

The Augusta Chronicle

COLUMNS

Campbell Vaughn: Gigantic tree that fell in Augusta after hurricane shows problems with rot

Campbell Vaughn Columnist

Published 6:03 a.m. ET Nov. 22, 2024 | Updated 6:03 a.m. ET Nov. 22, 2024

I have been spending a lot of my time driving the roads around Augusta assessing damage from Hurricane Helene. It is depressing, but I am doing everything I can to keep my chin up. I like to think that people know me for being associated intimately with landscapes and I need to be a positive force.

One of the things in life where I have been struggling is to believe that I am officially a grown-up. I am a kid at heart.

The incident that got me thinking about how I am not just a kid anymore was when I stopped by to see someone who has always been special in my life. I grew up with her kids and she was the best Cub Scout leader ever. When I was leaving her home, I questioned for whatever existential reason whether Mary Gail is now considered my friend or is she always going to be Scott's, Doug's and Robert's mom?

Should I still call her Mrs. Nesbit or Mary Gail? When does the transition from parental authority figure to peer happen? I am still not completely sure, but I did leave thinking that Mary Gail is my friend.

It was a good visit for a lot of reasons. I had to drop some paperwork off at Mary Gail's house that I found while cleaning out my dad's office. It gave me a chance to look around her yard off Walton Way. Her and her husband Bob were very gracious to show me around their beautiful yard and get some close-ups of one of the biggest trees that came down in the storm. It was a type of red oak that had to be over 150 years old. It had been cut into 5-foot pieces that were gigantic.

I asked Mary Gail if she would take a picture next to the cross section of this huge Quercus. She reminded me that she was 5-foot-4, and it came up to her chin.

With the picture, I wanted to show a reason for the decline of some of our mightiest trees. If you look at the center of the picture, there is a clear hole that runs straight through the center of it. This is rot and often is the ultimate threat to the overall longevity of some of our oldest specimens.

The basic design of a tree is the roots that spread wide and connect the plant to the ground. The roots supply water and nutrients to the tree. When the roots intake the water and nutrients, the plant sends them up into the tree via a vascular system. The vascular system also moves sugars around from photosynthesis. Most of this work moving stuff around in a tree takes place not too far below the bark. The center of the tree is called heartwood and isn't much of a part of a tree's vascular system. The heart is the strongest part, next to the root system, and holds the most structural integrity of the vertical part of the plant.

Campbell Vaughn: Stinking stinkhorns are popping up. Here's what you can do about it.

When I assess a tree of significant size, I always look for signs of rot in the interior of the plant. Ways to spot signs that a tree might have some interior rot would be black stains on the side that are oozing, holes that are rotting out, especially at the base, or sometimes mushrooms will show up on the side or base of the tree. Usually if you spot any of those signs, you can look up and see where there is a limb that might have broken over the years or a "Y" fork in the tree that leaves a pocket that holds water.

When the pocket starts to hold water, the wood below begins to rot, and then gravity takes over. The pockets get bigger and more water pools and over time the heartwood will begin to lose its structural integrity.

A plant can live for many years with the heart of the tree hollow from rot, because the vascular system still can move the water, nutrients and sugars it needs. But what is worrisome is that the tree isn't nearly as strong as it could be, and it is more susceptible to falling with much less force than what we saw with Helene's winds.

The picture with Mary Gail is a good example of what has probably been going on for many years on her beautiful oak. If it wasn't for 100 mph winds, that tree could have lasted another 20 years, but ultimately it would have failed. It is part of the cycle of tree life.

