

Diameter Limit Cutting --- Destroying Your Forest

A diameter limit cut is defined as the harvest of all trees over a specific diameter, typically 14 or 16 inches. By cutting the larger, more valuable trees, this type of cut leads to *high-grading*, which in a nutshell, takes the best and leaves the rest. It removes the high-grade trees and leaves the low-grade trees. This leaves the forest in a biologically and aesthetically degraded condition for a long period of time. It is analogous to pulling up your most prized tomato plants and leaving the suppressed and inferior plants to grow the tomatoes.

Most of the forests throughout Pennsylvania are in an *even-aged* condition, that is a result of extensive heavy cutting in the past. Therefore, most of the trees in your forest are within 20 years of age to each other. The smaller trees are small for a reason; they were out-competed, probably due to inferior genetics. They have been crowded and/or suppressed for a period of time and are of lower vigor and poorer health compared to the more dominant trees. Because they have inferior genetics and have been suppressed and crowded for a period of time, opening these trees to sunlight will not make them grow into valuable timber trees. Their growth response will be very limited, and they will severely limit the growth of new seedlings by blocking sunlight with their canopy. Often, deer will quickly browse over what new regeneration may be growing on the forest floor. Hence, after a diameter limit cut, we have a forest with poor genetics and suppressed, low vigor trees and low value species, often with little or no regeneration.

Unfortunately, diameter limit cutting is the type of cut most often practiced on private forestlands. It is the easiest type of cut to employ and probably the most understandable for many landowners. Unfortunately, it gives no consideration or planning for the future forest's species composition, spacing, wood and wildlife production, or new forest establishment through natural regeneration.

A typical landowner, if he or she cuts properly, may have one or two more harvests left in their lifetime. Apply a diameter limit cut and you're probably done, and most likely so is any income potential for your children. You leave a legacy to future generations of trying to correct a poor and unsustainable cutting practice from the past, usually by clearcut. Clearcutting is often the only option available to correct a diameter limit cut. At least this would remove the canopy of inferior, low vigor, and low value species so that the forest may start anew.

Diameter limit cutting is wrong.