

Trees to Use With Caution in Northern Tallgrass Prairie (Deciduous)

Species	Height (feet)	Width (feet)	Shape	Fall Color	Street use?	Under utility lines?	Shade Tolerance	Notable Flower	Notable Fruit	Other Notes
Ash, green [Fraxinus pennsylvanica]	60+	20+	Round	Yellow	No	No	No	No	Yes	Highly susceptible to Emerald Ash Borer, among other native diseases, pests and pathogens.
Ash, white [Fraxinus americana]	50+	40+	Round	Yellow/Purple/Red	No	No	No	No	Yes	Also highly susceptible to Emerald Ash Borer. If planted, use seeds from Northern parents due to low cold hardiness.
Catalpa, northern [Catalpa speciosa]	30+	25+	Irregular	Yellow/Green	No	No	No	Yes	Yes	Has large, showy, orchid-like flowers. Intermediate tolerance to deicing salts. May be best as a park tree because of its messy fruit. Has limitations due to cold hardiness. Use should be restricted to the southern or western portion of the Northern Tallgrass Prairie subsection if at all.
Corktree, Amur [Phellodendron amurense] ¹	30+	30+	Round	Yellow	Yes	No	No	No	Yes	'Macho' is a male selection with ascending branches without fruit and subsequent volunteer seedlings. Requires frequent pruning when young to remove branches with included bark. Restrict use to the southern and western portions of the Northern Tallgrass Prairie subsection because of cold hardiness.
Corktree, sakhalin [Phellodendron sachalinensis] ¹	40+	30+	Round	Yellow	Yes	No	No	No	Yes	Sakhalin corktree has a slightly more upright habit and may be better suited as a landscape tree, but it has limited availability.
Crabapple, Siberian [Malus baccata jackii]	30+	20+	Round	Yellow	Sometimes	Sometimes	No	Yes	Yes	Crabapples may need winter protection from rabbits.
Elm, American [Ulmus americana] ²	50+	35+	Oval	Yellow	Yes	No	Partial	No	Yes	The ideal street tree. But susceptibility to DED limits the usefulness of this species.
Elm, 'Lincoln' [Ulmus pumila x Ulmus rubra 'Lincoln'] ²	40+	30+	Vase	Yellow	Yes	No	Partial	No	Yes	Hybrid selection from a cross between Siberian elm and red elm that has apparent resistance to DED but has not been widely tested. Subject to severe defoliation by the elm leaf beetle.
Elm, Red (Slippery) [Ulmus rubra] ²	40+	30+	Vase	Yellow	Yes	No	Partial	No	Yes	Species native to the Northern Tallgrass Prairie subsection, but susceptible to DED.
Elm, 'Regal' [Ulmus carpinifolia 'Regal'] ²	50+	35+	Oval	Yellow	Yes	No	Partial	No	Yes	A DED resistant elm that is subject to severe defoliation by the elm leaf beetle. Use should be restricted to the southern and western portion of the Northern Tallgrass Prairie subsection due to cold hardiness limitations.
Elm, rock [Ulmus thomasi] ²	40+	30+	Vase	Yellow	Yes	No	Partial	No	Yes	Native to the Northern Tallgrass Prairie subsection, but susceptible to DED.
Elm, 'Sapporo Autumn Gold' [Ulmus carpinifolia 'Sapporo Autumn Gold'] ²	50+	35+	Oval	Yellow	Yes	No	Partial	No	Yes	A DED resistant elm that is subject to severe defoliation by the elm leaf beetle.
Elm, Siberian [Ulmus pumila] ²	40+	30+	Oval	Yellow	No	No	Partial	No	Yes	Widely planted as shelterbelt or windbreak tree that is resistant to DED but is subject to winter injury and defoliation by the elm leaf beetle. This tree is not suitable for urban plantings.
Hawthorn, downy [Crataegus mollis] ³	20+	20+	Round	Yellow/Red	Yes	Yes	No	Yes	Yes	Very susceptible to rust and fire blight.
Hawthorn, Washington [Crataegus phaenopyrum] ³	15+	10+	Oval	Orange	Yes	Yes	No	Yes	Yes	Very susceptible to fire blight. Markedly less susceptible to rust than many other hawthorns. Cold hardiness limits the use of this species to the southern or western portion of the Northern Tallgrass Prairie subsection.
Honeylocust, thornless [Gleditsia triacanthos var. inermis]	40+	40+	Round	Yellow	Yes	No	No	No	No	Winter hardiness and Nectria cankers are concerns. Cultivars include 'Halka', Imperial, 'Moraine', 'Shademaster', Skyline, Summer Lace, and Sunburst.
Magnolia, cucumber tree [Magnolia acuminata]	30+	20+	Oval	Green	No	No	Partial	Yes	Yes	A deciduous magnolia with large green leaves. Excellent tree for parks or large properties. Plant in protected locations, winter hardiness may be an issue.
Maple, freeman [Acer x fremanii] ⁴	40+	30+	Round	Orange/Red	No	No	No	No	Yes	Existing cultivars have performed poorly due to an apparent lack of hardiness. Freeman maples should be used with caution in the area covered by this publication.
Maple, Norway [Acer platanoides] ⁴	40+	40+	Round	Yellow/Brown	Yes	No	Yes	No	Yes	Winter hardiness and susceptibility to Eutypella canker limit the usefulness of this species and its cultivars in the area covered by this publication.
Oak, Eastern pin [Quercus palustris]	40+	20+	Pym	Red	Yes	No	No	No	Yes	Intolerance to alkaline soils and marginal winter hardiness limit the usefulness of eastern pin oak within the area covered by this publication.
Plum, Canadian [Prunus nigra]	10+	8+	Oval	Yellow	Yes	Yes	No	Yes	Yes	Is a small tree with white flowers in the early spring. 'Princess Kay' is a double-flowered cultivar that was collected from Itasca County and introduced by the University of Minnesota Landscape Arboretum. This species is very susceptible to black knot. May need winter protection from rabbits.
Poplar, Lombardy [Populus nigra 'Italica']	40+	10+	Columnar	Yellow	No	No	No	No	Yes	Lombardy poplar is an upright, fast-growing cultivar that is often used in windbreak and shelterbelt plantings. It is extremely susceptible to several canker diseases and as a consequence is short lived. All poplars have shallow and aggressive roots. Do not plant near pavement where shallow roots can cause damage.

¹ - Prefer rich, moist, and well-drained soils. May require extra pruning to train trees into a desirable form.

² - Elms are adaptable to urban conditions and grow rapidly.

³ - Hawthorns may need winter protection from rabbits and are sensitive to deicing salt spray and run-off.

⁴ - Maples other than Norway maple are sensitive to deicing salt. Maples perform better in lawn or park settings and in groups, rather than as single specimens in fully exposed boulevards. Planting with the root collar at ground line is important to see and treat girdling root syndrome.