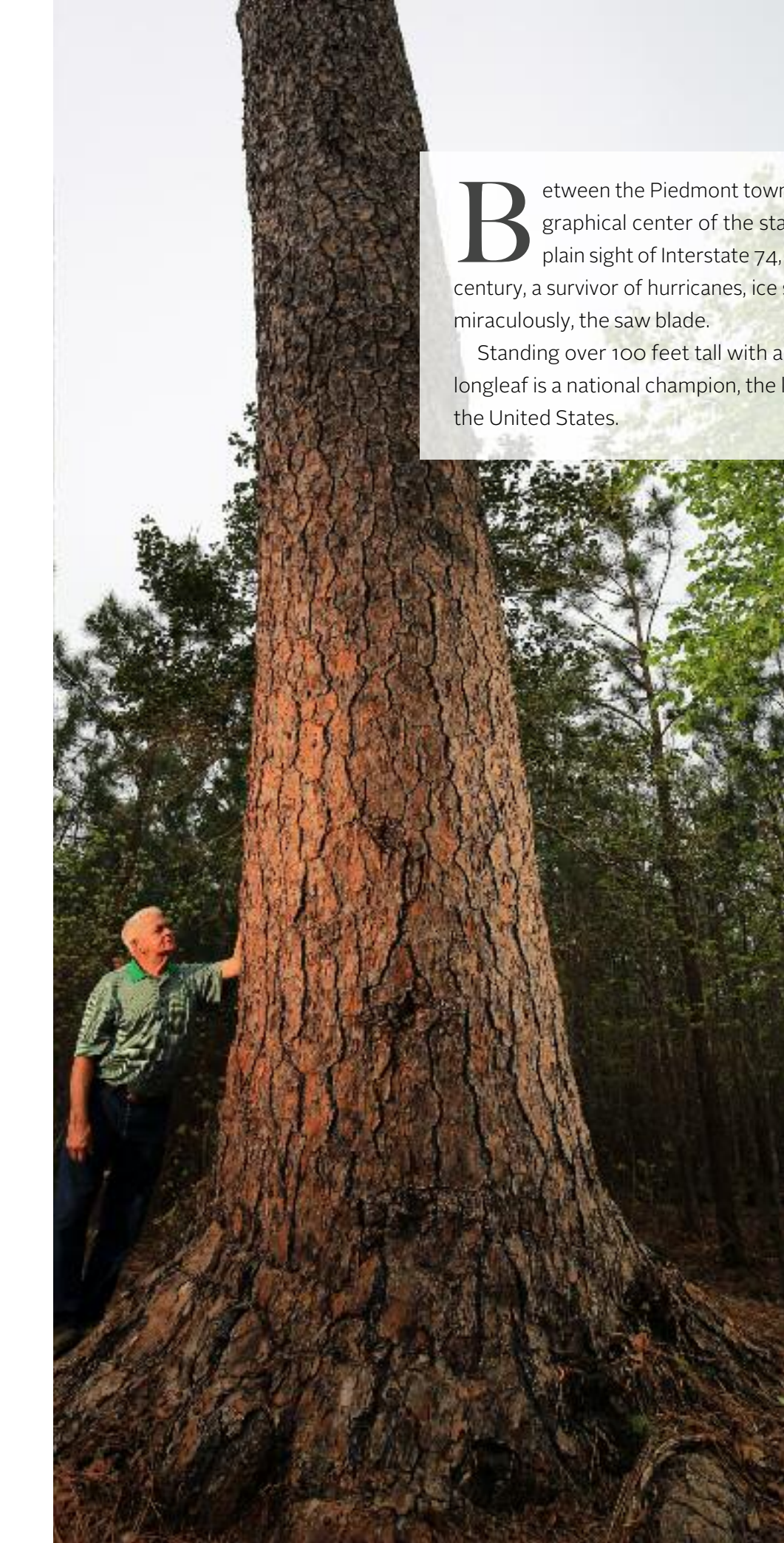




— THE LAST —  
**GIANTS**

Searching for champion trees in North Carolina

written and photographed by Todd Pusser



**B**etween the Piedmont towns of Candor and Seagrove, near the geographical center of the state, is an enormous longleaf pine tree. In plain sight of Interstate 74, the tree stands as it has for century upon century, a survivor of hurricanes, ice storms, lightning strikes—and even more miraculously, the saw blade.

Standing over 100 feet tall with a circumference greater than 12 feet, the longleaf is a national champion, the largest of its kind measured anywhere in the United States.

