Growing Perennials

Herbaceous perennials generally live for three or more seasons, but usually the tops die back to the ground each fall. The crown and roots of the plant resume growth in spring. A few perennials are evergreen or keep a green rosette of leaves at the base in winter. Hardy perennials can live through the winter without protection.

Many plants, such as cannas and dahlias, are hardy perennials in South Carolina that will not live through the winter outside farther north. On the other hand, many of the perennials that grow well in the Northeast United States or England will not tolerate hot, humid summers. Since books about perennials are often written for those cooler climates, it is important to use care in selecting plants that are adapted to Southern heat and humidity.

Many perennials will re-bloom in the warm climate of South Carolina.

Some perennials, such as ferns and hostas, are grown principally for their beautiful foliage. Include foliage plants to extend seasonal color and texture in the garden.

Landscape Use

While the traditional English perennial border was entirely made up of herbaceous perennials, they are attractively used in combination with other plants in the total landscape. Perennials are easily used as ground covers, mixed with annuals, grown in containers, and used as accents or specimen plants.

There are perennials for full sun, part-sun or heavy shade, and for dry, moist or wet soil. Select perennials that are suited to the growing conditions where they will be planted. Select a planting area with good air circulation to help avoid diseases.

Soil Preparation

Good soil preparation is extremely important for growing perennials, since they may be in place for many years. Deeply spade the beds to a depth of eight to 10 inches. Amend clay soils by mixing in at least 2 inches of composted pine bark, composted leaf mold, or a pine bark-based soil conditioner to improve the soil drainage and aeration. Improve water retention in sandy soils by mixing in 2 to 3 inches of composted leaf mold, peat moss, manure, or a peat moss-based potting soil. Good soil drainage is critical to the success of most perennials. Raised beds can be used to ensure adequate drainage.

Base fertilizer and lime applications on the results of a soil test for best results. In the absence of a soil test, add either a complete fertilizer such as 10-10-
10 at the rate of 1 pound per 100 square feet of bed area, or add either a complete slow-release fertilizer or complete organic fertilizer following label directions.

A pH of 6.0 to 6.5 is ideal for most perennials. Most South Carolina soils are very acidic (except for some areas along the coast) and require the addition of lime to correct pH. In the absence of a soil test, add 4 pounds of pelleted lime (3 pints) per 100 square feet of bed area. Incorporate lime and fertilizer into the top 4 to 6 inches of soil after mixing in the soil amendments. Rake the soil surface smooth. For more information about how to test the soil, please see HGIC 1652, Soil Testing.

Planting
Most perennials should be planted in the fall or early spring. Fall planting gives the plant more time to become established before the start of active growth in the spring. Fall-planted perennials are usually well-established before hot weather. Fall planting should be finished at least 6 weeks before hard-freezing weather occurs.

Early spring is also considered a good time to plant perennials. Planting early, just after killing frosts have passed, is better than later spring planting.

Many perennials can be grown from seed, but most gardeners prefer to start with established plants. Perennials are available grown in containers, field-grown, or shipped bare-root and dormant.

If plants are somewhat pot-bound at planting time, loosen the roots around the bottom and sides of the root ball and spread them out in the bottom of the planting hole. To encourage side root growth, make the hole twice as wide as deep. Refill the hole, firming the soil in around the plant to avoid air pockets. Be sure the crown of the plant (the point where roots and top join) is even with the soil surface.

Watering
Water the new perennials thoroughly following planting to settle the soil around the roots. Pay especially close attention to watering the first few weeks while plants develop their root systems. Adequate moisture is essential for the growth of perennials. Most perennials require at least 1 to 1½ inches of water per week from rain or irrigation. More may be needed during very hot weather. To promote deep root growth, water thoroughly and deeply. Allow the soil surface to dry before watering again. Soaker hoses and drip irrigation are ideal watering methods since they save water and avoid wetting leaves and flowers.

Mulch perennials with a 1- to 2-inch layer of compost, pine bark or pine straw to help keep down weeds and conserve moisture. Avoid overly heavy mulching to help prevent crown rot.

Maintenance
Weed control should usually be done by hand-weeding or with the use of herbicides to avoid damaging shallow roots. Read and follow label directions before using any herbicide. Do not apply pre-emergence herbicides around newly planted perennials, as these products will stop root growth.

