

Plants for Rain Gardens

Recommended for Western North Carolina

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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*
Cherry birch (2) – *Betula lenta*
Willows (3) – *Salix* species
Bald cypress (1,3) – *Taxodium distichum*
Sycamore (2) – *Platanus occidentalis*
Yellow buckeye (2) – *Aesculus octandra*
Persimmon (2) – *Diospyros virginiana*
Silverbell (1) – *Halesia carolina*
Blackgum (3) – *Nyssa sylvatica*
Black cherry (2) – *Prunus serotina*
White basswood (1) – *Tilia heterophylla*
Box Elder (3) – *Acer negundo*

Evergreen

Small Trees (under 30' tall)

Deciduous

Ironwood (1,3) – *Carpinus caroliniana*
Redbud (1,2) – *Cercis canadensis*
Fringe Tree (2) – *Chionanthus virginicus*
Washington Hawthorn (3) – *Crataegus phaenopyrum*
Umbrella Tree (2) – *Magnolia tripetala*
PawPaw (2) – *Asimina triloba*
Tag Alder (3) – *Alnus serrulata*
Serviceberry (2) – *Amelanchier arborea*
Pagoda Dogwood (1) – *Cornus alternifolia*
Witch-hazel (1) – *Hamamelis virginiana*
Silky Dogwood (3) – *Cornus amomum*

Evergreen

American Holly (1,2) – *Ilex opaca*
Sweetbay Magnolia (3) – *Magnolia virginiana*

Shrubs

Deciduous

- Chokeberry (1,3) – *Aronia arbutifolia*
- Sweet Shrub (2) – *Calycanthus floridus*
- Buttonbush (3) – *Cephalanthus occidentalis*
- American Hazelnut (1) – *Corylus americana*
- Strawberry Bush (2) – *Euonymus americanus*
- Winterberry (3) – *Ilex verticillata*
- Virginia Sweetspire (3) – *Itea virginica*
- Spicebush (2) – *Lindera benzoin*
- Ninebark (2) – *Physocarpus opulifolius*
- Common Elderberry (2) – *Sambucus canadensis*
- Meadowsweet (3) – *Spiraea latifolia*
- Hardhack (3) – *Spiraea tomentosa*
- Swamp Azalea (3) – *Rhododendron viscosum*
- Swamp Rose (3) – *Rosa palustris*
- Blueberry (1) – *Vaccinium ashei*
- Arrow-wood (2) – *Viburnum dentatum*
- Possumhaw (3) – *Viburnum nudum*

Evergreen

- Native Brake-Cane (3) – *Arundinaria gigantea*
- Carolina Rose (1) – *Rosa carolina*

Perennials

- Blue Star (3) – *Amsonia tabernaemontana*
- Lady Fern (2) – *Athyrium filix-femina*
- Swamp Milkweed (3) – *Asclepias incarnata*
- Butterflyweed (1) – *Asclepias tuberosa*
- False Indigo (1,2) – *Baptisia species*
- Turtlehead (3) – *Chelone glabra*
- Green and Gold (2) – *Chrysogonum virginianum*
- Mouse Ear Coreopsis or Lobed Tickseed (2) – *Coreopsis auriculata*
- Lanceleaf Tickseed (1,2) – *Coreopsis lanceolata*
- Rose Mallow (3) – *Hibiscus moscheutos*
- Texas Star (3) – *Hibiscus coccineus*
- Jewelweed (3) – *Impatiens capensis*
- Swamp Iris (3) – *Iris versicolor*
- Blue Flag Iris (3) – *Iris 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*
- Pickeralweed (3) – *Pontedara cordata*
- Rudbeckia (1,2) – *Rudbeckia fulgida*
- Cutleaf Coneflower (3) – *Rudbeckia laciniata*
- Goldenrod (3) – *Solidago rugosa*
- Stoke's Aster (2) – *Stokesia laevis*

Ironweed (3) – *Vernonia novaboracensis*

Ornamental Grasses

River Oats (1,3) – *Chasmanthium latifolium*

Panic Grass (1,3) – *Panicum virgatum*

Indiangrass (1,2) – *Sorghastrum nutans*

Sedges and Rushes

Lurid Sedge (3) – *Carex lurida*

Fringed Sedge (3) – *Carex crinita*

Woolgrass (3) – *Scirpus cyperinus*

Soft Rush (3) – *Juncus effuses*

- 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

