## Tree Time!

By Greg Sykes (greg@grsykes.com)

Autumn is here and now is peak time to think about trees. These diverse plants present many benefits to humans and wildlife, such as providing food, offering shelter, retaining soil, and purifying air. Trees save energy costs by shading houses from the hot summer sun and forming wind barriers during winter months. With trees contributing so many direct benefits, some people have asked about recommended species for their Northern Virginia yards. The answer is, "Let the species fit the job!" Here are some native recommendations for KPW yards, with expected heights, pros and cons:

<u>Oaks [Southern red, willow oak, and white (Quercus falcata, Q. phellos, and Q. alba respectively)</u>], 70-100'. Oaks are tall, majestic, long-lived shade trees, constituting the bulk of the tree biomass in KPW. Their deep roots remain underground, making oaks ideal for lawns. Acorns attract scores of wildlife, but the falling nuts can damage surfaces, so be mindful where these trees are planted. Also, acorns can be hard on the feet to those liking to walk barefoot.

<u>Hickories [pignut and shagbark (*Carya glabra* and *C. ovata*)], 75-100'. Pignut hickory is one of Northern Virginia's most common hickories, but other natives are equally fine choices. Another tall, enduring canopy tree, hickories have even deeper roots than oaks, and their leaves turn golden in the fall. Hickory nuts feed many species and the shagbark hickory nuts are enjoyed by humans (speaking of food, add fallen branches to a barbeque for smoky flavors)! Hickories require about 20 years of maturing before producing nuts. Like acorns, falling hickory nuts can also damage items they hit, let alone striking people's heads!</u>

<u>Common hackberry (*Celtis occidentalis*)</u>, 75'. Frequently overlooked, this native is a perfect urban tree. The roots shoot virtually straight down, enabling them to be planted near sidewalks without fear of buckling the cement. These tough plants have round, picturesque canopies, and a knobby sort of ornamental bark. The fruits feed multitudes of wildlife. The one drawback is hackberry's susceptibility to fungal galls, which may deform some branches.

<u>American sycamore (*Platanus occidentalis*)</u>, 100'. Sycamores are another lofty, long-lived shade tree but grow much faster than oaks or hickories. Once they reach maximum height, sycamores expand such that their trunks have the thickest girth of any other Virginian tree; the core wood may rot but the hollow tree may still survive. Providing year-round interest, mature bark has a gnarled, checkered appearance while new growth peals to cream or gull gray hues. The leaves are some of this area's largest. Frequently residing by streams, sycamores like wetter soil than oaks or hickories. The surface roots help retain erosion but poke through lawns. Plant this tree at least 30 feet away from houses or masonry since the roots may crack foundations and driveways. Also, the fine, sharp seeds may become a nuisance.

<u>Red maple (*Acer rubrum*)</u>, 80'. Maples are common shade trees in KPW yards. A fast grower, it is also widespread in recently cleared forests. Since it does not grow as tall as the oaks and hickories, maples eventually cede to those giants. With their dense surface roots, the same planting cautions apply to maples as do sycamores.

<u>Witch-hazel (*Hamamelis virginiana*)</u>, 25'. This little tree is perfect in woodland habitats. With the twisted branches, scalloped leaves, yellow draping autumn flowers, and application in astringent lotions, people find this tree intriguing. Witch-hazel can be temperamental during establishment: either people have luck with it or they do not. Gardeners who have established witch-hazel favor them.

<u>River birch (*Betula nigra*)</u>, 65'. River birches are perfect for sunny spots, especially if the site is soggy or near a drainage ditch. Another tree with year-round interest, the leaves turn yellow in autumn and the pealing bark always assumes varying hues of apricot to silver. Whereas the wild-type may lose leaves during hot, summer droughts, certain cultivars are better at retaining leaves and resisting aphids.

This brief list is an introduction to both some tree species found in Fairfax County parks and viable options for KPW yards. More alternatives may be discussed in future articles. Two "junk" trees to avoid planting are silver maples (*Acer saccharinum*) and Bradford pears (*Pyrus calleryana*). Silver maples are Virginia natives, but their exceptionally fast growth means that the wood is soft. Winds snap major branches since the weak wood cannot adequately hold its own weight. Silver maples are such poor lawn choices that some local nurseries no longer offer them. Like the silver maple, Bradford pears are also extremely prone to injury from storms and ice. Nearly every year, KPW residents experience property damage due to falling Bradford pear limbs. The tree is short-lived (recommended replacement is every 15 years), mostly succumbing to storm-inflicted wounds than other causes. Survivors trade their previously rounded symmetry for permanent disfigurement due to limb loss. Like any other short-lived organism, this Asiatic tree readily self-propagates, becoming an invasive weed in Virginia.

Equally important to what species people select is where it is located. We already touched upon planting trees too close to houses, yet that practice frequently occurs. For some reason, folks especially like planting Japanese maples a few feet away from foundations and walkways, yet these little trees' roots can cause fractures 10-15 years or so after planting. Additionally to repairing expensive masonry damage, branches hitting the house or foliage trapping humidity are other results of damage to houses. Some KPW residents even allow tree branches to touch chimneys, which is a fire waiting to happen! Fairfax County is close enough to the Atlantic to feel the effects of hurricanes (e.g., Ivan, Isabelle) and strong winds can fell trees. When planting, factor in how tall the tree grows, and that it may fall due to storms or other trees knocking into it. Also, plant trees away from underground utility lines (gas, electrical, telephone, and water). Roots cause underground utility problems and complicate maintenance and repairs. When trees fall, anything tangled in the roots come with it. Many KPW properties have sewer easements onto which planting shallow-rooted shrubs are preferred to deep-rooted trees. Willows have extremely dense root systems which seek moisture from any source, and those planted near sewers may exploit cracks and clog the lines.

A final thought about autumn and trees is the fallen leaves provide superb mulch. The wood/bark mulch commonly sold is actually detrimental to soil since the microbes breaking down the wood rob soil of nutrients, and "rubber mulch" from shredded tires is more fad than beneficial. While the best mulch is dried grass from an organic lawn, leaf mulch is a close second. Best of all, it arrives all-natural, already delivered, and free of charge! Why apply synthetic fertilizers to lawns when shredded leaves produce a healthy nutrient source? With so many garden plants, bushes, and newly planted trees benefiting from leaf mulch, why bag leaves for curbside pick-up? To prevent leaf mulch from becoming wind-strewn or matted, first process leaves through a mulcher or partially decompose in a compost pile. When applying mulch, make sure the total thickness (new mulch plus any existing material) does not exceed two or three inches deep.

October is the best time of year to plant trees, and the list we just examined has a species for every KPW yard. We also know where to (and not to) sink the new saplings, what existing trees need trimming or removal, and appreciate the natural benefits reaped from fallen leaves. If you would like to learn more about trees or mulching, check out these websites:

https://www.fairfaxcounty.gov/publicworks/trees
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