Tree values final

Len this case, forest landowner Joe Smith was given an offer to sell some of his umber. Wealth his forest he has a variety of trees, according to Karen Bent only a select few of his trees are worth selling. The central problems Mr.

. Smith faces are how many of his trees he should sell, and when he should sell them. According to Ms. Bennett, Mr.. Smith has 300 trees per acre, but only 60 crop trees per acre, out of 40 acres.

Out of these 60 crop trees, 30 are 12″ DB and the other 30 are 14″ DB.

The 12′ DB trees are grade 4, and within the 14″ DB trees 40% are grade 4 and the other 60% are grade 3. Smith is faced with two options, to sell what he has now or to wait so that the value and grade of his trees increases. If he decides to wait, he also has to decide when is the best time is to sell. Situation Analysis: Mr.

. Smith has to make a decision In how to proceed If he wants to sell or keep the trees. Mr.. Smith can either sell Immediately, allow his forest to continue growing In an unmanaged state, and sell later, or thin the forest down to sell some time down the line.

If Mr.

. Smith decides to allow the forest to grow unmanaged, the trees will grow but they will be of less value relative to their value if they were managed. Individually the value of the trees are based on the tree grade and the trees MBA, the lower the grade and the higher the MBA the higher the value of the tree will be. During the analysis, we will focus on the present value because

it shows the amount of money Mr.. Smith will receive for the trees during the time of the sale.

Mr..

Smith's first option is to sell what he has now. If he decides to do so Mr..

Smith will sell his grade 4, 12″ DB trees at $40 per MBA, he will sell his 14 DB trees at two different prices. The 40 percent of trees that are grade 4 will be sold at $40 per MBA, and the 0 percent that are grade 3 will be sold at $120 MBA. Mr.. Smith will receive $14, 496.

00. Mr.. Smiths second option Is to continue growing his trees unmanaged, and selling them later. The beginning value of Mr..

Smiths trees is $14, 496. If Mr..

Smith waits 10 years for his trees to grow, he will have 13″ grade 4 DB trees and 15″ DB trees. The 13″ DB trees will be sold at $102 MBA and the 15″ DB trees will be sold at $174 MBA.

If he waits 10 years the combined present value of his trees would be $10, 074. 25. The prices continue to fluctuate up and down but none of them get Geiger than the beginning present value. (See table 1) If he chooses this option the best time to sell would be to sell now. Mr..

Smith's third option is to manage his land, thin out his trees and continue growing them.

The starting value of the trees is still $14, 496. According to the combined present value the best time to sell his trees would be In 30 years. Individually, over 30 years the 12″ DB trees will grow to 18″ DB, the present value will Increase from $2, 880. 00 to $16, 338.

83. The 14″ DB trees will grow to 20″ DB, the present value will Increase from $1 1, 61 6 to $47, 847, after his the prices begin to decrease. If we look at graph 1, we can see that the highest Recommendation: We recommend that Mr..

Smith manages his trees and sells at 30 years.

According to the analysis this is where Mr.. Smith will make the most money. For instance if we compare the values in graph 1, the present values for an unmanaged forest slowly decrease over the years, with only one slight increase at 40 years. With an unmanaged forest the best time for him to sell would be now, where the present value is $14, 496. 00.

The present values for a managed forest increases, and creases over the years. But the best time for Mr..

Smith to sell would be in 30 years, where the present value would be $73, 156. 64.

This is $58, 660. 64 higher than what you would get for selling now, in a unmanaged forest. Conclusion: In conclusion, we recommend that Mr.. Smith manages his forest and sells at 30 years.

Here he would maximize the value of his trees and his profits in the least amount of time. He would receive $73, 156. 64, compared to the $14, 496. 00 he would receive with his other options.