Trunk Circumference (inches) + Height (feet) + ¼ Average Crown Spread (feet) = Total Points.

Diameter

1. Measure the distance around the trunk of the tree, in inches, at 4 ½ feet above ground level *(see photos).* This point is called the ***diameter breast height (dbh).***

2. If the tree forks at or below 4 ½ feet, record the smallest trunk circumference below the lowest fork. Record the height at which the measurement was taken. Trees should be considered separate if the circumference measurement below the lowest fork places the measurement on the ground

3. If the tree is on a slope, measure 4 ½ feet up the trunk on the high and low sides of the slope. The ***dbh*** is the average between both points. If the tree is on a steep slope, take the measurement at 4 ½ feet above the midpoint of the trunk.

4. If the tree is leaning, measure the circumference at 4 ½ feet along the axis of the trunk. Make sure the measurement is taken at a right (90 degree) angle to the trunk.

Height

1. Stand exactly one "chain" length away from the tree (66ft or 100 links).

2. Pinch the brass ring between your thumb and forefinger and look through the black eye piece using only one eye. If possible, the other eye should be looking at the tree. In the eyepiece you will see a black line and a scale. The right side of the scale is the height reading, the left is % slope. You want to read the right side of the scale.

3. Tilt your head until the black line is on the base of the tree and read and remember the number where the black line crosses the right hand side of the scale. (It will be a negative number because zero equals the height of your eye and you will inevitably be looking down at the base of the tree.) This is the

distance from the height of your eye to the base of the tree.

4. Repeat the process above except this time place the black line where you think the top of the tree is located. Read and remember the number where the black line crosses the right side of the scale. This is the distance from the top of the tree to the height of your eye. (It will be a positive number because you will be looking above the height of your eye.

Average Crown Spread

Two measurements of the crown spread are taken and recorded, in feet, at right angles to one another.

1. Measure the widest crown spread, which is the greatest distance between any two points along the tree's ***drip line*****.** The ***drip line*** is the area defined by the outermost circumference of the tree's canopy where water drips to the ground.

2. Turn the axis of measurement 90 degrees and find the narrow crown spread.

3. Calculate the average of the two crown spread measurements using this formula: (wide spread + narrow spread)/2 = average crown spread