MAINTAINING HEALTHY WOODLANDS IN QUEENS LAKE

Because Queens Lake was carved out of a woodland, many of our yards and landscapes contain remnants of that forest. When you stop to think about it, forests are an important part of the ambiance that makes Queens Lake so special as a neighborhood and as a setting for our lives. However, most gardening and landscape advice is geared towards lawns and flower beds. Garden centers can tell us how to plant baby trees, but they have little to tell us about how to care for mature trees, especially mature trees in a woodland. How can we best take care of our woodlands and protect the special landscape of Queens Lake?

Why We Should Take Care of our Woodlands - The Benefits of Forest Settings:

For many of us, the trees and the wildlife we see in and around Queens Lake are a wonderful lift to our spirits. Much of the wildlife is here because we live in a woodland. Our trees are hugely important in providing wildlife habitat.

Have you ever paid attention to the thermometer on your car when you've been out away from our neighborhood and then returned home, especially in the summertime? It's not unusual for me to notice at least a 5 degree drop in temperature and sometimes as much as a 10 degree drop, making our surroundings much more enjoyable and pleasant during summer heat. Not only is it more pleasant to be in shade during summer's heat, but the shaded shelter of the trees decreases our actual air conditioning costs demonstrably over similar structures in sunny locations.

When I was younger, I learned that every mature tree is the cooling equivalent of 3 air conditioners running 24/7. Information from the U.S. Forest Service puts it even higher: they say that a healthy young tree is equivalent to 10 room size air conditioners running 20 hours a day. We're getting a lot of free cooling from our neighborhood trees!

Our trees are part of what makes our neighborhood special and gives it its unique identity. Studies show that mature trees add 10% to a home's real estate value.

With Queens Lake itself anchoring our neighborhood and our identity, we would be wise to remember, too, that intact wooded areas are excellent at filtering out pollutants from water and at slowing water down as it's absorbed into the soil. Tree roots are extremely valuable in holding the soil on steep slopes, stabilizing those slopes and keeping our lake water free from the mud and silt that results from soil erosion.

In this day and age of climate change, our forests are also helping mitigate the increasing levels of carbon dioxide in the atmosphere. Each pound of wood (dry weight) represents 3.67 pounds of carbon dioxide being "captured" and kept out of our atmosphere. Trees are basically a marvel of carbon sequestration.

Last, but hardly least, have you heard of "forest bathing"? It's a term used by physicians in Japan to prescribe spending time in a forest because being in a forest has been shown to have major health benefits, including reduced blood pressure, increased mental health, and fewer respiratory issues. Much of our neighborhood can be considered our personal "forest bathing" experience!

Caring for our QL woodlands:

1. Although we tend not to think about it when we look at a forest, the soil is basically the most important component in keeping a woodland healthy. Healthy soil is important for healthy roots - and healthy roots are important for overall tree health and stability. It's vital to protect forest soils by avoiding compaction or erosion, by doing as little digging as possible, and by allowing the leaves to remain on the ground wherever possible. Do NOT use fertilizers,

fungicides, or other chemicals on your woodland soils. Not only are they unnecessary, they can be incredibly harmful to the trees and other woodland plants.

