## The Power of One Tree - The Very Air We Breathe

Posted by Joanna Mounce Stancil, U.S. Forest Service in <u>Forestry</u> Mar 17, 2015



Covering millions of acres of forested lands in the West, the Ponderosa Pine can grow to heights of over 200 feet. (U.S. Forest Service Photo)

The second in a series of blogs honoring the United Nation's 2015 International Day of Forests

On Saturday, March 21, the <u>U.S. Forest Service</u> will celebrate the <u>United Nation's</u> <u>International Day of Forests</u>. With such an important worldwide recognition of all forests do for us humans, the Forest Service would like folks to ask themselves: Do I really know how much trees contribute to my daily life?

Or, in another words, what is the power of one tree?

Just as we humans are comprised of many parts functioning together allowing us to do wondrous things, the anatomy of a tree is just as wondrous, empowering them with super hero qualities.

What am I talking about? A tree has the ability to provide an essential of life for all living things on our planet – oxygen, and the power to remove harmful gases like carbon dioxide making the air we breathe healthier.

Here is how it works:

To keep it simple a tree is comprised of its leaves, stems, trunk and its roots. When you look at a tree, note that about five percent of the tree is comprised of its leaves, 15 percent its stems, 60 percent goes into its trunk and 20 percent is devoted to its roots.

Here is the super hero part. Through a process called photosynthesis, leaves pull in carbon dioxide and water and use the energy of the sun to convert this into chemical compounds such as sugars that feed the tree. But as a by-product of that chemical reaction oxygen is produced and released by the tree. It is proposed that one large tree can provide a day's supply of oxygen for up to four people.

Trees also store carbon dioxide in their fibers helping to clean the air and reduce the negative effects that this CO2 could have had on our environment. According to the <u>Arbor Day Foundation</u>, in one year a mature tree will absorb more than 48 pounds of carbon dioxide from the atmosphere and release oxygen in exchange.

So next time you take a deep breath of air give credit to a tree or hug a tree in thanks for what it gives us – the very air we breathe.

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