist, well-drained soils.

'Alba'—white flowers 'Moerheimii'—double white flowers 'Telham Beauty'—pale blue flowers

Campanula poscharskyana

Serbian Bellflower

Small flowers appear in late spring and summer on plants that are 4 to 6 inches in height. Plants perform beautifully cascading along rock or stone walls.

Campanula puntata

Spotted Bellflower

Tubular flowers are single or double in white, pink, mauve, and blue.



Caryopteris × clandonensis

Bluebeard, Blue Spirea

Height 2 to 3 feet Zones 5–8 Full sun

The blue-lavender flowers encircle the stems in late summer. Gray-green leaves complement the flowers. Plants prefer well-drained soils and are late to emerge in spring. Mulch plants heavily in fall to increase winter survival.

'Blue Mist'—light blue flowers
'Heavenly Blue'—dark blue flowers
with dark green leaves



Centaurea montana 'Alba'



Centaurea montana



Centaurea macrocephala

Centaurea montana

Perennial Bachelor's Button

Height 1 to 2 feet Zones 3–8 Full sun to part sun

Open, airy, brilliant blue flower heads are 2 inches in diameter. White and pink flowering cultivars or varieties are also available. Leaves are silvery white to green, pubescent, and arranged on unbranched stems. Deadheading encourages additional blooms. Plants prefer well-drained soils and can be invasive. Also shown on front cover.

'Alba'—white flowers

Centaurea macrocephala

Cornflower

Plants are tall (3 to 4 feet) with bright yellow "powderpuff" flowers.



Chrysanthemum × morifolium (Dendranthema × grandiflora)

Garden Mum

Height 1 to 3 feet Zones 5–9 Full sun

Garden mums are noted for their wide variety of flower colors and forms. The most common garden types have daisy or cushion-type flowers that are available in almost every color except blue or black. The leaves are ovate, lobed, aromatic, and often grayish below. Plants benefit from moist, well-drained soils with regular fertilization. Pinching in late spring encourages well-branched, compact plants and more fall flowers. Garden mums may not survive the winter without protection. In late fall cover plants with several inches of straw.

'Minn Series'—a series of hardy mums developed at the University of Minnesota for northern gardens



Clematis integrifolia

Solitary Clematis

Height 1 to 3 feet Zones 3–7 Full sun

Solitary clematis is a non-vining type clematis with nodding, urn-shaped, blue flowers that are 1 to 2 inches in diameter and last for several weeks in mid- to late summer. The leaves are entire, sessile, and slightly pubescent or hairy. Plants tend to be floppy and may require some staking to remain upright. Solitary clematis is relatively easy to grow in moist, well-drained soils and sunny locations.

Clematis heracleifolia

Tube Clematis

Small blue-lavender flowers with reflexed sepals appearing in late summer.



Coreopsis grandiflora 'Early Sunrise'

Coreopsis grandiflora

Lanceleaf Coreopsis, Tickseed

Height 1 to 2 feet Zones 4–9 Full sun

The yellow, daisy-like flowers are borne repeatedly throughout the summer if deadheaded. Leaves are medium green and mostly basal. Plants are sometimes short-lived but reseed readily. Tickseed prefers well-drained soils. Also shown on page 34.

'Early Sunrise'—semi-double 2-inch diameter yellow flowers 'Sunray'—gold 2-inch diameter double flowers



Coreopsis verticillata 'Moonbeam'

Coreopsis verticillata

Threadleaf Coreopsis

Height 1 to 3 feet Zones 5–9 Full sun

Clusters of 1-inch diameter, yellow, daisy-like flowers are borne throughout the summer without deadheading. The finely divided, thread-like, dark green leaves give plants a fine textured appearance. Plants have few problems in well-drained to dry soils.

'Moonbeam'—soft yellow flowers; 18 to 24 inches in height 'Zagreb'—golden-yellow flowers; 12 to

15 inches in height

Coreopsis rosea

Pink Coreopsis

Plants are approximately 15 inches in height and have pink flowers with threadlike, dark green leaves.

Delphinium × elatum

Delphinium

Height 3 to 6 feet
Zones 3–7
Full sun

Stately, showy flowers are spurred and available in blue, violet, pink, red, white, or yellow. Leaves are palmate and lobed nearly to the base. Plants require moist, well-drained soils containing large amounts of organic matter. Delphiniums are heavy feeders that benefit from regular fertilization. Plants are often short-lived and suffer in extended hot summers. Deadhead for repeat blooms.

'Pacific' hybrids (Round Table Series)—spikes are at least 12 inches long in varying shades of blue, lavender, pink, and white 'Magic Fountains'—large flowers in lilac, pink, white, dark blue, light blue, and bicolor on plants that are 2 to 3 feet in height

'Connecticut Yankee'—heavily branched large flowers in many colors on plants that are 2 to 4 feet in height

Delphinium grandiflorum

'Blue Butterfly'—smaller, more open blue flower spikes that are 1 to 3 feet in height with smaller, more finely dissected foliage; more heat tolerant than other delphiniums.

Delphinium × belladonna

'Bellamosa'—hybrid of *Delphimium* × *elatum* and *Delphinium* grandiflorum that is 3 to 4 feet in height with deeper blue flowers.





Delphinium 'Magic Fountains'



Delphinium grandiflorum 'Blue Butterfly



Dianthus gratianopolitanus 'Spotty'



Dianthus 'Kawara Rose'



Dianthus 'Maiden Pink'

Dianthus × allwoodii

Pinks

Height 3 to 20 inches Zones 4–8 Full sun to part sun

Fragrant flowers have pink, red, white, and yellow petals with fringed edges. Flowers are single, semi-double, or double and often have contrasting centers. Leaves are gray-green, linear, smooth, and form dense mats below the flowers. Plants require well-drained, alkaline soils and are sometimes short-lived. Hot, humid summers or wet soils can damage or destroy plantings.

'Essex Witch'—pink, white, and salmon flower colors 'Frosty Fire'—double red flowers 'Helen'—deep pink flowers; free-blooming 'Doris'—fragrant salmon-pink flowers with deep pink eye

Dianthus gratianopolitanus

Chedder Pinks

flowers

Hybrids are noted for their pink, white, or red flowers.

'Bath's Pink'—soft pink flowers
'Dottie'—white flowers with a maroon
eye
'Spotty'—red and white bicolor flowers

'Tiny Rubies'—dark pink double



Dictamnus albus

Gas Plant

Height 2 to 4 feet Zones 3–7 Full sun

Lemon-scented glossy leaves complement the pure white terminal flowers. Flowers are thought to emit a volatile oil when first in bloom, hence the common name. Plants are slow to establish, but are long-lived. Gas plants prefer moist, well-drained soils and resent being transplanted. All parts of the plant can cause a skin rash in some people.

