

## Trees for Limited Use 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
<b>Alder, speckled</b> [A. rugosa]	15+	15+	Round	Green/Yellow	No	Yes	Partial	Yes	Yes	Native to Northern Tallgrass Prairie. The dominant form tends to be bushy and multistemmed. A good alternative for use in wet riparian or wildlife habitat plantings. Alder flowers are co-add winter interest., and their fruit is a persistent nutlet.
<b>Apricot, Manchurian</b> [P. armeniaca var. mandshurica]	15+	15+	Vase	Orange/Yellow	Sometimes	Yes	No	Yes	Yes	Showy white to pink flowers in the early spring. Produces edible fruit, however the more hardy cultivars produce drier fruit that is best suited for preserves. Hardier cultivars include 'Manchu', 'Moongold', and 'Sungold'. Apricots may need winter protection from rabbits.
<b>Aspen, bigtooth</b> [P. grandidentata] <sup>1</sup>	50+	20+	Columnar	Yellow	No	Sometimes	No	No	Yes	Native to Northern Tallgrass Prairie. Of the two aspens, bigtooth is the better aspen for urban plantings and is appropriate for planting in parks and natural or wildlife areas.
<b>Aspen, trembling</b> [P. tremuloides] <sup>1</sup>	40+	20+	Columnar	Yellow	No	No	No	No	Yes	Native to Northern Tallgrass Prairie.
<b>Aspen, upright European</b> [P. tremuloides 'Erecta'] <sup>1</sup>	30+	8+	Columnar	Yellow	No	Sometimes	No	No	No	
<b>Birch, European white</b> [B. pendula]	30+	20+	Oval	Yellow	No	No	No	Yes	Yes	Has attractive, white bark that does not exfoliate to the extent of the other birches listed. Very popular tree that has been overplanted. Serious pests include the birch leaf miner and the bronze birch borer. Cultivars include 'Dalecarlica'.
<b>Birch, river</b> [B. nigra]	30+	20+	Oval	Yellow	Yes	No	No	Yes	Yes	Has attractive, exfoliating, copper-colored bark. Can be purchased as a single stem or a clump. Suffers iron chlorosis in alkaline soils.
<b>Birch, 'Whitespire'</b> [B. platyphylla var. japonica 'Whitespire']	30+	20+	Pyramidal	Yellow	No	No	No	Yes	Yes	Is a white barked, nonexfoliating birch. Cold hardiness limits the use of this species to the southern and western portion of the Northern Tallgrass Prairie subsection.
<b>Bladdernut, American</b> [S. trifolia]	8+	6+	Oval	Yellow	No	Yes	Partial	Yes	Yes	Upright shrub that can be trained into a small tree. Prefers rich, moist soil and protected sites. Fairly intolerant to drought.
<b>Cherry, amur choke</b> [P. maackii]	20+	18+	Oval	Maroon	Sometimes	Yes	No	Yes	Yes	A rapid growing small tree with an attractive, copper-colored, smooth bark. Prefers fertile, well-drained soils. Often develops girdling roots and weak crotches with included bark, so plant high and prune regularly. May need winter protection from rabbits.
<b>Cherry, common choke</b> [P. virginiana]	15+	10+	Oval	Maroon	Sometimes	Yes	No	Yes	Yes	Native to Northern Tallgrass Prairie. Large shrub to small tree. Tart, edible fruit. Quite susceptible to black knot. Cultivars include 'Canada Red'. May need winter protection from rabbits.
<b>Cherry, Nanking</b> [P. tomentosa]	6+	6+	Oval	Green	No	Yes	No	Yes	Yes	A large, spreading shrub that can be pruned as a small tree. Has showy, white flowers in the early spring. Needs cross pollination to produce fruit. Cultivars include 'Leucocarpa' and 'Orient'. May need winter protection from rabbits.
