

## **Still Standing! Celebrating our BIGGEST Trees**

by: Gail Prunty, Geauga Soil and Water Conservation District

"I think this might be it!" I exclaimed. Surveying the colossal figure before me, my eyes lingered on its sheer size, then gazed higher, higher, higher... trying to locate the top of its crown. "Wow! This just might be the one!"

We were on a mission - the district technician, service forester, and I - and quickly got to work. Taking measurements and recording numbers, we were on a search to find and confirm the largest nominated sugar maple tree in Geauga County. This was Geauga County's inaugural BIG TREE Contest, sponsored by the Geauga Soil and Water Conservation District (SWCD) with support from our Division of Forestry's service forester. The sugar maple (*Acer saccharum*) was chosen as the contest's featured tree species, honoring its ongoing significance to Geauga County's maple syrup production industry. Throughout the day, we traversed colorful autumn landscapes where sap runs and maples rule, seeking the largest and perhaps oldest species in the county. Though we would "size up" several more trees throughout the day, it was here where we indeed found our champion tree.

### **Silent Sentinel**

Impressive and immense, this tree stands at approximately 111 feet high, with an estimated crown spread of 87 feet, a 55 inch diameter, and circumference of 14 feet, six inches (174 total inches). In order to compare and rank our biggest trees, these numbers are then used in a formula to determine an overall tree index value.

Standing next to a tree of this size can initially take your breath away. It is enormous. It is magical. It is incredible and rare. Most importantly, it is still standing!! Curiosity and awe quickly give way to a flood of questions in your mind. "How old are you?!" "What historical events have you witnessed?" "Who climbed on your limbs?" "How did you survive this long?" Oh, the stories it could tell! Joan Demirjian of Bainbridge Township, current owner of this tree, has had the privilege of hearing some of these stories from the previous owner who has passed them on, along with his deep love and respect for this extraordinary sugar maple.

### **The Birth of a Tree (then a Nation)**

Our champion tree is estimated to be 250 - 300 years old and insights to its historical significance are easy to find nearby. Its life began before our country was formed, quite possibly before the Revolutionary War. In fact, it stands next to the Southwest Burying Ground, a cemetery in Bainbridge Township dating back to 1831 where a Revolutionary War soldier is buried, along with members of a famous pioneer family who settled there, along with railroad workers who died and were buried in a common grave. Like the weathered



Having a circumference of 174 inches, this sugar maple was nominated by Joan Demirjian of Bainbridge Township and won champion tree in Geauga SWCD's 2016 BIG Tree Contest.  
(Photo by Karen Saari)

headstones, other nearby remnants in the landscape whisper tales from the past and serve as reminders of the longevity of this tree's life. Once a bustling site of innovation and industry, now only foundation stones remain from the grist mill, saw mill, tannery, brickyard, cheese factory, and distillery that were in full swing at the time of this tree's youth. The nearby river that once powered these bygone industries still flows, now as a designated State Scenic River. And this tree was tapped for maple syrup for over 50 years! Imagine all that this tree has seen through the hundreds of years of its existence. The people and settlements are now gone, yet this landmark tree still remains.

### Bigger Trees, Bigger Benefits

Throughout the world, big trees hold tremendous cultural, ecological, and economical value. While most of us can easily rattle off a list of the benefits of trees, the value of BIG trees has only recently been brought to light in scientific research and our understanding. According to the Center for Urban Forest Research, we know now that dollar for dollar, larger trees provide more economic benefits than their puny counterparts. Large-statured trees have more impact on conserving energy, reducing stormwater runoff, improving air, soil, and water quality, and increasing property values. Our sugar maple champion, for example, provides over \$468 of these annual benefits and intercepts over 7,083 gallons of stormwater per year. In addition, our understanding of the role of big trees in a forest is also developing rapidly. Research in 2012 showed that big trees comprise less than 2% of the trees in any forest, but can contain 25% of the total biomass. Big, old trees lock up massive amounts of carbon, recycle soil nutrients, affect the water and climate within an ecosystem, supply abundant food and seeds, and provide critical habitat. Up to 30% of all vertebrates rely on large, old trees for cavities.

### The Triumph of Big Trees

Recent research has also revealed two new surprising findings: Large trees grow more quickly! In a comprehensive study, scientists found that the largest trees gained the most mass each year in 97% of the species monitored. Another surprise involves carbon uptake (sequestration). It was previously believed that only young trees sequester carbon while growing and older trees simply store carbon. Now we know that the carbon uptake of trees continuously increases with their size because the

overall leaf area increases as they grow! Perhaps the greatest contributions big trees have to offer is their superior genetics. As the mack daddies of the forest, they have survived the longest and lived through the weather extremes, land use changes, fragmentation of forests, population explosions, new pests and diseases, etc. And still they stand. Their seed and offspring are now more important than ever as our oldest, largest trees are rapidly declining in many ecosystems at all latitudes throughout the world.

This fall take the time to look up with new eyes as you walk through the autumn leaves. What are the stories of the trees near you? What historical events have they seen? Join Geauga SWCD as we celebrate and honor our biggest, oldest trees, and perhaps nominate one of your own in the future.



**Joan Demirjian was recognized by Gail Prunty at Geauga SWCD's Annual Meeting for nominating the champion sugar maple tree in the District's 2016 BIG Tree Contest.**