

What's Your Favorite Tree?

As someone that works in an organization linked to forests I am often asked, "what is your favorite tree?" And when this occurs people have a lot of assumptions about what makes a great tree. Among consideration are certainly tall ones, wide ones, conifers, and deciduous. Certainly we think about those with special meanings. Perhaps the one your swing was attached to as a child, or the one you climbed, or one that sheltered your deck in the summer. Or maybe it's one at a favorite spot, or one that established a boundary or a shaded "parking" spot. There was a time when you couldn't get directions without an understanding of the local forest lore. "Take a left at the big oak, go about a hundred yards to the group of tall pines, and head downhill to the small group of cottonwoods and you'll find the river" might have been a common form of direction not that long ago.

So how do you define greatness in a tree? Maples not only provide maple syrup (one of Will Farrell's four favorite food groups in the movie Elf!) but also provide us materials for cutting boards, furniture, and a myriad of other durable products. Certainly they would make any list of great trees. Redwoods likely have to be on that list as well - they are tall, and broad, majestic, and awe-inspiring all in one package. And we won't mention what great products they make (although it's true) or how fast they grow (also true); but heck, who wouldn't love a tree you can drive through? Then there are oaks with their picturesque outlines and squirrel habitat; cherry and walnut with their beautiful coloring, and we can't forget all the pines. In fact, if we started listing the uses and benefits of each different trees species we'd get into the hundreds if not thousands, and still be coming up with more ideas.

So how would I pick? Easy, because my favorite tree is... the urban one! Why of all the options I could pick would I choose "urban" as my favorite tree? Well, that's simple. It is because I live in the St. Paul-Minneapolis metropolitan area. As such we are blessed with parks, bike and running trails, old neighborhoods and young neighborhoods and... And what ties these places together and makes me happy are the trees; urban trees – or as a group the urban forest.

My wife and I live in the center of a small city suburb. We chose our location in part because it is a great location from which we can walk to all the social amenities: shopping, restaurants, doctors, dentists and other public and private support services. But key is the proximity of a walking trail around the lake that is shaded by trees. This area provides me exercise and lifts my spirits. And many of these trees are oaks and thus the squirrels abound. And the squirrels attract a family of foxes that live down the street, and we have eagles that nest on the edge of the lake and feed off the fish – spying them out from their perches in the trees. One eagle couple occasionally sits in the tree in my backyard chirping about something - perhaps one is bragging about the size of a recent fish taken. Other birds and animals abound as well, and the trees are at the center of this process.

The same trees that occasionally support eagles in our back yard also perform a more mundane but critical function; they shelter our house from southern summer sun. Those two trees (they happen to be maples) are able to completely shelter our house from the summer sun that even on the hottest days (and yes it can get over 100 degrees in Minnesota during summer) our house rarely gets over 74 degrees inside; meaning air conditioning is unnecessary. So those two trees save us lots of money each summer. Being deciduous those trees also let the southern sun through in winter once they drop their leaves, so we are able to receive passive solar gain throughout the rest of year. Although Minnesota's winter days are short, they tend to be sunny, and there is nothing like sitting by a window in the warm sun on a cold winter day.

Increasingly urban trees are not only shaping our parks, trails and neighborhoods, but also providing the energy that heats our buildings and powers our lights. As an example, District Energy in St. Paul operates the largest, most successful, hot water district heating system in North America. District Energy provides highly efficient hot water service to 190 buildings, totaling over 31 million square

feet in downtown St. Paul, MN as well as to 300 single-family homes. This hot water provides space heat, domestic hot water for restaurants, hotels, laundry and dishwashing facilities; as well as heat for snow melt systems. The energy source for this activity? Yep, you guessed it...urban trees. District Energy utilizes urban tree trimmings from the management of parks, trails and neighborhoods of the metropolitan area, and burns them as biomass in highly efficient boilers. They have been doing this for over 30 years.

So, the next time someone asks you your favorite tree consider the urban one! It is one of millions that are playing a key role in our society and may be critical to addressing a number of human concerns, including: urban food issues (fruit trees and food security), reducing heat island effects, and reducing energy consumption. This is not to mention all the traditional roles in terms of natural beauty and bounty we think of in a forest. So next time you choose a tree, choose an urban one. And next time you volunteer to plant a tree... plant it in your yard!

Dr. Jeff Howe
January 2014