

Treeways

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How Long Do Trees Live?

Tree time. A lifetime from seed to death from a tree's perspective. How long does a tree live? What is the possible lifetime for tree? Simple questions with complicated answers ... it depends. Does a 100-year-old tree really approach its genetic potential for a long and beautiful life? In many cases no! Many trees have the potential to live hundreds or even thousands of years. There are city trees that are older than 100 years of age, the length of time that a healthy human could live. We can all relate to and understand a life that long. In cities even if a tree could live forever (in human terms) it's actual lifetime is very dependent on people. Because trees must grow where they are planted it is critical to plant them correctly, create and maintain a good place for them to grow, and keep them from harm as best we can.

Trees bring us joy as they grow and mature. The trees we are most familiar with such as oak, maple, elm, apple, pine, and spruce commonly live in cities for decades and could live for hundreds of years. Sadly, many city trees do not survive even to 20 years from initial planting due to problems caused by the city environment or residents. A tree that reaches 20 years, in most cases, has just barely paid back the economic and environmental costs associated with its original installation and ongoing care. From 20 years until at least 150 years and beyond an individual tree is providing increasingly valuable environmental benefits by managing rainfall, storing carbon, producing oxygen, and cleaning the air for all other creatures including us.

Trees live their lives where they are planted by wind, squirrels, blue jays, other critters, or us. From the moment of planting the tree must live and grow and flourish (or not) with whatever the local ecosystem throws at it. A tree can be eaten or damaged by rabbits or deer; pelted by wind, rain or storms; battered by excess water, drought, diseases or insects. People do strange and occasionally wonderful things to trees out of need, boredom, curiosity, or malign intent. If a tree survives all this and becomes an old soul, it deserves our respect. Aspens and birches are thought of as short-lived trees, but they can live for 100 years and more. White pines in old growth stands can live to be 300+ years. Various North American Oaks regularly live longer than 300 years. Bristlecone pines have been documented at greater than 5000 years of age.

The world's oldest trees are without exception not living in cities. Honestly, city trees are more likely to be damaged and killed by human activities than any other reason. There is probably a 200-year-old oak tree somewhere in our city of Sunfish Lake. My friend Dick Bancroft believed that since nearly all of his old oak trees were about 125-150 years of age that the original trees on his property had been clear cut for steamboat fuel for the paddlewheel boats going up and down the Mississippi River back then. That meant that his oak woods were a second growth forest and not a pristine original woodland like I had originally thought.

I touched an oak with a huge cavity near its base that my son-in-law actually crawled inside of, within the Royal Hunting Ground Park in Sweden. I estimated its age at 500 years old and though the oak had that huge open cavity it was very strong and healthy. On New Zealand's north island, I visited a Kauri tree that was likely 2000 years old. That kauri tree was a baby long before there were any people living

in New Zealand. A personal goal of mine is to meet “Old Tjikko”, a Norway spruce in Sweden that has been documented to be more than 9500 years old. “Old Tjikko” is old enough that it probably lived during the ice age ecosystem that existed when mammoths still roamed the earth. Imagine a living tree old enough that we can use carbon dating methods to prove how old it is. To touch a living being of that venerable age is something truly special, perhaps spiritual. By the way, Norway spruces are often planted in Sunfish Lake. How long will yours live?

Your City Forester is available for consultation regarding tree and ecological questions at no charge. He may be reached at 612-803-9033 or Jim@LStrees.com.