'Purpureus'—mauve-purple flowers with dark veining in each petal



Digitalis purpurea

Foxglove

Height 3 to 6 feet Zones 4–8 Full sun to part sun

Flowers are large, pendulous, and borne on stalks (racemes) that are 1 to 2 feet long. Individual flowers are commonly lavender, pink, or white and usually have spotted throats. Foxglove is a biennial but readily reseeds. Plants prefer moist, well-drained soils. All parts of the plant are poisonous. Foxglove is the source of the heart drug, digitalis. Also shown on back cover.

'Alba'—white flowers 'Foxy' hybrids—flowers produced the first year from seed; 2 to 3 feet in height 'Excelsior' hybrids—large flowers on

stems that are 5 to 7 feet in height



Echinacea 'Magnus'

Echinacea purpurea

Purple Coneflower

Height 2 to 3 feet Zones 3–8

Full sun to part sun

Solitary pinkish purple flowers resemble badminton shuttlecocks or "birdies." The dark green foliage is 4 to 8 inches long and coarsely toothed. Plants are heat and drought tolerant. Purple coneflower is native to the midwestern United States and often reseeds in the garden. Plants are susceptible to aster yellows.

'Magnus'—rosy-purple, non-droopy flowers

'White Swan'—white flowers on plants that are 1 to 2 feet in height





Echinacea 'White Swan'



Echinops ritro

Globe Thistle

Height 3 to 4 feet Zones 3–8 Full sun

Small flowers are surrounded by blue or white bristly bracts (modified leaves). The globe-like flower heads are 2 inches in diameter. Leaves are dark green with silvery undersides and coarse, armed serrations. Plants prefer well-drained soils and are tolerant of heat and drought. Deadhead for repeat bloom.

'Alba'—white flowers
'Taplow Blue'—shorter plants (2 to 3 feet) with blue flowers



Erigeron 'Merstham Glory'



Erigeron 'Rosa Jewel'

Erigeron hybrids

Fleabane

Height 1 to 3 feet Zones 2–7 Full sun

The aster-like, 1- to 2-inch diameter flowers are available in blue, lavender, pink, and white. Flower forms include single, semi-double, and double. The leaves are elongated and clasp the stems much like some asters. Plants prefer moist soils, but are tolerant of a variety of soils. Cut back plants after blooming to discourage weedy growth.



Eryngium alpinum

Sea Holly

Height 2 to 3 feet Zones 4–7 Full sun

Spiky metallic blue flowers resemble teasel but are much better behaved in the garden. The gray-blue spiny foliage complements the flowers. Plants prefer well-drained to dry soils and can be late to emerge in spring.



Eupatorium purpureum

Joe-Pye Weed

Height 5 to 7 feet Zones 4–9 Full sun to part sun

Many small pinkish purple flowers are clustered in terminal panicles in late summer to early fall. The medium green leaves are whorled, lobed, and often 12 inches long. Plants are easy to establish in moist to wet locations and are often long-lived.

Eupatorium maculatum

'Gateway'—compact cultivar (5 feet) with large flower heads



Eupatorium rugosum 'Chocolate'

Eupatorium rugosum

'Chocolate'— small white flowers appear in fall on stems that are 2 to 4 feet in height and have dark purple foliage



Euphorbia epithymoides (Euphorbia polychroma)

Cushion Spurge

Height 1 to 2 feet Zones 4–8 Full sun to part sun

Showy chartreuse bracts at the tips of stems provide color for a month or more in spring. Leaves are oblong, medium green, and turn reddish in fall. Stems and leaves exude a white milky sap. Plants prefer well-drained to dry soils and reseed freely. In summer, when the plants get leggy, cut back the stems to promote new growth. Also shown on back cover.

Euphorbia dulcis

'Chameleon'— purple to burgundy foliage; also reseeds freely





Filipendula rubra Queen-of-the-Prairie Height 6 to 8 feet Zones 3-7

Full sun The dense panicles of tiny pink flowers resemble puffs of cotton candy. The pinnately compound

leaves are a glossy dark green and

soggy soils and are native to Iowa.

lobed. Plants perform best in moist to





Filipendula vulgaris **Dropwort**

Height 1 to 3 feet Zones 3-7 Full sun to part sun

Large, fern-like foliage complements the creamy white, flat-topped flower clusters. The flowers persist for several weeks in early to midsummer. Moist soils are preferred but plants are tolerant of dry soils once established.

'Flore-Pleno'—showy double flowers 'Rosea'—pink flowering form



Galliardia 'Goblin'

Gaillardia × grandiflora

Blanket Flower

Height 6 to 24 inches Zones 3-10 Full sun to part sun

The daisy flowers have dark red centers and yellow-tipped petals. Individual flowers are 3 to 4 inches in diameter. Deadheading prolongs blooming. Plants prefer well-drained soils and are tolerant of heat and drought.

'Baby Cole'—dwarf 'Burgundy'—wine-red flowers; 2 to 3 feet in height 'Goblin'—dwarf 'Golden Goblin'—pale yellow flowers



Gaura lindheimeri

White Gaura, Whirling Butterflies

Height 3 to 4 feet Zones 5-8 Full sun

Flowers are 1 inch in diameter and have 4 petals arranged on long indeterminate spikes. These airy spikes flutter in the breeze resembling tiny butterflies, hence the common name. Leaves are alternate, lanceolate, medium to dark green and well below the flowers adding to the plants airy appearance. Plants prefer well-drained soils. Mulch heavily for the first few winters to ensure survival.

'Siskiyou Pink'—deep pink flowers



Geranium cinereum 'Ballerina'



Geranium × 'Johnson's Blue'



Geranium macrorrhizum

Geranium sanguineum

Bloody Cranesbill

Height 6 to 12 inches Zones 3–8 Full sun to part sun

Single, 5-petaled flowers are available in white or dark pink. While the majority of blooms appear in late spring, additional blooms appear sporadically throughout the summer. Leaves are palmate, dark green, and sometimes turn a brilliant crimsonred in fall. Once established, plants tolerate hot, dry sites.

'Album'—white flowers
'Alpenglow'—rose-red flowers
var. striatum ('Lancastriense')—
pale pink flowers
'Max Frei'—purple pink flowers
There are several other garden wo

There are several other garden worthy perennial geraniums. Below is a sampling of a few species or hybrids that are commonly available.

Geranium macrorrhizum 'Ingwersen's Variety'

Bigroot Geranium

Plants spread by rhizomes and have large aromatic leaves with pale pink flowers.

Geranium × '*Johnson*'s *Blue*' Clear blue flowers are produced on stems 15 to 18 inches tall.

Geranium cinereum

'Ballerina'—mounding geranium (4 to 6 inches tall); pink petals are marked with dark veins



Gypsophilia paniculata

Baby's Breath

Height 2 to 3 feet Zones 3–7 Full sun

Airy clusters of tiny white or pink flowers are favored in cut and dried bouquets. Narrow, gray-green leaves are mostly basal and covered when plants are flowering. Plants require well-drained to dry soils. Staking may be necessary.

'Bristol Fairy'—double white flowers 'Rosy Veil'—pale pink flowers on compact plants with height of 18 inches

Gypsophilia repens

Creeping Baby's Breath

Plants are 18 inches in height and make an excellent groundcover in sunny, dry sites. White or pink flowering cultivars are available.



