

# DBH

## How to determine the diameter of a tree



A diameter tape (D-tape) is used by foresters to measure the diameter of a tree. Since trees are swelled at the base, measurements are made **4.5 feet above the ground** in order to give an average diameter estimate. The D-tape is wrapped around a tree and is specially designed to convert the tree circumference to tree diameter.



This black oak is 21.6 inches in diameter.

Of course, there are rules for measuring DBH.

- Foresters always measure on the uphill side of a tree.
- If the tree forks below 4.5 feet, the trunks count as separate trees.
- If the fork is AT 4.5 feet, measure the diameter just below any swelling caused by the fork.
- If there is a swelling at 4.5 feet, measure just above the swelling.

The beech to the right is a problem for Ranger Nick. Assume the red line is at 4.5 feet. Can you help him?



BTW... Diameter can be measured with a cloth ruler. You will need to convert each measurement after you record it, because the cloth ruler actually measures tree circumference. To convert to diameter, just divide circumference by 3.14.