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Tree Facts

Like 184

Carbon sequestration, air quality, and climate change

- A tree can absorb as much as 48 pounds of carbon dioxide per year, and can sequester one ton of carbon dioxide by the time it reaches 40 years old. [1]
- One large tree can provide a supply of oxygen for two people. [2]

Energy

- According to the USDA Forest Service, "Trees properly placed around buildings can reduce air conditioning needs by 30 percent and save 20-50 percent in energy used for heating." [3]
- The net cooling effect of a young, healthy tree is equivalent to ten room-size air conditioners operating 20 hours a day. [4]

Water

- In one day, one large tree can lift up to 100 gallons of water out of the ground and discharge it into the air. [5]
- For every five percent of tree cover added to a community, stormwater runoff is reduced by approximately two percent. [6]

Recreation and Wildlife

- Healthy trees provide wildlife habitat and contribute to the social and economic well-being of landowners and community residents. [7]

EPA Urban Heat Island Effects [8]

- Reduced energy use:* Trees and vegetation that directly shade buildings decrease demand for air conditioning.
- Improved air quality and lower greenhouse gas emissions:* By reducing energy demand, trees and vegetation decrease the production of associated air pollution and greenhouse gas emissions. They also remove air pollutants and store and sequester carbon dioxide.
- Enhanced storm water management and water quality:* Vegetation reduces runoff and improves water quality by absorbing and filtering rainwater.
- Reduced pavement maintenance:* Tree shade can slow deterioration of street pavement, decreasing the amount of maintenance needed.
- Improved quality of life:* Trees and vegetation provide aesthetic value, habitat for many species, and can reduce noise

Tree Lifespan

- A reasonable estimate of the lifetime of trees is 100-150 years. Based on information from the USDA Forest Service [9], the lifetime of trees varies by region and species, but generally ranges from 50 years to 300 years of age. An average lifetime of trees planted in forests for long-term restoration purposes might be 100-150 years. Here are a few examples by region
 - In the Southeast, conifers may live 100-150 years, while hardwoods may live 150-200 years.
 - In the northeast and lake states, some conifers (e.g. white pine and red pine) may live 100-150 years, while Jack pine lives 80-100 years; mixed hardwoods (e.g. maples and oaks) might live beyond 150 years, while aspen and birch might only live 50-70 years.



Plant A Tree For Education Fifth grade students from DC's Amidon Elementary School attended the planting and received free t-shirts and seedlings to plant at home.