2. REMOVE INVASIVE SPECIES, to the best of your ability. Invasive species are non-native plants that, because nothing much eats them, have come to outcompete our native plants. Invasive species create what are essentially biological dead zones of just a few types of plants, plants that don't support our native wildlife. Kudzu, "the vine that ate the South", is a poster child for an invasive species. Invasive species that have taken hold in Queens Lake include English ivy, Japanese stilt grass, and privet.
3. Consider leaving and encouraging native small trees, shrubs, and perennials to grow under the canopy of the tall trees. Healthy woodlands have many layers to them and wildlife uses all of those layers. These plants include such species as flowering dogwoods, wax myrtle, spicebush, Christmas fern, columbine, Jack-in-the-pulpit, and bloodroot. The "open savannah" look has a visual appeal, but a multilayered woodland is much healthier overall.
4. It's important to realize that forests are not lawns. The species of grass used for lawns all require sunlight to grow well. Thus, lawns are never going to do very well under trees. Fertilizing heavily or using "weed and feed" products will not give you good results and will result in harm to your trees. Herbicides used to kill "broad-leaved weeds" in lawns will also harm trees, which are broad-leaved plants as well.
5. Leave the leaves. This one is psychologically hard, given all the advertising and (nowadays) social pressure to "tidy up" our yards. Leaves are NOT trash. Fallen leaves create a specific and important habitat in woodlands and, as they decompose, they feed the trees and other plants growing in them. In decomposing, leaves turn into organic matter that makes the soil richer and that provides many important nutrients. The leaf litter shelters important animals like firefly larvae (which are predators on snails and slugs), worms (which feed and aerate the soil as they tunnel), toads (which help keep insect populations balanced) and many more.
6. Where possible, leave fallen branch debris and even logs or standing dead "snags", the latter cut to a safe height. Again, this is psychologically difficult given our "clean it up" culture, but woody "debris" is very important to the health of the woodlands. Many animals live in or on dead wood or feed on the animals that live on that dead wood. Our beloved pileated woodpeckers, for example, rely almost exclusively on insects living in dead wood for their food. The woody debris and fallen leaves also contain a lot of carbon, much of which will be stored in the soil in organic matter if allowed to decompose in place.
7. In a woodland, roots intertwine and help provide both support and nutrition to neighboring plants. Cutting trenches will sever roots that the trees rely on for support and nutrition. Until those roots have a chance to regrow, the tree(s) will be weakened. The unnecessary removal of trees will also weaken the remaining trees until they have a chance to regrow their roots.
8. Because of our large deer population, it will probably be necessary to fence off young trees and shrubs as they get established. Not only will the deer eat the foliage and branches, bucks will also use the trunks of smaller trees to "rub" as they work to remove the velvet from their antlers in the fall. It may be necessary to fence off or otherwise protect flower gardens as well.
9. It takes decades to grow a forest. It is an honor and a pleasure to have the care of the irreplaceable, mature woodlands in our neighborhood.

Frequently asked questions:

1. Termites: Won't leaving leaves and dead wood increase the danger of termites? Answer: Termites are already present throughout our woodlands. They are an important and necessary part of most ecosystems throughout the world, as they help decompose dead wood and return its nutrients to the soil. To protect our houses and other structures, it is important that we not pile wood against the structure, that we not have our wood-based walls or other surfaces touching the soil, and that we maintain appropriate "termite contracts" that include annual inspections of our structures.
2. Won't leaving the leaves in the fall kill the grass in lawns? Answer: If heavy layers of leaves are left on lawns, the lawns will suffer. Leaves can be raked or blown (with electric leaf-blowers for less noise) off of the lawn into more appropriate areas, or they can be mulched-mown to provide organic material and nutrients for the grass. Plants and woody material at the edges of the woodland will help hold the leaves where you want them and keep them from blowing onto the grass.
3. How do I know which plants are native and which are invasive? Answer: There are online lists of invasive plants for Virginia that you can consult for more information. There are many online resources for determining if a plant is native to our area, including a wonderful reference called the Digital Atlas of Virginia Flora. The Virginia Native Plant Society is also a good resource.
4. Is it necessary that I ONLY plant native plants? Answer: Of course not, but do understand that native plants support wildlife and that non-native plants basically don't. Much of our landscaping here in Queens Lake, as in most of the country, is made up of non-native plants. Making an effort to increase our use of native plants in our landscapes will help the wildlife, including birds, to thrive.
5. If I don't use pesticides, won't my yard become a victim to plant-eating"worms" and other pests? Answer: Ironically, using pesticides increases our problems with plant-eating insects because it kills off their predators. The populations of the plant eaters rebound much more quickly than the populations of predators, so using pesticides creates a cycle of dependence on toxic chemicals. Letting natural predator populations build up will keep the ecosystem balanced in a much more coherent and effective manner.
6. Mosquitoes: Won't not spraying for mosquitoes mean that mosquito populations get out of control? Answer: Mosquitoes develop in standing water, although they may hang out in shady areas. The best way to control mosquitoes is to make sure that you do not have any standing water on your property, including water in clogged gutters or plant saucers. Water in bird baths should be changed every few days or a running fountain should be installed. Spraying for mosquitoes kills many, many insects including butterflies, dragonflies ("mosquito hawks"), and bees. Ironically, the mosquito populations will quite rapidly rebound after spraying, but the populations of other insects, including insects that prey on mosquitoes, will not. Since mosquitoes are poor fliers, fans can be used on porches to keep the mosquitoes away. Insect repellant can be used, if necessary, and/or light-colored, long sleeved clothing can be worn. Note: Queens Lake is surrounded by marshes, so we will never be free of mosquitoes.