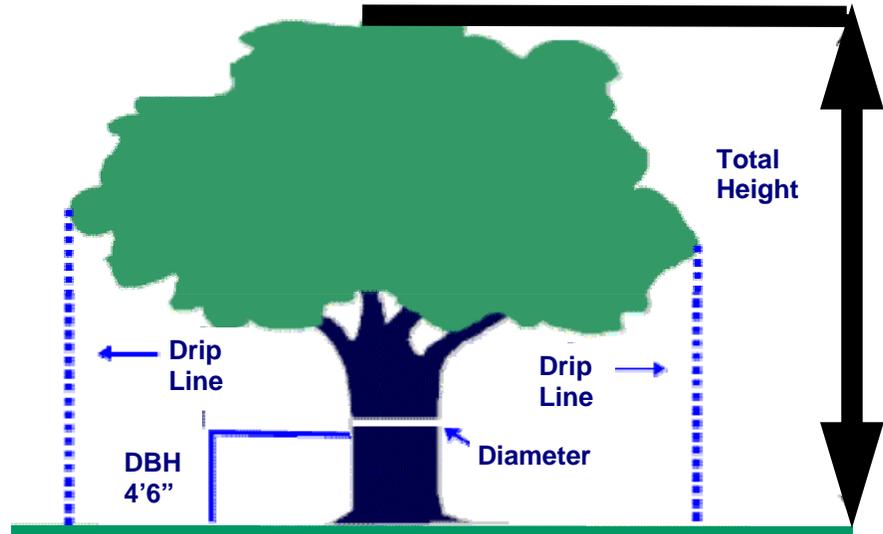# Does Your Tree Qualify as a
Grand Tree?

Grand Trees are determined by adding points calculated for the diameter, height and spread of a tree together. If the sum equals or is greater than the defined point total for your tree species, it is considered a Grand Tree.

Total Height

Drip Line

Drip Line

Diameter

DBH 4'6"

HERE IS THE FORMULA
diameter + height + (average spread/4) = total points

DIAMETER

Measure around the trunk at a point 4.5 feet from the ground. Take this circumference measurement and divide it by 3.14 to get the trunk diameter. If a swelling, branch, or fork in the trunk occurs at 4.5 feet then measure the circumference below this point. Measure forked trees at the point below the fork where the circumference is least. You get 1 point for each diameter inch.

HEIGHT

From the highest point in the tree to the ground. Height is measured as the distance in feet between the base of the tree's trunk and the top most twig.

Height is usually much more difficult to measure than girth, especially given the extraordinary size of most Grand Trees. Obviously, it is not feasible to climb a tree and drop a tape measure from the tip of the highest branch. Precise measurements require the use of a sophisticated instrument such as transit, hypsometer or relascope. Hand-held devices like an Abeney level or clinometer can yield accurate data if used carefully. In the absence of such measuring tool, a rough estimate can be obtained by a simple manual sighting technique using a straight ruler, tape measure and a little trigonometry. You get 1 point for each foot of height.

AVERAGE SPREAD

This is a combination of two measurements. Measure from one edge of the drip line to the opposite edge in one direction and then in a second direction. Add these two numbers and divide by 2. Now take the average spread and divide by four to get the number of points for the spread. You get 1 point for each 4 feet of average spread.

B

A   **A**

B
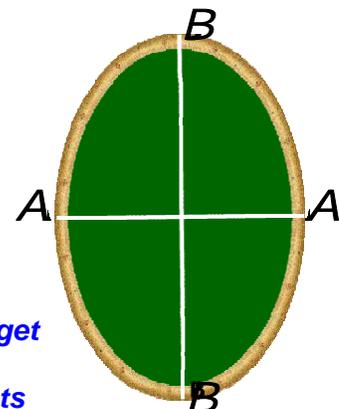
Average Spread = (AA+BB)/2
- *Divide the answer by 4 to get the points for the spread.*
- *(Average Spread)/4 = Points*

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Species of Trees that may qualify as Grand Trees

SPECIES OF TREES	MINIMUM POINTS NEEDED
American elm (*Ulmus americana*)	100
Bald cypress (*Taxodium distichum*)	100
Hickory (*Carya* spp.)	100
Live oak (*Quercus virginiana*)	100
Pine (*Pinus* spp.)	100
Red bay (*Persea borbonia*)	85
Sand live oak (*Quercus geminata*)	80
Southern magnolia (*Magnolia grandiflora*)	80
Southern red cedar (*Juniperus silicicola*)	90
Sugarberry (*Celtis laevigata*)	95
Sweetbay (*Magnolia virginiana*)	90
Sweetgum (*Liquidambar styraciflua*)	100

MEASUREMENTS	NUMBER OF POINTS
DBH	One point per inch
Height of Tree	One point per foot
Average canopy spread	One point per each four feet

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