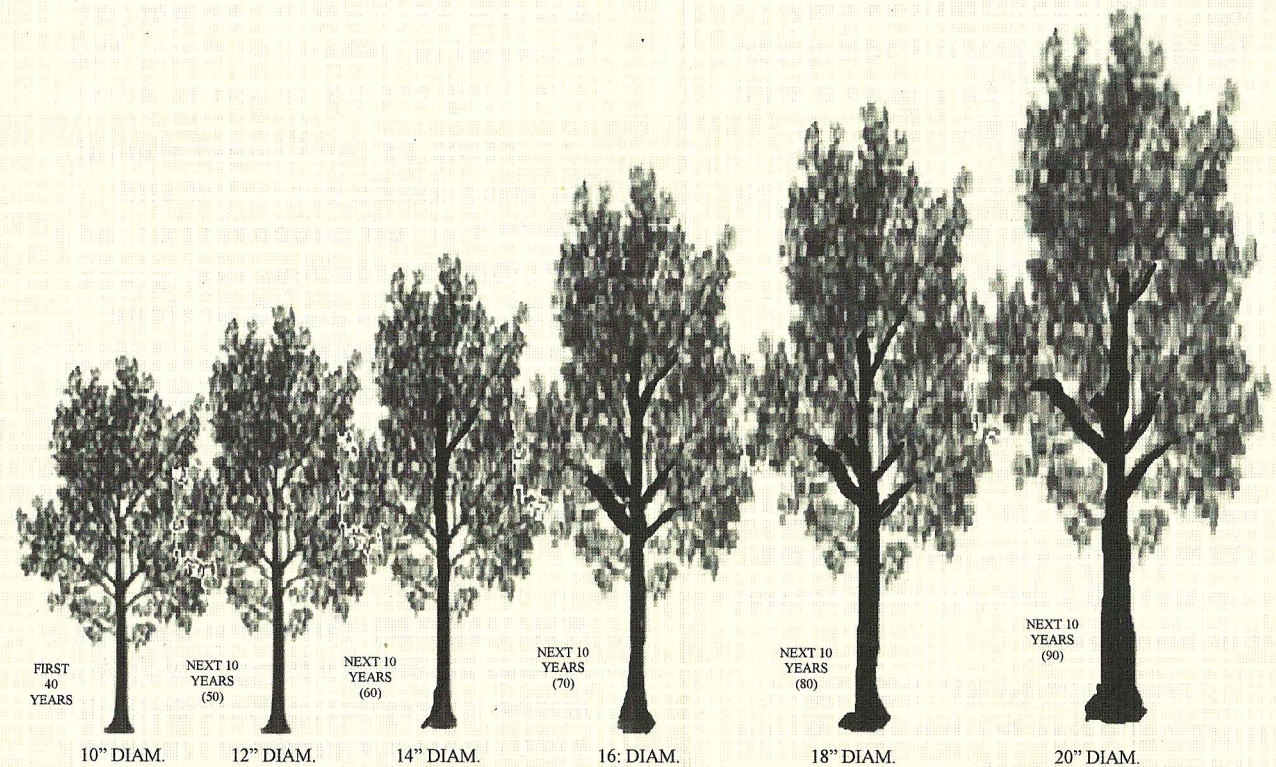


As a Tree Matures...

Trees may be turned into cash – but you may lose money when you sell small trees. Relative tree values shown here reflect only volume differences between size classes, but other factors being equal, the percentage of grade volume increases as trees become larger. Thus big trees not only have more volume, but more value per unit of volume. We recommend that sound, well-formed trees of desirable species, less than 17" diameter at breast height, be left to grow unless their removal will improve vigor, spacing, or species composition of the remaining stand.

Most tree measurements are made at diameter breast height (DBH) simply because it is convenient to do so. However, DBH alone tells little about a tree. The DBH can double from 10-20 inches, but the board foot volume increases about 12 times.

Value can increase as much as 25 times or more because trees not only increase in diameter size, but also in quality. Barring



RELATIVE VOLUME PER TREE (BOARD FEET)

DOYLE	14	27	60	115	192	261
INT ¼"	36	56	105	180	274	348

TREE GRADE IMPROVES AS DIAMETER INCREASES

GRADE	3	3	2 OR 3	1 OR 2	1	1 OR VENEER
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RELATIVE VALUE OF TREES OF DIFFERENT DIAMETERS (\$MBF)

DOYLE	--	100	105	110	125	130
INT ¼"	--	48	60	70	87	97

serious defect, the grade or quality is largely a function of the size of the butt log (the first 16' log). The better trees usually change from a grade 3 to a grade 2 at about 14" DBH and to a grade 1 at about 17" DBH.

Trees 4" to 10" DBH have no value except for pulpwood or firewood, but this size class is most in need of thinning. Valuable 20" trees do not just occur; they are the result of thinning young stands, good sites, or a combination of both. Young stands should be thinned and the increased demand for firewood makes such thinning both possible and profitable.

Trees 12" to 14" DBH have marginal value for timber. When such stands are thinned, especially on good sites, the rate of value increase is excellent. Hardwoods in this class may double in value for each 2 inches of diameter growth because (1) the grade improves with size, and (2) volume increases as growth in diameter and height continues. As

a growth rate of 10 rings per inch, on average, it takes only 10 years to increase 2 inches in diameter and double in value. Except for crowded or unhealthy trees, this size class should be left to grow.

Trees 18" and larger should be individually evaluated and marked or left depending on such variables as species, size, grade, vigor, and spacing. Size alone should not dictate when a tree is harvested; professional judgment is needed. Good forest management doesn't cost – it pays.

***Hale Forestry Company** has been serving the southern tier of New York and northern tier of Pennsylvania since 1987 and is currently a member of the Society of American Foresters and the Pennsylvania Forestry Association.*

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As a Tree Matures...



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