With permission from the landowners, I recently visited the massive pine with my father last summer (left). Standing on the shoulder of the interstate as cars whizzed by, I could easily see the flattop crown, so characteristic of an old longleaf pine, towering above all the surrounding oaks and planted loblolly pines.

Though I could tell right away it was a large pine, it was not until I walked up to its base that I could truly gauge the immensity of the tree. It was unlike any other longleaf pine tree I have ever seen. Three full grown adults, with arms outstretched, could not reach around its base. A large limb from the pine's crown, likely broken off during a storm, was lying on the ground next to the trunk. My father and I, straining as hard as our backs would allow, could not budge it. The longleaf pine tree was, in a word, awesome.

Though I see trees all the time, rarely, if ever, do I encounter anything remotely this large. With silent reverence, we stood and stared up at the massive trunk toward the Carolina blue sky. For some unknown reason, I felt an overwhelming urge to reach out and touch it. Running my hands over the furrowed crevices of its thick bark, I thought of the vast swaths of longleaf pine forest that once covered much of the Coastal Plain of North Carolina and the Southeast. Well over 90 percent of that forest is now gone, consumed by generations of man for lumber and turpentine.

Here, standing before us, was a shining example of that once plentiful forest. Longleaf pine trees can live more than 500 years and this incredible specimen was likely well over a century old when the United States declared its independence from Great Britain in 1776.

### The Big Book of Big Trees

When one thinks of giant trees, perhaps the first ones that come to mind are the enormous redwoods and sequoias of California. Standing over 350 feet tall with diameters large enough to drive a Ford F-150 through, these goliaths of the plant kingdom are the largest trees on earth and have inspired generations with their beauty and spectacular size. Countless words in the form of books, poems, magazine articles and newspaper stories have been written about their magnificence. National parks have been formed specifically to protect them. The largest examples are given names befitting their impressive stature. One giant sequoia appropriately named “The President” sports massive tree limbs that hold nearly 2 billion leaves.

North America has close to 750 species of native trees, ranging in size from the giant redwoods and sequoias of California to more dainty species, like southern crab apple, whose overall stature resembles a shrub rather than a tree. In 1940, the American Forest Association, a nonprofit organization based in Washington D.C., formed the National Big Tree Program in an effort to locate, register and protect the largest species of native trees across the United States. The program is active in all 50 states and publishes its list of champions in an annual publication called The National Register of Big Trees.

Each state maintains a list of the largest trees found within its individual borders, crowning them state champions. If state champion trees are large enough, they may qualify for the big leagues and make the Register as a national champion. For 75 years, the goal of the program has remained the same: to preserve and promote the iconic stature of these living monarchs and to educate people about the key role these remarkable trees play in sustaining a healthy environment.

North Carolina joined the Big Tree Program early in the 1970s and has since played host to dozens of national champion trees. According to Alan Moore of the N.C. Forest Service, and current big tree coordinator for the state, North Carolina currently has 31 National Champion trees listed on the Register.



Previous page: Named for forest ranger Bob Padgett, the massive trunk of the state champion tulip poplar reaches toward the sky in a mountain cove near Highlands. Gary Williamson (top) and Byron Carmean (bottom) have spent 30 years looking for champion trees throughout the south.

In order for a tree to make the Register, it must first be nominated by someone. The nominator, using an algebraic formula developed by the Forest Association, measures the tree's circumference in inches, adds the tree's height in feet and then adds one-fourth of the average crown spread. The total combined points from the three measurements determine whether the tree is a champion or not.

#### Keeping An Eye Toward The Sky

It's likely that no one has nominated more state and national champion trees than Byron Carmean and Gary Williamson of southeastern Virginia. Working together as a team, Carmean, a retired science teacher, and Williamson, a retired Virginia park ranger, have combed the backwoods, river bottoms and swamps of Virginia and North Carolina since the early 1980s in their quest for champion trees. Most Saturdays will find them paddling a canoe quietly down a Coastal Plain river or driving remote back roads searching for the next big tree.

For years, they concentrated their search in their home state of Virginia, nominating nearly half of that state's champion trees. For the last decade or so, they have spread their search into the wilds of North Carolina. Between the two states, Carmean and Williamson have found over 45 national champion trees — an astonishing figure.

I recently joined them as they set out to measure a massive bald cypress they found along the Tar River in Edgecombe County. The tree, if their hunch is correct, might be the largest living thing found east of the Continental Divide.

It takes a trained eye to spot a champion tree, a skill both Carmean and Williamson have in spades. Carmean once spotted the national champion poison sumac while driving down a rural South Carolina road at 60 mph. The two big-tree hunters also have an intimate knowledge of the more than 200 tree species, native and naturalized, that occur in North Carolina.

