

Plants for Rain Gardens

Recommended for Southeastern North Carolina

*Charlotte Glen, Urban Horticulture Agent,
North Carolina Cooperative Extension – New Hanover County Center*

Soil conditions in rain gardens alternate between wet and dry, making them tough places for many plants to grow. The following plants are adapted to these conditions, though some plants will tolerate more moisture than others. Each plant is marked according to its flooding tolerance, with **3**'s being tolerant of longer flooding, **2**'s only tolerating brief flooding, and **1**'s indicate plants that tolerant extended drought once established.

All of these plants are native to the southeastern United States in wetland habitats and most are readily available at local nurseries. Wetland plants can generally grow well in moist or well-drained soils, whereas plants adapted to dry soils rarely survive in soggy conditions. How wet a rain garden stays will vary considerably depending on the site where it is installed. Rain gardens created on sandy soils will rarely hold water for more than a few hours. On these sites it is most important to choose plants for their drought tolerance. Rain gardens created on loamy or silty soils could pond water for 1-2 days (if your site ponds water for more than 3 days, you should consider creating a wetland). On these sites, choosing plants tolerant of extended flooding is critical to success.

Remember you are not limited to planting just within the excavated area! Extending plantings around this area will help the rain garden to blend in with the overall landscape. Any plants adapted to the site conditions can be used outside of the excavated area.

For more information on designing rain gardens and bioretention areas, refer to the following NCSU publication: *Designing Rain Gardens (Bioretention Areas)*, available from your local NC Cooperative Extension office or online at:
http://legacy.ncsu.edu/classes-a/bae/cont_ed/bioretention/lecture/design_rain.pdf

Large Trees (over 30' tall)

Deciduous

- Red Maple (2) – *Acer rubrum*
- River Birch (1,3) – *Betula nigra*
- Green Ash (3) – *Fraxinus pennsylvanica*
- Black Gum (2) – *Nyssa sylvatica*
- Willow Oak (1,2) – *Quercus phellos*
- Willows (3) – *Salix* species
- Bald Cypress (1,3) – *Taxodium distichum*
- Pond Cypress (1,3) – *Taxodium ascendens*
- Nuttall Oak (1,2) – *Quercus nuttallii*

Evergreen

- Atlantic White Cedar (1,3) – *Chamaecyparis thyoides*
- Southern Magnolia (1,2) – *Magnolia grandiflora*
- Longleaf Pine (1,2) – *Pinus palustris*
- Swamp Laurel Oak (3) – *Quercus laurifolia*

Small Trees (under 30' tall)

Deciduous

- Red Buckeye (2) – *Aesculus pavia*
- Ironwood (1,3) – *Carpinus caroliniana*
- Redbud (1,2) – *Cercis canadensis*
- Fringe Tree (2) – *Chionanthus virginicus*
- Washington Hawthorn (3) – *Crataegus phaenopyrum*
- Possumhaw (1,3) – *Ilex decidua*

Evergreen

- Dahoon Holly (1,2) – *Ilex cassine*
- American Holly (1,2) – *Ilex opaca*
- Red Cedar (1,2) – *Juniperus virginiana*
- Sweet Bay (3) – *Magnolia virginiana*
- Devilwood (1,2) – *Osmanthus americanus*
- Red Bay (1,2) – *Persea borbonia*

Evergreen shrubs that can be grown as small trees include Yaupon, Wax Myrtle, and Anise Shrub.

Shrubs

Deciduous

- Chokeberry (1,3) – *Aronia arbutifolia*
- Beautyberry (2) – *Callicarpa americana*
- Sweet Shrub (2) – *Calycanthus floridus*
- Buttonbush (3) – *Cephalanthus occidentalis*
- Pepperbush (2) – *Clethra alnifolia*
- Strawberry Bush (2) – *Euonymus americanus*
- Fothergilla (2) – *Fothergilla gardenii*
- Winterberry (3) – *Ilex verticillata*
- Virginia Willow (3) – *Itea virginica*
- Spicebush (2) – *Lindera benzoin*
- Possumhaw (3) – *Viburnum nudum*
- Dusty Zenobia (2) – *Zenobia pulverulenta*

Shrubs continued. . . .

