



THE NEBRASKA STATEWIDE ARBORETUM PRESENTS

WET TOLERANT TREES FOR EASTERN NE

Justin Evertson & Bob Henrickson, NSA 2011. For more plant information, visit arboretum.unl.edu or retreenbraska.unl.edu.

The following tree species and cultivars are considered tolerant of flooding and extended periods of wet soil. Those marked in bold are considered to have exceptional flood tolerance, surviving 30 to 120 days under water. Adaptability can be highly variable depending on various factors including duration of flooding, flooding depth, species genetics, planting site, soils, climate, etc. The size range indicated for each plant is the expected average mature height x spread for the region.

INFORMATION SOURCES:

Morton Arboretum: <http://www.mortonarb.org/tree-plant-advice/article/853/plants-tolerant-of-wet-sites.html>

University of Tennessee: <https://utextension.tennessee.edu/publications/Documents/SP656.pdf>

US Forest Service: http://www.na.fs.fed.us/spfo/pubs/n_resource/flood/toler.htm

Medium/Large Trees (typically 30+ feet tall)

1. **Ash, Green** - *Fraxinus pennsylvanica* (native; very adaptable; good on wet or dry sites; 40-60'x 25-40'). **Note:** Due to threat of emerald ash borer (EAB) green ash species are no longer recommended for planting.
2. **Baldcypress** - *Taxodium distichum* (deciduous conifer; great for wet areas; drought tolerant; good fall color; 50'x 30'); The related Pond Cypress (*T. ascendens*) is similar but more narrow in growth; 50'x 25')
3. Beech - *Fagus spp* (smooth bark and graceful habit; needs protected siting; 45'x 25')
4. Black Gum - *Nyssa sylvatica* (very rare in region; needs moist site; not for high pH soils; purple fall color; 35'x 25')
5. **Cottonwood**, Eastern - *Populus deltoides* (majestic native; good for riverside planting; 80'x 60')
6. **Hackberry** - *Celtis occidentalis* (native; tough and reliable; distinctive warty bark; arching habit; 50'x 50')
7. Alder, Black (common) - *Alnus glutinosa* (useful for wet soils and water's edge; attractive glossy leaves; 30'x 20')
8. Aspen, Bigtooth - *Populus grandidentata* (native to northern U.S.; attractive green/white bark; narrow habit; 35'x 25')
9. Birch, River - *Betula nigra* (flaky cinnamon brown bark; drooping branches; avoid dry & high pH soils; 50'x 40')
10. Elm, American - *Ulmus americana* (choose disease resistant cultivars; 60'x 60')
11. Elm Hybrids that show some flooding tolerance include 'Accolade', 'New Horizon', 'Pioneer' & 'Triumph'.
12. Hickory, Shellbark - *Carya laciniosa* (similar to *C. ovata* but with tastier nut; tolerates wetter soils; 40'x 35')
13. Honeylocust - *Gleditsia triacanthos var. inermis* (native; tough and reliable; dappled shade; 55'x 40')
14. **Larch**, Japanese/Common - *Larix kaempferi* or *L. decidua* (deciduous conifers; cold hardy; prefer moist soils; 60'x 40')
15. Linden, Littleleaf - *Tilia cordata* (very tight, pyramidal form; dense shade; many cultivars available; 45'x 30')
16. **Maple, Boxelder** - *Acer negundo* (native to G.P. floodplains; very tough and adaptable; compound leaves; 30'x 25')
17. **Maple, Silver** - *Acer saccharinum* (native to floodplains; 70'x 60')
18. **Maple, Freeman** - *Acer x freemanii* (hybrid between red and silver maples includes 'Autumn Blaze'; 60'x 50')
19. **Maple, Red** - *Acer rubrum* (very popular for red fall color; becoming over-planted; 40'x 30')
20. Oak, Bur - *Quercus macrocarpa* (outstanding native; big and majestic; very tough and reliable; 60'x 75')
21. **Oak, Overcup** - *Quercus lyrata* (refined appearance; prefers consistent moisture; avoid high pH soils; 40'x 35')
22. **Oak, Pin** - *Quercus palustris* (often chlorotic on high pH soils and not generally recommended; 70'x 40')
23. Oak, Willow - *Quercus phellos* (very narrow distinctive leaves; pin-oak like habit; southeast Nebraska only; 45'x 40')
24. Oak, Swamp Chestnut - *Quercus michauxii* (interesting chestnut-like leaf; avoid high pH soil; 50'x 35')
25. Oak, Swamp White - *Quercus bicolor* (popular; attractive glossy leaves; good for wet or dry soils; 60'x 50')
26. **Pecan** - *Carya illinoensis* (underutilized; seek northern seed sources; transplant when small; 50'x 50')
27. **Persimmon** - *Diospyros virginiana* (distinctive blocky bark; tasty fruit; prefers moist, fertile soil; 30'x 20')
28. Redcedar, Eastern - *Juniperus virginiana* (very tough; nice striated bark on mature trees; 40'x 30')
29. Spruce, Black - *Picea mariana* (native to northern North America; 30'x 15')
30. **Sugarberry** - *Celtis laevigata* (related to hackberry but with smooth bark; marginally hardy here)
31. Sweetgum - *Liquidambar styraciflua* (star-like leaves; interesting spiked seed balls; yellow-purple fall color; 40'x 35')
32. **Sycamore** - *Platanus occidentalis* (tough native; beautiful mottled and creamy/white bark; up to 80'x 50')
33. Walnut, Black - *Juglans nigra* (native; proven throughout Nebraska; tough and reliable; good lumber tree; 60'x 45')
34. **Willow**, Misc. - *Salix spp.* (most willow species are highly tolerant of flooding and wet soils)

Small Deciduous Trees and Large Shrubs (under 20' tall)

35. **Buttonbush** - *Cephalanthus occidentalis* (large shrub or small tree; distinctive round, creamy flowers; 15'x15')
36. **Dogwood, Corneliancherry** - *Cornus mas* (tough, reliable; large shrub or small tree; early yellow flowers; 15'x 15')
37. **Dogwood, Gray** - *Cornus racemosa* (large shrub or small tree; good dusty-red fall color; multi-stem habit; 15'x 10')
38. **Fringetree** - *Chionanthus virginicus* (large shrub or small tree; wispy, fragrant flowers; attractive blue fruit; 15'x 15')
39. **Hawthorn, Downy** - *Crataegus mollis* (native to northern and western GP; downy leaves in spring; 15'x 15')
40. **Hornbeam, European** - *Carpinus betulus* (smooth gray bark; upright; tight, uniform branching; attractive leaf; 30'x 20')



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