

# Choosing Biennials and Perennials for Montana Gardens

by Cheryl Moore-Gough, Extension Horticulture Specialist, retired,  
and Robert E. Gough, MSU Professor of Horticulture

**Although Montana is not the easiest place to grow flowers, with care – the sort of maintenance, watering, staking, and feeding described here – you can have beautiful plantings in your yard. The extensive charts in this publication describe many perennial and biennial flowers that grow fairly well under our conditions.**



## MontGuide

MT199903AG Reviewed 3/10

### BIENNIALS AND PERENNIALS CAN BE USED TO FILL

in between shrubs, as a border to shrubs in foundation plantings, and as flower borders at the edges of lawns and along sidewalks and driveways. All of the plants were brought into cultivation from wildflowers and this cultivation and domestication has generally led to larger plants and flowers. In some cases domestication has led to highly specialized flowers that no longer set seed. Such plants can only be propagated vegetatively.

Herbaceous perennials have diverse cultural requirements but all commonly die back to the soil line during our Montana winters. Their perennial roots regenerate a new top each spring. Plant perennials in spring or fall, though fall planting is usually preferable. Biennials often form a rosette of leaves that remain close to the ground during the winter of their first year. The second season the plants produce flowers and seed stalks, then die. The hardier biennials can be sown in spring and transplanted to areas where they will bloom the following year. All biennials can also be transplanted to the garden in the spring of their flowering year and treated as you would treat annuals. Pull them as their blooms fade to make room for other plants and to keep the garden neat.

Although soils can be amended somewhat, most biennials and perennials have specific soil requirements so choose the right plant for the site you have in mind. Most do well in a well-drained loamy soil high in organic matter and adequately supplied with nitrogen and phosphorus. Prepare the soil by deep tilling to a depth of about 20 inches to encourage normally shallow roots to grow deeper. If the soil is poorly drained, incorporate some coarse sand into the area at planting. Most of these flowers do best in a nearly neutral soil, but *Anemone hupehensis*, 'Japonica', hollyhocks, and *Iris* prefer a slightly alkaline soil.



**Daffodil (*Narcissus* spp.) is the name given narcissi that have prominent trumpets. All daffodils are narcissi—but not all narcissi are daffodils. (See p. 6)**

## General Maintenance

Survey the garden each spring. Press back into place plants that have heaved out during winter. Divide or replace plants that are weak or crowded and remove dead or diseased plants and plant parts as soon as they appear.

### Watering

Most of these plants require moderate but thorough watering once each week to wet the soil to a depth of at least a foot.

### Staking

This is necessary to support weak and floppy stems and to protect tall flower spikes from being bent or broken by strong winds. Dahlias, asters, delphiniums and others require tall, strong stakes of bamboo or steel. Peonies can be supported by large wire hoops surrounding the plants.

Never tie stalks tightly to stakes, which could crush their stems. Bare wire and small-diameter twine can cut stems. Instead, use soft waterproof tape, large-diameter binder or baler twine, or strips cut from discarded panty hose.

### Renewal

Renew your gardens every several years to prevent perennial plants from becoming crowded and producing inferior blooms. You can renovate the gardens in spring or fall, but fall is usually preferable since you may have more time then and you can plant new bulbs during renovation.

Remove the perennials and work liberal quantities of compost or rotten manure into the bed, then divide the plants if necessary and reset them. Peonies, *Dicentra* (bleeding hearts) and Oriental poppies often do poorly if disturbed, so leave them in place during renovation.

Some perennials are comparatively short-lived.

Columbines, lupines, delphiniums and some *Linum* and *Daphne* often die out after several years. Others, like *Iris*, *Phlox*, and the hardy asters can live for many years. Lift and divide these every year or two to keep their blooms large and healthy.