Helenium autumnale

Sneezeweed

Height 3 to 6 feet Zones 3–8 Full sun

The 2-inch diameter, daisy-like flowers are yellow, orange, or reddish-brown with dark brown, dome-like centers. Dark green leaves are alternate, lanceolate, serrate, and attach to a winged stem. Plants prefer moist, well-drained soils. Excessive fertilization promotes weak, spindly growth.

'Crimson Beauty'—plants are 2 to 3 feet in height with mahogany flowers 'Moerheim Beauty'—brownish red flowers



Heliopsis and Eryngium



Heliopsis 'Summer Sun'

Heliopsis helianthoides

Hardy Zinnia, False Sunflower

Height 3 to 4 feet Zones 3–9 Full sun to part sun

The yellow or orange, daisy-like flowers appear in summer and often continue until fall. Leaves are opposite, dark green, and serrate. Plants prefer fertile, moist, well-drained soils. Plants tend to be floppy in partially shaded sites and may require staking.

'Summer Sun' (Sommesonne)—double, golden yellow flowers



Hemerocallis 'Siloam Tee Tiny'



Hemerocallis 'Kindly Light'



Hemerocallis 'Frosted Beauty'



Hemerocallis 'Gentle Shepherd'

Hemerocallis

Daylily

Height 1 to 4 feet Zones 3–9 Full sun

Daylilies are one of the most popular perennials. Flowers are available in a wide range of colors including red, yellow, gold, orange, lavender, pink, white, purple, and bicolors. Plants prefer moist, well-drained soils but are also adaptable to difficult sites.

'Stella d'Oro'—golden yellow flowers repeat bloom through the summer



Hibiscus species

Rose Mallow

Height 3 to 8 feet Zones 4–9 Full sun

Plants bloom in late summer. The bright pink, red, or white, single flowers are often 12 inches or more in diameter. Leaves are alternate, lobed, and medium to dark green. Plants prefer moist, organic soils and do well along the edge of ponds. Plants are late to emerge in spring with shoots sometimes not appearing until early June.

'Disco Belle'—height is 1 to 2 feet with red, pink, or white flowers 'Lady Baltimore'—pink flowers 'Lord Baltimore'—red flowers 'Southern Belle'—red, pink, or white flowers





Iberis sempervirens

Candytuft

Height 6 to 12 inches Zones 3–8 Full sun to part sun

The bright white flowers literally cover the narrow evergreen leaves in spring. Some cultivars bloom again in fall. Plants prefer well-drained soils and perform beautifully in walls or as edging.

'Autumn Snow'—blooms in spring and fall



Iris hybrids

Bearded Iris

Height 1 to 3 feet Zones 3–10 Full sun

Bearded iris is one of the most beautiful spring flowers. Each flower is composed of three upright petals (standards) and three drooping petals (falls). Each fall has a fuzzy, beard-like growth at its base. Flowers are available in nearly every color of the rainbow and appear for 2 to 3 weeks in spring. Leaves are upright, gray-green and sword shaped. Leaves and flower stems emerge from shallowly planted rhizomes. Plants prefer well-drained, organic soils. Iris borers can be serious problems. Division is required every 3 to 5 years.



Iris sibirica

Siberian Iris

Height 1 to 3 feet
Zones 3–10
Full sun to part sun

Siberian iris flowers resemble those of bearded iris but are smaller and lack fuzzy beards. Brilliant blue, white, lavender, or yellow flowers appear 1 to 3 weeks later than bearded iris. Leaves are more grass-like and dark green. Plants prefer moist, fertile soils and are suited to edge of ponds and streams. Siberian irises have fewer insect and disease problems than bearded iris. Also shown on back cover.



Kalimeris pinnatifida

Japanese Aster

Height 1 to 2 feet Zones 4–8 Full sun to part sun

Small daisy-like flowers with white petals and yellow centers attract attention in mid-to late summer. The first set of blooms are often single; later blooms are often double which creates an interesting textural contrast during the bloom period. Plants are extremely adaptable to varying light and soil requirements. Japanese asters are one of the easiest plants to grow in the garden.



Lavatera thuringiaca

Tree Mallow

Height 4 to 7 feet Zones 6–9 Full sun

White, pink, or rose hollyhock-like flowers last for several weeks in early to mid-summer. Some cultivars have fringed petals. Heart-shaped leaves have 3 to 5 distinct lobes. Well-drained soils and sunny areas are the best planting sites. In late fall, mulch plants to increase winter survival.



Leucanthemum × superbum (Chrysanthemum × superbum)

Shasta Daisy

Height 1 to 3 feet Zones 5–9 Full sun

Shasta daisy has the quintessential daisy flower with clear white petals and cheery yellow centers. Single, semi-double, and double flower forms are available. Leaves are spatulate, dark green, and coarsely toothed. Deadheading encourages additional flowering. Plants prefer well-drained, infertile soils.

'Alaska'—single flowers
'Becky'—long-blooming single flowers
'Crazy Daisy'—double flowers with
twisted petals
'Snowcap'—single flowers
'Snow Lady'—single flowers



Liatris spicata

Blazing Star, Gayfeather

Height 2 to 3 feet Zones 3–9 Full sun

Opening from top to bottom, clusters of small, pinkish purple flowers are produced on 12-inch spikes. Leaves are linear and medium green in color. Plants are drought and heat tolerant and native to the midwestern United States. Plants prefer infertile, well-drained soils. They are excellent cut flowers. Also shown on page 2.

'Kobold'—lilac-mauve flowers 'Floristan White'—creamy white flowers



Limonium latifolium

Sea Lavender

Height 2 to 3 feet Zones 3–8 Full sun

Thick stems attempt to support clusters of tiny blue-purple flowers that can be 1 to 2 feet in diameter. Flower clusters are often cut and dried for bouquets or decoration. Leaves are basal, 6 to 10 inches long, and often turn reddish in fall. Plants insist on sunny sites with well-drained to dry soils. Sea lavender is tolerant of both drought and salt, making it a fine perennial for along sidewalks and driveways. Plants will rot quickly in moist soils. Allow plenty of air circulation between plants by giving them adequate spacing. Flowering stems may require support as blooms begin to develop.



Linum perenne

Perennial Flax

Height 1 to 2 feet Zones 5–8 Full sun to part sun

The sky blue flowers are 1 inch in diameter and have five petals. While the individual flowers last a single day, plants bloom for several weeks in spring. The small leaves are alternate, linear, and attached to willowy stems. Plants prefer well-drained soils and cool temperatures; they often go dormant during the summer heat.

'Alba'— white flowers
'Saphir'—plants are 8 to 12 inches in height with deep blue flowers







Lupinus hybrids

Lupine

Height 1 to 4 feet Zones 4–6 Full sun to part sun

Clusters of pea-like flowers in blue, purple, white, orange, red, or pink appear on racemes that are 1 to 2 feet long in late spring or early summer. Dark green, palmately compound leaves complement the showy flowers. Plants prefer cool, moist locations. In Iowa, lupines are usually short-lived because of the hot, dry summers. Staking may be necessary in shady areas.



