Recommended Shade Trees for Private Landscapes of Robbinsdale

The community forest of Robbinsdale is under a constant threat from a variety of both living and non-living tree maladies such as diseases, insects and storm damage, as well as from predisposing factors that include stem girdling roots and recent summer droughts. As a way to assist residents who are interested in replacing a recently lost tree or a declining ash, or simply adding to their existing tree canopy, the following guide provides property owners with some ideas for species selection.

When too many trees of only one or two species are planted, the effects of pests such as Dutch elm disease or the emerald ash borer can decimate a community's urban forest. Some of the below species may be more challenging to find than others from local nurseries, but a more diverse community tree canopy is important to help avoid the problems that arise from planting too many of only one species. For each tree listed, the botanical name is provided along with some general notes and planting recommendations.

<u>Large-sized Deciduous Trees (~50' tall or greater at maturity):</u>

American elm (*Ulmus americana*); very hardy and tolerant of a wide variety of sites, common Dutch elm disease resistant cultivars include 'Accolade', 'Cathedral', 'Patriot', 'Princeton', 'St. Croix' or 'Valley Forge'

Basswood (*Tilia americana*); also called American linden, excellent species for pollinators, dense shade, native linden is superior to the non-native little leaf linden

Bitternut hickory (Carya cordiformis); native to southeast Minnesota, good wildlife value, smooth bark

Black walnut (Juglans nigra); good wildlife value, attractive form, avoid planting near gardens

Bur oak (Quercus macrocarpa); corky bark, excellent hardy native oak, site adaptable, resistant to oak wilt

Eastern cottonwood (*Populus deltoids*); plant away from pavement or structures, only use male cultivars, important species for bees (pollinators)

Gingko (Gingko biloba); pyramidal growth form, 'Autumn Gold' and 'Princeton Sentry' are good male cultivars

Hackberry (Celtis occidentalis); very drought tolerant, corky bark, good replacement tree for diseased elms

Heritage oak (Quercus 'heritage'); cross between bur and English oak, relatively fast growing

Kentucky coffeetree (Gymnocladus dioicus); unique flaky bark, 'Expresso' is a good fruitless cultivar

Northern catalpa (Catalpa speciosa): cigar-like fruit, attractive spring flowers, fast growing

Northern pin oak (Quercus ellipsoidalis); originally widespread in the region, susceptible to oak wilt

Northern red oak (Quercus rubra); susceptible to oak wilt, fast growing, somewhat shade tolerant

Quaking aspen (Populus tremuloides); fast growing, attractive white bark and fall color, shorter-lived species

Shagbark hickory (Carya ovata); native to southeast Minnesota, unique "shaggy" bark, excellent wildlife value

Sugar maple (Acer saccharum); great fall color, use with caution – plant only where roots will be cooler

Sycamore (*Platanus occidentalis*); rare in Twin Cities but a good species to try, unique patterned bark

Swamp white oak (*Quercus bicolor*); good urban oak tree, tolerant of inundation, resistant to oak wilt

Weeping willow (*Salix alba*); attractive weeping foliage, fast growing but tends to have weak branches

White oak (*Quercus alba*); resistant to oak wilt, slow growing, originally widespread in Robbinsdale

Medium-sized Deciduous Trees (~25-50' tall or greater at maturity):

Amur chokecherry (*Prunus maackii*); showy copper colored bark, requires formative pruning when young Balsam poplar (*Populus balsamifera*), fast growing native poplar species, good for honeybees Black cherry (*Prunus serotina*), attractive bark at all stages, good for wildlife and native pollinators Honeylocust (*Gleditsia triacanths*); good thornless cultivars include 'Shademaster', 'Imperial', Skyline', and 'Sunburst'; fast growing species, diffuse shade, subject to nectria canker (avoid pruning in humid weather) Ironwood (*Ostrya virginiana*); attractive smooth bark when young, hop-like fruit, very strong wood Japanese tree lilac (*Syringa reticulata*); attractive smooth bark, white flowers, native to East Asia Magnolia (*Magnolia spp.*); brilliant spring flowers, 4 varieties that are hardy to the southern Minnesota Hardiness Zone 4 include 'Star', 'Leonard Messel', 'Merrill' and 'Cucumber tree'

