

# Florida's

## Measuring the Senator

Florida's Champion  
Bald Cypress  
*Taxodium distichum*

by Daniel B. Ward  
and Robert T. Ing

**D**ecades ago, a gigantic bald cypress (*Taxodium distichum*) near Longwood, Seminole County, was recognized as perhaps the largest tree of its species surviving in Florida. As early as the 1880s, visitors to the Sanford area are known to have waded through the surrounding swamp to view this tree. In 1927, M. O. Overstreet, a prominent citizen of Orlando and state senator (1920-1924), gave lasting protection to the giant tree, thereafter known as the Senator in his honor, and an adjacent, slightly smaller tree, the Senator's Brother, by his donation of six acres to Seminole County. President Calvin Coolidge, during his last days in office in 1929, made a dedicatory speech beneath the tree, and a descriptive bronze plaque was

placed on its trunk. In the mid-1930s, the Works Progress Administration (WPA), to facilitate access, constructed a boardwalk from the nearby roadway to the base of the tree. But with access came vandalism; the bronze plaque and parts of an early iron fence were stolen by 1945. A sturdy replacement fence later placed at a small distance from the Senator's trunk has since effectively shielded the tree from overly-affectionate visitors.

Although nearly all early references to the Senator include statements of girth and height, as well as (unconfirmable) estimates of age, the first careful measurement to the American Forests standard (see inset on page 16) was made by County Forester Mike Martin in February 1981. Martin obtained



Tree-top view of the Senator.

Photos by Spence Guerin.

a point score of 531. This score was far above any bald cypress then on record, and for the moment, the general assumption that the Senator was the largest *Taxodium distichum* in Florida seemed vindicated.

But in October 1981, Joe Corbett Mathis, a Hamilton County forester, wandered into a depression north of the Suwannee River, about four

miles east of the Nobel's Ferry bridge, and found a monstrous bald cypress shaped like a giant turnip, with a hugely swollen base that tapered into a modest upper trunk. When the area had been logged for cypress, perhaps at the turn of the century, this tree was left because its lower portion was entirely hollow and its timber value, at that early date, wasn't worth salvaging. Mathis

# Big

# Tree



Man standing next to the Senator gives a sense of scale.

measured the tree by the American Forests standard, which specifies that circumference be measured only at 4.5 feet, and came to a resounding 644 points. The Senator's reign as Florida champion was over!

In 1993, with Bob Simons, the authors furthered the Senator's ignominy by finding a second Hamilton County bald

bypress, on Holton Creek, that measured 587 points. This discovery placed the Senator at third rank within the state. Also in 1993, with Bob Simons, we remeasured the Senator, as well as the then-unmeasured Senator's Brother. The Senator had a circumference of 425 inches, a height of 118 feet, and a spread of 57 feet, giving it a point score of 557, a small

improvement over Martin's 1981 score of 531, but insufficient to regain even second place. The Senator's Brother came in at 491 points, the sixth largest bald cypress in the state.

But Simons carried the investigation further. He used a Relaskop, a complex optical device that gives diameter measurements at different levels above the ground, and thus permits accurate calculation of trunk volume as a series of successively smaller cylinders. We accompanied him in measuring the volume of the Senator, the two Hamilton County giants, and, for good measure, an impressive tree known as Old Methuselah at DeLeon Springs Recreation Area, Volusia County.

The volume figures were just the inverse of the point scores. The Senator showed a volume of 3731 cubic feet. The Holton Creek tree had a volume of 2068 cubic feet. And Mathis' tree — the Florida champion by the American Forests standard — had a volume of 1872 cubic feet. Old Methuselah, though a beautiful, symmetrical tree, attained a volume of only 1155 cubic feet.

So which tree would be the Florida champion? Is it the Mathis tree, larger in point total? Or is it the Senator, with the larger trunk volume? One system or the other must prevail.

Simons then called our

attention to a similar controversy, in California, where trunk volumes and total scores of the two largest sequoia (*Sequoiadendron giganteum*) point in opposite directions. The General Sherman sequoia was clearly larger in general appearance, with its massive cylindrical trunk, but the General Grant, which has a sizable butt swell and a more tapered trunk, was given a larger total point score. When volumes of the two trees were measured, the General Sherman was found to contain 52,508 cubic feet, while the General Grant contained 46,608 cubic feet. But the General Grant was scored at 1348 points, a bit ahead of the General Sherman's 1300 points.