### Deadheading

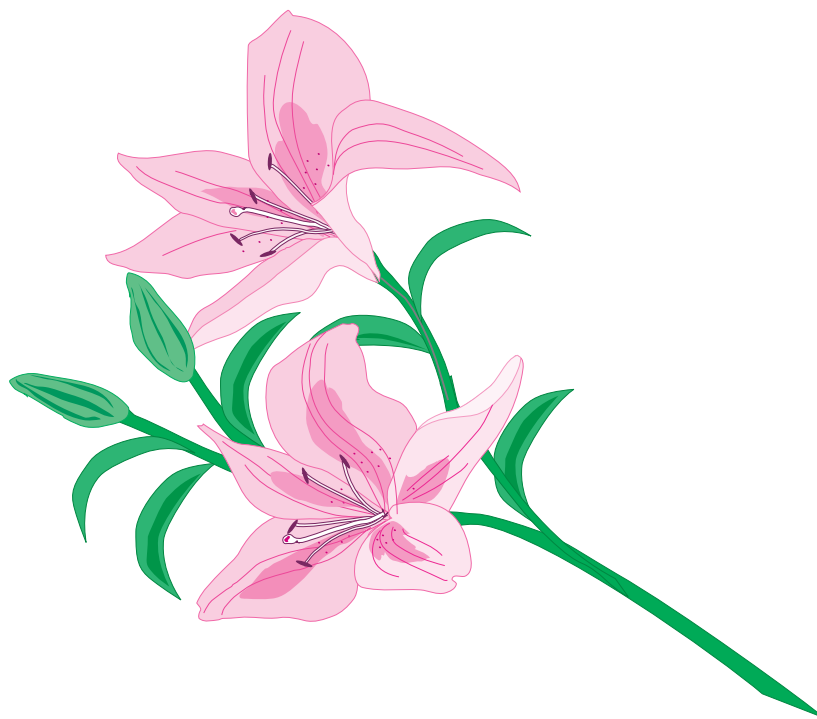
Removing the spent flower stalks (deadheading) from perennials tidies the garden and prevents the maturation of seed and allows the plant to shunt more food reserves into the crown and root areas for better growth next year. Deadhead your plants as the flowers begin to fade.

### Fertility

Apply a complete fertilizer such as 8–8–8 or 5–10–10 as soon as spring growth begins at the rate of about 2 pounds per 100 square feet. Fertilize again in early summer. Do not apply fertilizer after late June since it can stimulate late vegetative growth that could cause the plant to enter the fall in an immature condition.

Several inches of partially rotted manure or compost, applied as a mulch over the plants in the fall when the topgrowth has died down, supplies some nutrients and adds valuable organic matter to the soil to improve plant growth. Do not apply manure or compost mulch to plants susceptible to crown rots. These are so noted in the following table.

Montana is not the easiest place to grow flowers, but with care you can have beautiful plantings in your yard. The chart on pp. 2–5 describes some perennial and biennial flowers that will grow fairly well under our conditions. Some species can be classed as either perennial or biennial depending upon soil fertility as well as genetics.



