

 UI Extension Forestry Information Series

Does it Pay to Thin?

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When harvest decision time comes for your woodland, one choice is to thin the trees, leaving the best for additional growth and value. Does the potential increase in future income make it worth delaying the harvest of these trees? In many situations, it does. Let's look at a hypothetical situation to illustrate this point.

You have a 25 acre stand of mixed species with a healthy ponderosa pine overstory. Suppose you were able to leave 100 ponderosa pine per acre – 2500 trees – with an average diameter of 14 inches and a height of 90 feet. The average tree would contain 162 board feet of timber, and the 25 acre stand would have 400 MBF (thousand board feet) worth \$60/MBF net or \$24,000 if harvested now. If these trees grew at a realistic rate of ½ inch diameter and 1 foot height per year for ten years following thinning, the average diameter would increase to 19 inches and the height would be 100 feet. Then, the average tree would contain 390 board feet, for a stand volume of 975 MBF now worth \$58,500 (This presumes that no trees die or are otherwise affected and that all trees grow close to the average). The increase in diameter is 36% but the increase in volume and value is 140%.

Many of the investment guidelines for thinning decisions use diameter growth percentages as being equal to percent return on investment. This just isn't true; I

have, however, used the size range where the greatest changes occur to emphasize my point.

Now, you could have invested the \$24,000 if you harvested all trees now, so let's assume a 6% interest rate compounded quarterly for ten years. The value then becomes \$43,536. The \$15,000 you gain from holding the timber could be even higher if the trees move into a higher value class and will probably be higher due to lower logging costs. Of course there is risk involved, but timber has historically increased at a real value of 3% above the cost of inflation and the 6% you get at the bank includes inflation. There are many more things to consider about this oversimplified example, but I hope it will get you thinking. If a timber harvest is on your mind, think twice: once for yourself and once for the next generation. Call your local consulting forester for on-the-ground advice. It will cost you little or nothing for information.

For more written information, contact the UI Extension Forestry office, and ask for CIS 654 *Basics of Thinning for the Woodland Owner*.

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