

ReTree Nebraska's 17 for 2017

Tree Species for Nebraska

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	MATURE HEIGHT (ft.)	MATURE SPREAD (ft.)	FALL COLOR	ORNAMENTAL BARK
LARGE DECIDUOUS TREES (typically more than 40 feet tall at maturity)				
	G=Good; F=Fair; N/A=Not Significant			
Baldcypress (<i>Taxodium distictum</i>) A graceful, deciduous conifer. Great for wet areas or in compacted soils; drought tolerant. Primarily for eastern half of Nebraska.	50-70+	20-30	G	F
Catalpa, Northern (<i>Catalpa speciosa</i>) Large tropical leaves; attractive, fragrant flowers in spring. Easy to grow.	40-60	30-40	N/A	F
Coffeetree, Kentucky (<i>Gymnocladus dioicus</i>) Great for clay soils; highly ornamental in winter. Attractive seedpods are found on female trees; however the seedpods.	50-60+	30-45	F	F
Elm, misc. hybrids & cultivars (<i>Ulmus x spp.</i>) Many disease-resistant elms are available including proven cultivars, such as 'Accolade,' 'Discovery,' 'New Horizon,' 'Triumph' and 'Vanguard'. DED resistant American elms include 'Princeton,' 'New Harmony' and 'Valley Forge.' Easy to grow; good street trees.	40-60+	40-60+	F	F
Filbert, Turkish & other nut trees: hickory, chestnut, pecan, buckeye & walnut* - 2017 Addition (<i>Corylus columna</i> , also called Turkish tree hazel) pyramidal shape in youth, eventually rounded; scaly bark; handsome dark green foliage and interesting winter catkins; doing well in Lincoln, North Platte. The availability of Turkish filbert is very limited so planting other nut tree species may be more practical. For more information, visit retreenebraska.unl.edu/plantingfordiversity . *Black walnut is susceptible to a potentially serious threat called "thousand cankers disease." Other walnut species are less susceptible to this disease.	45	35	N/A	G
Hackberry (<i>Celtis occidentalis</i>) Native; tough and reliable; distinctive warty bark; arching habit; primary host for many butterfly larvae. Food source for many birds. (2015 addition)	50	50	N/A	G
Linden, American (<i>Tilia americana</i>) Native to eastern third of NE; distinctive, large leaves; has proven to be dependable throughout Nebraska landscapes; drought tolerant; casts heavy shade; fragrant flowers are a favorite of bees. (2016 addition)	50-60	40	G	F
Maple, sugar & closely related Black Maple and Bigtooth Maple (<i>Acer saccharum</i> ; <i>A. nigrum</i> and <i>A. grandidentatum</i>) Sugar maple is a beautiful tree that should be planted more on favorable sites throughout eastern Nebraska; nice fall color and attractive chalky bark; suitable cultivars include 'Fall Fiesta', 'Green Mountain', 'Legacy', 'Table Rock' and the drought tolerant variety Caddo. Black maple is very similar to sugar maple and should be sited accordingly. Bigtooth maple is a Rocky Mountain variant that is a better choice for western Nebraska. (2013 addition)	50	50	G	G
Oak, Chinkapin (<i>Quercus muehlenbergii</i>) Distinctive serrated leaves; thinner canopy than most oaks. Good on high-pH soils.	40-50+	30-40	F	F
Oak, Bur (<i>Quercus macrocarpa</i>) One of the best trees for Nebraska. Easy to grow and long-lived.	50-60	50-70	F	G
Oak, English (<i>Quercus robur</i>) Matures into a large, round-topped tree with handsome leaves. Can grow in western Nebraska when carefully sited. (2011 addition for eastern Nebraska.)	50-60	40-50	F	G
Sycamore, American (<i>Platanus occidentalis</i>) Beautiful mottled and creamy/white bark; good on wet sites. Primarily for eastern Nebraska but a species for the daring in western Nebraska when carefully sited. (2015 addition)	80	50	F	G
SMALL TO MEDIUM DECIDUOUS TREES				
Maple, Shantung (<i>Acer truncatum</i>) Glossy, distinctive leaves; rounded form. Proving to be tough and reliable.	15	15	G	F
Maple, Miyabe (<i>Acer miyabei</i>) Dark green summer foliage. The cultivar State Street® has seen winter dieback across the region in 2014 and 2015.	30-50	34-45	G	G
Oak, Gambel (<i>Quercus gambelii</i>) Shrubby growth habit with glossy green foliage turning golden yellow in fall; tolerates dry conditions and alkaline soil. (2011 addition for western Nebraska.)	25-35	25	F	G
Tree lilac (<i>Syringa reticulata</i> and <i>S. reticulata ssp. pekinensis</i>) Japanese tree lilac and Pekin lilac are small trees that can be grown either as a single or multi-trunk tree. Good alternative for crabapple. 'Ivory Silk' Japanese lilac is commonly available cultivar. (2012 addition)	25	15-25	N/A	G
EVERGREEN TREES				
Concolor fir (<i>Abies concolor</i>) Attractive blue-green, long, upswept needles. Most reliable fir for Nebraska.	30-50+	15-30	N/A	F
Black Hills spruce (<i>Picea glauca 'Densata'</i> , aka <i>Picea glauca var. densata</i>) Superior landscape tree species to white spruce (<i>P. glauca</i>). Dark needles, pyramidal in form with a conical top and straight leader; denser when young than most spruce but becomes more sweeping with age.	20-40	20	N/A	F
Ponderosa pine (<i>Pinus ponderosa</i>) Native to western Nebraska but a good choice for the entire state. This drought-tolerant tree prefers well-drained soils. The attractive cinnamon-colored bark is beautiful year-round. (2014 addition)	65+	35	N/A	G

