

TREES FOR WESTERN NEBRASKA

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

The following species are recommended for areas in the western half of Nebraska and/or typically receive less than 20" of moisture per year.

Size Range: The size range indicated for each plant is the expected average mature height x spread for Nebraska.

NOTE ON ASH SPECIES: Native American ash trees, including black ash, blue ash, green ash, and white ash are being decimated in the Great Lakes region by Emerald Ash Borer (EAB) and the insect is slowly spreading west. Until the full impact of EAB is understood, NSA recommends that native ash species no longer be planted in eastern Nebraska and used only sparingly in western Nebraska.

Large Deciduous Trees (typically over 40 feet tall at maturity)

- 1. Ash, Black Fraxinus nigra (good on wet sites; very cold tolerant; Fallgold a common form; 45'x 35')
- 2. **Ash, Green** *Fraxinus pennsylvanica* (native; very adaptable; good on wet or dry sites; over-planted in Great Plains; 40-60'x 25-40'; suitable cultivars include 'Bergeson', 'Foothills', 'Marshall's Seedless', 'Patmore' and 'Prairie Spire')
- 3. **Ash, White** *Fraxinus americana* (native eastern G.P.; good purple/yellow fall color; 40-50'x 40-50'; best when grown from seed or on own roots; common cultivars include 'Autumn Applause', 'Autumn Blaze', 'Northern Blaze')
- 4. Ash, Manchurian Fraxinus mandshurica (from Asia; upright growth; drought tolerant; may be resistant to EAB; 40'x 30')
- 5. Catalpa, Northern Catalpa speciosa (native; tough tree; large, heart-shaped leaves, showy flowers and long seed pods; 50'x 35')
- 6. Coffeetree, Kentucky Gymnocladus dioicus (native; amazingly adaptable; beautiful winter form; 50'x 40')
- 7. Cottonwood, Eastern Populus deltoides (majestic native; not for extremely dry sites; avoid most cultivars; 80'x 60')
- 8. Cottonwood, Lanceleaf Populus × acuminata (native; naturally occurring hybrid; narrow leaves; for west. G.P.; 50'x 35')
- 9. Elm, American Ulums americana (disease resistant varieties include 'Valley Forge' and 'New Harmony'; 50'x50')
- 10. **Elm, Japanese** *Ulmus davidiana var. japonica* (very cold tolerant; rounded habit; glossy green; 'Discovery' is a promising cultivar from Manitoba Canada; 45'x 45')
- 11. Elm, Rock Ulmus thomasii (distinctive corky stems; upright habit; DED resistance in west; 50-60'x 30-40')

New Elm, Hybrids - many disease resistant hybrid elms have been developed and show promise, including:

- 12. 'Accolade' looks like American elm; Morton Arboretum hybrid of U. japonica and U. wilsoniana; 50'x 40'
- 13. 'Cathedral' tough and adaptable; developed in Wisconsin; U. pumila x U. japonica; 40-50'x 40-50'
- 14. 'Frontier' smaller, glossy leaves; lacy bark pattern; purple fall color; *U. parvifolia* x *U. carpinifolia*; 40' x 30'
- 15. 'New Horizon' U. japonica x U. pumila; upright habit; strong branch structure; 50'x30'
- 16. 'Pioneer' cross between *U. glabra* and *U. carpinifolia*; fast growing; dense, rounded shade; 50'x 50'
- 17. 'Triumph' cross between 'Vanguard' and 'Accolade'; very adaptable; vigorous upright growth habit; 60'x 40'
- 18. 'Vanguard' an improved Siberian elm hybrid; VERY tough and adaptable; glossy leaves; 50'x 45'
- 19. Hackberry Celtis occidentalis (native; tough and reliable; distinctive warty bark; arching habit; good street tree; 50'x 50')
- 20. **Honeylocust** *Gleditsia triacanthos* (native; very tough and reliable; provides dappled shade; 55'x 40'; many seedless/thornless forms available including 'Northern Acclaim', 'Imperial', 'Moraine', 'Shademaster', 'Skyline')
- 21. Linden, American Tilia americana (native; large leaves; drought tolerant; heavy shade; fragrant flowers; 60'x 40')
- 22. Linden, Littleleaf Tilia cordata (very tight, pyramidal form; dense shade; many cultivars available; 45'x 30')
- 23. **Maple, Freeman** *Acer* × *freemanii* (hybrid between red and silver maples; tolerates wet soils; good fall color; 45'x 35'; common cultivars include 'Autumn Blaze', 'Celebration', 'Marmo', 'Sienna Glen' and 'Scarlet Sentinel')
- 24. Oak, Bur Quercus macrocarpa (outstanding native; big and majestic; very tough and reliable; 60'x 75')
- 25. Oak, Chinkapin Quercus muehlenbergii (great native tree; tolerates high pH soils; narrow, chestnut-like leaves; 50'x 40')
- 26. Oak, English Quercus robur (similar to white oak; tough, reliable; long, abundant acorns; narrow types available; 60'x 50')
- 27. Oak, Mongolian Quercus mongolica (similar in appearance to Bur Oak; performing well in N. Dakota; 50'x 45')
- 28. Sycamore Platanus occidentalis (tough native; beautiful mottled and creamy/white bark; good on wet sites; up to 80'x 50')
- 29. Walnut, Black Juglans nigra (native; proven throughout Nebraska; tough and reliable; good lumber tree; 60'x 45')

