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TREES FOR WESTERN NEBRASKA

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THE NEBRASKA STATEWIDE ARBORETUM PRESENTS

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 dioica* (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 x acuminata* (native; naturally occurring hybrid; narrow leaves; for west. G.P.; 50'x 35')
 9. **Elm, American** - *Ulmus americana* (disease resistant varieties include 'Valley Forge' and 'New Harmony'; 50'x 50')
 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 thomasi* (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'x 30'
 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 x 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 Thinline 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 x hybrida* (proven in western G.P.; attractive white flower, red fruit; oak-like leaves; 30'x 20')
44. **Oak, Bur-gambel** - *Quercus macrocarpa x 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; Lavalley Hawthorn (*Crataegus x lavalleyi*) 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 'Thompson')
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; plummy, 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')



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