

OKLAHOMA'S CHAMPION TREES

Oklahoma Forestry Services maintains records on the largest specimens of many of Oklahoma's tree species. On the national level, "American Forests" is responsible for the *National Register of Big Trees*. A tree's overall size in relation to other trees is determined by measuring three dimensions, as described below.

How Champion Trees are Measured

The "bigness" of a champion tree is calculated using a point system developed by the American Forestry Association. A Champion's overall size is a composite of its circumference, its total height and one-quarter of its average crown spread.

Measuring Circumference

Circumference is measured in inches using an ordinary tape measure. The first step in this process is to determine the point of measurement. On flat ground, take the measurement at a height of 4 ½ feet above the ground. If the tree is on a slope, take the measurement 4 ½ feet up the bole on the uphill side. Keep the tape perpendicular to the bole and read its circumference to the nearest inch.

Special rules apply for trees which fork below 4 ½ feet, and for trees with abnormalities on the bole that affect its size at 4 ½ feet. If the tree forks below 4 ½ feet, measure only its largest fork. If an abnormality affects the tree's circumference at 4 ½ feet, take the measurement at the smallest point below the abnormal growth.

Measuring Crown Spread

Crown Spread is measured in feet and is the average of the greatest and least distance across the drip line of the tree. This measurement is often the least accurate, due to the subjective nature of the exact points to be measured. Once the widest and narrowest spread is averaged, points are calculated by dividing by four.

Measuring Total Tree Height

Tree height is measured in feet and is most easily done using a special instrument called a "hypsometer." A hypsometer measures an angle and converts it to a direct height reading at a certain distance. Because most people do not have access to such an instrument, it is best to have a forester take this measurement prior to submitting an entry for consideration as a Champion Tree.

Calculating Total Points

Once all measurements are taken, the Total Points are calculated by adding the Circumference (in inches), the Height (in feet) and one-fourth of the Average Crown Spread (in feet). Entries are then compared to designate the Champions of each species. Accurate species identification is very important. Common and scientific names shall conform to the *Checklist of United States Trees*, by Elbert L. Little, Jr. (1979).

Additional Information

A nomination of a tree for the Champion tree list should include the measurements above, as well as its accurate location, the landowner's name, the name and address of the nominator, and other information which will help a forester relocate the tree. Send entries to: Oklahoma Department of Agriculture, Forestry Services Division, PO Box 528804, Oklahoma City, OK 73152.