Medium Deciduous Trees (20 to 40 feet tall at maturity)

30. Alder, Black (common) - Alnus glutinosa (useful for wet soils and waters edge; attractive glossy leaves; cone-like fruit; 30'x 20'; other alders worth trying in moist areas: White Alder - A. incana, Italian Alder - A. cordata, and Thinleaf Alder - A. tenuifolia)

- 31. **Aspen, Bigtooth** *Populus grandidentata* (native to northern U.S.; attractive green/white bark; narrow habit; 35'x 25'; European Aspen (*P. tremula*) is similar and has been used to create narrow forms such as 'Pyramidalis' and 'Tower')
- 32. **Aspen, Quaking** *Populus tremuloides* (native to Nebraska and Rocky Mountain region; attractive creamy bark & fluttering leaves turn golden-yellow; main trunk short-lived with re-sprouting from roots; best planted with room to colonize; 30'x 15')
- 33. Buckeye, Ohio Aesculus glabra (native; very tough & adaptable; rounded form; interesting 'buckeye' fruit; 30'x 30')
- 34. Cherry, Black Prunus serotina (native; eye-catching when in flower; fast growing, adaptable; 35'x 20')
- 35. Larch, Japanese/Common Larix kaempferi or L. decidua (deciduous conifers; cold hardy; prefer moist soils; 60'x 40')
- 36. **Lilac, Japanese Tree** *Syringa reticulata* (billowy white flowers in May; attractive bark; can grow to 30'x 25'; 'Ivory Silk' is common cultivar with a more compact growth habit and abundant floral display; 25'x 20')
- 37. Locust, Black Robinia pseudoacacia (good on poor, dry soils and hot sites; short thorns; fragrant white flowers; 35'x 25';)
- 38. Maple, Boxelder Acer negundo (native to G.P. floodplains; very tough and adaptable; compound leaves; 30'x 25')
- 39. Maple, Bigtooth Acer grandidentatum (Rocky Mountain relative of sugar maple; multi-stem habit; orange fall color; 30'x 20')
- 40. Maple, Hedge Acer campestre (pumpkin yellow fall color; drought tolerant; grown as a hedge in Europe; 30'x 25')
- 41. Maple, Miyabe Acer miyabei (similar to hedge maple but appears to be more adaptable; thick, glossy leaves; 30'x 25')
- 42. Mountainash, European Sorbus aucuparia (nice white flower and bright red fruit but disease prone; short lived; 25'x 20')
- 43. Mountainash, Oakleaf Sorbus × hybrida (proven in western G.P.; attractive white flower, red fruit; oak-like leaves; 30'x 20')
- 44. Oak, Bur-gambel Quercus macrocarpa × gambelii (hybrid of gambel oak and bur oak; for west. G.P.; 25-40'x 25-45')
- 45. Oak, Upright English Quercus robur var. fastigiata (a narrow form of English oak; seed grown; hardy; 40'x 5-10')
- 46. Pear, Ussurian Pyrus ussuriensis (glossy leaves; nice fall color; better drought tolerance than P. calleryana; 25'x 20')
- 47. Willow, Laurel Salix pentandra (attractive, glossy foliage; fast growth; needs consistent moisture; short lived; 35'x 30')
- 48. **Willow, Misc.** *Salix spp.* (several species/types to choose from in the nursery trade including some with golden and/or contorted twigs or weeping habit; all willows need consistent moisture and are typically short lived; *Salix alba* 'Tristis' is the popular Niobe weeping willow that grows to 50'x 50')

Small Deciduous Trees (under 20' tall)

