



# PERENNIALS

*for New England*

Perennial flower and foliage plants give our gardens continuity. Annuals live one season: some perennials come back for just a few years, but many live ten to fifteen, and peonies can go on for more than a hundred. When we're planning a garden, our first selections are a series of hardy perennial flowers whose sequence of bloom will carry color through the bed all season long. Within most species' stated bloom period, you can find varieties that come into flower early, midseason, or late. To avoid late spring frostbite in cool regions, choose late-blooming varieties of spring-flowering species; where frosts can come early in fall, choose early-blooming varieties of perennials that bloom in late summer. Most hardy perennials are resistant to surface frosts unless temperatures go below freezing (32 degrees Fahrenheit).

Once we've chosen the flowers for a garden, we look for foliage plants that will complement or contrast with the flowers. Colorful foliage—silver, blue, yellow, or red—placed to reinforce, or to be a foil for, the colors of nearby blooms, add depth to the design. Think of the effect of spiky globe thistle and furry lamb's ears. Two lovely blue-foliaged plants are the blue fescue and blue oat grass. Variegated foliage lightens the deep greens of summer. At a distance, white variegated foliage appears jade green or soft gray; yellow foliage looks like a splash of sunshine and fills the same role as flowers for color. We add ferns for the romance they lend to shaded spots, and ornamental grasses tall and small that dance, whisper, and bring sound and movement as well as contrasting texture to the garden.

In a large mixed border we include the big, dramatic leaves and striking architectural forms of a few bold-foliaged perennials, like the large hostas. In the shadow of tall perennials, these shade-lovers thrive even in a sunny border. Giant tropical foliage plants—dwarf canna and the hardy banana—add drama. These "tender perennials" won't winter over, but the effect they create is worthwhile. We also like to set two or three dwarf needled-evergreens in strategic places. Their solid forms and strong color anchor flower beds in early spring and, with the ornamental grasses, they maintain a sense of life when the garden falls asleep.

Finally, we look for places to tuck in a few aromatic herbs and very fragrant flowers. Low-growing, fuzzy, white-splashed pineapple mint and silver variegated thyme lighten the bed and release their fragrance as you brush by. Aggressive plants like the mints can be set out in buried containers. Some flowering bulbs and many important perennials have fragrant varieties. The most fragrant of the spring flowers are the hyacinths, in the Bulbs chapter, but there are fragrant varieties of many perennials not noted for scent. Two examples are 'Myrtle Gentry', a scented peony, and 'Fragrant Light', a scented daylily.



## WHEN, WHERE, AND HOW TO PLANT

If you are interested in experimenting with a flowering meadow or a wild garden, you'll need hundreds of plants. Try your hand at starting the perennials indoors from seed. (See Starting Seeds Indoors in the Appendix.) Plants that are the species, rather than an improved or named variety, will come true from seed. But when you want named varieties, we strongly recommend you choose container-grown perennials grown from root divisions and rooted cuttings. Here's why: the named varieties (hybrids and cultivars) are superior plants selected from among thousands. Growers propagate them from cuttings or root divisions, and so they bloom true to the parent plants. Buy one plant, divide it into three plants, repeat for three years and you will have twenty-seven plants, in five years 243 plants, ad infinitum—so a perennial bed of the best can be inexpensive.

Perennials in 1-quart containers planted in the spring produce some blooms the first season: those sold in 2- to 3-gallon containers will make a bigger show. Most container-grown plants can be set out in spring, summer, or fall. In spring, growers ship some perennials bare root—astilbes, for instance.



These often flower fully only the second or third season. A perennial that blooms early in the spring—columbine, for example—gives the best show its first year when it is planted the preceding late summer or early fall.

The surest way to provide soil in which perennials will thrive for many years is to create a raised bed. In the Soil Preparation and Improvement section of the introduction, you'll find instructions for creating a raised bed and for bringing the soil to pH 5.5 to 7.0, the range for most flowers. Our recipe for a raised bed includes long-lasting, organic fertilizers.

