Rain Gardens: An Attractive and Easy Way to Protect Our Water Resources

Rain Garden Requirements

Typical rain garden installation requires:

1. A suitable area located between the rainwater source and its destination (either a depressed area in your yard or beyond your property) where water flows naturally and is at least 10 feet from the home.

2. Materials, such as:
   - an appropriate soil-mix (50-60% sand, 20-30% top soil, and 20-30% compost), check your native soil first!
   - native plants (a hardy mix of grasses, small shrubs, and self-seeding perennials are good choices, especially those that are both wet- and drought-tolerant), and
   - a dense-material mulch that won’t float away,

3. Earth-moving tools (to excavate about a one foot depth of soil) and planting tools, and

4. A desire and willingness to manage stormwater on-site and protect water quality.

The size for the rain garden area depends on the size of the area to be drained and the ability of the soil to drain surface water. A rule of thumb is that the rain garden area should be approximately 20% of the drainage area (including rooftops, driveways, and other impervious surfaces) in well-drained, sandy soils, and between 20-60% of the drainage area in more poorly drained, loamy soils. It’s also important to select a location with a seasonally high water table depth no shallower than 18 inches to ensure proper drainage. The excavated area should be 6-8 inches deep, and the area should be typically 8-10 ft. wide in the direction as stormwater flow. Perforated irrigation pipe can be used to spread water flow into the garden. And be sure not to plant too many plants — they will grow and fill the space!

For more information, contact your County Clemson Extension Office www.clemson.edu/extension/counties1.htm or visit the Home and Garden Information Center at http://hgic.clemson.edu/.
Digging out the rain garden location...

Preparing the rain garden soil...

Planting, mulching, and enjoying your success!

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**Plant List for Rain Gardens**
(including blooming months)

### LARGE TREES (over 30' tall)

**Deciduous**
- Red Maple – *Acer rubrum*—Feb-Mar
- River Birch – *Betula nigra*—Mar-Apr
- Green Ash – *Fraxinus pennsylvanica*– Apr
- Black Gum – *Nyssa sylvatica*
- Willow Oak – *Quercus phellos*
- Willows – *Salix* species—Mar-Apr
- Bald Cypress – *Taxodium distichum*
- Pond Cypress - *Taxodium ascendens*

**Evergreen**
- Southern Magnolia – *Magnolia grandiflora*—May-Jun
- Longleaf Pine – *Pinus palustris*—Apr
- Swamp Laurel Oak – *Quercus laurifolia*

### SMALL TREES (under 30' tall)

**Deciduous**
- Red Buckeye – *Aesculus pavia*—Apr-May
- Ironwood – *Carpinus caroliniana*
- Redbud – *Cercis canadensis*—Mar-Apr
- Fringe Tree – *Chionanthus virginicus*—Jul-Sept
- Hawthorn – *Crataegus marshalli*—Apr-May

**Evergreen**
- Dahoon Holly – *Ilex cassine*
- American Holly – *Ilex opaca*
- Red Cedar – *Juniperus virginiana*
- Sweet Bay – *Magnolia virginiana*—Apr-Jul
- Wild Olive – *Osmanthus americanus*—Apr-May
- Red Bay – *Persea borbonia*

### ORNAMENTAL GRASSES

- River Oats – *Chasmanthium latifolium*
- Muhly Grass – *Muhlenbergia capillaries*
- Sweetgrass – *Muhlenbergia filipes*—Oct-Nov
- Switch Grass – *Panicum virgatum*—Jun-Oct

### SEDGES AND RUSHES

- Lurid Sedge – *Carex lurida*
- Fringed Sedge – *Carex crinita*
- Southern Waxy Sedge – *Carex glaucescens*
- White-topped Sedge – *Rhynchospora latifolia*

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**SHRUBS**

**Deciduous**
- Beautyberry – *Callicarpa americana*—Jun-Jul
- Sweet Shrub – *Calycanthus floridus*—Apr-May
- Buttonbush – *Cephalanthus occidentalis*—Jun-Aug
- Pepperbush – *Clethra alnifolia*—Sept-Oct
- Witch Alder— *Fothergilla gardenia*—Sept-Oct
- Winterberry – *Ilex verticillata*
- Swamp Rose—*Rosa palustris*—May-Jul
- Possumhaw – *Viburnum nudum*—Mar-Apr

**Evergreen**
- Inkberry – *Ilex glabra*
- Yaupon – *Ilex vomitoria*
- Anise Shrub – *Illicium parviflorum*
- Coastal Leucothoe – *Leucothoe axillaries*—Mar-May
- Wax Myrtle – *Myrica cerifera*
- Dwarf Palmetto – *Sabal minor*

### PERENNIALS

- Blue Star – *Amsonia tabernaemontana*—Mar-Apr
- Red Milkweed – *Asclepias rubra*—Jun-Jul
- Climbing Aster – *Aster carolinianus*—Sept-Oct
- False Indigo – *Baptisia* species—Apr-Sept
- Tickseed – *Coreopsis angustifolia*—Aug-Oct
- Joe Pye Weed – *Eupatorium fistulosum*—Jul-Oct
- Swamp Sunflower – *Helianthus angustifolius*—Jul—frost
- Swamp Mallow – *Hibiscus moscheutos*—May-Sept
- Blue Flag Iris – *Iris virginica*—Apr-May
- Seashore Mallow – *Kosteletskyia virginica*—Jun-Oct
- Blazing Star– *Liatris spicata*—Sept-Oct
- Cardinal Flower– *Lobelia cardinalis*—Jul-Oct
- Carolina Phlox – *Phlox carolina*—May-Jul
- Black-eyed Susan– *Rudbeckia fulgida*—Aug-Oct
- Goldenrod– *Solidago rugosa*—Aug-Nov
- Ironweed – *Vernonia novii-belgi*—Jul-Sept
- Verbena – *Verbena canadensis*—Mar-May

### FERNS

- Southern Lady Fern—*Athyrium aputiforme*
- Cinnamon Fern – *Osmunda cinnamomea*
- Royal Fern—*Osmunda regalis*
- Marsh Fern—*Thelypteris palustris*—Jun-Sept

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