

THE TIMBER SALE / TIMBER STAND IMPROVEMENT DILEMMA

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When timber is harvested, the mature, over-mature, damaged, defective, and lower-valued species are removed which improves the overall value and growth of the woodland for the future. This opening up of the woods to more sunlight provides a more immediate impact on the timber's future than any other man made event. Fire, tornadoes, ice storms, etc., are the exceptions, but are not man made. The best time to regenerate the forest is when the woods is opened up to sunlight after a harvest. Will the regeneration, which is the future timber sale, be of desired species, such as black walnut, white or red oak, etc., or undesirable, low-valued species, such as honey locust, boxelder, elm, river birch, ash, ironwood, bush honeysuckle, multiflora rose, grape vines, etc.?

Man can control the ultimate result, but it requires Timber Stand Improvement (TSI). TSI is a management step that kills the undesirable vegetation (trees, shrubs, vines, etc.) by application of herbicide to reduce or eliminate them from the woods thereby allowing the more valuable and desirable trees to grow better.

TSI is like weeding a garden or flower bed; one eliminates the "bad" to favor the "good". Obviously, the "bad" or undesirable vegetation must be eliminated before it seeds into the openings in the woods produced by the harvest operation. If you regenerate what you don't want and can't sell in the future and/or has limited wildlife benefit, your woods will be set back a whole generation by growing what you don't want and usually can't sell.

The most obvious answer to the problem is complete TSI before you harvest, so only the desirable or "good" trees are left to regenerate the stand. Here is where the dilemma arises.

If you complete TSI just before a timber sale, many loggers will not bid on the marked saleable timber since they want no part of this situation. Why is this so? If the landowner cuts down a smaller weed tree and leaves a tall stump cut at an angle, the logger can ruin or flatten skidder tires worth hundreds of dollars each. If the landowner girdles, applies herbicides and kills the larger unwanted trees, some loggers are afraid of the added risk while felling the saleable tree. Can you blame them?

There are several ways this dilemma can be solved. The easiest way is to TSI your woods five or more years before a timber sale so small stumps are rotten and most larger girdled trees have fallen. Another possibility is to cut and herbicide the worst problem trees or species before the sale and then finish the TSI immediately after the sale and before any of them seed into the openings from the logging operation. For example, cut, herbicide, and kill the grape vines and ironwood, elm, and bush honeysuckle or autumn olive. If you cut level about one inch from the ground and herbicide the stump, no harm is done to skidder tires, ATV or truck tires. We have

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also cut small trees off at three to four feet in height, and these tall stumps do not flatten tires. It is much easier to cut and spray high stumps standing up rather than bending over all day. Certain undesirable species are prolific seeders and can cause terrible problems to a woodland if allowed to reseed. Examples are box elder, ash, river birch, and elm. Rather than girdle these trees and perhaps cause a problem for a logger, I fell these trees and treat the stump. If they are larger than 12 inches d.b.h., I mark them for sale and hope the logger cuts them. If he doesn't, they are the first to be killed immediately after the timber sale.

The other choice is to wait and do TSI immediately after the logging job and before the first time these undesirable "weed trees" can seed. There are two major downfalls to this choice. The TSI never gets done and the woods is seeded full of "junk" species. Remember, a box elder, ash, sugar maple, etc., seed blows much farther than an acorn or walnut falls. Sometimes, I find these undesirable seedlings hundreds of yards from the seed tree. One small four-inch ash or box elder can produce tens of thousands of seeds most years. The other disadvantage to completing TSI after logging is climbing through and around the logging debris.

In summary, the best woodland management practice possible is to complete TSI as soon as practical in order to maximize your land value, future timber sale value, and wildlife values. The second best TSI practice if a timber sale is imminent is to carefully cut and kill the real problem species that you definitely don't want reseeding your woods. The third choice is to do TSI immediately after a timber sale **before** any of the undesirables reseed the area. This really is a poor choice since the TSI likely won't be done and your woods is usually reseeded with low value or "junk" species. The fourth choice is to do nothing and guarantee that you will lose money. Remember, you are only going to do one of two things with your woodland, keep it or sell it. If you keep it in the family, you and your kids will benefit financially forever from proper forest management. If you sell your woodland someday it will bring a much higher price **IF** it is properly managed.

The key point is, for the best forest management and most valuable woodland, complete TSI **BEFORE** undesirables seed into your woodland openings after a timber sale.