

# Forest Landowner's Guide to the Measurement of Timber and Logs

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As a forest landowner interested in selling timber, you are naturally interested in the price you will receive for your product and how that price is determined. The measurement of standing timber and logs may seem strange and complicated to you, and it is possible that you may be quoted dramatically different prices based upon different estimates of the amount of timber you have and the units of measurement used. Methods of measuring timber and the units of measurement often differ between buyers, and, as a seller, you should understand these methods, the units of measurement, and have an idea as to a reasonable price for your timber.

## Measurement of Standing Timber

The standing timber in your woodlot has a certain value, which is commonly called the stumpage value. Expressed in terms of dollars per unit volume of wood, this is the amount of money you can expect to receive upon sale of your timber. Many factors determine your stumpage value, but the most important are the species of trees you have, the quality and size of the trees, the location of your woodlot, the prevailing market conditions, the terrain, and the amount of wood you have to sell. Naturally, there are great variations in stumpage prices among woodlots, depending upon changes in any of these factors. Thick, mature stands of a valuable species like northern red oak, located on level ground near a mill, will obviously bring far more money than stands of smaller trees of lower quality species located on steep terrain far from a mill.

Buyers of timber will always need to conduct a survey of your woods before they can make an offer. This survey is often called a timber cruise and involves a series of measurements of individual trees, as well as an assessment of factors that will influence the price



Figure 1. Forester measuring the diameter of a white oak tree using a diameter tape held at breast height, or 4 1/2 feet from the ground (Photo by R. Griffiths).

of your timber. Such factors include the terrain, the amount of road building required, the need for culverts, the access across adjoining properties, and the need for special best management practices (BMPs) to protect against erosion and site deterioration after logging.

When the timber buyer measures your trees, he will locate a series of plots on your land and will measure each tree on each plot. Measurements will include the diameter of the tree (Figure 1), the merchantable height of the tree, the tree species, and often a subjective nota-