SELECTING THE RIGHT SHADE OR LANDSCAPE TREE
for western Nebraska – 2019

Nebraska Forest Service

Environmental conditions in Nebraska make it difficult for many trees to survive or grow well. Various soil types, heat, fluctuating winter temperatures, desiccating winds, and drought all contribute to stressful conditions for trees.

Matching a tree’s requirements for nutrients, light, water, and growing space to its prospective site location can prevent trees from becoming a nuisance or hazard; and if stressed, trees become susceptible to insect and disease problems. Any landscape tree with an inexpensive purchase price may result in expensive treatment costs later in the tree’s life if proper tree selection is not carried out.

The following list serves as a guide for selecting trees to plant along streets, in parks, schools and other public areas as well as private yards. Different tree species are listed separately; cultivars are listed in the parentheses.

**Small Ornamental Trees, (under 20’ tall)**
- buckeye+, red
- crabapple*, flowering
- hawthorn, thornless – cockspur, downy, Russian
- hornbeam+
- maackia, amur (Starburst)
- lilac, Japanese tree (Copper Curls, Ivory Silk), pekin
- maple – paperbark, tatarian (Hot Wings), Shantung, trident
- oak – dwarf chinkapin, gambel
- redbud
- serviceberry+ (Autumn Brilliance)

**Medium Ornamental Trees, (20 – 40’ tall)**
- buckeye+, Ohio
- corktree, amur
- goldenraintree
- filbert, Turkish
- hophornbeam+ or ironwood
- horsechestnut
- maple – bigtooth (Rocky Mountain Glow), black, miyabe
- (State Street), Norway (Crimson King, Emerald Lustre, Royal Red), sugar (Caddo, Green Mountain)
- mountainash* - European, oakleaf
- oak – columnar English
- pagodatree, Japanese

**Large Overstory Trees, (over 40’ tall)**
- catalpa, northern
- coffeetree, Kentucky
- elm – American (elm disease resistant varieties), lacebark
- elm hybrids (Accolade, Cathedral, Frontier, Triumph)
- ginkgo (Autumn Gold, Princeton Sentry)
- hackberry (Prairie Pride, Prairie Sentinel)
- honeylocust (Shademaster, Skyline)
- linden - American (native, Frontyard, Redmond), littleleaf
- silver (Green Mountain, Sterling Silver)
- oak - bur, chinkapin, English, swamp white, white
- oak hybrids (Heritage, Regal Prince)
- osage-orange (White Shield, Wichita)
- sycamore

**Conifers or Evergreens**
- baldcypress (deciduous conifer)
- douglas fir
- fir, concolor
- juniper, ornamental – many cultivars are available
- larch (deciduous conifer)
- pine - bristlecone, Bosnian, eastern white, jack, lacebark,
- limber, mugo, pinyon, ponderosa, southwestern white
- spruce - Black Hills, Colorado, Norway, Serbian

* Check for fire blight resistance in all cultivars of the Rose family!*  
+ Needs afternoon shade, or some shade during the day

**NOTE:** Trees to avoid planting include: ash, boxelder, white/weeping birch, ornamental pear, cottonless cottonwood, Siberian elm, silver maple, Lombardy poplar, tree of heaven. These trees are prone to early failure, insect & disease problems and/or are likely to drop branches during storms. Also, some species do not do well in alkaline soils like red oaks, red or Freeman maples, etc.

**FOR MORE INFORMATION:** The Nebraska Statewide Arboretum at [http://plantnebraska.org/](http://plantnebraska.org/) has excellent plant material information, as well as site specific information and other helpful links.
### Guidelines for Location, Placement and Spacing of Landscape Trees

<table>
<thead>
<tr>
<th>Category</th>
<th>Space Requirement</th>
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<tbody>
<tr>
<td><strong>LARGE</strong></td>
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<tr>
<td>Buildings</td>
<td>No closer than 20'</td>
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<tr>
<td>Curbs/Sidewalks</td>
<td>No closer than 4'</td>
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<tr>
<td>Street intersections</td>
<td>No closer than 35'</td>
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<tr>
<td><strong>TREES</strong></td>
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<tr>
<td>Driveway/Alleys/Utility poles</td>
<td>No closer than 15'</td>
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<tr>
<td>Fireplugs</td>
<td>No closer than 10'</td>
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<tr>
<td>Underground lines/Mains</td>
<td>Not within 5 lateral feet</td>
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<td>Overhead utility wires</td>
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**Considerations:**

1. If the grass area distance between curb and sidewalk is less than 4’, a "street tree” should not be planted due to lack of space.
2. In areas where no curbs or sidewalks exist, a “street tree” should not be planted.
3. The guidelines shown above are minimum spacing specifications; planting trees at less than these stated guidelines is strongly discouraged, with few exceptions.

Be sure to check your local community tree ordinance for the final approval on all tree plantings on public property.