**PERENNIALS AND BIENNIALS (arranged alphabetically by scientific name)**

Plant	Color of bloom	Season in bloom	Height of plant	Season to plant	Remarks
Hollyhock ( <i>Alcea</i> spp.)	Various	All summer	5 to 9 ft.	Spring	Thrive in any soil but do best in a rich, well-drained soil and sunny position. Usually biennial in habit. Plant seeds each spring. Pinch main stem early in the season for a shorter plant.
<i>Anemone hupehensis</i> 'Japonica'	Rose, pink, white	Fall	2 ft.	Transplant in early spring	Requires protection from wind and a deep, rich, moist soil, but well-drained location, especially for winter. Flourishes best when partly shaded from mid-day sun. Interplant with early flowering plants.
Columbine ( <i>Aquilegia</i> spp.)	Various	June to Aug.	2 to 3 ft.	Sow seeds in spring. Transplant in Sept.	Hybrids can be increased by division of plants. Columbines thrive in average garden soil. They respond to top dressing of peat moss or rotted manure made in late fall or early spring. Partial shade desirable. A small leaf miner feeds within the leaves—burn infested foliage. Self-sows. Deer resistant.
Hardy Fall Aster Michaelmas Daisy ( <i>Aster</i> spp.)	Purple, pink, lavender, rose, white	Fall	6 in. to 6 ft.	Transplant in early spring	Thrive in a wide range of soils but prefer a moist garden loam. Separate clumps every spring into divisions of 3 or 4 shoots each. Attracts birds and beneficial insects.
<i>Aurinia saxatilis</i> Common names include: Basket of Gold, Golden Tuft, Rock Madwort, Gold-Dust	Brilliant yellow	Late spring & early summer	10 in.	Plant seedlings in early spring	Full sun and well-drained soils preferred. Withstands dry conditions and is not particular about fertility. Commonly used in rock gardens. Desirable in the perennial border for its spring effect.
Canterbury Bells ( <i>Campanula medium</i> )	Various	Early summer	2 ft.	Transplant in late summer	Biennial. Sow seed in early spring. Transplant in late summer. Medium-textured rich garden soil; plenty of moisture. Protect from mid-day sun. Can be invasive.
Painted Daisy or Pyrethrum Roseum ( <i>Chrysanthemum-coccineum</i> )	Rose, pink, crimson, white	Early summer	1.5 to 2 ft	Sept.	May be started from seed sown in spring but it is better to increase by division of plants in fall to perpetuate color and form. Require well drained, moderately fertile soil. They thrive in full sun. Pinch.
Hardy Chrysanthemum ( <i>C. x morifolium</i> )also called Florists' Chrysanthemum	Various	Late summer & fall	1.5 to 3 ft.	Replant in early spring	Propagated by division of old plants. Separate and replant well-rooted young shoots in early spring. Work well-rotted manure and phosphate into soil by spading deeply. In late fall, cut tops several inches above ground. Use tops, other coarse material for mulching. Pinch.
Shasta Daisy ( <i>Chrysanthemum x superbum</i> )	White	July to Sept.	2 ft.	Transplant in early spring or Sept.	Good surface drainage as well as under-drainage is needed; otherwise plants may winterkill. Good garden loam with a good supply of organic material is needed for best growth. Addition of phosphate improves quality of the bloom. Pinch. Can be invasive.
Lily-of-the-Valley ( <i>Convallaria majalis</i> )	White	Early summer	8 to 10 in.	Fall or early spring	Plant in a rich moist soil in shaded areas. Plants multiply rapidly and require lifting and thinning every two to three years. Top-dress with manure or compost in fall. Deer resistant.
<i>Coreopsis lanceolata</i> (Also <i>C. grandiflora</i> )	Yellow	All summer	2 ft.	Early spring or Sept.	Good for cut flowers and desirable for growing with shrubs. Deer resistant. Attracts butterflies and birds.