<b>Cottonwood, eastern</b> [P. deltoides] <sup>1</sup>	60+	40+	Oval	Yellow	No	No	No	No	Yes	Native to Northern Tallgrass Prairie. A rapid growing tree that becomes very large with age. Female trees produce cotton that can be quite a nuisance. Roots are invasive; don't plant near pavement. 'Siouxland' is a cottonless male cultivar.
<b>Dogwood, pagoda</b> [C. alternifolia]	12+	10+	Oval	Maroon	Sometimes	Yes	Yes	Yes	Yes	Native to Northern Tallgrass Prairie. Is an excellent small tree or large shrub. Does not tolerate hot, dry sites. Canker diseases often become important on plants grown under stress.
<b>Eastern wahoo</b> [E. atropurpureus]	12+	12+	Round	Orange	No	Yes	Yes	Yes	Yes	Native to Northern Tallgrass Prairie. Fall color develops best in full sun. Cold hardiness limits the use of this species to the southern and western portion of the Northern Tallgrass Prairie subsection. May need protection from rabbits in the winter.
<b>Hornbeam, American</b> [C. caroliniana]	15+	15+	Round	Red/Orange/Yellow	No	Yes	Yes	Yes	Yes	Requires moist, well drained, fertile soils. Sensitive to deicing salts and subject to iron chlorosis on alkaline sites.
<b>Linden, littleleaf</b> [T. cordata]	35+	20+	Pyramidal	Yellow	Yes	No	Partial	Yes	Yes	Very adaptable shade tree, but is often subject to girdling root syndrome, winter stem damage, and weak crotches with included bark. Cultivars include 'Fairview', 'Greenspire', 'Olympic', 'Norlin', and 'Shamrock'. Lindens are sensitive to deicing salt. In addition, they are chronically prone to girdling root syndrome that develops from planting too deep. Always plant lindens shallow and mulch.
<b>Locust, black</b> [R. pseudoacacia]	30+	20+	Irregular	Yellow/Green	Yes	No	No	Yes	Yes	Very tolerant of dry, infertile soils. Produces a white, fragrant flower in late spring. Relatively short lived, somewhat messy, and has a tendency to suffer storm damage.
<b>Maple, silver</b> [A. saccharinum]	50+	40+	Round	Yellow/Green	No	No	Partial	No	Yes	This species has invasive roots, don't plant near pavement. Needs frequent pruning for structure when young. Tends to suffer frequent damage in storms. Is not tolerant of alkaline soils (high pH) and becomes chlorotic. Cultivars include 'Blair', 'Northline', 'Silver Queen', and 'Weiri'. 'Silver Queen' is a seedless cultivar. 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.
<b>Mountain Ash, European</b> [S. aucuparia]	20+	20+	Oval	Yellow	Yes	Yes	No	Yes	Yes	Small tree with showy flowers and fruit. Prefers cool, rich loam soils that are well drained. Not real tolerant of summer heat or drought. Susceptible to fire blight and subject to sunscald and stem damage by sapsuckers. Restrict use to the southern and western portion of the Northern Tallgrass Prairie subsection. Cultivars include: 'Blackhawk' and 'Cardinal Royal'.
<b>Mountain Ash, showy</b> [S. decora]	20+	10+	Oval	Yellow	No	Yes	No	Yes	Yes	Small tree with showy flowers and fruit. Limited use as a landscape tree. Short lived due to insect borers and fire blight. Does well in wet soils.
<b>Peashrub, Siberian</b> [C. arborescens]	10+	6+	Irregular	Yellow	No	Yes	No	Yes	Yes	An upright shrub that may be trained into a small tree. Has showy yellow flowers in late May. Very tolerant of drought, cold winter temperatures, and poor soil conditions. Cultivars include 'Walker', which has a weeping form and small thorns.
<b>Plum, American wild</b> [P. americana]	10+	10+	Round	Yellow	Sometimes	Yes	No	Yes	Yes	Native to Northern Tallgrass Prairie. Natural habit is to form shrubby thickets, but can be trained into small trees. Very drought tolerant. Diseases are common, but few threaten plant health. Common plum is recommended over cultivars unless fruit production is an objective. May need winter protection from rabbits.