Lychnis coronaria

Lychnis chalcedonica

Maltese Cross, Catchfly

Height 2 to 3 feet Zones 3-7 Full sun

Eye-catching clusters of vibrant deep scarlet flowers spark the summer garden. The leaves are oval and partially clasp the stems. Plants prefer well-drained, moist soils and typically reseed.

Lychnis coronaria

Rose Campion

Bright rose or white blooms appear in spring above wooly gray leaves and stems. Plants are often short-lived but frequently reseed.

Lychnis × arkwrightii

Arkwright's Campion

This short-lived perennial has bright orange flowers in late spring.



Lychnis × arkwrightii



Lychnis chalcedonica





Lysimachia clethroides

Gooseneck Loosestrife

Height 2 to 3 feet Zones 3–8 Full sun to part sun

Small white flowers are produced on terminal stalks (racemes) that are 12 inches long. The curved stalks resemble a goose's neck, hence the common name. Leaves are medium green and often turn yellow or bronze in fall. Plants are tolerant of diverse sites but prefer moist, well-drained soils. Plants spread aggressively. To control their spread, dig and divide plants every 2 to 3 years.



Malva sylvestris 'Zebrina'

Malva alcea v. fastigiata

Hollyhock Mallow

Height 2 to 3 feet Zones 4–7 Full sun

Hollyhock-like pink flowers adorn the leaf axils and stem tips during the summer. Flowering lasts for several weeks and is complemented by the bright green, lobed leaves. Plants prefer well-drained soils, but tolerate less hospitable sites as well.

Malva sylvestris

'Zebrina'—short-lived perennial (biennial) has pink flowers striped with red; reseeds



Monarda 'Beauty of Cobham'



Monarda 'Gardenview Scarlet'



Monarda 'Marshall's Delight'

Monarda didyma

Beebalm

Height 2 to 3 feet Zones 4–9 Full sun to part sun

Whorls of red, white, pink, lilac, or purple tubular flowers attract bees, butterflies, and hummingbirds in late spring or early summer. Aromatic graygreen leaves are arranged oppositely on square stems. Deadheading encourages repeat blooms. Plants prefer moist, well-drained soils. Taller cultivars may require staking. Powdery mildew can be a serious problem for plants in partially shaded sites and areas with poor air circulation.

'Gardenview Scarlet'—bright red flowers
'Jacob Cline'—deep red flowers with mildew resistant foliage
'Marshall's Delight'—pink flowers on powdery mildew resistant plants
'Petite Delight'—dwarf plants (15 to 24 inches) with pink flowers



Nepeta × faassenii

Catmint

Height 1 to 2 feet Zones 4–7 Full sun

Clusters of lavender-blue flowers are produced on stalks that orginate from the leaf axils. Well-drained to dry soils are required for best growth. Plants perform beautifully as edging, in rock gardens, containers, or walls. Cut plants back after flowering to encourage repeat blooms.

'Blue Wonder'—compact and long blooming 'Six Hills Giant'—3 feet tall; later blooming





Oenothera missouriensis (Oenothera macrocarpa)

Ozark Sundrops

Height 1 foot Zones 3–7 Full sun

Bright lemon yellow flowers with papery petals that are 4 inches in diameter grace the plants in mid- to late summer. Pale green, three sided fruit capsules blend with the simple green leaves. Plants are late to emerge in spring and prefer well-drained to dry soils. As the name implies, plants are native to the central United States.



Paeonia 'Andy'



Paeonia 'Raspberry Sundae'

Paeonia hybrids

Peony

Height 2 to 3 feet Zones 3–7 Full sun

Peonies are extremely long-lived perennials. Flower colors include white, pink, red, and pale yellow. The basic flower types are single, semi-double, double, and Japanese (anemone). If desired, divide plants in early fall. Also shown on page 3.



Papaver orientale 'Pizzicato Mix'

Papaver orientale

Oriental Poppy

Height 2 to 4 feet Zones 3–7 Full sun

The delicate flowers are 4 to 6 inches in diameter and are available in orange, red, dark red, white, purple, lilac, or pink. The papery petals often have a black blotch at their base, giving the flower a black eye or center. The graygreen leaves are sharply lobed and covered in a hairy pubscence. Stems and leaves exude a milky sap when broken or crushed. Plants prefer welldrained soils, cool temperatures, and resist transplanting. Oriental poppies usually go dormant by midsummer. Leaves often reappear in fall. Place plants in protected locations to prevent strong winds from prematurely destroying flowers.

'Beauty of Livermere'—deep red flowers 'Helen Elizabeth'—pale pink flowers



Penstemon barbatus 'Prairie Dusk'

Penstemon barbatus

Common Beard-Tongue

Height 1 foot

Zones 3–8

Full sun to part sun

Tubular, two-lipped flowers are borne in pink, white, purple, or red terminal stalks. Leaves are opposite, elongated, and entire. Flowers should be deadheaded to extend the bloom period. Plants prefer well-drained soils and perform poorly in wet soils.

'Elfin Pink'—hybrid with clear pink flowers
'Prairie Series'—pink, purple, or red

'Prairie Series'—pink, purple, or red cultivars bred at the University of Nebraska





Penstemon digitalis 'Husker Red'

Husker Red Beard-Tongue

Height 2 to 3 feet Zones 4–8 Full sun

This popular cultivar was developed at the University of Nebraska and has burgundy foliage. Plants also produce pure white flowers early to midsummer. Plants prefer well-drained soils but tolerate poor soils.





Perovskia atriplicifolia

Russian Sage

Height 3 to 5 feet Zones 4–9 Full sun

Tiny, two-lipped lavender-blue flowers are borne on branched spires above the aromatic, dissected, gray foliage. Plants prefer well-drained to dry soils and may require staking. The dead silvery-gray stems persist and provide some winter interest. Cut back plants in spring.

'Filagran'—finely dissected leaves



Phlox maculata 'Miss Lingard'

Phlox maculata

Meadow Phlox

Height 2 to 3 feet Zones 3–8 Full sun

Similar to garden phlox, meadow phlox is noted for its spotted stems, earlier flowers, and better mildew resistance. Flower colors are pink, rose, lavender, or white and sometimes have contrasting centers. For best performance, site plants in full sun with moist, well-drained soils. Provide good air circulation between plants.

'Miss Lingard'—pure white flowers 'Omega'—white flowers with lilac eye 'Rosalinde'—dark pink flowers



Phlox paniculata Garden Phlox

Height 2 to 4 feet Zones 4–8 Full sun

Small white, pink, red, lavender, or bicolor flowers are arranged in terminal clusters that are 10 to 12 inches in length from midsummer to early fall. Opposite, dark green, linear leaves cover the straight stems. Fertile, moist, well-drained soils are best. Deadhead flowers to promote repeat blooms and prevent self-seeding. Plants are susceptible to powdery mildew, especially in shady sites with poor air circulation.