- 49. Apricot, Manchurian Prunus mandshurica (tough, cold hardy but short lived; attractive pink flowers; 15'x 15')
- 50. Birdcherry (mayday tree) Prunus padus (similar to chokecherry; very early flower; suckering habit; short lived; 25' x 15')
- 51. Cherry, Canada Red Prunus virginiana 'Shubert' (purple-leaf form of native chokecherry; suckering habit; tough; 20'x 20')
- 52. **Cherry, Sour (tart)** *Prunus cerasus* (selected for cold hardiness and fruit production; useful in baking; several cultivars worth trying include 'Evans', 'Meteor', 'Montmorency' and 'Northstar'; protect in western Nebraska; 15'x 15')
- 53. Chokecherry Prunus virginiana (tough native; attractive white flowers in spring; good for birds; suckering habit; to 20' tall)
- 54. Chokecherry, Amur Prunus maackii (beautiful metallic amber to dark red-brown bark; short lived; 20'x 15')
- 55. **Crabapple, Flowering** *Malus* spp. (a wide variety of selections with varied flower/fruit colors and size ranges available; choose plants in late summer to avoid disease problems and to see fruit set; proven cultivars include 'Adams', 'David', 'Donald Wyman', 'Harvest Gold', 'Prairifire', 'Spring Snow', 'Sugar Tyme' and 'Zumi Calocarpa' among many others)
- 56. Crabapple, Prairie Malus ioensis (native to central U.S.; white flowers; distinctive, sharp spurs; 15'x 15')
- 57. Dogwood, Corneliancherry Cornus mas (tough, reliable; large shrub or small tree; early yellow flowers; red fruit; 15'x 15')
- 58. Dogwood, Gray Cornus racemosa (native; large shrub or small tree; good dusty-red fall color; multi-stem habit; 15'x 10')
- 59. Euonymus, Winterberry Euonymus bungeanus (very attractive with red fall fruits; tough and adaptable; 20'x 20')

Note: Most hawthorns are prone to rust and other leaf-spot diseases; do not plant near cedar trees.

- 60. **Hawthorn, Cockspur** *Crataegus crusgalli* (nice white flowers; glossy green leaves; abundant red fruit; 15'x 15'; variety *inermis* is a nice thornless form; Lavalle Hawthorn (*Crataegus* × *lavallei*) is a striking hybrid that grows 15'x 10')
- 61. Hawthorn, Downy Crataegus mollis (native to northern and western GP; downy leaves in spring; low, spreading habit; 15'x 15')
- 62. **Hawthorn, misc.** *Crataegus* spp. (other hawthorns worth trying include Winter King (*Crataegus viridis*) selected for abundant orange-red fruit; 'Crimson Cloud' (*C. laevigata*) with red flowers; and Russian Hawthorn (*C. ambigua*) that is very thorny and tough)
- 63. Hoptree (Wafer Ash) Ptelea trifoliata (large shrub or small tree; rounded form; distinctive disc-like fruit; 15'x 15')
- 64. Lilac, Pekin Syringa pekinensis (creamy white flowers; attractive, flaky bark; similar to Jap. tree lilac but not as large; 20'x 15')
- 65. Maple, Shantung Acer truncatum (glossy, distinctive leaves; rounded form; proving to be tough/reliable; 15'x 15')
- 66. **Maple, Tatarian** *Acer tataricum* (multi-stem habit; easy to grow; drought tolerant; good fall color; 20'x 15'; Amur Maple (*Acer ginnala*) is related and very similar but not as tolerant of high pH soils; 20'x 15')
- 67. Oak, Gambel Quercus gambelii (native to Rocky Mountains; variable multi-stem habit; prefers well-drained soils; 20'x 15')
- 68. Plum, American Prunus americana (shrubby but can be grown as a small tree; tough and adaptable; edible fruit; 15' x 12')
- 69. Plum, Newport Prunus cerasifera 'Newport' (dark purple-green foliage; edible plums; tough but short lived; 15'x 15')
- 70. Privet, New Mexican Forestiera neo-mexicana (creamy-mottled bark; multi-stem habit; for western G.P.; 12'x 12')