<b>Poplar, balsam</b> [P. balsamifera] <sup>1</sup>	40+	20+	Pyramidal	Yellow	No	No	No	No	Yes	Native to Northern Tallgrass Prairie.
<b>Poplar, European white</b> [P. alba] <sup>1</sup>	40+	40+	Round	Yellow	No	No	No	No	Yes	Bolleana poplar (P. alba 'Pyramidalis') is a short-lived, columnar variety that is very susceptible to cankers and should not be planted.
<b>Poplar, 'Robusta'</b> [P. x canadensis 'Robusta'] <sup>1</sup>	40+	30+	Round	Insignificant	No	No	No	No	No	A hybrid poplar with a broad oval crown, rapid growth, and seedless.
<b>Poplar, 'Tower'</b> [P. x canescens 'Tower'] <sup>1</sup>	40+	10+	Columnar	Insignificant	No	No	No	No	No	Has a narrow pyramidal form, is very hardy and resistant to stem cankers.
<b>Russian-olive</b> [E. angustifolia]	20+	20+	Irregular	Yellow	No	Yes	No	Yes	Yes	An attractive plant with gray foliage and reddish-brown bark. Very tolerant of drought and deicing salts. Verticillium wilt and cankers may be occasional problems.
<b>Sumac, smooth</b> [R. glabra]	8+	10+	Round	Red	No	Yes	No	Yes	Yes	Large shrubs that spread by root suckers to form large thickets and are sometimes invasive. They are tolerant of poor, dry sites.
<b>Sumac, staghorn</b> [R. typhina]	12+	12+	Round	Red	No	Yes	No	Yes	Yes	Large shrubs that spread by root suckers to form large thickets and are sometimes invasive. They are tolerant of poor, dry sites.
<b>Walnut, black</b> [J. nigra]	40+	50+	Oval	Yellow	No	No	No	No	Yes	Select plants grown from a central Minnesota seed source. Plants from southern seed sources often suffer winter damage. Avoid planting near gardens; walnuts secrete a chemical that affects some herbaceous plants and spruce trees.
<b>Willow, black</b> [S. nigra] <sup>2</sup>	35+	20+	Columnar	Yellow/Green	No	No	No	No	No	
<b>Willow, 'Flame'</b> [S. 'Flame'] <sup>2</sup>	20+	15+	Round	Yellow	No	Yes	No	No	No	
<b>Willow, golden weeping</b> [S. alba 'Tristis'] <sup>2</sup>	40+	30+	Weeping	Yellow	No	No	No	No	No	Large tree with brittle wood that is often subject to significant storm damage. Most appropriate for use in parks or large properties.
<b>Willow, laurel</b> [S. pentandra] <sup>2</sup>	20+	15+	Oval	Green	No	No	No	No	No	Medium-sized tree with dark green foliage. Grows rapidly and is not too demanding of site conditions. Foliage can be seriously damaged by leaf diseases and leaf beetles.
<b>Willow, weeping 'Prairie Cascade'</b> [S. 'Prairie Cascade'] <sup>2</sup>	35+	35+	Weeping	Yellow	No	No	No	No	No	Hybrid willow that combines the form of weeping willow and the glossy foliage of Laurel willow.
<b>Willow, pussy</b> [S. discolor] <sup>2</sup>	15+	12+	Oval	Yellow	No	Yes	No	Yes	No	Noted for catkins that can be forced in the winter and are often used in interior floral arrangements. Subject to damage by stem cankers, borers, and leaf beetles.

<sup>1</sup> - All poplars have shallow and aggressive roots. Do not plant near pavement where shallow roots can cause damage.

<sup>2</sup> - Willows are valued for their fast growth and tolerance to wet sites. They are relatively short-lived and have aggressive, shallow root systems. The larger species are better suited for larger parks and natural greenspaces rather than residential properties.