'David'—white flowers; plants are mildew resistant
'Eva Cullum'—pink flowers with darker eye
'Franz Shubert'—lilac flowers with darker eye
'Mt. Fuji' (Fujiyana)—white flowers
'Norah Leigh'—cream and green variegated leaves and pink flowers

'Starfire'—cherry red flowers



Phlox subulata

Moss Phlox

Height 6 to 9 inches Zones 2–8 Full sun

Carpets of pink, white, lavender, and blue cover plants in early spring. The dark green, needle-like leaves are semi-evergreen and often persist into winter. Sites in full sun and well-drained to dry soils provide the best growing conditions.

'Blue Hills'—lavender-blue flowers 'Candy Stripe'—pink and white striped flowers

'Snowflake'—white flowers 'White Delight'—white flowers



Physostegia virginiana

Obedient Plant, False Dragonhead

Height 2 to 4 feet Zones 2–9 Full sun to part sun

Rose, purple, or white tubular flowers are arranged in 4 vertical rows along square stems. Leaves are opposite, finely serrate, and medium green. Plants tolerate a wide variety of soils. Because plants are aggressive spreaders, frequent division may be necessary to control growth.

'Vivid'—bright pink flowers 'Variegata'—green and white leaves with lavender-pink flowers



Platycodon grandiflorus 'Shell Pink'

Platycodon grandiflorus

Balloon Flower

Height 2 to 3 feet Zones 3–7 Full sun to part sun

Blue, white, or pink flowers resemble balloons when in bud and are 2 to 3 inches in diameter. Flowers are cup-shaped when open. Leaves are alternately arranged and medium green in summer. Leaves turn a clear yellow in fall. Plants are long-lived in fertile, well-drained soils. They are often late to emerge in spring and may require staking in shady locations. Also shown on front cover.

'Komachi'—blue buds that rarely open 'Mariessi'—blue flowers on plants that are 1 to 2 feet in height 'Sentimental Blue'—blue flowers on plants that are 18 inches in height 'Sentimental White'—white flowers on plants that are 18 inches in height



Pulsatilla vulgaris (rubra) (Anemone)

Pasque Flower

Height 8 to 12 inches Zones 5–7 Full sun to part sun

The fuzzy purple or white flowers emerge early in spring. Flowers have 6 "petals" around yellow centers. The finely dissected foliage is hairy. Feathery seedheads develop after flowering. Plants prefer moist, well-drained soils with high organic matter. They bloom best with morning sun and afternoon shade. Plants are not heat tolerant and often dissappear during extended hot periods.

'Alba'—creamy white flowers 'Rubra'—reddish purple flowers





Rudbeckia fulgida 'Goldsturm' Black-eyed Susan, Orange Coneflower Height 2 to 3 feet Zones 3–8 Full sun

Golden yellow, daisy-like flowers are 3 to 5 inches in diameter. Flowers have prominent dark brown centers. Flowering continues for 4 to 6 weeks in mid- to late summer. Leaves are dark green, alternate, oblong, and covered in coarse hairs. Plants prefer well-drained soils and are tolerant of dry, hot sites. Also shown on front cover.



Salvia 'Purple Rain'



Salvia 'May Night'

Salvia × superba

Perennial Salvia, Perennial Sage

Height 1 to 3 feet Zones 4–7 Full sun

Plants produce blue-lavender flowers in late spring and early summer.
Plants prefer moist, well-drained soils. Avoid wet, poorly drained sites.
Once established, plants possess good drought and heat tolerance. Cut plants back after flowering for repeat blooms later in the growing season.

'East Friesland'—deep purple flowers 'May Night'—deep indigo flowers



Scabiosa caucasia 'Butterfly Blue'

Scabiosa caucasia

Pincushion Flower

Height 1 to 2 feet Zones 3–7 Full sun

Light blue, lavender, pink, or white flowers are 3 inches in diameter and have tufted centers resembling pin cushions, hence their common name. Some hybrids will flower continuously from midsummer into fall. Deadheading extends the blooming period. Leaves are basal, medium green, and lanceolate. Plants prefer fertile, well-drained soils. Mulch heavily in winter to prevent "lifting or heaving" in response to the frequent freezing and thawing of the soil.

'Butterfly Blue'—continuous blooming with blue-lavender flowers 'Pink Mist'—continuous blooming with pink-lavender flowers



Sedum 'Atropurpureum'

Sedum spectabile

Showy Stonecrop

Height 1 to 2 feet Zones 3–8 Full sun

Dense clusters of small red, pink, or white flowers are arranged on flat-topped terminal flower heads (cymes). Flowering begins in late summer and continues into fall. Leaves are fleshy, opposite, and medium to gray-green. Plants prefer well-drained to dry soils and possess excellent heat tolerance. Dry flowers will remain standing through much of the winter if not removed in fall.

'Autumn Joy'—popular form with pink to bronzy-red flowers 'Atropurpureum'—dark bronze or burgundy foliage and rose-red flowers 'Frosty Morn'—leaves have white edges; flowers are pink 'Matrona'—gray-green leaves with purple undertones and pale pink flowers



Sedum spectabile 'Brilliant'



Sedum spectabile 'Variegatum'



Sedum spectabile 'Autumn Joy'





Sempervivum arachnoidium 'Cobweb'

Sempervivum species

Hens and Chicks

Height 2 to 6 inches Zones 3–7 Full sun

The common name is used with 25 species, all having fleshy leaves on compact rosette plants. Many have showy red, pink, purple, white, green, or yellow flower clusters in summer. After flowering, young "chicks" form around the base of "hens" on mature plants; the "hen" plants often die leaving the "chicks" to bloom and continue the cycle. Plants prefer welldrained or dry soils in sunny sites.



Solidago hybrids

Goldenrod

Height 2 to 6 feet Zones 3–9 Full sun

Bright, golden yellow flowers in large terminal panicles are prominent from late summer to early fall. The medium green leaves are alternate, lance-shaped, and serrate. Plants prefer well-drained, poor soils and good air circulation. Excessive fertilization causes rampant growth. Goldenrod flowers do not cause hayfever.

'Crown of Rays'—loaded with bright yellow flowers



Stachys byzantina

Lamb's Ear

Height 12 to 18 inches Zones 4-7 Full sun

The wooly silver leaves resemble the shape and softness of a lamb's ear, hence the common name. The lavender flowers appear in summer and are often removed as they detract from the flowers. This perennial is commonly grown as a groundcover or as edging in sunny, dry sites.

'Contess Helene von Stein' (Big Ears) leaves twice the size of the species; few flowers

'Silver Carpet'—non-flowering cultivar with silvery foliage



Stokesia laevis 'Blue Danube'



Stokesia laevis 'Alba'

Stokesia laevis

Stoke's Aster

Height 1 to 2 feet Zones 5–9 Full sun

The daisy-type flowers are often lavender-blue and about 4 inches in diameter. Flowers have shorter petals in the center instead of the yellow centers that are common on daisies. Dark green, linear leaves are basal. Plants prefer well-drained soils and should be mulched in the winter to increase survival. Plants abhor wet soils, especially during the winter months.

