## 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.

# 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 $=(A A+B B) / 2$

- Divide the answer by 4 to get the points for the spread.
- (Average Spread)/4 = Points


## 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.


## Species of Trees that may qualify as Grand Trees

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


| MEASUREMENTS | NUMBER <br> OF POINTS |
| :--- | :---: |
| DBH <br> Height of Tree <br> Average canopy spread | One point per inch <br> One point per foot <br> One point per each <br> four feet |

For more information contact:
ENVIRONMENTAL PROTECTION DIVISION
Environmental Permitting - (941) 861-5000 or Visit the following locations:
North County -1001 Sarasota Center Blvd., Sarasota, FL 34240
South County - 4000 S. Tamiami Trail, Venice, FL 34293

