

Recommended Trees for Western Nebraska

By the Nebraska Statewide Arboretum

- **Drought/Wet Adaptability:** ☼ indicates plants with exceptional drought tolerance while a 1 indicates plants that tolerate wet soils.
- **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. Most experts agree that it is only a matter of time before the insect reaches Nebraska. Green ash is one of the most common trees planted in the state and has been overused in many communities. 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 (over 40' tall at maturity)

Catalpa, northern - *Catalpa speciosa* - interesting character tree with large tropical foliage; very tough native tree with picturesque winter habit; beautiful white flower clusters in late June followed by long bean pods that persist all winter.

* **Coffeetree, Kentucky** - *Gymnocladus dioica* - amazingly adaptable native; beautiful winter outline with rugged branches; interesting ridged bark on older trees; rich bluish green foliage turns yellow in fall; female trees produce leathery seed pods.

Corktree, Amur - *Phellodendron amurense* - unusual tree; corky bark and picturesque habit; very tough; dark green leaves.

Cottonwood, Lanceleaf - *Populus x acuminata* - upright hybrid native; good on wet sites; 'Highland' an excellent selection with disease and pest resistance.

Cottonwood, Narrowleaf - *Populus angustifolia* - distinctive long, narrow leaves somewhat like a willow; native to Pine Ridge along streams; good on wet sites; suckers to form groves.

Cottonwood, Plains - *Populus sargentii* - large native with large spreading crown; good on wet sites

Elm, American - *Ulmus americana* (☼,1; disease resistant varieties include 'Valley Forge' and 'New Harmony'; 50' x 50')

Elm, Japanese - *Ulmus davidiana* var. *japonica* (☼,1; very cold tolerant; rounded habit; glossy green; 'Discovery' is a promising cultivar from Manitoba Canada; 45' x 45')

Elm, Rock - *Ulmus thomasi* (☼,1; 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:

'Accolade' - looks like American elm; Morton Arboretum hybrid of *U. japonica* and *U. wilsoniana*; 50' x 40'.

'Cathedral' - tough and adaptable; developed in Wisconsin; *U. pumila* x *U. japonica*; 40-50' x 40-50'.

'Frontier' - smaller, glossy leaves; lacy bark pattern; purple fall color; *U. parvifolia* x *U. carpinifolia*; 40' x 30'.

'New Horizon' - *U. japonica* x *U. pumila*; upright habit; strong branch structure; 50' x 30'

'Pioneer' - cross between *U. glabra* and *U. carpinifolia*; fast growing; dense, rounded shade; 50' x 50'.

'Triumph' - cross between 'Vanguard' and 'Accolade'; very adaptable; vigorous upright growth habit; 60' x 40'.

'Vanguard' - an improved Siberian elm hybrid; VERY tough and adaptable; glossy leaves; 50' x 45'.

Filbert, Turkish - *Corylus colurna* (beautiful rounded specimen near North Platte; needs further testing in W. Nebraska)

* **Hackberry** - *Celtis occidentalis* - great old Great Plains tree with legendary tolerance; irregular habit when young but matures to stately rounded crown; interesting corky knobbed bark; 'Prairie Pride' resistant to nibble gall and witches broom.

* **Honeylocust** - *Gleditsia triacanthos* - a very tough, adaptable tree that thrives on neglect; many great seedless and thornless forms available, including 'Shademaster', 'Skyline' and 'Sunburst'; graceful habit and rich golden yellow fall color.

* **Linden, American** - *Tilia americana* - also known as basswood; develops nice oval-rounded crown with age; large, lustrous leaves turn yellow in fall; fragrant flower clusters in June; give it room to grow; a very adaptable tree native to the Great Plains.

Linden, Littleleaf - *Tilia cordata* - very pyramidal shape; good yard tree that tolerates wet or dry soils; densely branched and leaves turn a reasonable yellow in fall; 'Greenspire', 'Glenleven', 'Legend' and 'Chancellor' are excellent selections.

