

Trees are a truly beautiful part of the natural environment and they are also amazingly efficient machines to make Earth a healthier planet.



Here are 10 proven ways that trees make a big difference.

1. Trees improve air quality.

Trees are sometimes called the lungs of the Earth because they absorb pollutants through their leaves, trapping (or “sequestering”), and filtering contaminants in the air. Like all green plants, trees also produce oxygen through photosynthesis.

2. Trees improve water quality, and reduce flooding and erosion.

A tree's leafy canopy catches precipitation before it reaches the ground, allowing some of it to gently drip and the rest to evaporate. Tree roots hold soil in place, reducing erosion. In these ways, trees lessen the force of storms and reduce the amount of runoff into sewers, streams, and rivers, improving water quality. One hundred mature trees can intercept about 100,000 gallons of rainfall per year.

3. Trees temper climate.

Trees lower air temperatures and humidity; they can also influence wind speed. Evaporation of water from trees, or transpiration, has a cooling effect. Cities develop "heat islands" because dark roofs and pavement absorb solar energy and radiate it back. Trees in parking lots have been shown to reduce asphalt temperatures by 36 degrees Fahrenheit and car interiors by up to 47 degrees Fahrenheit.

4. Trees conserve energy.

Three or more large trees strategically placed on sunny sides of a house shade it from the hot summer sun, reducing air-conditioning costs by as much as 30 percent. Deciduous trees are best for this use because they lose their leaves in winter, exposing the house to the warming winter sun, which lowers the energy needed to heat the house. Coniferous trees, because they retain their needles year-round, serve to reduce wind when placed on the north and northwest sides of a building, resulting in significantly lower winter heating costs.

5. Trees are good for the economy.

Economic analyses have found that the value of homes near trees is 9 to 15 percent higher than homes without. Research shows that shoppers linger longer along a shaded avenue than one barren of trees and are even willing to pay more for goods and services.

6. Trees create habitat for plants and animals.

Wherever trees are established, wildlife and other plants are sure to follow, ensuring a healthier ecosystem. Trees provide shelter and food for a variety of birds and small animals.

7. Trees improve health.

Research demonstrates that exposure to trees has a relaxing effect on humans, reducing stress and imparting a sense of well-being. Hospital patients with a window view of trees recover faster than those without. Children with Attention Deficit Disorder (ADD) are better able to concentrate after time spent in outdoor green settings.

8. Trees reduce crime.

Data show that apartment buildings with high levels of greenery had significantly fewer crimes than those without any trees.

9. Trees reduce noise pollution and can serve as screens.

A belt of trees 100 feet wide and 50 feet tall can reduce highway noise by up to 10 decibels, reducing the sound volume by half. Densely planted trees can also block unsightly views.

10. Trees promote community.

Trees can enhance a community's sense of pride, and ownership. Active involvement in tree planting programs leads to a stronger sense of community and the promotion of environmental responsibility and ethics. Planting programs also project a visible sign of change and provide the impetus for other community renewal and action programs.

How Trees Help our Climate

One tree can sequester (or take in) more than one ton of carbon dioxide in its lifetime. Planting trees and avoiding deforestation are key measures in reducing the human impact on global climate change.