



## General Facts About Trees

- Trees keep our air supply fresh by absorbing carbon dioxide and producing oxygen.
- In one year, an acre of trees can absorb as much carbon as is produced by a car driven up to 8700 miles.
- Trees provide shade and shelter, reducing yearly heating and cooling costs by 2.1 billion dollars.
- Trees lower air temperature by evaporating water in their leaves.
- The average tree in metropolitan area survives only about 8 years!
- A tree does not reach its most productive stage of carbon storage for about 10 years.
- Trees cut down noise pollution by acting as sound barriers.
- Tree roots stabilize the soil and prevent erosion.
- Trees improve water quality by slowing and filtering rain water as well as protecting aquifers and watersheds.
- Trees provide protection from downward fall of rain, sleet, and hail as well as reduce storm run-off and the possibility of flooding,
- Trees provide food and shelter for wildlife.
- Trees located along streets act as a glare and reflection control.
- The death of one 70-year old tree would return over three tons of carbon to the atmosphere.
- Trees receive an estimated 90% of their nutrition from the atmosphere and only 10% from the soil.
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- Trees grow from the top, not from the bottom as is commonly believed. A branch's location on a tree will only move up the trunk a few inches in 1000 years.
- The largest area of forest in the tropics remains the Amazon Basin, amounting to 81.5 million acres.
- Tree leaves help trap and remove tiny particles of soot and dust which otherwise damages human lungs.
- By creating shade, trees moderate temperatures both globally and in the micro-climates of cities and counties.
- The presence of trees in urban neighborhoods has been linked to less crime.
- Tree rings provide precise information about environmental events, including volcanic eruptions.

## Tree Biology

- Trees are the longest living organisms on earth.
- Trees and other plants make their food through a process called photosynthesis.
- The inside of a tree is made of phloem, cambium, and xylem.
- The xylem of a tree carries water from the roots to the leaves.

## Trees and the Environment

- Trees renew our air supply by absorbing carbon dioxide and producing oxygen.
- The amount of oxygen produced by an acre of trees per year equals the amount consumed by 18 people annually. One tree produces nearly 260 pounds of oxygen each year.
- One acre of trees removes up to 2.6 tons of carbon dioxide each year.
- Shade trees can make buildings up to 20 degrees cooler in the summer.
- The cottonwood tree seed is the seed that stays in flight the longest. The tiny seed is surrounded by ultra-light, white fluff hairs that can carry it on the air for several days.

## Record-setting Trees

- One of the tallest soft wood trees is the General Sherman, a giant redwood sequoia of California. General Sherman is about 275 ft or 84 m high with a girth of 25 ft or 8 m.
- The 236 ft or 72 m high Ada Tree of Australia has a 50 ft or 15.4 m girth and a root system that takes up more than an acre.
- The world's tallest tree is a coast redwood in California, measuring more than 360 ft or 110 m.
- The world's oldest trees are 4,600 year old Bristlecone pines in the USA.

## Trees and Science

- Dendrochronology is the science of calculating a tree's age by its rings.
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- Moon trees were grown from seeds taken to the moon by Stuart Roosa, Command Module pilot of the Apollo 14 mission of January 31, 1971. The effort included 400-500 seeds, which orbited the moon on the first few days of February 1971. NASA and the USFS wanted to see if being in space and in the moon's orbit would cause the seeds to grow differently than other seeds.

## Most Dangerous Tree

- *Hippomane mancinella*, also called the manchineel tree, claims the title of most dangerous tree. Every part of this [Caribbean](#) beach-dweller causes burns and blisters, and consuming the apple-like fruit can lead to death.

## Overview

In the past, trees covered most of the Earth's land surface. At present, according to Ecology.com, trees cover just over 29 percent of the Earth's land surface. Even with the reduction in the number of trees, there are still some interesting facts and figures about trees.

## Size

The tallest tree in the world is a coastal redwood in California. That tree, named Hyperion, is nearly 380 feet tall. The largest known tree is another coastal redwood called the General Sherman. The General Sherman may not be as tall as Hyperion, but it has a much more massive trunk.

## **Age**

Recent research on a Swedish spruce tree has shown that it took root nearly 9,500 years ago, according to an article in "The Telegraph." Researchers have found other nearby spruce clusters that are 8,000 years old. Before the discovery of these trees, the previously oldest known trees were some North American pines estimated to be around 5,000 years old.

## **Deepest roots**

The roots of a South African wild fig tree reach 400 feet into the ground, bestowing it with the title of deepest roots in the world.

## **Fastest Growing Tree**

The fastest growing tree in the world is the Eastern cottonwood, or the *Populus deltoides*. This tree is known to grow nearly 18 inches per year and is often cultivated as a [core](#) wood for furniture grade plywood and other engineered wood-based products. This deciduous tree can reach heights of over 80 feet and spreads of nearly 60 feet.

## **Hardest Wood**

Hardwoods can be very dense, which makes them ideal for furniture and home building. The denser the wood, the more stable it is and the better it can support a load. The densest wood in the world is ironwood, sometimes called the "axe breaker." Ironwood contains long, tightly packed fibers with almost no air spaces, accounting for its hardness and density.

## **Softest Wood**

The softest wood commercially produced from trees in the world is balsa wood. Balsa is also the lightest wood. Balsa has an average specific gravity of .16 and easily floats in water.

## **Darkest & Lightest Wood**

The darkest wood in the world comes from the ebony tree. The lightest is from the silver striped holly.