

# MU Guide

## Determining Timber Cost Basis

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As a forest landowner, you may someday contemplate the sale of your timber. The gain from the sale of the timber can represent either a *capital gain* or an *ordinary income gain*. In either case, you will be required to pay taxes on the gain. Gain is the operative word, implying that you may subtract something from the total amount you received. In fact, you may subtract the total amount you spent to acquire the asset. To minimize the amount of gain and thereby reduce your tax liability, you need to establish the *cost basis* in your capital assets such as timber.

Establishing cost basis means that you calculate the proportionate amount of the original purchase price that you spent on the timber. It is obviously best to do these calculations soon after acquiring timbered property, but it may also be accomplished years later if you have maintained good records.

So, how do you do it? First, you must have an *inventory* of the merchantable timber volume at the time you acquired the property. If a timber inventory has not been done, a forester can “cruise” the timber and estimate both the current volume and what it was when you acquired the property. An estimate of *fair market value* is also provided as part of the inventory.

Second, you need to calculate the proportion (percentage in decimal form) of each asset to the total fair market value or appraised value. Here’s an example. Suppose you acquire a property for \$165,000. However, you incur additional costs of \$1,500 to hire a forester to complete an inventory, \$2,000 for a boundary survey, and \$1,000 for closing costs. The total acquisition cost is then \$169,500 (\$165,000 + \$1,500 + \$2,000 + \$1,000). The forester’s inventory lists 40 mbf (thousand board feet) of walnut sawlogs valued at \$9,975, 19 mbf of walnut veneer logs valued at \$20,330, and 100 mbf of mixed oak/hickory sawlogs valued at \$10,500. The total appraised value of the property is \$159,000, which could also include buildings, fence, merchantable timber (identified above), bare land and a young (non-merchantable) tree plantation.



Our example assumes the owner completed a sale of 10,000 board feet of walnut veneer trees soon after acquiring the property for a price of \$20,000. To continue calculating the value in the walnut veneer log account, use the following procedure. Divide the appraised value of the walnut veneer sawlogs (\$20,330) by the total appraised value of the property (\$159,000) to get the proportionate value as a percentage (in decimal form) ( $\$20,330 \div \$159,000 = 0.1279$ ). Take this decimal and multiply it by the total acquisition price of \$169,500 to get the original cost basis of \$21,679.05 for the walnut veneer sawlogs ( $\$169,500 \times 0.1279 = \$21,679.05$ ). This procedure is repeated for each of the timber products identified in the inventory when they are sold or harvested.

So, why take the time to make these calculations? We do it so that we can recover our cost basis in the timber account when the timber is harvested or when the logs are cut from the timber and sold or used in the owner's business. This process of recovery is called *depletion*.

The third step in calculating depletion is to calculate the *depletion unit rate* and the *depletion deduction allowance*. To calculate the depletion unit rate, divide the original or adjusted basis (if the timber has grown or changed in some other way over time) by the current volume in the account ( $\$21,679.05 \div 19,000 \text{ bf}$ ) to get a depletion unit rate of \$1.14 per bf. If we sell 10,000 board feet immediately after purchase then our depletion deduction allowance is  $\$1.14/\text{bf} \times 10,000 \text{ bf} = \$11,400$ . So federal income tax would be paid on the net gain

shown below:

<b>Net gain from timber sale:</b>	<b>\$20,000</b>
Less:	
Consulting forester's appraisal/marketing/administration	\$ 2,000
Depletion deduction allowance	\$11,400
<b>Taxable gain:</b>	<b>\$ 6,600</b>

If you are in the 28 percent federal income tax bracket, your action of establishing the cost basis of your timber saved you more than \$3,700 in tax liability because you pay tax on \$6,600 instead of \$20,000. Contact a consulting forester or public agency forester if you have an interest in completing an inventory of your timber. It is the first step in realizing significant tax savings on timber income.

### For further information

*William C. Siegel, et al. 1995. Forest Owners' Guide to Federal Income Tax, Agriculture Handbook no. 708. Washington, D.C.: U.S. Government Printing Office.  
See <http://bookstore.gpo.gov>.  
Federal Income Tax on Your Timber — A Key to Your Most Frequently Asked Questions, Jefferson City, Mo.: Missouri Department of Conservation.*