Chaos swept the halls of American Forests! Since 1940, when American Forests began the registration of champion trees, a standard developed in 1925 by the Maryland state forester had been the agreed-upon comparator, a yardstick that permitted trees of different shapes to be matched with a single numerical scale (the trunk circumference in inches, plus the tree height in feet, plus one-fourth of the average branch spread in feet). But tree volume, even simplified as trunk volume, was an obviously logical alternative measure. What to do? It took *American Forests* two years to decide that the standard formula was adequate and far

easier to apply, since measurements by tape and clinometer were more readily attained than those requiring sophisticated volume measurement. But in 1992, *American Forests* concluded that volume measure, when available, was to be used in place of the standard formula. By this ruling, the General Sherman, at 1300 points and 52,508 cubic feet, was the national champion Sequoia, and the General Grant, at 1348 points and 46,608 cubic feet, was relegated to national challenger.

Applied to *Taxodium distichum* in Florida, we must invert the ranking of the three largest trees. The Florida champion, once again, is the Senator, in Longwood, Seminole County, with a volume of 3731 cubic feet. The Florida challenger is the tree along Holton Creek, Hamilton County, with a volume of 2068 cubic feet. And the Mathis tree, also in Hamilton County, after its fifteen year reign as Florida champion, is now moved to third place, with a volume of 1872

cubic feet. The King is deposed! Long live the King!

But let us not be quick to accept these trees as merely Florida champions. Might the largest of them also be the national champion? By *American Forests* records, the largest bald cypress is at Cat Island, West Feliciana Parish, Louisiana; it has a circumference of 644 inches and a point score of 748. But the grapevine tells us it also is a "turnip," with a swollen basal trunk but little above. It cannot be displaced, of course, without volume measurements. But should it turn out to have a volume smaller than the measured Florida giants, then the Senator will become the national champion. We are awaiting records from *American Forests* and the opportunity to visit and measure the Louisiana tree. Stay tuned!

*Dan Ward was presented with a Mentor Award at this year's FNPS conference, for his creation of the Champion Tree program in Florida, among other accomplishments. ✨*

## Help Wanted

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## Champion Trees in Florida

Florida has 146 champion trees, more than any other state in the U.S. Champions for each species are determined by measuring trunk circumference, vertical height, and average crown spread; or trunk volume. The program and *National Register of Big Trees* is sponsored by American Forests, a national not-for-profit conservation organization which publishes a magazine by the same name. FNPS conference attendees received free copies of American Forests 1994 *National Register of Big Trees*. In Florida, the champion trees program is administered by the Division of Forestry, Florida Department of Agriculture & Consumer Services.

Thanks to the efforts of Dan Ward, 117 of Florida's national champions have been relocated and remeasured. During the re-measuring process, many trees have been dethroned, however, many more have been added to the list of national champions.

Despite the fact that Florida has so many champion trees, there are still species for which there are no champions, including the Florida natives listed below.

### Florida Natives for which No Champions are Listed

- Bay-leaved caper *Capparis flexuosa*
- Biscayne prickly-ash *Zanthoxylum coriaceum*
- Black-calabash *Amphitecna latifolia*
- Black-mangrove *Avicennia germinans*
- Cocoplum *Chrysobalanus icaco*
- Firebush *Hamelia patens*
- Florida-privet *Forestiera segregata*
- Florida mayten *Maytenus phyllanthoides*
- Marlberry *Ardisia escallonioides*
- Northern bayberry *Myrica pensylvanica*
- Pawpaw *Asimina obovata*
- Red mangrove *Rhizophora mangle*
- Red stopper *Eugenia rhombea*
- Spanish stopper *Eugenia foetida*
- Twinberry *Myrcianthes fragrans* var. *fragrans*
- White stopper *Eugenia axillaris*
- Winged sumac *Rhus capallina* var. *leucantha*

The information above comes from *American Forest's National Register of Big Trees, 1994 Edition*, and the Florida Department of Agriculture and Consumer Services "Florida Urban & Community Forestry Newsletter, Spring 1996."

FNPS member Travis MacClendon (Conradina Chapter) has suggested that FNPS members nominate large trees of these species for championship status. Go forth and measure!