

Virginia Big Tree Program

Data Collection Form for Nominations and Recertifications

1. Name of nominator | measurer (circle one): _____ Date: _____

Phone and email of nominator | measurer (circle one): _____

Name and address of tree owner: _____

Phone and email of tree owner: _____

The best contact for further information on this tree is (circle one): the nominator | the measurer | the owner

2. Kind of tree (common name): _____ (scientific name): _____

3. Comments about the tree (is it healthy, is it endangered, does it have cultural or historical significance, etc.?):

4. Dimensions of tree (measurement guidelines on page 2):

Trunk circumference: _____ (inches)

Trunk measurement height (if other than standard 4.5'): _____

Vertical tree height: _____ (feet)

Method of vertical height measurement: _____

Average crown spread: _____ (feet)

Score Calculation:

Trunk circumference: _____ (1 pt. per inch)

+ Height: _____ (1 pt. per foot)

+ Avg. crown spread: _____ (¼ pt. per foot)

= **Total points:** _____

5. Directions to tree (describe using major roadways or landmarks that are nearby, list nearest street address if known):

6. County or city where the tree is located (for town, list surrounding county): _____

7. GPS coordinates (please use decimal degrees, dd.ddddd): Latitude N: _____ Longitude W: _____

8. May the location of this tree be shared publicly?

Yes: _____ No: _____

10. Sketch map of tree location on owner's property:

North: ↑

9. May the owner contact information be shared publicly?

Yes: _____ No: _____

Virginia Big Tree Program

Nomination and Recertification Policy

Anyone may submit nomination or recertification information to the Virginia Big Tree Program. All information is subject to review and verification by the Virginia Big Tree Program. To be eligible for the register, a specimen must be at least 13 feet tall and have a trunk circumference of 9.5 inches at 4.5 feet above the ground. If several stems have grown together to form a trunk, then only the largest stem will be considered for scoring. We currently accept nominations for any tree species found growing in Virginia. A tree must be re-measured at least every 10 years to maintain its status in the register.

MEASUREMENT GUIDELINES

To score a tree, you need three measurements: Trunk Circumference (inches), Tree Height (feet), and Average Crown Spread (feet). Trees are ranked in the Virginia Big Tree Register based on this scoring system:

$$\text{Big Tree Score} = \text{Trunk Circumference (inches)} + \text{Height (feet)} + \frac{1}{4} \text{Average Crown Spread (feet)}$$

Trunk Circumference

- Measure the distance around the trunk of the tree (in inches) by wrapping a measuring tape around it at 4.5 feet above ground level.
- If the tree has a forked stem or large branch below 4.5 feet, record the smallest trunk circumference below the fork or large branch. Record the height at which this measurement was taken. If the fork in the stem is below ground line, then only the largest stem should be measured.
- If the tree is on a slope, calculate the trunk circumference from two measurements. First, measure the trunk circumference 4.5 feet up the trunk at the bottom of the slope. Then, repeat this measurement at 4.5 feet up the trunk at the top of the slope. Average the two measurements.
- If the tree is leaning, measure the circumference at 4.5 feet along the axis of the trunk, from where the trunk emerges from the ground. Make sure the measurement is taken at a right angle (90 degrees) to the trunk.

Tree Height

Measure the vertical distance (in feet) between the base of the trunk and the topmost branch. Height is most accurately measured using a clinometer, laser, hypsometer, or other specialized tools. If these tools are not available, height can be estimated using the “stick method”.

Stick Method

- Use a yardstick or straight stick longer than your arm.
- Hold the stick vertically at arm’s length, making sure that the length of the stick above your hand equals the distance from your hand to your eye (forming an isosceles right triangle between your arm and the stick).
- Hold your arm at eye level and walk backward away from the tree. Stop when the tip of the stick above your hand aligns with the top of the tree.
- Measure the horizontal distance from the tree to where you are standing in feet. Add your height to this horizontal distance measurement. This is the total tree height. Record the total measurement to the closest foot.
- Note: This method only works if you are standing at the same elevation as the tree and the peak of the tree is directly above the base of the trunk.

Average Crown Spread

- First, measure the maximum crown spread (in feet), which is the greatest distance between any two points along the perimeter of the crown. This measurement is not required to go through the trunk.
- Then, turn the axis of measurement 90 degrees and find the widest crown spread (in feet) perpendicular to the maximum crown spread. This measurement is not required to go through the trunk.
- Calculate the average crown spread using this formula:
(crown spread #1 + crown spread #2) ÷ 2 = average crown spread