Maintenance fertilization should be based on the results of a soil test. In the absence of a soil test, apply a complete, slow-release fertilizer, such as a 12-6-6, at the rate of 1 to 2 pounds per 100 square feet of bed area just before new shoots emerge in the early spring. For additional growth, repeat the fertilizer application in 6 weeks. Alternatively, complete organic fertilizers may also be used. However, if a soil test reveals that the soil pH is above 6.5, use an acid-forming, complete fertilizer instead, such as an azalea & camellia fertilizer, or use an acid-forming, complete organic fertilizer. Avoid touching any emerging leaves with fertilizer to avoid leaf damage. Alternatively, apply 4 to 7 pounds of a complete organic fertilizer, such as Espoma Garden-tone (3-4-4) per 100 square feet.

Many newly planted perennials will not bloom the first year. A few, such as peonies, may take several years to bloom heavily.

Many perennials should be staked to prevent them from bending or falling over during wind and rain. When staking is done correctly, the plants grow to cover the stakes. A floppy perennial plant may be an indication that the plant is not receiving adequate sunlight and needs to be relocated.

Remove old flowers to encourage re-bloom on perennials. Many perennials should be cut back to
ground level after bloom is finished to encourage new leaf growth from the base.
Remove dead foliage and stems in the fall, and mulch to protect crowns and roots from alternating mild and freezing weather.

Most perennials eventually become overcrowded and require division. Information on division is available in HGIC 1150, Dividing Perennials. Many perennials are also easily propagated in this way. Other methods of propagating perennials include stem cuttings, root cuttings and seed. 

Problems
Perennials vary considerably in their susceptibility to pests. Selection of resistant species and cultivars, proper site selection, and good cultural practices will prevent many disease problems.

Perennials for Various Uses

Many perennials are available in several cultivars with different color, height or other attributes. Some, such as the heat-and humidity-tolerant cultivar of lamb's ears called 'Big Ears,' are better suited to our climate than the species. Consult with a local nursery person or Extension specialist for cultivars that are especially suited to your area.

Perennials for Shade

Those marked with a * will tolerate the most shade.
Acanthus mollis - Bear's Breech
Alchemilla mollis - Lady's Mantle
Amsonia tabernaemontana - Blue Star

Anemone species
Aquilegia species - Columbine
Arum italicum - Painted Arum *
Asarum species - Wild Gingers *
Aspidistra elatior - Cast Iron Plant *
Astilbe x arendssii - Astilbe
Begonia grandis - Hardy Begonia
Bergenia cordifolia - Heartleaf Bergenia
Brunnera macrophylla - Siberian Bugloss
Carex elata - Golden Sedge
Ceratostigma plumbaginoides – Plumbago

Please see HGIC 1180, Perennial Leadwort
Chasmanthium latifolium – Upland River Oats
Chelone obliqua - Turtlehead
Chrysogonum virginianum - Green and Gold
Please See HGIC 1186, Green & Gold.

Green & Gold (Chrysogonum virginianum) flowers best in partial shade, and is a slow spreading perennial that blooms in spring. It is a native to the Southeast US.
Joey Williamson, ©2015 HGIC, Clemson Extension

Cimicifuga species - Bugbane
Convallaria majalis - Lily-of-the-Valley *
Cyclamen species - Hardy Cyclamen
Dicentra species - Bleeding Heart
Digitalis species - Foxglove
Epimedium species - Barrenwort *
Ferns * (most)

Please see HGIC 1176, Hardy Ferns
Galium odoratum - Sweet Woodruff *
Geranium maculatum - Wild Cranesbill
Gillenia trifoliata - Bowman's Root
Helleborus foetidus - Bearfoot Hellebore
Helleborus x hybridus - Lenten Rose

Please see HGIC 1185 Lenten Rose
Hexastylis species – Gingers
Please see HGIC 1113, Wild Gingers
Lenten Rose (Helleborus × hybridus) has flowers that range from white to mauve and purple. This perennial is evergreen, blooms in the very early spring, and slowly spreads by seeds. Joey Williamson, ©2015 HGIC, Clemson Extension

Heuchera species & hybrids - Coral Bells

'Caramel' Coral Bells (Heuchera 'Caramel') is an example of a hybrid and one of the many foliar colors that are available. One species, Heuchera americana, is a native to the Southeast US. Flowers are typically pink or red.
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Hosta species - Plantain Lily

Please see HGIC 1165, Hosta

Iris cristata - Dwarf Crested Iris

Please see HGIC 1167, Iris

Lamium maculatum - Spotted Dead Nettle *

Lobelia cardinalis - Cardinal Flower *

Lobelia siphilitica - Great Blue Lobelia *

Mertensia virginica - Virginia Bluebells *

Myosotis sylvatica - Forget-me-not

Phlox divaricata – Woodland Phlox

Woodland Phlox (Phlox divaricata) is a beautiful, spring blooming, native perennial. The species has blue, fragrant flowers, but other cultivars are available in white and pink.
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Phlox stolonifera - Creeping Woodland Phlox