The spacing of perennials depends on the size the mature plant will be: we've offered suggestions with each plant. Always provide a generous planting hole, one twice the width and twice as deep as the rootball. Before you plant, unwind roots that may be circling the rootball, or make shallow vertical slashes in the mass, and cut off the bottom ½ inch of soil and rootball. Soak the rootball in a big bucket containing starter solution. Half-fill the hole with improved soil. Then set the plant a little high in the hole, fill the hole with soil, and tamp firmly. Water slowly and deeply, then mulch around the planting following our suggestions in the Introduction. Staking protects very tall flowers in a storm. But most, if correctly fertilized and given plenty of space all around, won't need it. Tall, weak growth is often the result of force-feeding with non-organic fertilizers. Wide spacing also improves air circulation, reducing the risk of disease and mildew. Water a new planting, slowly and deeply, every week or ten days for a month or so unless you have soaking rains. Water any time the plants show signs of wilting.

## CARE GUIDELINES

After summer, we like to leave in place seed-bearing perennials with woody upright structures, like black-eyed Susans, because they look interesting in winter and feed the birds. Some self-sow and will replenish the planting. In late fall we clear away collapsed foliage that will grow slimy after frost. When you remove dead foliage,



cut it off; don't pull it off because that may damage the crown beneath. In late winter or early spring, after the soil has dried somewhat, it is time to clear away the remains of last year's dead foliage: watch out for burgeoning stems while raking through perennials such as lilies. Every year in spring, and

again in September to October, we fertilize established perennial beds, not individual plants, by broadcasting slow-release, organic fertilizer: an acid-type fertilizer at the rate of 4 pounds per 100 square feet for acid lovers, 6 pounds of a non-acid fertilizer for the others.

## ARTEMISIA

*Artemisia* species and hybrids



**Hardiness**—Zones 3 to 7

**Color(s)**—Silver foliage, yellow blooms

**Bloom period**—August to October

**Mature Size (H x W)**—1 to 3 ft. x 1 to 3 ft.

**Water needs**—If rain is scarce, water new plants; once established, they will be quite drought-tolerant.

**Planting/Care**—Plant divisions in spring or fall in average, well-drained soil. Space plants 18 inches apart for good air circulation and to allow room to grow. Pinch stem tips to encourage bushier growth. Unless the flowers are useful, remove them. Stake tall varieties. Divide overlarge clumps in fall.

**Pests/Diseases**—None

**Landscaping Tips & Ideas**—The silver foliage punctuates green and sets off individual plants and their flowers. In spring, they obscure ripening bulb foliage, and they're still present to complement mums in fall. Do well in containers, especially the rampant 'Silver King'. For nice compact growth, drastically cut back by half in June.



## ASTER

*Aster* spp., cultivars, and hybrids



**Hardiness**—Zones 3 to 8

**Color(s)**—Blue, dark purple, lavender, pink, rosy red, white

**Bloom period**—Fall

**Mature Size (H x W)**—1 ½ to 6 ft. x 3 to 5 ft.

**Water needs**—Water regularly to establish, then during dry spells.

**Planting/Care**—Sow seed in spring for bloom the following year; for bloom this year, set out root divisions. Soil should be moderately fertile, well-drained, and somewhat acidic. To keep plants stocky, pinch back shoot tips once in spring and again a month later. Taller ones will need support or staking.

**Pests/Diseases**—Avoid mildew by watering at the base of the plant. Plant resistant varieties.

**Landscaping Tips & Ideas**—Beautiful in naturalized plantings with ornamental grasses and Russian sage; good in mixed borders. Also lovely by a stone wall. Aptly named 'Purple Dome' is an excellent dwarf variety.

## ASTILBE

*Astilbe* spp. and hybrids



**Hardiness**—Zones 4 to 8

**Color(s)**—Creamy white, pale pink, lilac, coral, red

**Bloom period**—Late spring and early summer

**Mature Size (H x W)**—1 to 5 ft. x 2 to 3 ft.

**Water needs**—Maintain a moist soil. Water deeply every week to ten days unless you have a soaking rain.

**Planting/Care**—Plant in mid-spring or late summer. Astilbe thrives in light shade in rich, moist, humusy soil with a slightly acid pH. Maintain a 2- to 3-inch mulch; replenish every spring. Fertilize once in early spring and again in early fall. Divide every three years if you wish, between early spring and August.