'Alba'—creamy white flowers 'Blue Danube'—lavender blue flowers 'Klaus Jelitto'—lavender flowers



Tanacetum coccineum (Chrysanthemum coccineum)

Painted Daisy, Pyrethrum

Height 1 to 3 feet Zones 3–7 Full sun to part sun

The bright green, finely dissected leaves support equally bright pink, red, or white daisy-like flowers with yellow centers. The flowers are a source of the botanical insecticide, pyrethrum, thus this plant has few pest problems. Painted daisy is not heat tolerant, and may disappear during extended hot periods. Plants prefer moist, well-drained soils.



Thermopsis caroliniana

Carolina Lupine

Height 3 to 5 feet Zones 3–9 Full sun to part sun

Plants bear yellow, pea-like flowers on terminal spikes that are 6 to 12 inches long. Flower stalks somewhat resemble true lupines. Foliage is clover-like and blue-green in color. Plants prefer moist, well drained soils.

'Album'—creamy white flowers on stems that are 2 to 3 feet tall



Veronica spicata 'Blue Charm'



Veronica spicata

Spike Speedwell

Height 1 to 3 feet Zones 3–8 Full sun

Dense racemes of blue, purple, pink, or white flowers appear above dark green leaves in summer. Deadheading encourages new flowers throughout the summer. Plants prefer well-drained soils for best performance.

'Sunny Border Blue'—hybrid with bright blue flowers 'Red Fox'—rosy pink flowers 'White Icicle'—white flowers





Yucca filamentosa

Adam's Needle

Height 2 to 5 feet Zones 5–9 Full sun

This native of the southwestern United States thrives in hot, dry conditions. Its thick, spine-tipped, sword-like leaves add a bold architectural feature to the garden. Clusters of creamy-white, bell-like flowers are borne on 24-inch branched stems in summer. Plants insist on well-drained soils and sunny sites.

'Color Guard'—bright yellow with green edges. Shown on page 35.

Sources of sun perennials

Ambergate Gardens 8730 County Road 43 Chaska, MN 55318-9358 (877) 211-9769 www.ambergategardens.com

Bluestone Perennials
7211 Middle Ridge Road
Madison, OH 44057-3096
(800) 852-5243
www.bluestoneperennials.com

Busse Gardens 17160 245th Avenue Big Lake, MN 55309 (800) 544-3192 www.bussegardens.com

Carroll Gardens
444 East Main Street
P.O. Box 310
Westminster, MD 21157
(800) 638-6334
www.carrollgardens.com

Fieldstone Gardens, Inc. 620 Quaker Lane Vassalboro, ME 04989-9713 (207) 923-3836 www.fieldstonegardens.com

Hallson Gardens 411 Wolf Lake Drive Brooklyn, MI 49230 (517) 467-7955 www.perennialnursery.com

Heronswood Nursery 7530 NE 288th Street Kingston, WA 98346 (360) 297-4172 www.heronswood.com

AVERAGE BLOOM TIMES FOR SELECTED SUN PERENNIALS

Plant Name	Apr	May	June	July	Aug	Sept	Oct
Achillea filipendulina (Fernleaf Yarrow)		畿	畿	畿	器		
Achillea millefolium (Common Yarrow)		聯	**	畿			
Achillea hybrids (Moonshine Yarrow)		器	*	畿			
Alcea rosea (Hollyhock)							
Anthemis tinctoria (Golden Marguerite)		畿	畿				
Arabis caucasica (Rockcress)	聯	畿					
Armeria maritima (Sea Thrift)		畿	畿				
Artemisia schmidtiana (Silver Mound Artemsia)			**	፨			
Asclepias tuberosa (Butterfly Weed)			畿		፨		
Aster novae-angliae (New England Aster)					፨	**	聯
Aster novi-belgii (New York Aster)					畿	樂	攀
Baptisia australis (False Indigo)		聯	**				
Belamcanda chinensis (Blackberry Lily)				፨	攀		
Boltonia asteroides (Boltonia)					銏	**	**
Campanula carpatica (Carpathian Bellflower)		**	*				
Campanula glomerata (Clustered Bellflower)				畿			
Campanula persicifolia (Peachleaf Bellflower)			*	፨			
$Caryopteris \times clandonensis$ (Bluebeard, Blue Spirea)					銏	**	**
Centaurea (Perennial Bachelor's Button)	畿	器					
Chrysanthemum imes morifolium (Garden Mum)						**	**
Clematis integrifolia (Solitary Clematis)			*	፨			
Coreopsis grandiflora (Lanceleaf Coreopsis, Tickseed)			፨	፨	፨		
Coreopsis verticillata (Threadleaf Coreopsis)			*	፨	器	*	
$Delphinium \times elatum$ (Delphinium)			*	፨			
Dianthus × allwoodii (Pinks)	畿	聯	*				
Dictamnus albus (Gas Plant)		帶	*				
Digitalis purpurea (Foxglove)		聯	*				
Echinacea purpurea (Purple Coneflower)				፨	፨		

AVERAGE BLOOM TIMES FOR SELECTED SUN PERENNIALS

Plant Name	Apr	May	June	July	Aug	Sept	Oct
Echinops ritro (Globe Thistle)				畿			
Erigeron hybrids (Fleabane)				聯			
Eryngium alpinum(Sea Holly)				畿	器		
Eupatorium purpureum (Joe-Pye Weed)				聯		樂	
Euphorbia epithymoides (Cushion Spurge)	**						
Filipendula rubra (Queen-of-the-Prairie)			*	聯			
Filipendula vulgaris (Dropwort)			*				
Gaillardia imes grandiflora (Blanket Flower)			*	聯		樂	
Gaura lindheimeri (White Gaura, Whirling Butterflies)				畿	፨	樂	畿
Geranium sanguineum(Bloody Cranesbill)			*				
Gypsophilia paniculata (Baby's Breath)			*	畿	畿		
Helenium autumnale (Sneezeweed)						樂	樂
Heliopsis helianthoides (Hardy Zinnia, False Sunflower)			*	畿			
Hemerocallis (Daylily)			樂	畿		*	
Hibiscus species (Rose Mallow)				畿	畿	*	
Iberis sempervirens (Candytuft)	畿						
Iris hybrids (Bearded Iris)			畿				
Iris sibirica (Siberian Iris)			樂				
Kalimeris pinnatifida (Japanese Aster)			畿	畿	器		
Lavatera thuringiaca (Tree Mallow)			樂	畿			
$Leucan the mum \times superbum \ ({\tt Shasta Daisy})$			畿	畿	器		
Liatris spicata (Blazing Star, Gayfeather)			樂	畿			
Limonium latifolium (Sea Lavender)				畿	器		
Linum perenne (Perennial Flax)	聯		樂				
Lupinus hybrids (Lupine)			攀				
Lychnis chalcedonica (Maltese Cross, Catchfly)			樂	፨			
Lychnis coronaria (Rose Campion)			樂				
$Lychnis \times arkwrightii$ (Arkwright's Campion)			樂				