Ohio buckeye (Aesculus glabra); orange-reddish fall color, 'Autumn Splendor' is a good cultivar

River birch (*Betula nigra*); attractive exfoliating bark, much more drought tolerant than paper birch, 'Heritage' is a commonly available cultivar

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

Amur maackia (*Maackia amurensis*); attractive foliage and flowers, tough, native to northeast Asia

American plum (*Prunus Americana*); attractive flowers, edible fruit, use common plum over cultivars

Blue beech (*Carpinus caroliniana*); Best in moist organic soil, attractive "muscle-like" bark

Canada plum (*Prunus nigra*); 'Princess Kay' a good hardy cultivar, attractive winter bark

Chokecherry (*Prunus virginiana*); native to Minnesota, edible fruit, susceptible to black knot stem canker

Crabapple or Apple (*Malus spp.*); many different cultivars in existence, good for wildlife, *Malus ioensis* (prairie crabapple) is the native wild crabapple of southern Minnesota

Eastern redbud (*Cercis Canadensis*); attractive spring flowers, growth form is more horizontal than vertical, select the Minnesota Strain Redbud for better cold hardiness

Hawthorn (*Crataegus spp.*); Numerous varieties exist with attractive fruit and flowers, 'Cockspur', 'Crimson Cloud', and 'Russian' are options, most nursery selections are thornless

Mountain ash, American (Sorbus americana); showy fruit, not a true ash (no risk from emerald ash borer)

Mountain ash, Showy (Sorbus decora); showy fruit, not a true ash (no risk from the emerald ash borer)

Nannyberry viburnum (Viburnum lentago); native, large shrub/small tree, reddish fall color, hardy

Pagoda dogwood (Cornus alternifolia); native, excellent wildlife value, white flowers, plant in moist soil

Serviceberries (Amelanchier spp.); good berries for birds, several varieties available, also called juneberries

Sumac, Smooth (Rhus glabra); excellent scarlet red fall color, tolerant of dry sites, smooth branches

Sumac, Staghorn (Rhus typhina); same as smooth sumac but with "fuzzy" branches

Three Flowered Maple (Acer triflorum); excellent autumn color, attractive papery bark

Coniferous Trees (all sizes):

Cedar, Rastern Red (*Juniperus virginiana*); native to southern Minnesota, very drought tolerant

Cedar, Northern White (Thuja occidentalis); native, fragrant, plant in a cooler spot, also called Arborvitae

Fir, Balsam (*Abies balsamea*); fragrant needles, very conical shape, plant in a cool and/or shady location

Fir, Douglas (*Pseudotsuga mensezii*); native to western United States, a drought tolerant evergreen

Canada Hemlock (*Tsuga canadensis*); attractive rare evergreen, requires shade and moist soil

Pine, Red (*Pinus resinosa*); prefers sandy well drained soils, the state tree of Minnesota

Pine, Scotch (*Pinus sylvestris*); unique orange bark, often exhibits crooked upper canopy growth form

Pine, White (*Pinus strobus*); attractive form, plant in a cooler, moist site, leader may need deer protection

Spruce, Black Hills (*Picea glauca* var. *densata*); cultivar of the white spruce with better drought tolerance

Spruce, Norway (*Picea abies*); good landscape species that exhibits "drooping" twigs, native to Europe

Spruce, White (*Picea glauca*); native to northern Minnesota, a good windbreak species

Tamarack (*Larix laricina*); large deciduous conifer (drops needles in fall), excellent yellow fall color

Notes:

^{*}Most deciduous trees need winter bark protection from rabbits by wrapping a white tree guard around the trunk

^{*}No maples are listed due to their current overplanting and high susceptibility to drought conditions that have become more common

^{*}Colorado spruce (blue spruce) is not recommended because of various needle diseases commonly found in our humid climate

^{*}Although many people like crabapples, there are a variety of other small fleshy fruit bearing species that can be planted as an alternative

^{*}Many of the deciduous trees on this list may also be planted on boulevards (city owned right of way), but any planting in the boulevard requires a permit per city code Section 820, which would need to be approved by the city forester