**Pests/Diseases**—Problems are rare.

**Landscaping Tips & Ideas**—Excellent fillers in the middle or back of shade borders. Lovely edging a woodland path, stream, or pond. Make a lovely tapestry when massed.



**BABY'S BREATH***Gypsophila paniculata***Hardiness**—Zones 3 to 9**Color(s)**—White or pink**Bloom period**—June to August**Mature Size (H x W)**—2 to 3 ft. x 3 to 4 ft.**Water needs**—Water when rainfall is scarce.**Planting/Care**—Transplant potted plants anytime during the growing season. Likes average, well-drained soil that is not too rich in organic matter and is slightly alkaline. Choose the site well because they resent being moved later. Space plants 2 to 3 feet apart. Cut off branches when their flowers turn brown to stimulate renewed flowering and compactness. Stake as needed.**Pests/Diseases**—Avoid possible crown, root, and stem rot problems with well-drained soil.**Landscaping Tips & Ideas**—Use as a filler or as a foil to coarser, green-foliaged plants in a border or rock garden. Pink-flowered ones harmonize with silver-leaved artemisia and lamb's ears. Try it near the front of a border as a see-through plant.**BEEBALM***Monarda didyma***Hardiness**—Zones 4 to 9**Color(s)**—Scarlet, pink, cerise, red, white, violet**Bloom period**—Late summer**Mature Size (H x W)**—2 to 4 ft. x 2 to 4 ft.**Water needs**—Water new plantings deeply for a month or so. Maintain soil moisture during dry spells.**Planting/Care**—Set out container plants or divisions in spring, summer, or fall. It thrives in well-drained, moist, humusy soil that is slightly acid. Give it plenty of space and good air circulation—it will fill in quickly. Fertilize in early spring. Deadhead to extend bloom period. You may divide every two or three years in late summer.**Pests/Diseases**—Prevent mildew by providing space and air circulation and choosing resistant varieties.**Landscaping Tips & Ideas**—Makes an extraordinary statement, even from afar, when planted in a clump growing against a wall. Wonderful in perennial borders, meadows, wild gardens.**BELFLOWER***Campanula spp.***Hardiness**—Zones 3 to 8**Color(s)**—Blue, white, lavender, pink**Bloom period**—Late spring to early fall**Mature Size (H x W)**—2 to 6 ft. x 2 to 3 ft.**Water needs**—Water new plants deeply every week the first season, unless you have soaking rains.**Planting/Care**—Seed sown indoors develops well and transplants readily. Springtime divisions and rooted cuttings also grow readily. Provide well-drained, fertile garden soil. Mulch well. Stake taller ones. Fertilize in early spring and early fall. Deadhead the taller forms only when all the buds on a stem have faded.**Pests/Diseases**—Combat slugs and snails with traps and/or bait.**Landscaping Tips & Ideas**—Taller ones are perfect for cottage gardens and lovely with Siberian iris. Attractive with gray artemisias and white- or pink-flowered plants. Height and habit varies with species and cultivar—shop around for ones that suit your garden plans.**BLACK-EYED SUSAN***Rudbeckia fulgida var. sullivantii*  
'Goldsturm'**Hardiness**—Zones 3 to 9**Color(s)**—Dark gold with a dark eye**Bloom period**—Summer into fall**Mature Size (H x W)**—1 1/2 to 2 1/2 ft. x 2 to 2 1/2 ft.**Water needs**—Water new plants weekly if there are no soaking rains; drought-tolerant once established.**Planting/Care**—Plant from seedlings started indoors or as seed in the open garden once the soil can be worked in spring. Well-drained, light, fertile soil is best. Fertilize in early spring and early fall. Deadhead. Divide in early spring every four years to keep plants full and flowery.**Pests/Diseases**—Powdery mildew is the biggest threat; prevent with good air circulation.**Landscaping Tips & Ideas**—Excellent with ornamental grasses, in meadow gardens, and in sunny mixed flower borders. Leave some flowers on at season's end for the birds, for winter interest, and to reseed.**BLAZING STAR***Liatris spicata***Hardiness**—Zones 3 to 9**Color(s)**—Mauve, purple, white**Bloom period**—Mid- to late summer**Mature Size (H x W)**—2 to 3 ft. x 2 ft.**Water needs**—Water during prolonged dry periods.**Planting/Care**—Plant divisions in the spring in ordinary, moist, well-drained soil (they hate soggy winter soil). In good soil, they do not need routine fertilizing—in fact, a rich diet makes for floppy flower stems that need staking. Promote fall rebloom by cutting back the flower spikes to basal foliage after three-quarters of the florets have faded. Do not cut back foliage until it is brown. Dig and divide the corms in overlarge clumps every four years.**Pests/Diseases**—None significant**Landscaping Tips & Ideas**—The rose colors are most compatible with blue, lilac, or magenta flower companions, or yellow ones such as black-eyed Susan, goldenrod, beebalm, and Shasta daisy. Ornamental grasses make good neighbors as well.**BLEEDING HEART***Dicentra spectabilis***Hardiness**—Zones 3 to 9**Color(s)**—Pink, pink-and-white, white**Bloom period**—Spring**Mature Size (H x W)**—2 to 3 ft. x 2 to 3 ft.**Water needs**—Maintain a moist soil; water deeply every week to ten days if there have been no soaking rains.**Planting/Care**—Plant in early spring in well-drained, rich, moist, humusy soil. The key to a long bloom period is sustained moisture and mulch, especially in the warmer reaches of New England. Fertilize in early spring and early fall. Cut back to the ground when the foliage dies down. Established plants resent being disturbed, but with care you can divide them in early spring.**Pests/Diseases**—Not common—though rot can occur in poorly drained sites.**Landscaping Tips & Ideas**—Delightful in shady gardens, with wildflowers, and in rock gardens. Good companions include ferns, hostas, and Solomon's seal.