Tree-planting for Success

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PLANTING

Proper planting is critical to the establishment of healthy, thriving trees. The planting guidelines below have been developed to help new trees get off to a successful start. The recommendations are based on nationally recognized standards as well as experience compiled by the Nebraska Statewide Arboretum and the Nebraska Forest Service. The recommendations assume that an appropriate tree has been selected for the planting site and that the site is suitable for planting.

DIGGING. Dig a saucer-shaped hole wider than the root system but no deeper than the root mass. Most holes do not need to be deeper than about one shovel's depth (10-14"). The bottom of the hole should be firm enough to prevent the tree from settling deeper after planting. **Note:** Using an auger is not recommended since trees often settle too deep and the sides of the holes become glazed. If using an auger, don't drill deeper than needed and loosen the sides of the hole.

PLANTING. Plant so the base of the trunk is at original ground level or slightly higher. **The first lateral roots** should end up just under the soil surface (1-2" deep) and the **trunk should flare** visibly at ground level.

- Always locate the first main lateral roots and remove any excess soil above them before setting the plant in the hole. The first main roots are often several inches below the top of the container or root ball.
- All graft unions should be visible above the soil line.
- Remove all pots and containers before planting.
- For balled and burlap (B&B) stock, try to remove the wire basket and burlap before placing the tree in the hole. If maintaining the integrity of the soil ball is important, then remove the bottom part of the burlap and wire basket before setting the plant in the hole and then remove the remaining burlap and wire basket after stabilizing the tree in the hole. Remember to check for and remove any excess soil at the top of the root ball before planting.
- **Loosen and spread circling roots before backfilling** (especially important for potted trees). It may be necessary to cut larger roots that cannot be straightened to prevent girdling, but this should be done with caution. Reject plants with severely circled or girdled root systems.
- For potted trees, try to remove as much of the original growing medium as possible before planting to help achieve good soil-root contact. Dunking in water or spraying with a hose will help in this effort.

BACKFILLING. Backfill with the original soil dug from the hole. Large clods and soil chunks should be broken up as much as possible. Adding water during backfilling can help remove air pockets and better moisten the roots.

MULCHING. Mulch individual trees with a 2-4" layer of wood mulch extending from the trunk to at least the drip line of the tree. Where possible, mulch trees and other plantings together en masse to help separate from surrounding turf. **Don't** pile the mulch deeply over roots or against the base of the trunk and **don't** mulch with rock or use plastic weed barriers under the mulch.

STAKING & BRACING. Brace the tree if it might dislodge or blow over in the wind (most trees typically benefit from staking). Some sway should be allowed in the tree after staking. Use only broad, belt-like materials to attach the bracing to the trunk to help prevent rubbing injuries. **Do not** brace with wire, rope or wire through hose. Remove staking within one year.

POST-PLANTING CARE

WATERING. After planting, keep the root zone moist but not waterlogged. In general, a newly planted tree should receive about 1" of moisture per week, including rainwater, during the first growing season. Check the root zone frequently for moistness—don't just guess. Many trees are lost to either under- or over-watering. Containerized trees often need more watering than bare-root or B&B stock, because the porous growing medium they are potted in dries out faster.

FERTILIZING. If the right tree was selected for the planting site, fertilizer is generally not needed. If fertilizer is desired, use only a slow-release, low-nitrogen fertilizer applied to the soil surface after planting.

- **Never** add fertilizer to the planting hole since it can damage newly transplanted roots. In addition, excess nitrogen in the soil can cause newly planted trees to add top growth at the expense of proper root development.
- Address major soil problems **before** planting. Adding organic matter to the planting site before planting can be very beneficial for poor, inorganic and/or compacted soils.

PRUNING. At planting time, prune only to remove dead or damaged branches and to correct structural defects. Never cut back healthy branches or trim the tree to try and "balance" the top with the roots. The tree will benefit from having as many food-producing leaves left on as possible. Also, try to leave lower branches on a tree for as long as possible after planting. Lower branches help protect the trunk from cracking, sunscald and animal damage and they aid in developing good trunk taper. If needed, limb the tree up gradually over a matter of several years after planting. Monitor the tree when young and prune, sparingly but properly, to prevent structural defects.