**PERENNIALS AND BIENNIALS (arranged alphabetically by scientific name)**

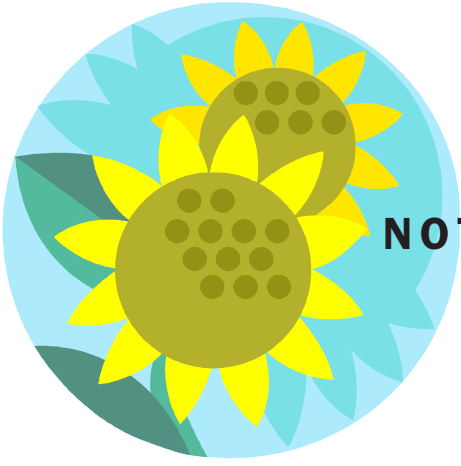
Plant	Color of bloom	Season in bloom	Height of plant	Season to plant	Remarks
Crocus ( <i>Crocus</i> spp.)	Various	April & May	5 in.	Sept.	Can be grown on lawns and left undisturbed for several years. Set bulbs 3 in. apart and about 3 in. deep. They grow in various types of soils but prefer well-drained, sandy loam.
Dahlia ( <i>Dahlia</i> spp.)	Various	Aug. to Oct.	3 to 6 ft.	May	Time planting so plants will emerge after spring frost. Plant tubers 6 in. deep. Each tuber should have at least one good sprout or bud. Cover tubers with 2 in. of soil to start. Replace rest of soil as growth starts. Destroy all dwarfed plants. Cut tops 6 in. above ground after first fall frost. Dig clumps of tubers about 2 weeks later. Store in cool, dark place. Cover with sawdust or peat moss to prevent drying and shrivelling during storage.
Delphinium or larkspur ( <i>Delphinium</i> spp.)	Various	Early summer	3 to 6 ft.	Sow seeds as soon as mature or early spring. Transplant in late summer.	Grow in full sunlight. Prefer medium texture deep rich soil. Avoid the use of manure where leaf spot and stem rot is troublesome. The Siberian Larkspur is a smaller type, hardy and suitable for smaller gardens.
Sweet-William ( <i>Dianthus barbatus</i> )	Various	Summer	1.5 ft.	Sow seeds in early spring, transplant early fall.	Prefers deep, rich, sandy soil but does well on heavier soils. Requires full sun.
Cottage Pink, Grass Pink, or Garden Pink ( <i>Dianthus plumarius</i> )	Pink	Late June to Aug.	8 to 12 in.	Sow seeds in early spring. Transplant in late summer, early spring.	Use in the border or in rock gardens. Withstands drought but requires good drainage. Often very fragrant.
Bleeding Heart ( <i>Dicentra spectabilis</i> )	Pink, white	Spring & summer	3 ft.	Spring	Prefers light shade but will tolerate partial or full shade. Will die back in very hot summers. Maintain moisture in soil while blooming. Deer resistant.
Foxglove ( <i>Digitalis purpurea</i> )	Purple, white dappled	July to Aug.	3.5 to 5 ft.	Sow seeds in early spring.	An old-time biennial. Sow seed each spring, transplant in late summer. Will thrive in full sun or partial shade when planted in rich soil and given ample moisture.
Blanket flower ( <i>Gaillardia aristata</i> )	Yellow	All summer	2 ft.	Early spring	Excellent for use in the border and for cut flowers. Adaptable to wide range of soil and climatic conditions. Attracts butterflies. Deer resistant.
Snowdrop ( <i>Galanthus</i> spp.)	White	Early spring	5 in.	Early fall	Plant 3 in. deep in cool, moist, well-drained soil. They thrive in most locations but prefer the shelter of trees.
Prairie Smoke ( <i>Geum</i> spp.)	White, orange, yellow, red	July & Aug.	1 ft.	Spring	Propagated by seeds, cuttings or division in late summer. Require plenty of moisture but need good drainage. Good for cut flowers but should be placed in warm water to avoid wilting.
Gladiolus ( <i>Gladiolus</i> spp.)	Various	July to Oct.	3 to 5 ft.	May	Glads prefer an enriched, sandy loam soil. Apply 3 lbs. of 5-10-5 to each 100 feet of row. Place the fertilizer in narrow bands at about the same depth as the corms are planted and 1 to 2 in. away from them. Remove and burn old dry skins. Dig up and store corms indoors for winter.
Daylily ( <i>Hemerocallis</i> spp.)	Orange, yellow	July & Aug.	3 ft.	Sept.	Succeeds under various conditions. Does well in the border or at the edge of shrubs. Does best in a rich soil and partial shade. Divide every two to three years.