## PERENNIALS

Cold tolerance and light needs are the first considerations when choosing perennials for our region. If frost threatens your garden through mid-spring, choose late-blooming varieties of spring-flowering species. If frosts come early in fall, choose early varieties—they'll have time to bloom before the frost gets there.

Most flowering perennials need a full sun location and six to eight hours of direct sun from 10 a.m. through mid-afternoon. Plants that can take shade need the bright shade under a tall tree or all-day dappled light under a tree with open branching. In Zones 3 and 4, perennials growing in full sun generally can stand a little more cold.

The ideal perennial garden includes

- Flowers that bloom in spring, summer, and fall. Our perennials list can help you locate those that are just right for your garden.
- Foliage plants for color and diversity, including ornamental grasses (see Chapter 5) and ferns.
- Small evergreens to anchor the composition and to keep it green in winter.

## PLANNING

When will it bloom? Most perennials come into bloom their second season and grow fuller each year until they need dividing (see below). Only a few perennials will bloom the first year from seed. To be sure of a show of flowers the first season, buy big container-grown root divisions or second-year seedlings. Generally speaking, the larger the crown (and container and price), the fuller will be the floral display that year. If the perennial that you are interested in blooms in early or mid-spring—columbine, for example—you'll get more flowers the first spring if you set out a container-grown specimen the preceding late August or early September than if you plant it in early spring.

Some catalogs ship perennials in spring "bare root," with planting instructions—astilbes, for instance. In our experience, these often flower fully only in the second or even third season.

When you need lots of a particular perennial—catmint to edge a big bed, for example—seeds are the way to go. You can start seeds in flats indoors or in a cold frame, but most don't germinate as quickly as seeds for annuals. (See the January pages of the *Annuals* chapter.) Perennials can also be started from seed in the garden or in a cold frame, either in spring two weeks after the last frost date, or in early summer up to two months before the first frost date. When fall sowing is recommended on a seed packet, it usually means those seeds will benefit from a chilling period. The process, called "stratification," is described in November.

