

# Recommended Shade Trees for Private Landscapes

The community forest of Robbinsdale is under a constant threat from various diseases and insects, most notably Dutch elm disease and the emerald ash borer. Other trees such as maples and lindens have been under increasing risk from storm damage, stem girdling roots and alternating periods of drought and high water tables. When too many trees of only one genus (ash or maple) or a single species (American elm) are planted an exotic pest can result in a devastating loss of tree canopy. Planting a more diverse array of species can help prevent such significant losses of tree cover.

To assist residents interested in replacing a recently lost tree or who would like to add or enhance their canopy a recommended tree list for private yards was developed. Some species may be more challenging to find than others but selection diversity in local nurseries has increased in recent years. Maples often seem to be the go to planting choice due to their fall color. However, maples have been way overplanted and are dying in increasing numbers from periods of drought and dysfunctional root systems, and thus should be avoided.

For each tree listed some general notes about the species, planting site recommendations and any noteworthy cultivars and are provided. At the bottom of the document is a list of some trees that are NOT recommended due to insect/disease/structural issues or because of excessive overplanting in recent years.

## Large-sized Deciduous Trees (~50' tall or greater at maturity):

**American & Hybrid Elms (disease resistant cultivars):** Very hardy, fast growing, tolerant of a wide variety of sites & soils, common Dutch elm disease resistant cultivars include 'Accolade', 'Cathedral', 'Discovery', 'Patriot', 'St. Croix' (local selection) and 'Valley Forge'

**Amur Corktree:** Unique corky bark, fast growing, 'His Majesty' is a good male cultivar developed by the U of M

**Basswood (American Linden):** Excellent species for pollinators, casts dense shade, fast growing, make sure to plant the native linden and avoid the nonnative cousin little leaf linden

**Bigtooth Aspen:** Native to Minnesota, very showy yellow foliage, fast growing, superior choice to the more commonly found quaking aspen, may only be available from specialty nurseries

**Black walnut:** Good wildlife value, attractive form, fast growing, highly site adaptable, edible nuts, avoid planting near gardens

**Eastern Cottonwood (males only):** Very fast growing, near 'instant' shade, plant away from pavement or structures, valuable for bees & pollinators, male cottonwoods do not produce the much maligned cottony seed

**Ginkgo:** Pyramidal growth form, very adaptable species, deicing salt tolerant, ancient plant family, unique fan-shaped leaf, 'Autumn Gold', 'Magyar' and 'Princeton Sentry' are all common male cultivars

**Hackberry:** Very drought tolerant, corky bark, excellent choice for birds, good replacement for diseased elms

**Hickory, Bitternut:** Native to southeast into central Minnesota, good wildlife value, smooth bark, strong wood, likely only available from specialty nurseries such as Knecht's or Outback

**Hickory, Shagbark:** Native to southeast Minnesota, unique shaggy bark, excellent wildlife value, likely only available from specialty nurseries such as Knecht's or Outback

**Honeylocust:** Fast growing, diffuse shade, small leaflets, good structure & strong wood, avoid pruning in humid or wet weather, cultivars include 'Shademaster', 'Imperial', 'Northern Acclaim', 'Skyline', and 'Sunburst';

**Kentucky Coffeetree:** Unique scaly bark, huge compound leaf, essentially free of any insect or disease problems, fast growing once established, highly recommended, 'Espresso' is a common male cultivar

**Northern Catalpa:** Cigar-like fruit, very attractive white spring flowers, huge leaves, very fast growing

**Oak, Bur:** Corky bark, excellent tolerance for drought & urban soils, resistant to oak wilt, great for wildlife, primary species of the oak savanna originally common in the Metro Area

**Oak, Chinkapin:** Originally native to southeast MN, sawtooth leaf margins, very tolerant of alkaline (high pH) soils commonly found in urban/suburban yards, likely only available from specialty nurseries

**Oak, Heritage:** Cross between bur and English oak, relatively fast growing, tolerant of high pH soils

**Oak, Northern pin:** Originally widespread in the region, fast growing, russet red fall color, very drought tolerant, \*different than the eastern pin oak which is similar but subject to iron chlorosis

