Trees are Good for Us

April 2017 - Mother Nature's Moment by: Lesley Bruce Smith, ISA Certified Arborist

As someone who has just spent the last 2 years having to be VERY intentional about recovering from both a severe bicycle accident and a breast cancer diagnosis it seems fitting that I would write about the benefits of trees on our health.



I've noticed a large number of people posting about *Shinrin-yoku*, or *forest bathing*, which became part of a national health program in Japan in 1982 and essentially just means being in the presence of trees. The idea is not to "do" anything but simply bask in the presence of the trees. Amazingly, but not surprisingly, being with the trees lowers our heart rate, lowers our blood pressure, reduces stress hormone production, and improves feelings of well being. That calm feeling you get walking in nature isn't just in your imagination. From 2004 to 2012, Japanese officials spent about \$4 million dollars studying the effects of forest bathing. Qing Li, a professor at Nippon Medical School in Tokyo measured the activity of human natural killer (NK) cells in the immune system before and after exposure to the woods. These are the cells that researchers in cancer treatment are always looking to increase. These are the cells that provide rapid responses to combat viral infections, tumor formation and are associated with immune system health and cancer prevention. Li's subjects showed significant increases in NK activity in the week after a forest visit and those positive effects lasted a full month following every weekend spent in the woods.

These positive benefits are primarily due to the forest bather's exposure to the essential oils that are produced in trees and plants. These oils, often referred to as *phytoncides*, are antimicrobial, *allelochemic* organic compounds. *Allelochemic* simply means they produce chemicals that help protect them from damaging insects or invading plants. They obviously help us too. Long before this research in Japan, or our high tech medical protocols, hospital and



sanitarium architects in this country understood that the "fresh air" around trees, especially our aromatic Pine and Fir species, were good for health. They understood, intuitively, that the volatile compounds that the Pines and Firs give off helped patients, especially those with lung disorders. They tried to make sure there were Pine or Fir groves established on the grounds, so patients could walk among the trees for their health. Little did they know, what huge benefits these tree groves had on patients. The

University of Illinois has also done research in the last decade that proves that there is less violent crime or domestic abuse and that patients heal faster when they simply have a *view of trees from their window.*

So as spring emerges, here is another reason to get out in the woods, it's really good for you!