## PLANTING ADVICE

**Soil for perennials.** The "good garden loam" that perennials thrive in is more often created than inherited. The solution to assorted soil problems, including rocky soil and poor drainage, is to grow perennials in raised beds enriched with organic additives.

**Planting procedures.** Whether you are planting in the soft soil of a new raised bed or preparing a planting hole in an established perennial border, make the hole three times the diameter of the rootball, and twice as deep.

If you are preparing a planting hole in an established bed, test and amend the soil pH as when preparing a raised bed (see *Soil Preparation and Improvement* in the Introduction to the book) and then mix in 3 to 4 inches of humus, enough so that a quarter of the soil is organic matter. Mix in a slow-release organic fertilizer, half-fill the hole with the amended soil, and tamp it down firmly.

Free the plant from matted roots circling the rootball. If you can't untangle them, make four shallow vertical slashes in the sides and slice off the bottom half inch. Dip the rootball in a bucket containing starter solution. Half-fill the hole with improved soil. Set the plant a little high in the hole. Fill the hole with improved soil, and tamp firmly. Water slowly and deeply, and then apply a 2- to 3-inch layer of mulch starting 3 inches from the crown.

The spacing between perennials depends on the size of the plant when mature. Edging plants under a foot tall need 12 to 18 inches all around. Intermediate sizes—1 to 1½ feet tall—which is most perennials—need 18 to 24 inches between plants. Larger plants need to be about 3 feet apart. Hostas and daylilies need 24 to 30 inches. Peonies need 3 to 4 feet. Cool climate gardeners find that close planting shades out weeds.

When summer is over, we like to leave in place healthy seed-bearing perennials with woody upright structures, like black-eyed Susans. They're interesting in the winter, and they provide seeds for the birds. Some self-sow and will refurbish your bed.

In the fall, clear away perennials' dead foliage; cut it off, don't pull it off because pulling may damage the crown beneath. Look before you leap; be careful not to damage burgeoning stems.

**Maintenance.** To sustain growth and satisfying bloom, your perennials need a continuous supply of nutrients. The fertilization schedule for established beds begins in late winter or early spring. After that, how often you fertilize depends on the type of fertilizer you are using.

Here's an overview of the annual maintenance needs of a perennial bed:

1. Before growth begins in late winter and early spring, clean up the beds, test and adjust the pH, fertilize and refurbish the soil.
2. Maintain a year-round mulch to protect plant roots from heat, cold, and drought. A winter mulch of pine boughs applied after the second hard frost in fall catches leaves and blown debris and saves some tricky raking in spring.
3. Deadhead and groom the plants during the growing season.
4. Every few years divide the crowns to keep plants producing and healthy.
5. Control the problems described in the section on pests and diseases.

6. Make a final application of fertilizer as growth slows at the end of the growing season: Zones 3 and 4, usually about August 15; Zone 5, early September; Zones 6 and 7, early September to early October.

7. Throughout the season, early spring to mid-fall, edge beds that are not protected by some form of barrier to prevent grasses and weeds from invading. Use an edger to create a trench 4 to 8 inches deep.

In addition to an annual check of the pH, every three to five years we recommend an application of rock phosphate, green sand, and where there is clay, gypsum. These are the granular soil additives recommended for preparing a new planting bed. Just measure the products into a bucket, mix them, and with your fingers scratch them into the soil a quarter-inch deep.

## FERTILIZERS

If you are using organic fertilizers, such as Holly-Tone® or Plant-Tone®, then you will need to fertilize the first time about four to six weeks before growth is due to begin in spring, and then again as the growing season is ending.

If you are using time- or controlled-release chemical fertilizers, you will need to fertilize just before the plants start to grow and to repeat according to the formula inscribed on the fertilizer container. If you use a nine-month formula, that should carry you through the whole growth season.