**Oak, Northern red:** One of the fastest growing oaks, good for loamier/heavier soils, somewhat shade tolerant

**Oak, Swamp white:** Good urban oak, pyramidal growth, tolerates both high water and drought conditions

**Oak, White:** Drought tolerant, majestic canopy when mature, very durable structure but rather slower growing

**River Birch:** Attractive exfoliating bark, fast growing, showy mature specimen in front of Elim Lutheran Church at 3978 West Broadway, good drought tolerance, 'Heritage' is a common cultivar

**Sycamore:** Rare in the Metro Area but a good species to try if available, very fast growing, unique patterned bark, couple large private front yard specimens in Robbinsdale exist, cousin to the London Planetree

**Tuliptree:** Tulip-like spring flowers, fast growing, hardy to our climate, unique large 4-lobed leaves, planted by the city in boulevards in recent years

### **Medium-sized Deciduous Trees (~25' - 50' tall at maturity):**

**Amur Chokecherry:** Attractive showy copper-colored papery bark adds striking winter interest, fast growing

**Black Cherry:** Attractive dark bark, tall growing cherry, native species good for wildlife and pollinators

**Ironwood:** Attractive smooth bark when young, hop-like seeds, very strong wood, does well in shady sites

**Japanese Tree Lilac:** Attractive smooth bark, very drought tolerant, white spring flowers, compliant for growing under utility lines, several cultivars widely available

**Katsuratree:** Medium sized ornamental, heart shaped leaves, yellow fall color, site adaptable, native to Japan

**Magnolia:** Showy large spring flowers, 4 varieties that are hardy to southern Minnesota include 'Star', 'Leonard Messel', 'Merrill' and 'Cucumber tree'

**May Day Tree:** Fragrant clusters of white flowers, yellow fall color, alternative species for sunny landscapes

**Ohio Buckeye:** Orange-reddish fall color, rounded growth form, dark brown nut with an 'eye', good for wildlife

**Regal Prince Oak:** Very narrow/columnar growth form oak cultivar for tight spaces, yellow fall color

**Yellowwood:** Hanging clusters of fragrant white flowers, yellow fall color, requires structural pruning

**Zelkova:** Member of the elm family but not susceptible to Dutch elm disease, 'Kiwi Sunset' a common cultivar

## **Small-sized Deciduous Trees (less than ~25' tall at maturity):**

**Amur Maackia:** Attractive foliage and flowers, olive green bark, deicing salt tolerant, native to northeast Asia

**Apples & Crabapples:** Many different cultivars in existence with different flower colors, good for wildlife, some crabapple cultivars more susceptible than others to apple scab, cedar apple rust and/or fireblight

**Blue Beech:** Unique ridged trunk bark, performs best in moist organic soil and/or shadier locations

**Common Chokecherry:** Native to Minnesota, edible fruit, 'Canada red cherry' a common cultivar with red leaves in summer, susceptible to black knot stem canker so plant with caution

**Diablo Ninebark Tree** – Small ornamental with birch-like papery white bark and reddish purple foliage

**Eastern Redbud:** Very showy lavender spring flowers, growth form is more horizontal than vertical, the redbud cultivar 'Minnesota Strain' is best for our climate

**Hawthorn:** Good wildlife value, numerous thornless varieties exist with attractive fruit and flowers, 'Cockspur', 'Crimson Cloud', 'Toba' and 'Snowbird' are just a few options

**Mesabi & Meteor Cherry:** 2 of several ornamental cold hardy cherry selections, attractive spring flowers, large crops of sweet/tart fruit in early summer