* **Locust, Black** - *Robinia pseudoacacia* - thorny native of E. Nebraska with fragrant flowers; good on poor soils

* **Oak, Bur** - *Quercus macrocarpa* - a great, wonderful, fantastic, large native tree - the best!

Oak, Chinkapin - *Quercus muehlenbergii* - native to limestone soils in e. Neb.; tolerates drought and high pH soils.

* **Bebb's Oak** - *Quercus macrocarpa* x *Q. alba* - symmetrical branching; soil adaptable; faster growth rate; heavy acorn production; 60' high

Burchestnut Oak - *Quercus macrocarpa* x *Q. prinus* - upright growing tree; large leaves, clean foliage; faster growing timber; heavy acorn production; 60' high

Burenglish Oak - *Quercus macrocarpa* x *Q. robur* - fast growing oak; very adaptable to soil types; maintains straight trunk; symmetrical crown; heavy acorn production; grows to 70' high.

Heritage® Oak - *Quercus macrocarpa* x *Q. robur* - glossy, dark green leaves; a vigorous cultivar from Heritage Trees, Inc.; broadly pyramidal to 70' high.

Schuettes Oak - *Quercus macrocarpa* x *Q. bicolor* - vigorous and hardy; soil adaptable; flaky bark with tan, buff color; early acorn production; symmetrical, upright growth; height to 70'

* **Poplar, Silver** - *Populus alba* - large, spreading tree with white bark and silvery leaves; good on tough sites

* **Walnut, Black** - *Juglans nigra* - several nice specimens in Panhandle

Medium Deciduous Trees (20-40' tall at maturity)

Alder, Common - *Alnus glutinosa* – handsome dark green foliage; fast grower in youth; develops interesting small cones that persist all winter along with 2-4" catkins; plant on moist sites only.

Alder, Thinleaf - *Alnus tenuifolia* -interesting cones; plant on moist sites only; group in groves like aspens.

***Apricot** - *Prunus armeniaca*- great fall color; great looking trees at Cheyenne Station; Siberian and Manchurian.

Aspen, Quaking - *Populus tremuloides* - good in groups; any single stem not long lived; 'Prairie Gold' is a nice selection discovered growing in Platte County, Nebraska; tolerant of the problems that plague more western sources.

Birch, Rocky Mountain - *Betula occidentalis* - native to Pine Ridge in western Nebraska; small tree with nice cherry-like bark; keep root zone cool/moist for best growth; good yellow fall color.

Birdcherry - *Prunus padus* -very hardy; likes to sucker; white flower clusters bloom in early May.

* **Buckeye, Ohio** - *Aesculus glabra*- very adaptable Midwest native; distinctive rounded tree with dense foliage; interesting greenish-yellow flower panicles in spring followed by prickly seed pods.

* **Buffaloberry, Silver** - *Shepherdia argentea* -large; overlooked native with silvery leaves and clusters of orange-red berries in fall; for windy, tough sites; conservation plantings; an excellent food source for wildlife; plant several to assure good fruit set.

***Chokecherry** - *Prunus virginiana* – tough reliable native; suckers to form thickets; easily kept confined with mowing; 'Canada Red' and 'Shubert' are purple-leaf forms of this;)

Crabapple - *Malus* spp. -dozens of cultivars available; consider disease resistant cultivars with persistent fruit- 'Adams', 'Cardinal', 'Prairiefire', 'Don Wyman', 'Harvest Gold', 'Red Jewel', 'Pink Spires' are all highly rated.

Chokecherry, Amur - *Prunus maackii* -beautiful shiny red bark makes this a tree worth trying

Dogwood, Corneliancherry - *Cornus mas* -yellow flowers in early spring; can be a small tree or large shrub)

Dogwood, Gray - *Cornus racemosa* -large shrub/small tree; good fall color; Roughleaf Dogwood is similar)

* **Euonymus, Winterberry** - *Euonymus bungeanus*- seldom seen; can be striking with red fall fruit capsules; attractive bark; 'Prairie Radiance' is a nice, cold hardy selection out of North Dakota State University and Dr. Dale Herman.