A native tree is one whose species is native to the United States, while a naturalized tree is one whose species was introduced into the United States from another country but is now growing in a natural or wild state. In the woods, the two men are

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A full moon shines through the branches of the national champ Darlington oak in Edgecombe County.



How Can Trees Get So Large?  
See Nature's Ways, page 43.

like walking field guides, pointing out the variety of trees growing next to trails and rattling off the Latin names of plants growing beneath their canopy.

One might think that champion trees can only be found in thick swamps or in remote mountain valleys. However, according to Carmean and Williamson, many champion trees are found right in suburban front yards or on busy town streets where hundreds of people see them every day, most of whom don't even realize they are looking at a champion tree.

One such tree, the state champion water oak, sits on a corner of a well-traveled street near downtown Elizabeth City—its massive limbs draping over a two-lane suburban road. The national champ Fraser fir, our tallest Christmas tree, stands by the 18th green of a golf course in plain sight of the front porch of the High Hampton Inn in the mountains of Jackson County.

Big-tree aficionados regularly hunt old estates and farms that have been in families for generations. Old cemeteries are also favorite spots to look for big trees. The current state champ, and former national champion, flowering dogwood is found in an old cemetery next to a small country church in the town of Clinton near Interstate 95.



State champion trees are often found in suburban environments, such as the water oak (above) from Elizabeth City and the flowering dogwood (below) in a cemetery near Clinton. The bloom of the national champion silky camellia (below right) can be seen in Merchants Millpond State Park. Byron Carmean and Gary Williamson measure the circumference of the large bald cypress (right).



Not all champion trees are obviously trees. Some may appear as nothing more than a large bush or shrub. To avoid confusion, the American Forestry Association adopted the definition of a tree as: "A woody plant having one erect perennial stem or trunk at least 9 1/2 inches in circumference at a point 4 1/2 feet above the ground, a definitely formed crown of foliage, and a height of at least 12 feet."

One such shrubby-looking tree is the silky camellia, whose large, white flowers make for a spectacular show when it blooms in May. Working on a tip from a park ranger, Carmean and Williamson recently found the national champion silky camellia deep within the forest of Merchants Millpond State Park.

#### 'A Wow Tree'

It was a cold, dreary day when I traveled with the big-tree hunters to view the massive bald cypress growing along the shore of the Tar River. Ominous clouds overhead threatened rain as we drove a winding dirt road through a hardwood forest near the edge of the river.

Carmean and Williamson first found the tree while paddling the Tar in late August, its crown easily seen towering above the surrounding tree line. At the time, the forest was dry and the duo could easily walk around the base of the tree. Not so this day.

Heavy rain throughout much of October had caused the slough in which the cypress stood to fill with water. Now 4 feet of water surrounded portions of its immense base. It was difficult to maintain footing on the slippery, muddy bank as I photographed Carmean and Williamson measuring the circumference of the tree, which was just shy of 30 feet. Combined with the tree's height of 134 feet and one-quarter inch and the crown spread of 61 feet, the tree scored a total of 507 points. Or as Williamson put it: "A wow tree," one that when you see it in the forest, you just have to stop walking and say "wow."

Despite the tree's impressive point total, it amazingly did not score as high as the current state champion bald cypress in Martin County, which has a total of 558 points. Carmean refers to that tree as a "turnip tree," because its base, at 39 feet in circumference, is considerably more massive than the rest of its trunk.



One thing that the champion tree formula fails to take into account is the total volume of wood the tree contains, a quirk, that some say, gives "fat trees" an unfair advantage. If the total volume of the tree was measured, then the Tar River bald cypress is a much larger tree than the current state champion because it maintains its massive girth nearly all the way up its trunk.

Rain started to fall as I finished photographing the tree hunters standing next to the immense trunk. The men commented that the bald cypress was the largest tree either had encountered in over 30 years of looking for champions. Gargantuan cypress trees, like the one standing before us, are ancient. Annual growth rings counted from core samples taken from bald cypress growing along the Black River in the southeastern corner of the state have shown the trees to

reach over 1,700 years of age, making them among the oldest organisms recorded on the planet. A cypress this size could be over 2,000 years old.

Gathering our remaining gear, Carmean and Williamson were already discussing their next trip, a paddle down the lower stretches of the nearby Meherrin River. Their hunt for the next champion tree goes ever on.

Before leaving, we turned one more time to pay our respects to the great monarch of the forest. To gaze up at an old-growth bald cypress, its towering trunk of gray-brown bark and reddish needles contrasting with the pale sky, is to see one of the great wonders of the world. ♦

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