TREE TALK with BRIAN RILEY

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A Tale of Two Titans

Think for a moment about some of the greatest rivalries of all-time. David and Goliath. Letterman and Leno. Ali and Frazier. Yankees and Red Sox. And, of course, Ohio State and Michigan. When it comes to intense rivalries, the Ohio Big Tree Program boasts one of its own: two state and national champions of epic proportions duking it out for the coveted distinction of being Ohio's overall biggest tree. Since 1995, debate has raged as to what single tree, an American sycamore (*Platanus occidentalis*) or an eastern cottonwood (*Populus deltoides*), can rightly claim this illustrious title. Therefore, for this edition of *Tree Talk*, I thought it would be fitting to tell the history of these woody wonders and why supporters on both sides of the issue feel their tree should be tops.

In 1978, Ohio Division of Forestry service forester Jack Basinger was visiting a property located in eastern Ashland County near Jeromesville. As he and the property owner, William Noogle, were walking back to the woods, Mr. Noogle wanted to show Basinger an unusually large American sycamore growing along a tributary of the nearby Mohican River. What a sight it was to behold! An enormous tree consisting of four main trunks, each one large enough to be revered as a giant tree in and of itself. After marveling at its incredible size for a few minutes, a simple question arose: where do you measure the trunk of this tree? Having no strict guidelines to follow for multiple-stemmed trees, the circumference of this splendid sycamore was measured a few inches above the ground – enough to avoid the root swell but well below the now standard 4½ foot mark (*see "How to Measure a Big Tree" in this issue).* Measured this way, the tree was found to have an astronomical 582-inch circumference. That is more than 48 feet around! Given its overwhelming size, this was one tough tree to beat – or was it? Because of the multiple-stemmed nature of this tree, many questioned if it was in fact the largest-known hardwood in the country, or just the biggest hoax east of the Mississippi.

Given the benefit of the doubt, this sycamore would continue to reign supreme as state and national champion of its species for the next 22 years until 2000 when AMERICAN FORESTS, the nation's oldest non-profit conservation organization and sponsor of the biennial *National Register of Big Trees*, decided that dethroning this tree was in order because it branches out below 4½ feet where a tree's circumference is measured. What AMERICAN FORESTS did not consider at the time was the incredible size of each individual stem. If the largest trunk had a big enough circumference, then the tree may score enough points to reclaim its position as state or even national champion – an unlikely possibility but one certainly worth the time and effort to verify.

In 2004, in an overdue effort to resolve this intense and sometimes heated debate once and for all, I was tasked with the responsibility of remeasuring this sycamore while adhering to the fairest and most stringent big tree measuring criteria recently set forth by AMERICAN FORESTS. I soon saw first-hand what the controversy was all about. Sure enough, this sycamore forked too low to be considered a single-stemmed tree. But I was taken aback at the girth of the tree's four main stems, particularly the west stem which had a cavity large enough to fit ten people. This giant trunk was created from three other smaller stems fusing together over time to form a five-foot-high single trunk, just barely tall enough to qualify under the new standards. So following the new AMERICAN FORESTS guidelines, though by a proverbial hair, the largest single stem of this stately sycamore measured 422 inches in circumference. On top of this amazing figure, the sycamore stood a towering 129 feet tall and had an equally impressive average crown

spread of 105 feet, giving it a grand total of 577 points, making it once again the largest-known American sycamore in the country!

In addition to being the largest of its species in the United States, the American sycamore in Ashland County also weighs in as the largest tree of any species in the state of Ohio. However, it does have one serious contender for that coveted title located just 56 miles away in Delaware County. In 1995, Dr. Don Mann nominated the towering eastern cottonwood tree growing directly across the street from his veterinarian practice in the small town of Cheshire. The imposing tree, located at Alum Creek State Park, turned out to be much larger than any other eastern cottonwood listed in the Ohio Big Tree Program. Today this cottonwood measures 370 inches (30 feet 10 inches) in circumference, stands 136 feet tall and has an average crown spread of 135 feet for a grand total of 540 points. In 2010, it ascended to the title of largest eastern cottonwood in the country, joining the American sycamore as Ohio's only two national champions that are also members of the "500 point club."

Despite falling 37 points short of the sycamore's cumulative score, those who advocate that the eastern cottonwood is truly the overall largest-known tree in Ohio may have a good case to argue. The cottonwood lacks the controversy that surrounds the sycamore since it is unquestionably a single-stemmed tree. Those who deprecate the sycamore's status as Ohio's overall largest-known tree do so on the premise that the cottonwood branches out at 8 to 10 feet above ground, well above the set mark for circumference readings, whereas the sycamore branches out at only 5 feet above ground and does so as a result of three co-dominant trunks coalescing over time to create a single stem. Once again, we see yet another fine example of how no two trees are exactly alike. Because the standard rules for measuring big trees currently make no exception for several stems merging into one massive trunk, the American sycamore can be legitimately measured as such. However, the sycamore's reinstatement as national and state champion has done nothing but resurrect a controversy that has been brewing in the world of big trees for over three decades.

Another factor that further intensifies this rivalry is the growth rate and condition of the two trees. The sycamore is deteriorating from within, losing large branches from its massive crown and thus not growing nearly as fast as it did in its prime. Meanwhile, the cottonwood continues to swell at a stellar rate and shows no signs of slowing down anytime soon. Between 1995 and 2008 the cottonwood added a full foot to its circumference – a girth expansion of nearly one inch per year which far exceeds the pace of the sycamore. Assuming all else remains the same; the cottonwood is closing in fast and should catch and surpass the sycamore within the next several decades.

So there you have it, two titans, each one the reigning national champion of its species and separated by a mere 37 points and an hour-long drive. The final verdict on which tree is bigger and which one is better will never be handed down, for each has its own posse of passionate supporters.
And for comparison's sake, the third-largest Ohio Big Tree is the national champion American elm (*Ulmus americana*) in Ross County, at a distant 416 points. So despite the size of this elm, it does not hold a candle to the eastern cottonwood of Delaware County or the American sycamore of Ashland County – although to be fair, when it comes to North American hardwoods, not much does. But regardless of point totals, each of Ohio's 263 champion trees is impressive in its own right and well worth the time and effort spent to see it first-hand. This is why I encourage all big tree enthusiasts to visit and investigate these superb specimens for themselves as the pictures found throughout this special edition of the *Ohio Woodland Journal* do no justice when it comes to capturing the actual size and magnitude of Ohio's Big Trees.

See a related article from Ohio Magazine featuring big tree sleuth Brian Riley and the Ohio Big Tree Program later in this issue of the Ohio Woodland Journal.