

BLUE PAPER

Part 1 - Why Trees Matter

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The region that the Clear Lake Township Land Conservancy serves is filled with good people. Neighbors who support each other and work toward the common good are vital for developing a "community of stewards" who deeply care about the sustainability of natural resources. Neighbors are important.

Perhaps the hardest working and most valuable "neighbor" near you is not Fred or Brenda or Chuck or whoever lives nearby. Rather it is that large oak tree in your yard. Clear Lake Township is truly a wondrous place. One of the great treasures that makes it so are the native grand **oaks** and **hickories** that adorn our shores and landscapes. They have been here for decades, even centuries, working for us in so many ways. They are a legacy that we inherited, not one that we ourselves produced, and they need to be preserved and developed.



This "good neighbor":

Cleans the air. No trees, no human life. A mature, leafy tree produces as much oxygen in a season as 10 people inhale in a year. They capture carbon dioxide from the air and turn it into pure oxygen, serving as a giant filter intercepting airborne particles and absorbing pollutants such as carbon monoxide and dioxide, sulfur dioxide, and nitrogen dioxide. Trees remove this air pollution by lowering air temperature, through respiration, and by retaining particulates.

Cleans the soil. Phytoremediation, meaning "restoring balance," is a process of decontaminating soil or water by using plants and trees to absorb or break down pollutants. Trees can either store harmful pollutants or change the pollutant into less harmful forms. Plants filter sewage as well as lawn and farm chemicals, reduce the effects of animal wastes, clean roadside spills, and clean water runoff flowing into our streams and lakes.

Controls noise pollution. Trees are an extremely effective means of absorbing sound. Planted at strategic places around your house, they can abate major noises from car and boat traffic.

Slows storm water runoff. Flash flooding is dramatically reduced via trees; just a single mature tree can intercept as much as 1,000 gallons of water annually. Underground

water-holding aquifers are recharged with this slowing of water which feeds the cleansing springs that are a major source of Clear Lake's water. They fight soil erosion as their roots bind the soil and their leaves break the force of the wind and rain. *Lowers energy costs.* Shade resulting in cooling is often a primary reason for having trees. The shade provided drastically reduces air conditioning costs during the summer months. During the cold and windy seasons strategically placed trees act as a windbreak and can lower heating costs as much as a thirty percent, protect assets from wind damage, and have a significant effect on the reduction of snow drifts.

Makes property more desirable. Studies show that mature trees on a home site increase the value by as much as ten percent, meaning a \$60,000-plus gain on many lakefront homes.

Enhances wildlife. Many species of wildlife depend on native trees for habitat. Native trees provide food, protection, and homes for many birds and mammals.

Makes life nicer. It has been shown that spending time among trees and green spaces reduces the amount of stress that we carry around with us in our daily lives. Ailing family members have been shown to recover more quickly when their room offered a view of trees. Children retain more of the information taught in schools if they spend some of their time outdoors in green spaces. Trees are often planted as living memorials or reminders of loved ones or to commemorate significant events in our lives.

Trees Make Good Neighbors. Dana Karcher writes, "No doubt, it's the tree that makes us gather together in neighborly goodness. They stand as sentinels in our daily lives assuring that their benefits make our neighborhood great." There is a popular Chinese proverb that says: "The *best time to plant a tree* was 20 years ago. The second *best time* is now." The Conservancy fosters a "Community of Stewards." Let's get growing to maintain the many valuable roles played by our native trees.

Without question native trees are the best choice. You've learned the "Why," next learn the "What" and "How" with Blue Paper No. 7_a .

References:

https://www.purduelandscapereport.org/article/we-need-trees-and-heres-why/ https://www.arborday.org/trees/benefits.cfm https://www.savatree.com/whytrees.html https://www.treesaregood.org/portals/0/docs/treecare/TreeValues.pdf https://www.onetreeplanted.org

