Timber company profits come from harvested board feet. This is maximized by how much fiber was produced in those growing stands prior to harvest. Profits are reduced when the trees have suffered beetle damage as a result of stress from droughts (a concern that was widely discussed 2 years ago as it was actually playing out after a 3 year drought). There are a number of other factors that minimize the growing potential (fiber produced) of trees even after their stage of growth dominates the understory vegetation.

There is a lot of research that has been done that shed new light on how forests, trees, and organisms function and are interconnected via fungi mycorrhizae, and that without it trees could not ever grow larger than a tulip plant without the minerals they can only obtain from mycorrhizae.

The use of herbicides is intended to give the replanted trees an advantage over competing vegetation, but how necessary is that really? The forests grew back just fine without herbicides after the historic Tillamook burn.

It is highly likely that the herbicides are contributing to a wide range of factors that negatively impact the potential `fiber produced` in a given stand rotation of harvested timber.

Trees depend entirely on mycorrhizae for minerals, nutrient exchange with other plants and trees, defenses against insects and diseases, and supplying a significant percentage of their water. Hypogeous fungi, truffles and truffle like fungi, are generally associated with younger trees and are essential in giving trees a healthy start. A study done years ago at the PNW Forestry Science Lab and Research Center in Corvallis determined that these young trees grow 9 times faster when inoculated with hypogeous fungi. Hypogeous fungi is entirely dependent on small animals to spread their spores and reproduce because they only grow underground like potatoes and can not release their spores like gilled mushrooms. There is little doubt that herbicides are having a negative impact on the small animals that are needed to spread those spores.

It would seem logical to assume that the most productive and responsible timber management practices would be designed and implemented for maximum yield with minimal impact.

A representative of a private timber company (Roseburg Lumber) attended a series of meetings at the Siuslaw Watershed Council about ten years ago. He was sharing their plans to go to 20 year rotation cycles in an effort to curtail the diminishing board feet production levels. This of course would require even more herbicide use. When asked how many rotations it would take before the soils were depleted, he answered “6 or 7”. The next question was “then what”? His answer was “we start using synthetic fertilizers”.

So this is their plan, and based on so much science and research that has been surfacing since those meetings, it is clear that those kinds of management plans will not only never work, they will fail with catastrophic consequences.

It was understood in the late 60’s that we could have a sustainable yield of 10 billion board feet per year based on a 200 year rotation cycle. The introduction of the high bred “super trees” in the early 70’s, with the claim that those trees could grow as large as a 200 yr old tree in just 60 yrs, opened the door to over cutting at 3 times the previous levels, for the following three decades.
The genetic super trees failed, the over cutting continued, and the result was a timber shortage. Going to shorter rotations with more and more herbicides is like peddling the bike faster when you're headed for the cliff.

The real fix is in phasing back to longer rotations, not shorter. The fiber produced in each tree every year is in the outside ring. The larger the tree, the more fiber that is produced each year. Just like money in the bank collecting interest. This can be done, and quite frankly, it is our only choice. That is, if we can look at our grandchildren in the face with what we leave for them.

And then there is the whole other issue of human health and poisoned waterways.