Polygonatum species - Solomon's Seal *

Solomon’s Seal (Polygonatum species) are spring blooming perennial for partial shade. This variegated form is Polygonatum odoratum 'Variegatum', which blooms in the spring and is an extremely drought tolerant plant.
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Primula species - Primrose

Pulmonaria species - Lungwort *

Salvia koyame - Japanese Yellow Sage

Saxifraga stolonifera - Strawberry Begonia

Shortia galacifolia - Ocone Bells *

Sisyrinchium angustifolium - Blue-Eyed Grass

Smilacina racemosa - False Solomon's Seal

Spigelia marilandica - Indian Pink

Please see HGIC 1188, Indian Pink

Thalictrum species - Meadow Rue

Tiarella species - Foam Flower *

Please see HGIC 1183, Foam Flower

Tradescantia virginiana - Spiderwort *
Tricyrtis species - Toad Lily *
Trillium species - Wake Robin *
Viola species - Violet *

**Tolerant of Moist or Damp Soils**

Those marked with a * will tolerate wetter soils.
*Acorus gramineus* - Sweet Flag *
*Amsonia tabernaemontana* - Blue Star
*Aster novae-angliae* - New England Aster

New England Aster (*Aster novae-angliae*) is a late summer-blooming perennial that is native to the Eastern US. The species has violet-purple flowers, but cultivars are available in white or various shades of pink.

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Astilbe x arendsi - Astilbe
*Canna* species - Canna *
*Carex* species - Sedge *
*Chelone* species - Turtlehead *
*Cimicifuga* species - Bugbane
*Colocasia esculenta* - Elephant's Ear *
*Crinum* species - Milk and Wine Lily, Crinum
*Cyperus alternifolius* - Umbrella Sedge *
*Eupatorium purpureum* - Joe-Pye Weed

Ferns, many

Please see HGIC 1176, Hardy Ferns

*Filipendula* species - Meadow Sweet
*Galium odoratum* - Sweet Woodruff
*Helianthus angustifolius* - Swamp Sunflower *
*Hemerocallis* species – Daylily

Please see HGIC 1163, Daylily

*Hibiscus coccineus* - Texas Star *
*Iris ensata* - Japanese Iris *
*Iris virginica* - Blue Flag*
*Iris laevigata* - Japanese Water Iris *
*Iris hybrids* - Louisiana Iris *

Please see HGIC 1167, Iris

Joe-Pye Weed (*Eupatorium purpureum*) is a tall, native perennial with soft mauve-pink flowers held in large flower clusters. It typically blooms in October.

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**Perennials for Hot, Dry Conditions**

*Achillea* species – Yarrow

'Coronation Gold' Yarrow (*Achillea 'Coronation Gold') is an excellent hybrid cultivar that resists flopping after rains. Golden, plate-like flower clusters appear in late summer. Plants are very drought tolerant.

Joey Williamson, ©2015 HGIC, Clemson Extension
**Perennials for Poor, Sandy Soil**

*Agapanthus africanus* - Lily-of-the-Nile

*Agave parryi* - Hardy Century Plant

*Andropogon* species - Bluestem Grass

*Artemisia* species - Artemesia

*Asclepias tuberosa* - Butterfly Weed

*Butterfly weed* (*Asclepias tuberosa*) grow in sunny locations and blooms in late summer. It is a nectar source & a larval food source for the Monarch butterfly.

