

Healing Harvest Forest Foundation
8014 Bear Ridge Road SE
Copper Hill, VA. 24079
540-651-6355
rutledge@swva.net

FORESTLAND – A NATURAL CAPITAL SYSTEM

This writing is an analogy comparing the forest resource to a stock portfolio. Although like many subjects defining and redefining the natural world, the forest is far more than just a stock. We do see the forests beyond the trees - as an ecological presence that provides services for the “public good” beyond modern measurement. Our analogy embraces the value of those ecological services as precious and as a benefit not yet quantified on a landscape perspective by modern economics. The purpose of this analogy is to educate and convince a forest landowner that “Restorative Forestry” is the way to make the most money from their forest over the long-term management perspective.

The forest is a biological system dominated by trees as the largest species in that system. This may not be totally correct because the largest living organism is a fungus that can grow in a forest, but for this discussion it makes it easier to understand. Those trees are growing at an annual biological rate of around 4% in volume. We see the “principle” of the investment being the ecological integrity of the biological system. We recognize that the eastern “oak hickory,” generally hardwood forest type will only produce a limited volume of board footage due to the nature of the system and characteristics of the dominant species of trees present. So understanding the limitations of volume possible leads wise managers to consider the opportunity to increase the value from a quality of material produced approach. Restorative forestry management protects and enhances the principle (forest ecology) while carefully extracting the worst tree specimens first as the “interest”. The way it enhances the principle is by increasing the growth rate of the best trees present, by thinning and relieving the competition for water, nutrition and sunlight to the remaining superior trees to create a forested condition dominated by what we call the “enhanced residual dividend”. This management

method also establishes an opportunity for the forest to be regenerated in a multiple age range condition of trees, grown from seedlings of superior species and specimens.

The growth of the forest value is exponentially increased by restorative forestry management. The exponential (i.e. any positive content raised to a power) is the increased value of the future growth of the superior specimens on a given site. This management is an expression of an increased “interest” rate being generated by not only the normal 4% biological growth, but by the fact that the growth rate has been increased to 6-12% by removing the competition. This growth is occurring at an increased rate on the most valuable specimens present. Since this growth is occurring in trees that are the most valuable for their quality, their value is compounded in that it also is growing on the largest trees present. For instance 10% of a 24-inch diameter at breast height (DBH) is much greater than the same rate on a smaller tree.

The value of the best quality trees is based on their production of clear, defect-free lumber that has an increasing worth that actually is greater than the average increased value of common lumber over the last 50 years of accounting by industrial commodity markets. When an analysis is done on the value of lumber over this time period, the common lumber just keeps up with the rate of inflation, and the clear defect-free or “first and seconds” (FAS) increases greater than the lower grades. This is simply because the yield of clear lumber percentage-wise available from most trees/logs today is less than it was historically, and it is a supply and demand system. This simple analysis should be an indictment of current management methods. Instead the need for FAS is being addressed by increased rates of harvesting (often overharvesting) and further mechanization of the task on the ground level. Expensive, hi-tech automation deals with increasingly lower grade lumber. So again, the answer from conventional thinking is that technology, fossil fuel-dependent mechanization and over production will address our needs, when in fact we could meet our needs better by practicing restorative forestry.

To continue the analogy of the forest with any other commodity or a bank, one thought is that the investment is not insured as deposits in a bank are (FDIC). It is well understood that the forests are under tremendous pressure for addressing human needs for forest products. Those pressures and threats to the ecological integrity of the forests are many. These threats to the forest are too many to mention in this writing, but real nonetheless and worthy of serious consideration in any management activity. One certain factor is that disturbance of the ecological system is critical to the health of the overall system. So our methods of management are aimed at being the ultimate low impact harvesting practice by including the use of animal powered extraction techniques. This approach combined with a well-defined way of leaving the forest in a pro-generative condition is the best forestry we know. Our best insurance is to be as sensitive as possible, while addressing human needs. It is a matter of recognizing that the forest has many individual trees that are parts of the stock portfolio that are in clear decline, while other individuals are highly gainful in value. Once a stock is known to be declining, it is wise to liquidate that portion of the stock portfolio that is not growing at all or actually losing money, value and worth. Once the forest is managed restoratively the value it will have in the future will therefore increase exponentially.

One consideration of long-term forest management may be the restrictions placed on land use by Conservation Easements. The specific wording of each individual easement will come into play. If an easement allows for cutting trees for the health of the forest, then our methods will comply perfectly. If the easement says no commercial timber sales, then our method will work as forest improvement and allow the landowner to donate their portion of the proceeds to a non-profit organization that promotes restorative/sustainable forestry, such as Healing Harvest Forest Foundation. A Conservation Easement supports long-term tenure of ownership and a long-term management strategy.

We are comfortable to project that “Restorative Forestry” management on good sites will yield 15% overall annual compounded dividend, perpetually. This is an extremely conservative estimate and on some sites could be considerably more. This management activity is occurring while the forest remains intact, providing all the ecological services that a forest does and being aesthetically pleasing as well.

We use many euphemisms to express this forest management method. It is simply a “have your cake and eat it too” situation. If conventional forestry practices are tree farming, one can see what we do as “tree gardening”. If conventional forestry, particularly when practicing “liquidation” even-aged management or clear cutting is seen as “fast food forestry”, then our practices are “home cooking with home grown ingredients”. When the forest is seen as a “natural capital system”, or a financial institution such as a bank, then if you own the bank, it would be wise to not rob it. This is truly the best way for man-to-age the forest...

Following the stock analogy it would be appropriate to define some conventional approaches with the same comparison. To clear cut the forest is simply to liquidate all assets of the investment that the living biologically diverse forest is. It is even aged management and most appropriate only applied in that type of forested conditions or where industrial monocultures already exist. To high grade is to pick the best performing stocks and liquidating them while retaining the marginal low performing, low producing and sometimes declining stocks as an investment. Even when a forester or logger suggests a diameter limit cut such as “just cut everything above a certain (fill in the blank) size”, it is high grading because the highly productive individuals are selected. It would be like taking the very best stocks and selling them off out of a diverse portfolio. Restorative forestry enhances the dividend while collecting the interest.