

Trees, Shrubs, and Groundcovers Tolerant of Wet Sites

Very few plants will grow when soil is constantly saturated; however, some trees, shrubs, and ground covers are more tolerant of wet sites than others. The list shown below includes such plants.

Plant roots require oxygen in order to function. Plants cannot tolerate extremely wet sites because soil that is completely full of water has no room for air. Poor root growth occurs when soil air/water balance is out of balance. Trees and shrubs may survive under these conditions but will often grow poorly. They will be more susceptible to soil borne diseases and site related problems.

Sloped sites are not necessarily well drained. Soils that have poor internal drainage with high clay content, or sites with high water tables may all hold too much water for trees and shrubs to survive.

Some sites are wet for extended periods only during spring and fall when rainfall is abundant but evaporation is low. While these sites may appear well drained during much of the year, they too are often not suitable for many trees and shrubs.

Soil amendments are only effective in relieving soil moisture problems if the entire root zone of the mature planting can be changed. Therefore, adding organic matter, sand, etc. to tree planting holes is ineffective and often destructive. Trees may be planted with as much as one-third of the ball above the existing soil line and mulched in an attempt to establish trees on marginally well drained sites.

Shrub beds may be amended with additions of large amounts of organic matter such as compost, peat, and composted sludge. Sand is ineffective in improving drainage unless more than 50 percent of the total soil

volume is sand. Consequently, sand is usually a poor soil amendment.

Trees and their USDA Hardiness Zone

- Red maple, *Acer rubrum* 3-9
- Silver maple, *A. saccharinum* 3-9
- European black alder, *Alnus glutinosa* 4-7
- Downy serviceberry, *Amelanchier arborea* 4-9
- River birch, *Betula nigra* 3-9
- American hornbeam, *Carpinus caroliniana* 3-9
- Northern catalpa, *Catalpa speciosa* 4-8
- Common hackberry, *Celtis occidentalis* 3-9
- *Atlantic white cedar, *Chamaecyparis thyoides* 4-8
- Common persimmon, *Diospyros virginiana* 4-9
- Green ash, *Fraxinus pennsylvanica* 3-9
- Thornless honeylocust, *Gleditsia triacanthos*
var. *inermis* cultivars 4-9
- *American holly, *Ilex opaca* 5-9
- Sweet gum, *Liquidambar styraciflua* 5-9
- Sweet bay magnolia, *Magnolia virginiana* 5-9
- Dawn redwood, *Metasequoia glyptostroboides* 5-8
- Black gum, *Nyssa sylvatica* 4-9
- *Austrian pine, *Pinus nigra* 3-7
- London plane tree, *Platanus x acerifolia* 5-8
- Sycamore, *Platanus occidentalis* 4-9
- Swamp white oak, *Quercus bicolor* 4-8
- Pin oak, *Quercus palustris* 4-8
- Willow oak, *Quercus phellos* 5-9
- White willow, *Salix alba* 2-8
- Hankow willow, *Salix matsudana* 5-7
- Laurel willow, *Salix pentandra* 2-5
- Bald cypress, *Taxodium distichum* 5-9
- *American arborvitae, *Thuja occidentalis* 3-7
- *Oriental arborvitae, *Thuja orientalis* 6-11
- Lacebark elm, *Ulmus parvifolia* 5-9
- Japanese zelkova, *Zelkova serrata* 5-8

Shrubs

- Red chokeberry, *Aronia arbutifolia* 4-9
Black chokeberry, *Aronia melanocarpa* 3-8
Sweetshrub, *Calycanthus floridus* 4-9
Button Bush, *Cephalanthus occidentalis* 6-9
Summersweet, *Clethra alnifolia* 4-9
Siberian dogwood, *Cornus alba* 'Sibirica' 3-7
Silky dogwood, *Cornus amomum* 4-8
Gray dogwood, *Cornus racemosa* 3-8
Redosier dogwood, *Cornus sericea* 2-7
Possumhaw, *Ilex decidua* 5-9
*Inkberry, *Ilex glabra* 5-9
Winterberry, *Ilex verticillata* cultivars
and hybrids 3-9
Virginia sweetspire, *Itea virginica* 5-9
*Laurel, *Kalmia* species 4-9
*Drooping Leucothoe, *Leucothoe fontanesiana* 5-8
Spice bush, *Lindera benzoin* 4-9
Northern bayberry, *Myrica pensylvanica* 3-6
Pinksterbloom azalea, *Rhododendron*
periclymenoides 4-8
Swamp azalea, *Rhododendron viscosum* 4-9
American elder, *Sambucus canadensis* 4-9
Highbush blueberry, *Vaccinium corymbosum* 3-7
Arrowwood viburnum, *Viburnum dentatum* 3-8
European Cranberrybush, *Viburnum opulus* 3-8
American Cranberrybush, *Viburnum trilobum* 2-7

Ground covers

- Japanese sweet flag, *Acorus gramineus* 4-11
Lady's mantle, *Alchemilla mollis* 4-7
Siberian bugloss, *Brunnera macrophylla* 3-7
Plumbago, *Ceratostigma plumbaginoides* 6-9
Turtlehead, *Chelone oblique* 5-9
Bleeding heart, *Dicentra spectabilis* 3-9
*Wintercreeper, *Euonymus fortunei* 5-9
Daylily, *Hemerocallis* species and cultivars 3-11
Plantain-lily, *Hosta* species 4-9
Spotted deadnettle, *Lamium maculatum*
'Variegatum' 4-8
Liriope, *Liriope* species 4-8
Blue Phlox, *Phlox divaricata* 4-8
Primrose, *Primula* species 3-8
Lungwort, *Pulmonaria* species 4-8
Memorial Rose, *Rosa wichuraiana* 5-8
Foam flower, *Tiarella cordifolia* 3-7
Globeflower, *Trollius x cultorum* 5-8
Violet, *Viola* species 7-9
Yellowroot, *Xanthorhiza simplicissima* 3-9

*Indicates Evergreens

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