If you are using granular chemical fertilizers, then you will need to fertilize just before growth begins in spring, and repeat every six weeks until the end of the growing season.

## STAKING

Most tall perennials that are spaced properly, fertilized organically, and not stuck on a windy hill won't need staking. Wide spacing improves the plants' access to light and air, and that strengthens the stems. Weak growth is often the result of force-feeding with non-organic fertilizers. However, delphiniums, lilies, the tallest dahlias, and some other very big perennials usually do need staking.

When you set out a new plant that needs staking—or when an established plant that will be very tall starts to grow—insert a stake in the soil as close as possible to the crown and as tall as the plant will grow to be. Tie the main stem loosely to the stake with soft green wool, raffia, cotton string, wool yarn, or strips of pantyhose. As the plant grows, keep tying the main stem and branches onto the stake higher and higher.

## PRUNING, SHEARING, AND DEADHEADING

You can improve the performance and health of some perennials by selective pruning, shearing, and deadheading. Our suggestions appear in the month-by-month pages that follow.

For some perennials, pruning or shearing early in the growth cycle keeps plants compact and encourages later and more, though usually smaller, blooms. Removing fading and dead blooms—deadheading—stops the development of seeds and, in most cases, results in more flowers.

Shearing is the way to deadhead plants with very small flowers—creeping phlox, miniature pinks, and baby's breath, for example. The quick and easy way to deadhead larger blooms is by pinching them out. Just place your thumbnail and forefinger in back of the bracts—the small scale-like leaves behind the petals—and squeeze the flower head off. If the flower stems are too thick to pinch out, snip them off with small pruning shears sold for that purpose.

Pruning and shearing also helps the health of some plants attacked by leafminer and mildew. Cut the diseased foliage to the ground and discard it. The new foliage should grow in clean.

## WATERING AND MULCHING

**Watering.** Sustained moisture makes nutrients in the soil available and is essential to the unchecked growth and health of perennials.

When you plant a perennial, put down 1½ inches of water right after planting. New plants and established flower beds need 1½ inches of gentle rain or slow, deep, gentle watering every ten days to two weeks.

Between July and August, you will likely have to water perennials regularly. In fall, just before the ground freezes, water the perennials thoroughly.

**Mulching.** We recommend keeping a 2- to 3-inch layer of mulch around perennials. Deeper mulch may bury the crown and kill some perennials. (See *Mulch* in the Introduction to the book.) Start the mulch a few inches from the crown, and spread it out over an area wider than the plant's diameter. That is enough to minimize the loss of soil moisture—saving water and the time applying it—and to moderate soil temperatures. For year-round use, we recommend organic mulches such as shredded bark and pine needles (which can be piled a little deeper) because they add humus and nutrients to the soil as they decompose. Replenish the mulch after the late winter/early spring fertilization.

The need for a winter mulch depends on the severity of your climate, the hardiness of the plants, and the exposure of the beds. In Zone 6, the main purpose of winter mulch is to keep the perennials from heaving out of the ground as the ground freezes and thaws in winter and early spring. In Zone 7, a winter mulch can save perennials that are borderline hardy during especially severe winters. Apply a winter mulch only after the ground has frozen hard, and remove it when you first spot signs of active growth in the plants.

We recommend airy organics such as straw or pine boughs as a winter mulch. Apply the mulch so you can see the plant through it. For coastal dwellers, marsh hay and salt hay from the shore are excellent winter mulches as they are weed free, and they can be saved, covered in a pile, from year to year.

## DIVIDING AND MOVING PERENNIALS

To remain productive and showy, most perennials should be divided and replanted every four or five years. Dividing also gives you plants for the development of new gardens and to give away as gifts. On the plant pages that follow, we explain when each is likely to need dividing. But the perennials themselves indicate when the time has come: the stems become crowded and leggy, the roots become matted, and there are fewer and smaller blooms.

You can help your perennials stay healthy and productive by dividing and replanting them every few years. Division forces the crowns to grow new roots, and replanting provides an opportunity to refurbish the soil. A new planting hole generally has freshly amended soil—and the plant benefits.