High Country Gardens 2902 Rufina Street Santa Fe, NM 87507-2929 (800) 925-9387 www.highcountrygardens.com

Joy Creek Nursery 20300 NW Watson Road Scappoose, OR 97056 (503) 543-7474 www.joycreek.com

Milaeger's Gardens 4838 Douglas Avenue Racine, WI 53402 (800) 669-9956

Niche Gardens 1111 Dawson Road Chapel Hill, NC 27516 (919) 967-0078 www.nichegardens.com

Park Seed Company 1 Parkton Avenue Greenwood, SC 29647 (800) 213-0076 www.parkseed.com

Plant Delights Nursery 9241 Sauls Road Raleigh, NC 27603 (919) 772-4794 www.plantdelights.com

Prairie Moon Nursery Route 3 Box 163 Winona, MN 55987 (866) 417-8156 www.prairiemoon.com

Continued on the following page

AVERAGE BLOOM TIMES FOR SELECTED SUN PERENNIALS

Rice Creek Gardens 11506 Highway 65 Blaine, MN 55434 (763) 754-8090 www.ricecreekgardens.com

Roslyn Nursery 211 Burrs Lane Dix Hills, NY 11746 (631) 643-9347 www.roslynnursery.com

Siskiyou Rare Plant Nursery 2825 Cummings Road Medford, OR 97501 (541) 772-6846 www.srpn.net/index2.shtml

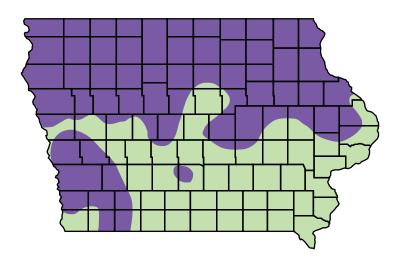
Song Sparrow Perennial Farm 13101 East Rye Road Avalon, WI 53505 (800) 553-3715 www.songsparrow.com

Wayside Gardens 1 Garden Lane Hodges, SC 29695 (800) 213-0379 www.waysidegardens.com

White Flower Farm P.O. Box 50 Litchfield, CT 06759 (800) 503-9624 www.whiteflowerfarm.com

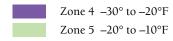
No endorsement of companies or their products is intended in this listing, nor is criticism implied of similar companies or their products that are not included.

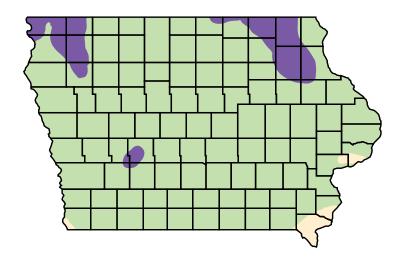
Plant Name	Apr	May	June	July	Aug	Sept	Oct
Lysimachia clethroides (Gooseneck Loosestrife)			**	*	畿		
Malva alcea v. fastigiata (Hollyhock Mallow)			**	**	聯		
Monarda didyma (Beebalm)		攀	*	畿			
Nepeta × faassenii (Catmint)		፨	*	畿			
Oenothera missouriensis (Ozark Sundrops)			畿	畿			
Paeonia hybrids (Peony)		聯	畿				
Papaver orientale (Oriental Poppy)		攀	畿				
Penstemon barbatus (Common Beard-Tongue)		聯	聯				
Penstemon digitalis (Husker Red Beard-Tongue)			畿	畿			
Perovskia atriplicifolia (Russian Sage)				器	聯	袋	
Phlox maculata (Meadow Phlox)			*	畿	聯		
Phlox paniculata (Garden Phlox)			*	፨	**		
Phlox subulata (Moss Phlox)	攀	*					
Physostegia virginiana (Obedient Plant, False Dragonhead)				፨	**	**	
Platycodon grandiflorus (Balloon Flower)				樂	*	畿	
Pulsatilla vulgaris (Pasque Flower)	銏	*					
Rudbeckia fulgida (Black-eyed Susan, Orange Coneflower)				樂	畿	畿	
Salvia imes superba (Perennial Salvia, Perennial Sage)		*	*				
Scabiosa caucasia (Pincushion Flower)			**	樂	畿	畿	
Sedum spectabile (Showy Stonecrop)				፨	聯	畿	畿
Sempervivum species (Hens and Chicks)			**	樂			
Solidago hybrids (Goldenrod)					聯	畿	畿
Stachys byzantina (Lamb's Ear)			**	樂			
Stokesia laevis (Stoke's Aster)				፨	聯	畿	
Tanacetum coccineum (Painted Daisy, Pyrethrum)		*	*				
Thermopsis caroliniana (Carolina Lupine)			**	***			
Veronica spicata (Spike Speedwell)		**	*	樂	*		
Yucca filamentosa (Adam's Needle)			畿	**			



1990 ZONE MAP

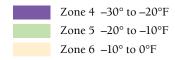
Average Annual Minimum Temperatures





2003 ZONE MAP (PROPOSED)

Average Annual Minimum Temperatures



TOP: American gardeners have used the United States Department of Agriculture hardiness zone map as a standardized guide to cold tolerance for plants for more than 40 years. The 1990 version includes "a" and "b" sections that indicate 5°F increments in average annual minimum temperatures.

BOTTOM: The revised map proposed in 2003 includes four more zones for the United States than the 1990 version. Zone designations are based on temperature data from the archives of the National Climatic Data Center in Asheville, North Carolina, and are based on the average of the lowest recorded winter temperatures from 1986/87 to 2001/02. Each zone represents a 10°F difference in average annual minimum temperature.

Because parts of the United
States experienced warmer than
"normal" temperatures during
the years on which the new map
is based, many areas (including
Iowa) are rated as higher (warmer)
zones than previously. Map
developers caution gardeners
not to make drastic changes in
their home gardening practices.
Yards and gardens often have
pockets of microclimates that
may be warmer or cooler than the
assigned area zone.

