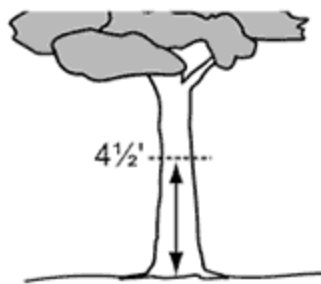


Diameter at breast height, or DBH, is the standard for measuring trees. DBH refers to the tree diameter measured at 4.5 feet above the ground.

DBH can be measured quickly with a specially calibrated diameter tape, often referred to as a d-tape, that displays the diameter measurement when wrapped around the circumference of a tree. If you don't have access to a d-tape, you can find the diameter of the tree using a string, a measuring tape, a thumb tack, and a calculator.

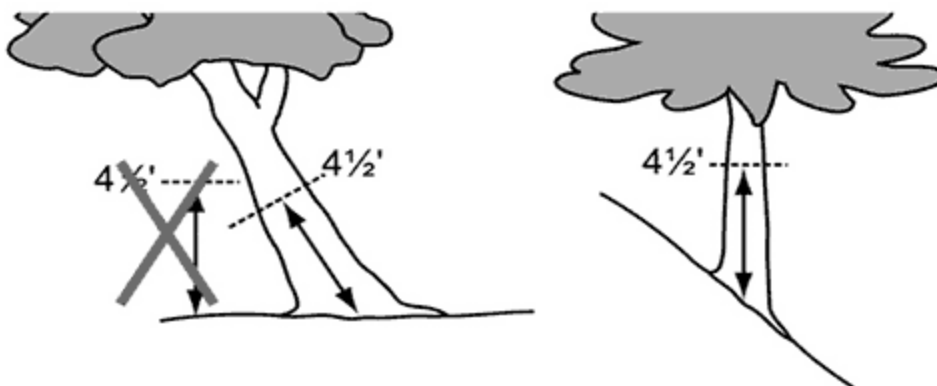
1. With the measuring tape, measure 4.5 feet up the trunk of the tree from the ground. Use a thumb tack to mark the height on the tree.
2. Wrap your string around the tree trunk at 4.5 feet. Make sure the string is straight and tight around the trunk, and mark or cut the circumference on the string.
3. Measure the length of string to get the circumference of the tree.
4. Convert the circumference measurement to diameter by dividing the circumference by pi (3.14).

**Figure 80-4**  
**Measuring Tree Size for Existing Trees**



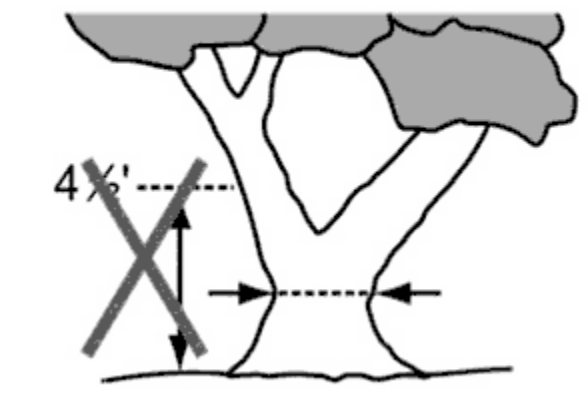
When the trunk is at an angle or is on a slope, the trunk is measured at right angles to the trunk 4.5 feet along the center of the trunk axis, so the height is the average of the shortest and the longest sides of the trunk; see Figure 80-5.

**Figure 80-5**  
**Measuring Existing Trees with an Angle or on Slope**



When the trunk branches or splits less than 4.5 feet from the ground, measure the smallest circumference below the lowest branch. See Figure 80-6. If the tree has a branch or a bump at 4.5 feet, it is better to measure the diameter slightly below or above the branch/bump.

**Figure 80-6**  
**Measuring Split Trunk Tree**



For multi-stemmed trees, the size is determined by measuring all the trunks, and then adding the total diameter of the largest trunk to one-half the diameter of each additional trunk (see Figure 80-7). A multi-stemmed tree has trunks that are connected above the ground and does not

include individual trees growing close together or from a common root stock that do not have trunks connected above the ground.

**Figure 80-7**  
**Measuring Multi-stemmed Trees**

