

Trees - The Good, the Bad, and the Ugly

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Trees are so important in our lives and critical for the perpetuation of life on Earth. They have been around for approximately 400 million years and survived five major extinctions. Yet we take them for granted as silent guardians of our world and a renewable natural resource.

As we grow in population, consume more resources, and develop more and more forest lands we have intentionally and unintentionally impacted the critical ecosystems associated with our woodlands. Sometimes it overwhelms us to believe we cannot do anything about it. In his great book *Nature's Best Hope* author David Tallamy shares his ideas on what we can do in our backyards to make a small difference and a reasonable argument follows that if most of us participated, that small impact grows larger with every participant. And to do this, we start with trees.

The Good

All trees are good and they provide countless benefits to us, our environment and the creatures, large and small, that rely on them. The bad is trees that are planted in the wrong locations or have become invasive where they outcompete native species. The ugly are trees that are not cared for or are abused where they become a hazard to people and property.

To begin with, we need to understand that most trees originated in the forest and that the environment in which they evolved over the millions of years has influenced and programmed them to thrive in those conditions. So, before you purchase a tree from a nursery or garden center, first learn about the conditions, climate (hardiness zones), soils and sun exposure it requires and then determine if that tree will thrive in the location you selected. Will the tree grow into the overhead power lines? Will it shade your pool or drop its fruit or nuts on your patio? That cute little tree you purchased will likely substantially grow over time. Will browsing deer be a factor? Will road salts harm it?

Next, try to plant the tree in a site where you can reproduce forest like conditions as much as possible. This includes providing as much area as possible to favor the tree with adequate growing space with plenty of organic matter incorporated in the soil such as compost or humus. Add 2-3 inches of natural mulch and keep the lawn as far away from the main stem as possible. This will keep lawn mowers and weed whackers away from damaging the bark. Besides there are over 20 million acres of lawns in this country that are biological deserts that do little for wildlife, climate mitigation and add fertilizer and pesticide runoff into our waterways. We need to reconsider how we landscape our properties are limit the lawn to what is only necessary.

I highly recommend that people plant and nurture trees, shrubs and herbaceous plants that are native to the area you live in. First, they will survive the climate and fair much better than exotic species during drought or insect and disease attacks. Secondly, the

native insect pollinators, native wildlife and amphibians that depend upon native species will thank you. While exotic, non-native trees are fine for ornamental highlights, going native is better for the environment and better for you.

For Putnam, Dutchess and upper Westchester counties I recommend the following trees for your consideration:

Red Oak (*Quercus rubra*), **White Oak** (*Quercus alba*), **Scarlet oak** (*Quercus coccinea*), **Swamp White oak** (*Quercus bicolor*) – these are native large size trees that live long, have good fall colors and provide acorns for wildlife and over 500 species of caterpillars that birds love to feed their young in the Spring.

Sugar Maple (*Acer saccharum*) and red maple (*Acer rubrum*) – Large sized native trees with excellent fall colors, long lived and produce abundant seed for wildlife.

Black Gum (*Nyssa sylvatica*) – Also known as tupelo, this native mid- sized tree likes wetland areas and has some of the best fall colors of all our native species.

Sassafras (*Sassafras albidum*) – This mid-sized native tree prefers drier sites, produces interesting leaves with great fall colors and is a favorite of some native butterfly species. Deer also will nip at it.

Paw Paw (*Asimina triloba*) – This small tree is native just to our south but will thrive here and loves growing in shade. It produces a great tasting fruit that resembles a cross between a banana and custard. It has interesting dark purple flowers; yellow fall foliage and the seed are consumed by wildlife.

Serviceberry (*Amelanchier canadensis*) – This small native tree produces showy white flowers in early spring, has great fall color and people and wildlife eat the tasty berries.

Eastern red cedar (*Juniperus virginiana*) – a small to mid-sized native conifer, this tree tolerates road salts, bluebirds love the berries and can tolerate drier sites.

Eastern White Pine (*Pinus strobus*) – A large, fast growing and stately conifer that provides great wildlife cover and food, can be a good buffer for unpleasant views and requires lots of growing space.