SUN PERENNIALS THAT TOLERATE DRY SOILS

Achillea (Yarrow) Anthemis tinctoria (Golden Marguerite) Asclepias tuberosa (Butterfly Weed) Armeria maritime (Sea Thrift) Artimesia schmidtiana 'Nana' (Silver Mound Artemisia) Baptisia australis (False Indigo) Coreopsis Dianthus × allwoodii (Pinks) Echinacea purpurea (Purple Coneflower) Echinops ritro (Globe Thistle) Eryngium alpinum (Sea Holly) Gaillardia × grandiflora (Blanket Flower) Gypsophila paniculata (Baby's Breath) Gypsophila repens (Creeping Baby's Breath) Limonium latifolium (Sea Lavender) Malva alcea v. fastigiata (Hollyhock Mallow) Nepeta × faassenii (Catmint) Oenothera missouriensis (Ozark Sundrops) Perovskia atriplicifolia (Russian Sage) Phlox subulata (Moss Phlox) Rudbeckia fulgida 'Goldsturm' (Black-eyed Susan, Orange Cornflower)

SUN PERENNIALS THAT TOLERATE MOIST SOILS

Solidago hybrids (Goldenrod)

Stachys byzantina (Lamb's Ear)

Sedum spectabile (Showy Stonecrop)

Asclepias incarnata (Swamp Milkweed)
Eupatorium purpureum (Joe-Pye Weed)
Filipendula rubra (Queen-of-the-Prairie)
Filipendula vulgaris (Dropwort)
Hibiscus species (Rose Mallow)
Iris sibirica (Siberian Iris)*
Lysimachia clethroides
(Gooseneck Loosestrife)

SUN PERENNIALS THAT ATTRACT BUTTERFLIES

Achillea (Yarrow) Arabis caucasica (Rockcress) Asclepias tuberosa (Butterfly Weed) Aster Caryopteris × clandonensis (Bluebeard, Blue Spirea) Chrysanthemum × morifolium (Garden Mum) Coreopsis Echinacea purpurea (Purple Coneflower) Erigeron hybrids (Fleabane) Eupatorium purpureum (Joe-Pye Weed) Gaillardia × grandiflora (Blanket Flower) Helenium autumnale (Sneezeweed) Liatris spicata (Blazing Star, Gayfeather) Monarda didyma (Beebalm) Nepeta × faassenii (Catmint) Phlox paniculata (Garden Phlox) Rudbeckia fulgida 'Goldsturm' (Black-eyed Susan, Orange Cornflower)

Salvia × superba (Perennial Salvia, Perennial Sage) Scabiosa caucasia (Pincushion Flower) Sedum spectabile (Showy Stonecrop) Solidago hybrids (Goldenrod)

Veronica spicata (Spike Speedwell)



Coreopsis grandiflora



SUN PERENNIALS WITH FRAGRANT FLOWERS

Dianthus × allwoodii (Pinks)
Iberis sempervirens (Candytuft)
Iris
Nepeta × faassenii (Catmint)
Paeonia hybrids (Peony)

SUN PERENNIALS FOR CUT/DRIED FLOWERS

Perovskia atriplicifolia (Russian Sage)

Achillea (Yarrow)
Artemisia schmidtiana 'Nana'
(Silver Mound Artemisia)
Aster
Campanula glomerata

(Clustered Bellflower)

Campanula persicifolia

(Peachleaf Bellflower)

Campanula puntata
(Spotted Bellflower)

Delphinium

Dianthus × allwoodii (Pinks)

Echinacea purpurea (Purple Coneflower)

Echinops ritro (Globe Thistle)

Eryngium alpinum (Sea Holly)

Gypsophila paniculata (Baby's Breath)

 $Gyp sophila\ repens$

(Creeping Baby's Breath)

Leucanthemum × superbum

(Shasta Daisy)

Iris

Liatris spicata (Blazing Star, Gayfeather) Limonium latifolium (Sea Lavender)

Paeonia hybrids (Peony)

Phlox maculata (Meadow Phlox)

Phlox paniculata (Garden Phlox)

Physostegia virginiana (Obedient Plant,

False Dragonhead)



SUN PERENNIALS THAT ARE NATIVE TO THE UNITED STATES

Artemisia ludoviciana (White Sage)
Artemesia schmidtiana 'Nana'
(Silver Mound Artemisia)
Asclepias tuberosa (Butterfly Weed)
Aster novae-angliae (New England Aster)
Baptisia australis (False Indigo)
Boltonia asteroides (Boltonia)
Coreopsis
Echinacea purpurea

(Purple Coneflower)

Erigeron hybrids (Fleabane)

Eupatorium purpureum (Joe-Pye Weed)

Filipendula rubra (Queen-of-the-Prairie)

Gaillardia × grandiflora (Blanket Flower)

Gaura lindheimeri (White Gaura.

Whirling Butterflies)

Helenium autumnale (Sneezeweed) Heliopsis helianthoides (Hardy Zinnia,

False Sunflower)

Hibiscus species (Rose Mallow)

Liatris spicata (Blazing Star, Gayfeather)

Lupinus perennis (Lupine)

Monarda didyma (Beebalm)

 $Oenothera\ missouriens is\ (Ozark\ Sundrops)$

 $Phlox\ maculata\ (Meadow\ Phlox)$

Phlox paniculata (Garden Phlox)

Phlox subulata (Moss Phlox)

Physostegia virginiana

(Obedient Plant, False Dragonhead)

Rudbeckia fulgida 'Goldsturm'

(Black-eyed Susan, Orange Coneflower)

 $Solidago \ hybrids \ (Goldenrod)$

Stokesia laevis (Stoke's Aster)

Thermopsis caroliniana (Carolina Lupine)



Yucca filementosa 'Color Guard'

SUN PERENNIALS THAT ARE RARELY EATEN BY DEER

Achillea (Yarrow)

Anthemis tinctoria (Golden Marguerite)
Artemisia ludoviciana (White Sage)
Artemisia schmidtiana 'Nana'
(Silver Mound Artemisia)
Asclepias tuberosa (Butterfly Weed)
Aster novae-angliae (New England Aster)

Baptisia australis (False Indigo)
Delphinium
Echinacea purpurea (Purple Coneflower)
Erigeron hybrids (Fleabane)
Filipendula rubra (Queen-of-the-Prairie)
Gaillardia × grandiflora (Blanket Flower)
Geranium species
Helenium autumnale (Sneezeweed)
Heliopsis helianthoides (Hardy Zinnia,
False Sunflower)
Iris

Lupinus perennis (Lupine)
Lychnis coronaria (Rose Campion)
Monarda didyma (Beebalm)

Nepeta × faassenii (Catmint) Paeonia(Peony)

Rudbeckia fulgida 'Goldsturm'

(Black-eyed Susan, Orange Coneflower)

Scabiosa(Pincushion Flower)

Solidago hybrids (Goldenrod)
Stokesia laevis (Stoke's Aster)

Yucca filamentosa (Adam's Needle)



FOR MORE INFORMATION Contact your local ISU Extension office for additional information or copies of the following publications.

Daylilies (RG 303)
Delphiniums (RG 306)
Early Spring Blooming Perennials
(RG 318)

Growing Garden Lilies (RG 313) Growing Garden Peonies (PM 1313)

Late Season Perennial Flowers (RG 304)

Perennials for Shade (PM 1913) When to Divide Perennials (RG 319) Additional information also is

available from these Web sites:

ISU Extension Publications https://store.extension.iastate.edu/

ISU Horticulture www.YardandGarden.extension. iastate.edu

Questions also may be directed to ISU Extension Hortline by calling (515) 294-3108 during business hours (10–12, 1–4:30, M–F).

If you want to learn more about horticulture through training and volunteer work, ask your ISU Extension office for information about the ISU Extension Master Gardener program.

Back cover photos clockwise from top left: Alcea rosea, Euphorbia epithymoides, Digitalis purpurea, Iris sibirica