Evergreen

- Florida Leucothoe (2) – *Agarista populifolia*
- Inkberry (2) – *Ilex glabra*
- Yaupon (1,2) – *Ilex vomitoria*
- Florida Anise Shrub (3) – *Illicium floridanum*
- Anise Shrub (1,2) – *Illicium parviflorum*
- Coastal Leucothoe (2) – *Leucothoe axillaris*
- Wax Myrtle (1,2) – *Myrica cerifera*
- Dwarf Palmetto (3) – *Sabal minor*

Perennials

- Blue Star (3) – *Amsonia tabernaemontana*
- Lady Fern (2) – *Athyrium felix-femina*
- Butterflyweed (1) – *Asclepias tuberosa*
- Swamp Milkweed (3) – *Asclepias incarnata*
- Climbing Aster (3) – *Aster carolinianus*
- False Indigo (1,2) – *Baptisia species*
- Boltonia (3) – *Boltonia asteriodes*
- Turtlehead (3) – *Chelone glabra*
- Green and Gold (2) – *Chrysogonum virginianum*
- Mouse Ear Coreopsis (2) – *Coreopsis auriculata*
- Tickseed (1,2) – *Coreopsis lanceolata*
- Swamp Coreopsis (2) – *Coreopsis rosea*
- Joe Pye Weed (3) – *Eupatorium dubium*
- Swamp Sunflower (3) – *Helianthus angustifolius*
- Swamp Mallow (3) – *Hibiscus moscheutos*
- Texas Star (3) – *Hibiscus coccineus*
- Blue Flag Iris (3) – *Iris virginica*
- Seashore Mallow (3) – *Kosteletskya virginica*
- Gayfeather (2) – *Liatris spicata*
- Cardinal Flower (3) – *Lobelia cardinalis*
- Cinnamon Fern (3) – *Osmunda cinnamomea*
- Royal Fern (3) – *Osmunda regalis*
- Garden Phlox (2) – *Phlox paniculata*
- Moss Pinks (1,2) – *Phlox subulata*
- Rudbeckia (1,2) – *Rudbeckia fulgida*
- Green Headed Coneflower (3) – *Rudbeckia laciniata*
- Goldenrod (3) – *Solidago rugosa*
- Stoke's Aster (2) – *Stokesia laevis*
- Ironweed (3) – *Vernonia novaboracensis*
- Verbena (1,2) – *Verbena canadensis*

Ornamental Grasses

- River Oats (1,3) – *Chasmanthium latifolium*
- Muhly Grass (1,2) – *Muhlenbergia capillaris*
- Panic Grass (1,3) – *Panicum virgatum*
- Indiangrass (1,2) – *Sorghastrum nutans*

Sedges and Rushes

Lurid Sedge (3) – *Carex lurida*
Fringed Sedge (3) – *Carex crinita*
Southern Waxy Sedge (3) – *Carex glaucescens*
White-topped Sedge (3) – *Rhynchospora latifolia*
Woolgrass (3) - *Scirpus cyperinus*

Non-native perennials and ornamental grasses suitable for rain gardens include: Liriope (1,2) (*Liriope muscarii* and *L. spicata*), Siberian Iris (2) (*Iris sibirica*), Daylily (1,2) (*Hemerocallis* hybrids), Rain Lilies (3) (*Zephyranthes* species), Crinum Lilies (3) (*Crinum* species), Japanese Painted Fern (2) (*Athyrium nipponicum*) and Maiden Grass (1,2) (*Miscanthus* cultivars).

- 1 Plants that, once established*, can withstand considerable drought (3-4 weeks without rainfall)**
- 2 Plants that grow best in moist to average soils and will only tolerate short periods (1-2 days) of flooding.**
- 3 Plants that will tolerate longer periods of flooding (3-5 days), but will also grow in moist to average soils.**

*Establishment usually takes 1-2 years for trees and shrubs and 1 year for perennials.

For more detailed information and images of each plant, visit the Plant Fact Sheets available on NCSU's Urban Horticulture website:

www.ncstate-plants.net