**PERENNIALS AND BIENNIALS (arranged alphabetically by scientific name)**

Plant	Color of bloom	Season in bloom	Height of plant	Season to plant	Remarks
Coral Bells ( <i>Heuchera sanguinea</i> )	Various	June to Sept.	1.5 to 2 ft.	Fall	Propagated from seed planted early in spring or divisions in fall. Prefers partial shade. Drought resistant once established. They do best in deep rich garden loam and will not succeed in clay.
Hyacinth ( <i>Hyacinthus</i> spp.)	Various	May	8 to 12 in.	Oct.	Hyacinths do well in good garden soil but respond to manure. The manure should not come in contact with the bulb, but is placed in a 3 in. layer about 2 in. below the bulb.
Iris ( <i>Iris</i> spp.)	Various	Late May to July	1 to 3 ft.	Aug.	Many species and colors, they make good additions to the border but should not be used in mass planting. Manure placed over the crown or too close to the fleshy rhizomes may induce rot. Require frequent lifting and thinning. Deer resistant.
Blazing Star, Gayfeathers ( <i>Liatris</i> spp.)	Purple	Aug. & Sept.	3 to 4 ft.	Fall	Readily propagated by offsets of their corm-like base or started from fall-sown seed. The long flower spikes bloom from the top downward and remain in bloom for a long period. They grow fairly well in poor soil but thrive in rich soil. Attracts butterflies. Deer resistant.
Regal Lily ( <i>Lilium regale</i> )	White suffused with pink, canary yellow at center	Aug.	3 to 5 ft.	Early fall	Grows in a wide range of soil. The soil should be well drained and fertile. Requires full sun. Plant bulbs 8 to 9 in. deep. Flowers purple outside.
Upright Lily ( <i>Lilium concolor</i> x <i>L. pennsylvanicum luteum</i> )	Red & yellow	July	1.5 ft.	Early fall humus.	Adapted to a wide range of soils from light sandy to heavy loam. They do best in soils rich in humus. Mix rotted manure with the soil at planting. The manure should not come in direct contact with the bulb. Plant each bulb about 9 in. deep with 2 in. of sand below and about the bulb. Set the bulb in a slightly tipped position for drainage. <i>L. elegans</i> grows best when the soil is heavily mulched with peat moss or shaded by foliage of other plants.
Browns Lily ( <i>L. brownii</i> )	Creamy-white within, purplish rose outside	July & Aug.	3 to 4 ft.	Early fall	Plant 8 to 10 in. deep in fertile, sandy, well-drained soil. This is a beautiful trumpet lily, hardy and easy to grow, but may not be adapted to cooler areas of the state
Tiger Lily ( <i>L. tigrinum</i> )	Orange-red-spotted with purplish black	Aug. to Sept.	4 to 5 ft.	Early fall	An American favorite and probably the oldest cultivated lily. Plant 7 to 9 in. deep. Use 2 in. of clean sand below and above each bulb. Plant in full sun.
Speciosum Lily ( <i>L. speciosum</i> )	White to rose pink	Sept.	3 to 4 ft.	Early fall	Plant 10 in. deep in a sunny location. Prefer a slightly acid soil that is well drained. Not as easy to grow as the tiger lily.
Henry Lily ( <i>L. henryi</i> )	Orange	Sept.	3 to 4 ft.	Early fall	Plant 8 to 10 in. deep in well-drained sandy loam soil that has been enriched with decayed vegetable matter. Plants need support to hold them up. Flowers hold color best in partial shade.
Turban Lily or European Turk's Cap Lily ( <i>L. martagon</i> )	Purple-pink	July	4 ft.	Late summer	Plant 8 in. deep in a soil containing enough fine gravel to make it gritty. Flowers are small and less showy than other species.
American Turk's Cap Lily ( <i>L. superbum</i> )	Orange, red	Aug.	4 ft.	Early fall	This is an American lily. It requires a moist, slightly acid soil. Plant bulbs from 6 to 9 in. deep.