We divide when we need more of a plant, typically heuchera, catmint, and other edgers.

A plant needs dividing when it is producing fewer and smaller blooms or when the crown is pushing up and stems look crowded and leggy. Many perennials benefit from division every five or six years.

You can divide in early spring before growth begins. But the best time to divide most perennials is toward the end of the growing season—late summer, before and around Labor Day. The soil will be warm enough for several more weeks ahead to keep existing roots growing while new roots are developing. In Zones 3 and 4, divide around August 15. In Zone 5, divide about September 1. In Zone 6, most perennials can be divided September 1 to September 15. In Zone 7, divide September 1 to mid-October.

There's more than one way to divide a crown. For the gardener who wants to multiply his/her supply, the most profitable way is to lift the whole crown with a spading fork, and with a shovel or an edger, divide the crown into two or more pieces. While waiting to replant, keep the divisions moist and out of the sun. This method is best for perennials that have very hard crowns.

For the method that is easiest on the gardener, with a shovel, chop through the center of the crown and dig up one half. Amend and fertilize the soil around the section that is to remain where it is; it will grow on in lively fashion. Replant the other section in improved soil. We recommend this method for peonies and other perennials that are slow to recover from being moved. This method allows for reproduction without interrupting the blooming cycle of the garden.

## PESTS AND DISEASES

**Weeds.** Keep weeds out of flower beds to eliminate competition for water and nutrients, to keep air moving in the garden, to avoid pests and diseases inherent to some perennials, and to keep the garden looking beautiful.

**Deer and rodents.** Deer prefer most all perennials, and especially hostas. So far they are snubbing ornamental grasses, ferns, and perennials with dainty foliage and tiny flowers, like baby's-breath. The deterrents we've tried keep deer away only until they realize smelly sprays and flashing lights are not hazardous to their health. Changing the deterrent every six weeks is some help. Dogs, electric fences, and deer fences work . . . up to a point.

To keep rabbits, woodchucks, and other rodents away from your flower beds, try chemical fungicide formulations such as Thiram (Arasan) and hot pepper wax.

If you see signs of vole or mole activity, bait the main runway with a rodenticide.

**Insects and diseases.** Pests, such as aphids, caterpillars, beetles, and mealybugs, and diseases, such as powdery mildew, root and stem rot, rust disease, and spider mites, can afflict perennials. Keep an eye out for these problems.

## PERENNIALS THRIVE IN CONTAINERS

You can outwit limitations imposed by light, wind, and some pests by planting perennials in containers. Deer bait, the gorgeous perfumed 'Casa Blanca' lily for example, is safer in pots on your terrace than in the garden.

### Soil:

- ¼ good garden soil or bagged topsoil
- ¼ compost
- ¾ commercial soilless mix
- ½ PermaTill® or perlite water-holding polymer

**Light:** Set large containers (too big to move) where they will receive some sun on all sides over the course of the day. Turn small pots often so all sides receive some direct light.

**Containers:** Hardy perennials can survive Zones 6 and 7 winters outdoors if in containers big enough to buffer the cold, 14 to 16 inches wide and deep. Grow tender perennials in big tubs, and move them for the winter to a frost-free shed or attached garage. Equipment on casters makes moving easy.

**Insulation:** Wrap very large containers remaining outdoors for the winter with a double row of large bubble wrap before filling them with soil. You can also pack bags of leaves around them to keep the cold out.

## PRUNING ENCOURAGES REBLOOMING

Deadheading—removing fading and dead blooms—encourages almost all flowering perennials to bloom on. To keep the plant shapely, cut off the stem of the spent bloom just above the next node on the stem. That's where the next flowering stem will arise.

In some plants, cutting out-of-bloom stems to the ground and reducing deteriorating foliage by 4 to 6 inches or more will encourage regrowth and reblooming. Some perennials that respond to this treatment are catmint, *Campanula carpatica*, *Centranthus*, *Echinops*, *Chrysanthemum* 'May Queen', and cultivars of the Shasta daisies, daylilies that are rebloomers, delphiniums, *Salvia nemerosa*, *Scabiosa*, *Stokesia*, *Tradescantia*, *Verbena*, *Veronica*, and yarrow.