* **Hackberry, Netleaf** - *Celtis reticulata* -drought tolerant; native to arid southwest into Frontier County; crooked branches.

Hawthorn, Cockspur - *Crataegus crusgalli* -great small tree; thornless variety available; avoid high pH soil.

Hawthorn - *Crataegus* spp -several others worth growing include the eastern NE native Downy Hawthorne, the highly rated Russian Hawthorne and 'Toba', a hybrid developed in Manitoba, Canada.

Hophornbeam - *Ostrya virginiana* – good, tough native tree; slow growing but worth the wait; resistant to ice storm breakage; interesting hoplike fruits in summer; yellow fall color; also known as Ironwood.

Lilac, Japanese Tree - *Syringa reticulata* - great ornamental with fragrant white flower clusters in late spring; beautiful cherry-like bark.

Lilac, Pekin - *Syringa pekinensis* -creamy white flowers; attractive, flaky bark; similar to Jap. tree lilac but not as large and smaller leaves; 20' x 15')

* **Mountain Mahogany, Curl-leaf**– *Cercocarpus ledifolius* -semi-evergreen; lance-shaped leathery leaves; attractive, curled, fuzzy "seed tails" provide fall interest; tough, drought tolerant; can be grown as small tree

Maple, Amur - *Acer ginnala* - good fall color; best as multi-stem; avoid high pH soil.

***Maple, Bigtooth** - *Acer grandidentatum* - native to Rocky Mtns; western version of sugar maple with yellow-orange fall color; slower growing but worth the wait; tolerates dry and alkaline soils.

***Maple, Boxelder** - *Acer negundo*- tough but forgotten native; tolerates alkaline soils; 'Sensation' has orange-red fall color.

Maple, Rocky Mountain - *Acer glabrum* - native in Pine Ridge along streams; can be grown as large shrub or small tree.

Maple, Tatarian - *Acer tataricum*- is very similar to Amur maple; tough, drought tolerant; more tolerant of Panhandle soils than Amur maple; showy bright red fruits or samaras on 'Red Wings' an outstanding selection from Bailey Nursery.

Maple, Shantung - *Acer truncatum* - great ornamental from Asia; small star-shaped leaves turn yellow in fall; drought tolerant.

Mountainash - *Sorbus* spp. - beautiful flower and fruit but susceptible to fireblight; the selection 'Hybrida' from the Cheyenne Research Station has handsome oak-like leaves; cherry-red fruit in fall; tolerates alkaline soils

***Oak, Bur-gambel** - *Quercus macrocarpa* x *gambelii* (♂♀; hybrid of gambel oak and bur oak; for west. G.P.; 25-40' x 25-45')

***Oak, Gambel** - *Quercus gambelii* - native to Rocky Mountains; prefers well-drained soils; tolerates extreme drought, high pH; deeply lobed, leathery leaves; abundant crop of acorns for wildlife.

***Oak, Dwarf Chinkapin** - *Quercus prinoides* - great small native tree; shiny, leathery leaves; excellent for small spaces; native to SE Nebraska; abundant acorns attractive to wildlife; National Champion tree in Richardson County, NE is 25' tall.

***Oak, Wavyleaf** - *Quercus undulata* (small, semi-evergreen oak from southern Rocky Mountains)

***Scrub Live Oak, Quercus turbinella**- shrubby thicket forming oak; small holly-like leaves; extremely drought tolerant

***Burnella Oak, Quercus macrocarpa x turbinella**- compact growing tree; dark green foliage; pleasing shape.

***Liotung Oak, Quercus liotungensis**- small uncommon oriental oak; smallish, dense branch habit and shallow lobed leaves

***Mongolian Oak, Quercus mongolica**- attractive toothed foliage and vigorous growth

***Pear, Ussurian** - *Pyrus ussuriensis* -similar to Callery Pear types but hardier; nice fall color; good flower and 1" fruits; 'Prairie Gem' is a selection from North Dakota and 'Mountain Frost' a vigorous upright selection from Bailey Nursery in Minnesota; tolerates high pH.