**Mountain Ash, American:** Showy fruit, not a true ash (no risk from emerald ash borer)

**Mountain Ash, Showy:** Showy fruit, tolerant of deicing salts, not a true ash (no risk from emerald ash borer)

**Plum American:** Attractive flowers, native species, edible fruit, use common plum over cultivars

**Plum Canada:** Native, showy white flowers, the U of M cultivar 'Princess Kay' is commonly planted

**Plum Newport:** Attractive dark red foliage during mid-summer, U of M ornamental introduction

**Nannyberry Viburnum:** Native, large shrub/small tree, reddish fall color, hardy

**Pagoda Dogwood:** Native, good wildlife value, white flowers, good for moist soils or shadier sites

**Serviceberries:** Good berries for birds, numerous varieties & cultivars available, also called juneberries

**Sumac, Smooth:** Excellent scarlet red fall color, tolerant of dry sites, smooth branches

**Sumac, Staghorn:** Same as smooth sumac but with "fuzzy" branches, can be trained as a small ornamental

**Three Flowered Maple:** Brilliant red fall color, attractive papery bark, plant in a protected location

## **Coniferous Trees (all sizes):**

**Cedar, Eastern Red:** Common across southern Minnesota, compact growth, extremely drought tolerant

**Cedar, Northern White (Arborvitae):** Native, highly fragrant foliage, plant in a cooler or shadier location

**Dawn Redwood:** Deciduous conifer (drops needles in fall), fern-like foliage, turns russet-brown in fall

**Fir, Balsam:** Highly fragrant needles speaks of Christmas, very conical shape, plant in a cool or shady location

**Fir, Douglas:** Native to western US, drought tolerant evergreen, conical spruce-like shape with few diseases

**Pine, Austrian:** Nonnative but performs well in harsh urban areas, similar to red pine but with grayer bark

**Pine, Ponderosa:** Drought resistant, broad canopy, very drought tolerant, dominant pine of the western US

**Pine, Red:** Prefers sandy well drained soils, red flaky bark, good self-pruner, the state tree of Minnesota

**Pine, Scotch:** Unique orange bark, fast growing, often exhibits crooked upper canopy growth form

**Spruce, Norway:** Good but large landscape species, unique “drooping” branchlets” distinguish this spruce apart from others, very hardy with few insect/disease problems and fast growing, native to Europe

**Tamarack (eastern larch):** Deciduous conifer, graceful summer form, brilliant orange-yellow fall color, will do well in wetter sites, plant only in full sun

## **Trees species & cultivars that are NOT RECOMMENDED due to overplanting or other significant health issues:**

**Ash (Green, Black & White):** All are susceptible to the emerald ash borer so avoid planting or transplanting

**Buckthorn (illegal to plant):** Once planted as a hedge but now a noxious weed, highly invasive species that has overtaken woodlands, berries are toxic to birds, if you know you have any then please remove & replace!

**Elm, Princeton:** This elm cultivar often exhibits poor upright branching structure and frequent storm damage

**Little Leaf Linden (all cultivars):** Overplanted, nonnative, messy due to insect feeding, readily suffers from stem girdling roots and Japanese beetle defoliation, poor branching structure, prone to trunk sprouts

**Maple, Freeman:** Better known as cultivars ‘Autumn Blaze’ or ‘Sienna Glen’, fast growing but produces a problematic upright branching structure highly prone to storm damage; overplanted, requires frequent pruning

**Maple, Norway:** Nonnative, potentially invasive, highly prone to frost cankers and stem decay, commonly exhibits protruding large spreading surface roots that make mowing a challenge

**Maple, Red:** Overplanted, prone to sunscald & drought stress, struggles in the heat & sun of suburban yards

**Maple, Silver:** Very fast growing but overplanted, messy, still a better choice than sugar or hybrid maples; if chosen then try the cultivar ‘Silver Queen’ which has better branching structure and is seedless

**Maple, Sugar:** Great fall color but best to avoid since way overplanted statewide and numerous recent examples of public sugar maples declining. If must plant then do so where roots will remain cooler (i.e. shade) and/or select the ‘Highland Park’ hybrid which is a cross between sugar and bigtooth maple

**Paper Birch & other white barked birches:** Short lived, not adapted for the heat & sun of suburban yards, susceptible to drought which causes decline and attracts the bronze birch borer; river birch a better option

**Spruce, Black Hills:** Cultivar of the white spruce with better drought tolerance, however now overplanted, increasing incidences of needlecast diseases so plant only in exposed sites with good wind flow

**Spruce, Colorado:** Way overplanted, susceptible to needlecast & canker diseases due to our humid climate

**Notes:**

\*Many young deciduous trees, especially fruit trees, need winter bark protection from rabbits – wrap a white tree guard/bark protector around the trunk from November through April

\*Many of the deciduous trees on this list may also be planted on boulevards (city-owned right of way). Any planting in the boulevard requires a permit per city code Section 820, which can be found on our website and requires approval by the Engineering Department

\*An exotic insect that has not yet been found in Minnesota, the Asian longhorned beetle, targets maples and may be the 'next emerald ash borer' caliber problem. However, due to aggressive monitoring and control efforts this insect has been successfully kept in check where found in North America