**PERENNIALS AND BIENNIALS (arranged alphabetically by scientific name)**

Plant	Color of bloom	Season in bloom	Height of plant	Season to plant	Remarks
Blue Flax ( <i>Linum perenne</i> )	Light blue	July & Aug.	1 ft.	Early fall	Very attractive in clumps among other perennials. Flowers borne on slender, erect stems. Avoid poorly drained and alkali soils.
Lupine ( <i>Lupinus</i> spp.)	Blue, rose, white	July	2 to 3 ft.	Late summer	An old garden favorite. Requires medium fertile, well-drained soil. Young plants may be transplanted in early spring. Does well in full sun. Russell hybrids are a popular very ornamental group.
Daffodil ( <i>Narcissus</i> spp.)	Yellow	May	8 to 10 in.	Aug.	Daffodil is the name given those narcissi which have prominent trumpets. All daffodils are narcissi, but not all narcissi are daffodils. Daffodils do not require rich soil, but benefit from small amounts of rotted manure worked into the soil at planting. Space 4 to 5 in. apart and plant 4 to 5 in. deep. Deer resistant.
Peony ( <i>Paeonia</i> spp.)	Various	Late May & June	2.5 ft.	Early fall	Grow best in deep, fertile, moist, loam soil. Propagated by division of old plants. Set plants in Sept. with buds, or eyes, no deeper than 1-2" below soil surface. Spade soil deeply and mix fertilizer with soil below roots when transplanting. Manure applied over top of plant may cause root rot. An abundance of moisture is needed through bloom period. Cut flowers in early morning. Select buds partly open for cutting. Do not cut stem below first pair of leaves.
Oriental Poppy ( <i>Papaver orientale</i> )	Pink & scarlet	July	2.5 ft.	Aug. & Sept.	Divide every 5 years. For spring planting, it is better to secure pot grown plants.
Iceland Poppy ( <i>Papaver nudicaule</i> )	White & orange	July to Aug.	1 ft.	Sept.	Well adapted to rock gardens and thrives in rocky infertile soils. Requires full sun and well drained location. When grown in very fertile soil, it may become biennial.
Garden Phlox ( <i>Phlox paniculata</i> )	Various	All summer	2 to 3 ft.	Spring	Propagated from seeds or by division of old plants. Divide plants every 3 or 4 years. Well drained neutral to slightly acid soil preferable. Yellowing foliage may be due to high soil pH or poor drainage. Pinch.
Primrose ( <i>Primula polyantha</i> )	Various	June & July	6 in.	Summer	Divide plants in summer. A rock plant and good for border edging. Prefers shade.
Creeping Buttercup ( <i>Ranunculus repens</i> )	Yellow	June	6 in.	Spring	Will adapt itself to shade, full sun or wet locations. Spreads rapidly and easily divided. May become a weed.
Black-Eyed Susan ( <i>Rudbeckia fulgida</i> )	Yellow, orange	All summer	2 to 4 ft.	Spring	Tough and low maintenance. Upright, spreading plant does best in full sun or partial shade. Tolerates fairly heavy clay soils. Deer resistant.
Siberian Globe-flower ( <i>Trollius asiaticus</i> )	Orange, yellow	Early	1.5 ft.	Sept.	Prefers a deep, cool, moist soil and partial shade. May be propagated from seed if sown immediately after they mature.
Tulip ( <i>Tulipa</i> spp.)	Various	May & June	8 to 12 in.	Oct.	Choose a sunny location. Spade soil to a depth of 12 to 15 in. and work manure into lower 8 in. Space bulbs 4 to 6 in. apart and cover with 4 in. of soil.
Speedwell ( <i>Veronica gentianoides</i> )	Blue	June	1.5 ft.	Sept.	Propagated by divisions or cuttings. Does best in good rich soils, in full sun. Spreads.



**NOTES**



To order additional publications, please contact your county or reservation MSU Extension office, visit our online catalog at [www.msuextension.org/publications.asp](http://www.msuextension.org/publications.asp) or e-mail [orderpubs@montana.edu](mailto:orderpubs@montana.edu)

Copyright © 2011 MSU Extension

We encourage the use of this document for nonprofit educational purposes. This document may be reprinted for nonprofit educational purposes if no endorsement of a commercial product, service or company is stated or implied, and if appropriate credit is given to the author and MSU Extension. To use these documents in electronic formats, permission must be sought from the Extension Communications Coordinator, 115 Culbertson Hall, Montana State University, Bozeman MT 59717; E-mail: [publications@montana.edu](mailto:publications@montana.edu)

The U.S. Department of Agriculture (USDA), Montana State University and Montana State University Extension prohibit discrimination in all of their programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital and family status. Issued in furtherance of cooperative extension work in agriculture and home economics, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Douglas L. Steele, Vice Provost and Director, Montana State University Extension, Bozeman, MT 59717.