Joey Williamson, ©2015 HGIC, Clemson Extension

*Belamcanda* - Blackberry Lily

*Coreopsis* species - Coreopsis

*Cortaderia selloana* - Pampas Grass

*Crocus x Curtonus ‘Lucifer’*

*Delosperma cooperi* - Hardy Ice Plant

*Festuca ovina* - Blue Fescue

*Gaillardia* species - Blanket Flower

*Gaura lindheimeri* - Whirling Butterflies

*Helianthus* species - Perennial Sunflower

*Hemerocallis* species and hybrids – Daylily

Please see HGIC 1163, *Daylily*

*Hesperaloe parviflora* - False Red Yucca

*Iris* hybrids - Bearded Iris

Please see HGIC 1167, *Iris*

*Kniphofia uvaria* - Red Hot Poker

*Lantana* species – Lantana

Please see HGIC 1177, *Lantana*

*Lavandula x intermedia* - Provence Lavender

*Liatris* species - Gayfeather

*Limonium latifolium* - Sea Lavender

*Nepeta* species - Catmint

*Oenothera* species - Evening Primrose, Sundrops

*Opuntia humifusa* - Prickly Pear Cactus

*Perovskia atriplicifolia* - Russian Sage

*Phlomis* species - Jerusalem Sage

*Phlox subulata* - Thrift

*Rudbeckia* species - Black-eyed Susan

*Ruellia brittoniana* - Mexican Petunia

*Salvia greggi* - Texas Sage

*Santolina* species - Lavender Cotton

*Sedum* species - Stonecrop

*Sempervivum tectorum* - Hens & Chickens

*Solidago odora* - Sweet Goldenrod

Please see HGIC 2326, *Goldenrod*

*Stachys byzantina* - Lamb’s Ear

*Verbena* species – Verbena

Please see HGIC 1175, *Verbena*

*Yucca* species - Yucca

*Butterfly' Crocosmia* (*Crocosmia x Curtonus ‘Lucifer’) is a relative of iris and is a full-sun perennial that blooms in summer with brilliant scarlet flowers.

Joey Williamson, ©2015 HGIC, Clemson Extension

*'Lucifer’ Crocosmia* (*Crocosmia x Curtonus ‘Lucifer’) is a relative of iris and is a full-sun perennial that blooms in summer with brilliant scarlet flowers.

Joey Williamson, ©2015 HGIC, Clemson Extension

*Perennials for Poor, Sandy Soil*
Hemerocallis species – Daylily
   Please see HGIC 1163, *Daylily*
Hesperaloe parviflora - False Red Yucca
Lantana species – Lantana
   Please see HGIC 1177, *Lantana*
Plumbago auriculata – Plumbago
   Please see HGIC 1180, *Perennial Leadwort*
Salvia greggi - Texas Sage
Setcrasea pallida - Purple Heart
Yucca species - Yucca

Attractive Foliage
Those marked with a * are gray or silvers that tolerate heat and humidity.
Acanthus species - Bear's Breech
Alchemilla mollis - Lady's Mantle
Artemisia 'Powis Castle' - Wormwood *
Baptisia species - False Indigo
   Please see HGIC 1184, *Baptisia*

Dianthus gratianopolitanus - Cheddar Pink *
Helleborus x hybridus - Lenten Rose
   Please see HGIC 1185, *Lenten Rose*
Heuchera species - Coral Bells
Hosta species and hybrids - Plantain Lily
   Please see HGIC 1165, *Hosta*
Iris pallida 'Variegata' - Variegated Sweet Iris
   Please see HGIC 1167, *Iris*
Lamium maculatum - Spotted Dead Nettle
Marrubium incanum - Silver Horehound *
Opuntia humifusa - Prickly Pear
Ornamental Grasses
   Please see HGIC 1178, *Ornamental Grasses*
Phlomis fruticosa - Jerusalem Sage *
Polygonatum species - Solomon's Seal
Pulmonaria species - Lungwort
Santolina chamaecyparissus - Lavender Cotton *
Sedum species - Stonecrop
Sempervivum tectorum - Hen-and-chicks
Stachys byzantina 'Big Ears' - Lamb's Ear *
Teucrium fruticans - Silver Germander *

Perennials That Can Be Invasive
Aegopodium podagraria - Goutweed
Ajuga – Bugleweed
   Please see HGIC 1102, *Ajuga*
Artemisia ludoviciana - Western Mugwort
Arundinaria species - Bamboo
Arundo donax - Giant Reed
Bambusa species - Clumping Bamboo
   Please see HGIC 2320, *Controlling Bamboo*
Campanula rapunculoides - Creeping Bellflower
Chasmanthium latifolium – Upland River Oats

Chrysanthemum pacificum - Gold & Silver Mum
Cynara cardunculus - Cardoon
Delosperma cooperi - Hardy Ice Plant *

The white-flowered false indigo (Baptisia alba) forms a 3 – 4 foot, multi-stemmed clump and blooms in April.
Joey Williamson, ©2015 HGIC, Clemson Extension

Upland River Oats (Chasmanthium latifolium) spreads by seed production. This is one of the few ornamental grasses that will grow well in shade. It is also called Northern Sea Oats.
Joey Williamson, ©2015 HGIC, Clemson Extension
Rose Campion (Lychnis coronaria) is a clump forming, short-lived perennial that freely spreads by seed. It flowers during the summer months with rose-magenta blooms that contrast well with its gray-green foliage.
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