Shearing tall fall-blooming perennials by half their height June 1 and again by July 15, or no later than eight weeks before their scheduled bloom time, results in more attractive plants and better blooms. Some that benefit from this treatment are asters, boltonia, chrysopsis, helianthus, heliopsis, mums, Russian sage, *Salvia grandiflora*, and *Saponaria officinalis*.

Shearing spring bloomers soon after they finish blooming keeps them from getting leggy and promotes fuller bloom next season. Some that benefit from this treatment are candytuft, creeping phlox, and sweet alyssum.

## WHEN YOUR PERENNIALS NEED WATERING

Climates and microclimates and the weather patterns from year to year affect the size, color, and health of perennials, their bloom time, their hardiness, and their seasonal performance.

Understanding how heat and humidity affect your perennials helps you to water correctly.

- The hotter and drier the air, and the windier the weather, the more water your plants need. Don't water by rote; water when the soil feels dry.
- The sandier the soil, the more often your garden will need watering. You can offset sandy soil by incorporating plenty of humus in the soil before planting new plants. The windier the exposure, the sooner container and plants and garden soil will dry out.
- The higher the heat, the drier the air will be, and the more likely you are to encounter spider mites infesting your plantings. Overhead watering humidifies the air and can help. Perennials growing in moist humusy soil and mulched 2 to 3 inches deep can stand considerably more heat, sun, and drought than plants without mulch.
- The wetter the season, the higher the humidity, and the more likely the soil is to become waterlogged, especially in beds that don't drain well. Humidity encourages mildew and other negative conditions.

The first line of defense against disease in areas of high heat and humidity is to plant perennials advertised as disease-resistant. Equally important is provide your plants with very well-drained soil, a must for most perennials. Uncrowded, well-spaced plants have better drainage and good air circulation. The solution to finding a wet spot right where you want to put your flower bed is to create a raised bed.



## JANUARY

- If you have in mind moving some plants this spring, spend some time now with your garden books and catalogs and make a spring-planting and moving plan. If you will be adding plants, try for ones that have more than one asset.
- It's too early to plant anything, but not too early to decide whether you want to try starting seeds indoors. Seed packets and the blurbs in many garden catalogs tell you whether and when the seeds can be started early indoors.
- If you are without snow cover, make the rounds of your perennial beds to see if there are crowns that have been heaved. If yes, gently heel them in, and cover them with a winter mulch of evergreen boughs to keep the ground cold until winter ends.
- Prune back ornamental grasses that are looking weatherbeaten. Use shears, and cut back to within a few inches of the crown.

## FEBRUARY

- While the cold keeps you housebound, look through garden catalogs for summer-flowering bulbs, tender tropicals, aromatic herbs, dwarf evergreens, and flowering trees that enhance the seasonal color, structure, and texture of your perennial borders. Decide what to order. It's time.
- You can start some perennials indoors from seed this month and next. Some to try are garden mums, delphiniums, catmint, sweet rocket, hollyhocks, and phlox.
- Check snow-free flower beds for plants heaved by thaw-and-freeze cycles, and press the crowns back into place. Add a light winter mulch to plants that have been heaved and those that retain green foliage over the winter—for example, garden mums, candytuft, and basket-of-gold.
- Cut off battered hellebore foliage to make space for new growth and flowering.
- Seedlings started indoors that are crowded or lack good drainage may show symptoms of damping off, which rots stems near the soil surface. Discard affected plants, and increase light and fresh air.

## MARCH

- Take advantage of early sales this month to buy fertilizers, other soil additives, and mulch. But be cautious. If the price is a steal, make sure the bag is unbroken. Moisture that gets into bags of cocoa hulls, for example, encourages mildew.
- If bare-root perennials arrive too soon for planting, store them in their packages in a dark, cool, but frost-free place.
- As soon as you can, rake up the perennial borders to get them ready for their first annual application of fertilizer.