Evergreen Trees

- 71. Arborvitae, Eastern Thuja occidentalis (narrow habit; vertically layered foliage; 'Techny' a common form; 20-25'x 5-15')
- 72. Douglasfir Pseudotsuga menziesii (soft blue-green needles; distinctive cones; graceful habit; avoid open sites; 50'x 30')
- 73. Fir, Concolor Abies concolor (attractive blue-green, long, upswept needles; most reliable fir for Nebraska; 50'x 25')
- 74. Juniper, Chinese Juniperus chinensis (tight growing juniper; tree form types available include 'Keteleer'; 15-25'x 10-15')
- 75. Juniper, Rocky Mountain Juniperus scopulorum (native; blue-green foliage; prefers well drained, drier soils; 20-35'x 15-20')
- 76. Pine, Austrian Pinus nigra (common, tough, easy to grow; attractive bark; similar to Ponderosa Pine; disease prone; 50'x 35')

- 77. Pine, Bristlecone Pinus aristata (use on well-drained soils only; great looking "bottle-brush" branch tips; 25'x 20')
- 78. Pine, Bosnian Pinus heldreichii var. leucodermis (great looking tree; dark green; similar to Austrian pine; 45'x 30')
- 79. Pine, Jack Pinus banksiana (extremely hardy; irregular, gnarled growth habit; windswept look; 40'x 25')
- 80. Pine, Limber Pinus flexilis (native; slow growing; soft needles; very flexible branches; plant on well-drained soils; 50'x 30')
- 81. Pine, Lodgepole Pinus contorta (similar to Ponderosa Pine but with needles in twos and more twisted; 50'x 30')
- 82. Pine, Mugo Pinus mugo (variable growth habit; short needles; tough and adaptable; tree forms can grow to 15-40'x 15-25')
- 83. Pine, Pinyon Pinus cembroides var. edulis (very stout, short needles; well-drained soils only; large edible nut; 25'x 20')
- 84. Pine, Ponderosa Pinus ponderosa (native; best on well-drained soils; attractive cinnamon-brown-black bark; 65'x 30')
- 85. Pine, Red Pinus resinosa (northeast U.S. native; slow growing; reddish bark; 40'x 30')
- 86. Pine, Scotch Pinus sylvestris (beautiful cinnamon orange bark; easy to grow; 60'x35'; caution: Pine wilt disease is killing many trees in eastern Nebraska the tree is longer recommended for planting in eastern part of the state)
- 87. Pine, Southwestern White Pinus reflexa (graceful five-needle pine; 'Vanderwolfs' a common form; 35'x 20')
- 88. Pine, Swiss Stone Pinus cembra (to 50' tall; similar to Korean Pine; seldom seen; edible nut; soft foliage)
- 89. Redcedar, Eastern Juniperus virginiana (very tough; nice striated bark on mature trees; 40'x 30')
- 90. Spruce, Black Hills Picea glauca var. densata (alternative to blue spruce; slower growing; native to Black Hills; 50'x 30')
- 91. **Spruce, Colorado** *Picea pungens* (very adaptable; common throughout Nebraska; wide size range from 45-70'x 15-35'; variety *glauca* is the common "Blue Spruce" and includes brighter blue cultivars such as 'Hoopsi', 'Moerheim' and 'Thompsen')
- 92. Spruce, Norway Picea abies (pendulous (weeping) branch tips; tolerates moist sites; largest of the spruce growing to 70'x 40')
- 93. Spruce, White Picea glauca (very cold hardy; shorter needles than P. pungens and slower grower; 50'x 30')

Trees for the Daring (trees that need further testing or require special site conditions

