

Quad's Big Tree Grove Features a "Champion"



Ed Bruno regularly inspects the trees on the Academic Quad to ensure that they are free of pests and disease.

If you ever want to learn more about a tree on campus – what species it is, its age, its health – go ask WCU's tree guru, Ed Bruno.

While Bruno wears many hats in his role as a designer/draftsman in the Facilities division, first and foremost, he is an accomplished arborist with a degree in forestry

and 26-plus years of experience managing the University's collection of trees, shrubs and plants.

Take a stroll around the Quad's Big Tree Grove with Bruno by your side and you'll discover the back stories behind the majestic, old trees and newer plantings that grace this signature location on campus. You also might pick up a few tree tips for your home landscape projects.

Here are highlights from a recent stroll with Bruno around the grove, which is immediately adjacent to Philips Memorial Building:

Begin at the Frederick Douglass statue and walk to your right a few feet. You are now standing amidst some of the University's oldest and most majestic trees, including a tree that has been recognized as a Pennsylvania champion oak. A champion tree is the largest known tree of a given species in a particular geographic area. WCU's champion oak is at the center of the grove and it's easy to spot because it's the only tree with wires affixed to it.

"A lot of people, including here at the University, has called this tree a Bartram Oak, but it's not. It's actually some type of hybrid oak" says Bruno. "To clear up the confusion, we have sent a DNA sample of the tree out for testing."

This tree is not only the largest hybrid oak in these parts but it's also the largest tree in the Quad, at 56 inches in diameter (measured 4.5 feet up from trunk). It's about 120 years old. Because it is so valuable, the University has equipped it with lightning rods (that's what the wires are all about). These copper cords, running alongside both sides of the tree, extend to copper ground rods, and would conduct electrical charge to the earth should the tree get struck by lightning.

Immediately adjacent to this hybrid oak is a London Plane tree, a hybrid of the American and Oriental Plane trees that is particularly well adapted to urban conditions. It's a beautiful tree, though it may not be a favorite of Grounds employees because it tends to drop bark and seed balls.

Now take a look at the big tree growing closest to Philips. This is a Burr Oak, which features large leaves and, in fall, big acorns. The Burr Oak gets its name from the fringed cap that grows on its acorns. As a species, it tends to grow crooked branches, and this Burr Oak also is a tad lopsided.

Walk west, almost to the sidewalk, and you will come upon a much younger duo of trees. These Sawtooth Oaks were planted about eight years ago to commemorate a student engagement program by Dr. Madeline Wing Adler, president emerita of WCU. The Sawtooth Oak grows at a fast pace, of about two to three feet a year, and can reach 30 feet in 15 years. However, with a mature size of 40 to 60 feet tall, it is one of the smaller oaks, which can make it the right size for many backyards, notes Bruno.

Now head back toward the Frederick Douglass statue and you will see the last major tree in this grove – an American Sweetgum. This tree is about 80 to 90 years old, estimates Bruno, and, as the name implies, is native to the U.S. The American Sweetgum is known for its striking fall colors but also for its fruit -- brown, spiny tipped “gum balls.” “Like the London Plane tree, this tree isn’t necessarily well-liked by the Grounds employees who have to maintain it and keep the grounds looking good,” says Bruno.

An excellent shade tree, the American Sweetgum can grow as large as 150 feet under the right conditions. This Sweetgum is about 80 feet tall. It is very shallow rooted. Walk up the trunk and look down. You will see lots of big, thick, gnarled roots protruding from the ground.

If this mini-tour of the Big Tree Grove piqued your interest to learn more about big trees throughout the campus, check out the map on the newsletter’s home page. Bruno created this map from data that was compiled by the University’s Green Legacy project, under the direction of Joy Fristchle, associate professor of geography, and Gerry Hertel, former stewardship manager for the Gordon Natural Area.

“The Big Tree Grove on the Quad is a valued and dynamic resource,” notes Bruno. “Many trees predate everyone in the current University community and will continue long after our association with WCU ends.”