***Privet, New Mexican** - *Forestiera neo-mexicana* – attractive, smooth blond bark on this native to s. Rocky Mountains; small yellow flowers in early spring; dark blue fruit on female plants; prune to create a small tree.

Wafer-ash (Hop Tree) - *Ptelea trifoliata* -large; unusual shrub with compound leaf and interesting wafer fruit; tolerates shade.

Wahoo, Eastern - *Euonymus atropurpureus* -large; native shrub with good rose red fruit capsules and orange-red fall color.

Serviceberry - *Amelanchier* spp. - native; great 4 season tree – flower, leaf & fruit, bark and branching habit. 'Autumn Brilliance', 'Forest Prince', 'Robin Hill' are all excellent selections; nice pumpkin color in fall.

***Sumac, Staghorn** - *Rhus typhina* (nice fall color; similar to smooth sumac; great character plant; can spread aggressively in the landscape; confine with a mowed edge; easily pruned to form a small tree.

Viburnum, Nannyberry - *Viburnum lentago* - large; overlooked native, good fall color; 'Deep Green' has larger, thicker foliage.

* **Viburnum, Wayfaringtree** - *Viburnum lantana* -medium/large; very tough and adaptable; 'Aureus' selection with green and gold foliage; 'Mohican' dependable heavy textured foliage, red to black fruit; 'Emerald Triumph' with glossy leaves.

Evergreen Trees

1. **Douglasfir** - *Pseudotsuga menziesii glauca* -not as drought tolerant as spruce; give some protection
2. ***Fir, Concolor** - *Abies concolor* -one of the most beautiful evergreens; should be planted more
3. ***Juniper, Chinese** - *Juniperus chinensis* -'Keteleer' is a great cultivar
4. ***Juniper, Rocky Mountain** - *Juniperus scopulorum* -wide range of cultivars; prefers well drained soils
5. **Pine, Bosnian** - *Pinus heldreichii var. leucodermis* -similar to Austrian pine; worth a try
6. ***Pine, Bristlecone** - *Pinus aristata* -for well drained soils only; slow grower; great looking foliage
7. ***Pine, Jack** - *Pinus banksiana* -extremely cold hardy; gnarly growth habit
8. **Pine, Korean** - *Pinus koraiensis* -needs more study in Nebraska; looks like a winner
9. ***Pine, Limber** - *Pinus flexilis* -native to Kimball County; very flexible branches; for well-drained soils
10. **Pine, Lodgepole** - *Pinus contorta var. latifolia* -Rocky Mountain native; seldom seen in Nebraska; plant more
11. ***Pine, Mugo** - *Pinus mugo* -many forms from dwarf to larger types
12. ***Pine, Pinyon** - *Pinus cembroides var. edulis* -for well drained soils; nice edible nut
13. ***Pine, Ponderosa** - *Pinus ponderosa* --reliable native; for well-drained dry soils; avoid overwatering
14. **Pine, Red** - *Pinus resinosa* -very cold hardy; attractive reddish bark.
15. **Pine, Swiss Stone** - *Pinus cembra* -seldom seen here; supposedly edible nut; 'Prairie Statesman' is a nice cold-hardy selection.
16. ***Redcedar, Eastern** - *Juniperus virginiana* -Canaerti is a great cultivar with tufted foliage; 'Taylor' for upright habit.
17. ***Spruce, Black Hills** - *Picea glauca var. densata* -nice alternative to blue spruce; watch out for spider mites
18. ***Spruce, Colorado** - *Picea pungens* -the old standby; many cultivars with wide color and habit range
19. **Spruce, Norway** - *Picea abies* - beautiful weeping habit and attractive long cones on this durable tree from Europe.
20. **Spruce, Serbian** - *Picea omorika* - arching, ballerina effect on branches; deep green with white undersides; adaptable.

* Indicates plants with extreme drought tolerance.