Eastern Hemlock (*Tsuga canadensis*) – A long-lived, towering (100 ft or more) conifer tolerant of shade, moist soil, and slopes. Prone to lethal infestation with the hemlock wooly adelgid. Excellent specimen or screen tree.

Flowering Dogwood (*Cornus florida*) – This is the showiest flowering native tree with abundant white flowers in May, red/orange/purple fall colors and red berries in winter. This is a small tree and does best with some partial shade and lots of mulch to keep its roots protected and moist.

Ironwood (*Carpinus caroliniana*) – This small understory tree needs shade and likes moist soils. Muscular bark, wildlife loves its seeds and it has nice fall color. This tree is sometimes confused with hop hornbeam (*Ostrya virginiana*), which is also called ironwood but with much different bark. Hop hornbeam also is a great wildlife tree, likes shade but better on a bit drier site.

River Birch (*Betula nigra*) – A small to medium size tree that has attractive pinkish exfoliating bark, resistant to insect attacks and likes to be planted along streams.

Eastern Redbud (*Ceris canadensis*) – Beautiful rose-colored flowers in early spring and great fall colors, this small native tree is a great focal point for your landscape.

Trees and the ecosystems surrounding your property will do much better if you create a larger planting/landscape zone with associate plants such as native shrubs and herbaceous plants that will recreate a more natural area. You will attract more birds and wildlife as well as reduce your lawn footprint. Add organic matter and natural mulch which will result in a healthier and productive landscape.

The Bad

While no trees are bad if in the right place but when some trees are intentionally planted or accidentally allowed to proliferate without consideration of potential impacts, then the bad shows up. Invasive trees and plants are exotic species from other areas of the world that when introduced to a new environment they sometimes outcompete native species and negatively affects the ecosystems by reducing diversity, limiting wildlife habitat and inhibiting natural forest regeneration. New York State has a list of invasive trees and plants that are either restricted or prohibited to be planted in our State.

Please refer to

(https://extapps.dec.ny.gov/docs/lands_forests_pdf/isprohibitedplants2.pdf) for more information on this and refuse to plant any of those species.

Aside from the list of invasive plants, I would not recommend the following trees for your yard:

Silver Maple (*Acer saccharinum*) – Fast growing and very prone to storm damage.

Eastern Cottonwood (*Populus deltoides*) – Fast growing, messy, and known to fail in storms.

Black Walnut – (*Juglans nigra*) – While highly prized for its wood this tree has allelopathic roots that will inhibit nearby plants, produce lots of walnut fruit that will stain your clothes and be a maintenance issue.

White Birch – (*Betula papyifera*) – This is a beautiful tree that just cannot survive for long in our area due to its susceptibility to bronze birch borer.

The Ugly

There is no such thing as “maintenance free”. A tree in decline is not only ugly, but it can also be hazardous. You need to pay attention to your landscape, water when necessary, eliminate invasive plants, keep vines off all your trees, use mulch, and monitor for insects and diseases that may occur. Early detection is essential and avoid indiscriminate use of pesticides. Also read the labels on lawn care products as herbicides enclosed in those “weed and feed” products can have detrimental affects on your trees (their roots extend way into your lawns). Keep lawn equipment away from damaging the tree bark and roots. If your soils is undisturbed and contains good organic content it is usually unnecessary to fertilize trees To be sure, take a soil test and go from there. Do not fertilize a tree in decline as overfertilization will do more harm than good.

Be careful when trenching or disturbing the soils anywhere near the root zones of your tree as tree roots are critical to the health and stability of your trees. Significant impacts can cause a gradual decline in the tree or cause a catastrophic failure during a storm.

Properly prune off dead, diseased, or damaged limbs and avoid tree paints and other products sold as wound sealers – they do more harm than good because they will create a perfect moist location for bacteria or fungus to establish and invade the wood.

If in doubt retain the services of a certified arborist or forester for more assistance with your trees. Most importantly, take the time to learn about those trees you wish to grow and what it takes to keep them healthy.