What's That Tree Worth?

If you owned a woodlot and sold timber in 1984, one of the trees that was harvested could have been a good quality black cherry, 14" DBH (diameter breast height), with two 16-foot logs in merchantable height. This tree would have contained 124 board feet* and (hopefully) you were paid \$20.96 for that single tree. The average price paid for cherry stumpage in 1984 was \$169.00 per thousand board feet (MBF)**. Twenty dollars was good money for one small sawtimber tree back then.

However, if you let that cherry tree grow, and instead took the lower quality red maples growing next to it, your vision would have paid off handsomely in the future. Here's how:

Black cherry is a relatively fast growing species. If a tree has room to grow, on a well-drained site, it is possible to gain one full inch of radial growth in just 7-8 years. This is equal to two inches of diameter growth. That's four inches of diameter growth in 15-16 years.

By the year 2000, the same 14" DBH cherry could now be almost **18" DBH**. Instead of being only 2 -16' logs high, it would probably be 2½-3 logs in merchantable height. And instead of 124 board feet in volume, it would contain 238 board feet – **almost DOUBLE in volume**.

In 1984 the cherry was a Grade 2 tree, even if it was relatively free of defects, simply because it was only 14" in diameter. In 2000, at 18" DBH, it could easily be classed a Grade 1, or possibly even veneer grade tree if the defect is minimal.

With the growth of 114 additional board feet, the projected increase in grade of the butt log, and the increase in the price paid for cherry stumpage over sixteen years (see the table on the reverse side), the same tree that you had the foresight to leave growing in 1984 would be worth \$347.00 in the year 2000 (average price of \$1458/MBF). If the butt log attained veneer grade it could be worth twice as much.

Taking \$21.00 to \$347.00 is a gain of 1,652%. Over sixteen years that's a phenomenal annual rate of return! Try and get that kind of rate from your investments!

This type of return is not just a fantasy. It will not be possible for all of the trees in your woodlot to attain this rate, but some of them, if managed properly, can probably do it. If your objective is to grow high quality timber, the key is to identify those trees that have this potential, let them grow, and remove competing trees that may have only a 2-3% annual return rate.

If you take every tree over 16" on the stump when you sell your timber, what we call a 'diameter limit cut' or 'high-grading', you're shortcoming yourself on a pretty lucrative, long-term investment return.

Board Foot Volume Tables for Commercial Forest Species of Pennsylvania. The Pennsylvania State University, College of Agriculture, School of Forest Resources Second Edition, 1983

^{**} Average of Quarterly prices listed in the "Timber Market Report", Pennsylvania Woodlands, The Pennsylvania State University, School of Forest Resources, Cooperative Extension Service

\$1,800-1<u>60</u>9 \$1,600-1<u>45</u>8 1393 1<u>37</u>4 \$1,400-1<u>35</u>6 \$1,200-Dollars/ Thousand Bd.Ft. 1<u>10</u>3 \$1,000 9<u>68</u> 8<u>91</u> 8<u>36</u> \$800· 7<u>48</u> 7<u>48</u> \$600· <u>544</u> 415 \$400-<u>381</u> <u>380</u> 331 274 <u>193 205</u> \$200-169 \$0· 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 Т Т Year

Average Black Cherry Sawtimber Prices