- 94. Arborvitae, Western Thuja plicata (similar to eastern Arborvitae but potentially much bigger; 25-40'x 10-20')
- 95. Butternut Juglans cinerea (smooth, silver-gray bark; native to upper Midwest; tasty nut; 40'x 30')
- 96. Cherry, Higan Prunus subhirtella (early flowering type from Japan; variety 'Pendula" is gracefully weeping; 15'x 15')
- 97. Cherry, Sargent Prunus sargentii (beautiful tree; attractive polished red-brown bark; lovely pink flowers; 25'x 20')
- 98. Corktree, Amur Phellodendron amurense (drought tolerant; low/broad branching makes it good for climbing; 30'x 30')
- 99. Corktree, Sakhalin Phellodendron sachalinense (similar to Amur corktree but considered to be hardier; 30'x 30')
- 100. Evodia, Korean Evodia daniellii (attractive smooth bark; small, creamy flowers; nice specimens at Arbor Lodge; 20'x 15')
- 101. Filbert, Turkish Corylus colurna (also called tree hazel; pyramidal shape like linden; scaly bark; 35'x 25')
- 102. Goldenrain Tree Koelreuteria paniculata (interesting yellow flower panicles followed by papery fruit capsules; 35'x 25')
- 103. Ginkgo Ginkgo biloba (very interesting leaf; good yellow fall color; distinctive upright habit; tolerant of poor soils; 45'x 35')
- 104. Hawthorn, Washington Crataegus phaenopyrum (attractive foliage, flower and fruit; tough; relatively disease free; 20'x 20')
- 105. Hophornbeam (Ironwood) Ostrya virginiana (native understory tree; shaggy bark; yellow fall color; hop like fruit; 20'x 15')
- 106. Linden, Silver Tilia tomentosa (similar to T. americana; dark, shiny leaves have silvery underside; 50'x 40')
- 107. Maackia, Amur Maackia amurensis (seldom seen legume; worth a closer look; attractive summer flowers; 25'x 20')
- 108. **Maple, Norway** *Acer platanoides* (dark green leaves; dense shade; grafted clones prone to frost cracking; 40'x 35'; cultivars include 'Crimson King', 'Deborah', 'Emerald Lustre', 'Emerald Queen', 'Superform')
- 109. **Maple, Red** *Acer rubrum* (very popular for red fall color; becoming over-planted; good for wet sites and irrigated lawns; 40'x 30'; common cultivars include 'Autumn Spire', 'Burgundy Belle', 'Northfire', 'Red Sunset', 'Rubyfrost')
- 110. Maple, Three-flower Acer triflorum (newer selection from Asia; papery bark; leaves and habit similar to A. negundo; 20'x 15')
- 111. Mountainash, Korean Sorbus alnifolia (beautiful flowers and fruit; attractive glossy, crisp leaves; orange fall color; 30'x 25')
- 112. Oak, Red Quercus rubra (reliable native; common, tough and adaptable; nice red fall color; 50'x 50')
- 113. Oak, Sawtooth Quercus acutissima (fast growing oak from Asia; unique, sawtooth leaves; upright growth; 50'x 35')
- 114. Oak, Shumard Quercus shumardii (rarely planted; drought tolerant; similar to red oak; good fall color; 45'x 40')
- 115. Oak, Swamp White Quercus bicolor (popular; attractive glossy leaves with silver underside; good for wet or dry soils; 60'x 50')
- 116. Oak, Wavyleaf Quercus undulata (shrubby but can be trained as a small tree; semi-evergreen; needs testing; 15'x 15')
- 117. Pine, Eastern White Pinus strobus (graceful; fast growth; soft, long needles; tolerates damp soils; grows big to 70'x 40')
- 118. Pine, Japanese White Pinus parviflora (graceful open natural habit; attractive large cones; 30'x 20')
- 119. Pine, Korean Pinus koraiensis (edible nut; soft, attractive needles in groups of five; looks promising; 50'x 30')
- 120. Pine, Lacebark Pinus bungeana (slow growing but graceful; beautiful mottled bark; multi stem habit; 45'x 20')
- 121. Pagodatree, Japanese Sophora japonica (uniformly round; attractive, late summer flowers in creamy panicles; 30'x 30')
- 122. **Pear, Callery** *Pyrus calleryana* (upright ornamental with showy white flowers in early spring; nice maroon-red fall color; 30'x 25'; improved cultivars include 'Aristocrat', 'Autumn Blaze', 'Chanticleer', 'Redspire'; **avoid** 'Bradford')
- 123. Poplar, Balsam Populus balsamifera (fast growing; strong balsam fragrance; typically short lived; 65'x 45')
- 124. Poplar, Silver Populus alba (tough & adaptable; silvery/white leaves; suckering, weedy habit; can grow up to 80' x 65')
- 125. Redbud Cercis canadensis (native; attractive purple flowers in early spring; select from hardy seed source; 20'x 15')
- 126. Smoketree, American Cotinus obovatus (blue-green leaves; yellow-orange fall color; plumy, smoke-like flowers; 20'x 15')
- 127. **Serviceberry (Juneberry)** *Amelanchier spp.* (serviceberries are multi-season plants with early-spring white flowers, glossy leaves, tasty fruit and nice fall color; many cultivars available including 'Autumn Brilliance', 'Cole's Select', 'Snowcloud'; tree-form serviceberries prefer some protection or part shade; wide size range from 10-20'x 10-20')
- 128. Spruce, Engelmann Picea engelmannii (slower growing spruce from higher elevations of Rocky Mountains; 40'x 20')
- 129. Spruce, Oriental Picea orientalis (graceful habit; attractive pendulous branches similar to P. omorika; slow growing; 45'x 20')
- 130. Spruce, Serbian Picea omorika (weeping habit more graceful than P. abies; attractive dark cones; slower growing; 45'x 20')

