



The colourful bracts of Euphorbia 'Fireglow' are a standout in a sunny garden.

Photo: Helen Battersby

Perennials for Full Sun: A Toronto Master Gardeners Guide

Perennials are hardy, ornamental plants that live for at least 3 years and die back to the ground each winter in colder climates. Most perennials bloom in the second year after seeding; however, there are now perennials available that will flower in the first year, and will continue to bloom for years to come.

Planning your Perennial Garden

Choose a location that is pleasing to you. Select your perennial to match the location. Be sure to check the hardiness zones to see if the perennial is hardy for this area. Some options to consider for perennials are borders, beds along a wall or fence, or an island garden. Once the site has been selected, determine the amount of light that it gets. There are 3 categories of light exposure: full-sun (6 hours or more), partial or filtered sun (3 to 6 hours of sun, or filtered through a light tree canopy all day), and full shade (less than 3 hours). Knowing how much light the area gets will assist you in selecting the correct perennial for your site. Next, consider plant heights, colours, and bloom periods.

Preparing your Soil

Prepare the perennial garden site by clearing the soil as soon as the ground can be worked. Ph should be checked early on as it will dictate additions to the bed. The ideal level for most plants is 6.5-7.5. Organic matter should be added to the soil surface. Apply equal amounts of peat moss, compost and sand or any other material needed. Try to disturb the existing soil profile as little as possible. You want to minimize changes to the natural soil layers that have built up, and prevent disturbance of existing microorganisms that digest organic matter, aerate, and turn over the soil naturally. Remember that most perennials need an area 18" to 24" square to properly develop.

Three common types of perennial gardens are:

- Rock garden: well drained soil (sandy)
- · Border/island bed: loose and humus rich, well drained soil
- Waterside garden: moist humus soil

Cultural Practices

Most perennials require division every 3-4 years. Spring blooming perennials are best divided after flowering or in late summer to fall. Late summer and fall blooming perennials should be divided in the spring. There are some perennials that are best if left undisturbed once planted and should not be divided. These include butterfly milkweed, Euphorbias, oriental poppies, baby's breath, gas plant, blue false indigo and columbines.

In late fall (November), a three inch layer of mulch can be applied after the ground has frozen. Avoid covering the crowns of the plants. This will help prevent the soil from alternately freezing and thawing, which can damage roots and cause plants to heave. Mulch may be removed in early spring to help the ground warm more quickly, then reapplied once it has.

Pests and Diseases

Few major pest and disease problems will arise in a perennial garden if the correct plant has been chosen for the right place. Making choices for the correct cultural matches (light requirements, drainage, soil type, root competition, moisture needs) will result in little or no major pest and/or disease problems. Some common diseases that may occur are powdery mildew, botrytis, root/crown rots, fungal leaf spots, Tospoviruses, bacterial blight, and downy mildew.

Inspect for insects and diseases regularly, and avoiding over and under watering. Observe the details of a plant's appearance and make written notes. Good sanitation practices are also important. Remove decaying plant material and remove any weeds as they appear.

Due to the new pesticide law, and in the interest of preserving biodiversity, we recommend only organic controls. First, identify what is attacking a plant (pest or disease) prior to treatment. This may help determine if treatment is practical or even needed. Spraying water from a hose can knock off most aphids and spider mites. Hand picking larger insects is also an option. Use insecticidal soaps for control measures. Use insect traps and dust barriers for crawling insects. Natural insect controls include ladybugs and nematodes.

Perennials for Hot Dry Soils

- Anthemis tinctoria (Golden Marguerite Daisy)
- Arabis caucasica (Rock Cress)
- Asclepias tuberosa (Butterfly Weed)
- Aurinia saxatilis (Basket-of-Gold)
- Cerastium tomentosum (Snow-in-Summer)
- Echinops ritro (Globe Thistle)
- Eryngium sp. (Sea Holly)
- Euphorbia sp. (Spurge)
- Gaillardia sp. (Blanket Flower)
- Hemerocallis hybrids (Daylily)
- Iberis sempervirens (Candytuft)
- Liatris sp. (Gayfeather 'Blazing Star')
- Limonium latifolium (Sea-Lavender)
- Malva alcea (Hollyhock Mallow)
- Phlox subulata (Moss Phlox)
- Physostegia virginiana (Obedient Plant)
- Rudbeckia sp. (Blackeyed Susan)
- Sedum sp. (Stonecrop)
- Stachys byzantina (Lamb's Ears)
- Thymus sp. (Garden Thyme)

Perennials for Windy Sites

- Echinacea sp. (Coneflower)
- Hemerocallis sp. (Daylily)
- Delphinium grandiflorum (Dwarf Delphinium)
- Rudbeckia hirta 'Indian Summer' (Indian Summer Blackeyed Susan)
- Miscanthus sinensis (Eulalia grass)
- *Penstemon* sp. (Beard-tongue)

- Kniphofia uvaria (Red-hot poker)
- Rosmarinus officinalis (Rosemary)

Perennials for Wet Sites

- Eryngium sp. (Sea holly)
- Angelica archangelica (Garden Angelica)
- Angelica gigus (Angelica)
- · Astilbe sp.
- Lobelia cardinalis (Cardinal flower)
- Lysimachia clethroides (Gooseneck loosestrife)
- Eupatorum purpureum (Joe Pye weed)
- Ligularia sp.
- Filipendula sp. (Meadow sweet or Queen of the prairie)
- Physosetegia virginiana (Obedient plant)
- Tradescantia andersoniana (Spiderwort)
- Hibiscus moscheutos (Swamp hibiscus or Common rose mallow)
- Chelone Iyonii (Turtlehead)
- Mertensia virginica (Virginia bluebells)

References

1. Valleau, John M. *Perennial Gardening Guide*, Fourth Edition. Abbotsford, BC: Valleybrook International Ventures, Inc, 2003.

Produced by the Toronto Master Gardeners, these Gardening Guides provide introductory information on a variety of gardening topics.

Toronto Master Gardeners are part of a large, international volunteer community, all committed to providing the public with horticultural information, education and inspiration. Our goal is to help Toronto residents use safe, effective, proven and sustainable horticultural practices to create gardens, landscapes and communities that are both vibrant and healthy.

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Date revised: January 2012

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