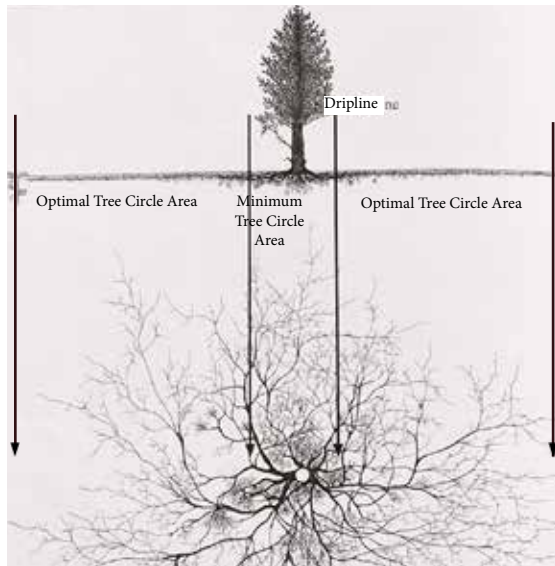


Trees!

The Extent of Tree Roots



- Significant tree roots run right below the surface through neighbors' yards, up to 1 block from the tree. This upper soil layer is the primary source for water and nutrients.
- "Tree circles" are round areas beneath the tree dripline that help to protect the tree roots and trunk from weed wackers, lawn mowers, broad-leaf weed killers, and chemical fertilizers that kill beneficial fungus and insects that support the tree.
- It is best for "tree circle" areas to have a natural, undyed mulch with woodland-type groundcover plants that do not compete with the tree. (Dyed mulches contain chemicals that kill beneficial soil organisms.).

Trees!

NEED



- Natural, undyed mulch and/or woodland-type groundcover plants within tree circles.
- Slow release, natural fertilizers that support the tree nutrient uptake system.
- Water when there is hot weather and/or a shortage of rainfall.
- No chemicals to kill weeds, fungus, insects. (<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0185809>)
- No mulch or soil on trunk above tree base. (No "volcano" mulching.)
- Hand weeding.

Trees!

Benefits



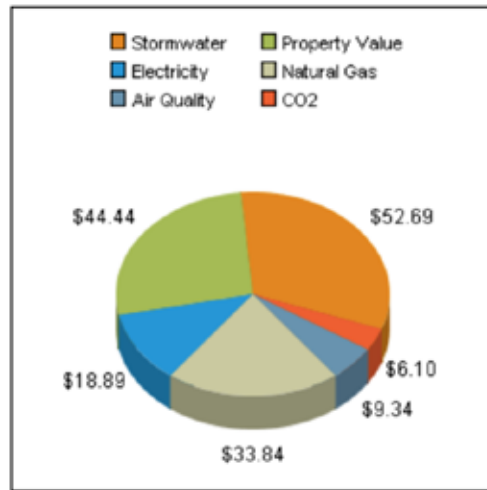
- Absorb large amounts of CO²
- Alleviate flooding by absorbing stormwater
- Protect homes from extreme sun and wind
- Save heating and cooling costs
- Increase property values
- Increase air and water quality by filtering
- Increase oxygen

For more information contact:
doug@gogreennorthbrook.org



Trees!

Savings



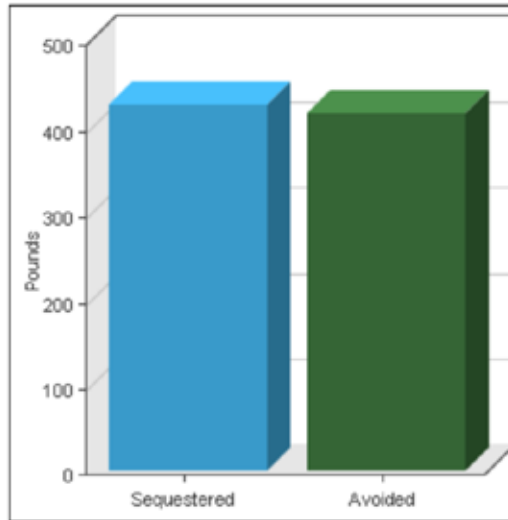
(Source: www.treebenefits.com)

An 18" Swamp White Oak can SAVE:

- \$52 for combined natural gas and electricity
- 10-15% saved for heating and 20-50% for cooling. (Source: Canopy)
- \$52 for stormwater
- Absorbs 2,000 gallons of stormwater
- Increase neighborhood beauty (Priceless)
- Raise property value by \$44 this year
- Homes on tree-lined streets may be worth 25% more. (Source: Canopy)
- Streets with trees may be 6-8 degrees cooler in summer than comparable streets without trees. (Source: Canopy)

Trees!

Benefits - CO²



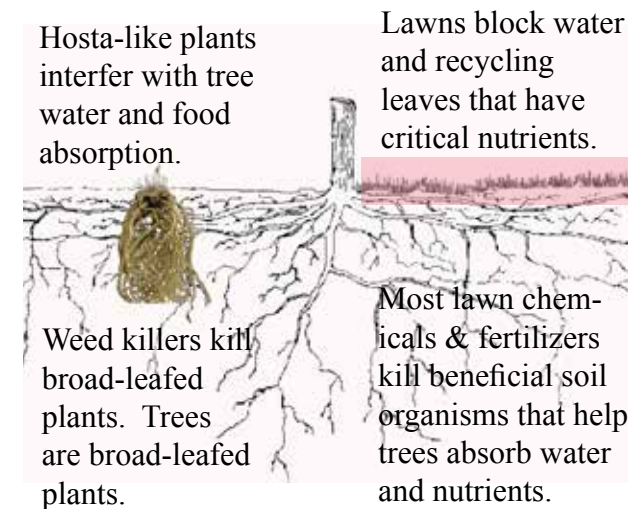
(Source: www.treebenefits.com)

An 18" Swamp White Oak can LOCK UP 844 Pounds of Carbon ...from the air

- Locks up carbon in tree trunk, branches, leaves, roots, and tree-soil microorganisms.
- Reduces fossil fuel + CO² emissions used for heating and cooling.
- Reduces fossil fuel + CO² emissions used for mowing.

Trees!

Problems



©2017 Sustainable Places®

- Old tree leaves have vital nutrients for trees and healthy soil organisms and act as mulch.
- Many lawn fertilizers have too much nitrogen for trees.
- Weed killers damage/kill trees.
- Lawn fungus & insect chemicals kill beneficial soil organisms.
- Hosta and plants with dense roots interfere with trees ability to absorb adequate water & food.
- Digging in tree root zones to plant annuals destroys tree roots.
- Trees need more water than lawns.