

Hall County Champion Tree Search - Measurements

The Georgia Forestry Commission personnel will calculate the Total Score using the equation: Trunk circumference + Tree height + $\frac{1}{4}$ Average crown spread. Consequently, three measurements need to be submitted with a Georgia Champion Tree nomination.

1. Tree circumference is measured in inches.

The circumference is the distance around the tree. It is measured 4.5 feet above the ground level (Photo A). If the tree forks below 4.5 feet, measure the largest stem only (Photo B). If the tree forks or has a deformity at 4.5 feet, drop below and measure the smallest circumference between 4.5 feet and the ground below the lowest fork excluding dead branches and epicormic sprouts (Photo C).



Photo A - Measuring a tree at 4.5 feet



Photo B - Measuring a forked tree



Photo C - Measuring a tree forked at 4.5 feet

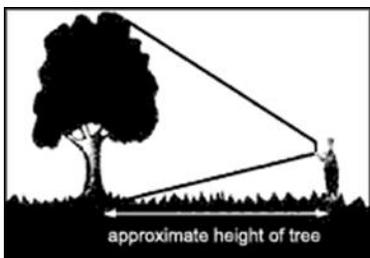


Figure 1 - Tree height using stick method.

illustration - American

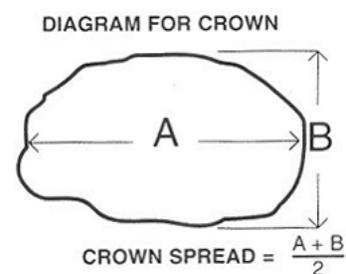
Forests

2. Tree height is measured in feet.

Height is accurately measured using a clinometer, laser, hypsonometer, or other specialized tools. If these tools are not available, height can be estimated using the "stick method."

The "stick method" works using a stick of a length equal to the distance from your eye to the palm of your extended hand. With the stick vertical to the ground and the length of stick extending out of the top of your closed fist, back away from the tree until the bottom of the tree lines up with the top of your fist and the top of the tree lines up with the top of the stick. The height of the tree is equal to the distance from the point you are standing to the base of the tree (Figure 1).

If tree height cannot be accurately measured, estimate and note it as such on the nomination application.



3. Average crown spread is measured in feet.

Crown spread is estimated by taking two measurements at right angles to one another. The first crown spread measurement (A) is the widest crown spread, which is the greatest distance between any two points along the drip line of the tree. The drip line is the outline on the ground of the outermost leaves of the crown. Measure the second crown spread measurement (B) by turning the axis of the first measurement 90 degrees. The two measurements are averaged together (Figure 2).

Figure 2 - Crown spread measurements