

Kentucky's Woodland Owners and Logging Best Management Practices

by Jeff Stringer

When the phrase best management practices (BMPs) is used in forestry it refers to a set of practices implemented during forest operations (logging, tree planting, and pesticide use) to eliminate or reduce the potential for water pollution. Kentucky's forestry BMPs are comprised of practices used to control mud, logging debris, and trash from entering streams and to maintain trees around streams for shade.

Kentucky also has laws for landowners and loggers (see page 2) that require use of a designated set of "minimum criteria" for BMP use in forestry and agriculture. Landowners are required to ensure the BMP minimum criteria are used on their property, and the Kentucky Division of Forestry (KDF) inspects commercial logging operations for proper use of the minimum criteria. Typically loggers implement the BMP minimum criteria in the most cost-effective manner. The minimum criteria are designed to help prevent or reduce pollutants. However, implementing them in the most cost-effective manner for temporary logging operations may not meet the long-term needs of woodland owners. This discrepancy can cause problems between loggers and woodland owners. This is an important issue and is discussed with loggers during the Kentucky Master Logger program. Woodland owners should also discuss BMP issues during timber sale negotiations. The following represents some of the typical issues that arise between loggers using the minimum criteria and woodland owners conducting long-term management.

Rutting

Generally rutting is a bad thing. It is also recognized that in Kentucky we must keep the wood industry running even during the winter when conditions are conducive to rutting. Because of this situation the BMP minimum criteria allows ruts to be generated as long as they can be fixed with available equipment. Is this good or bad? It depends. If the rutting occurs on roads or trails that will remain open after the harvest, then some rutting is not necessarily a problem as roads and trails are not productive woodland soils. It is a much bigger issue if rutting occurs off of roads or trails. This means that productive ground is being disturbed, compacted, and damaged even if ruts are filled. Rutting off of main roads and trails should be avoided.

Stream and Channel Crossings

The BMP minimum criteria requires the use of bridges or culverts (or other elevated crossings) to cross streams and channels where feasible. Feasibility includes economic and topographic limits. Loggers typically, and for good reason, develop crossings that are temporary and meet their equipment requirements (Figure 1). As a woodland owner you



Photos courtesy: Jeff Stringer

Figure 1. A skidder bridge that is temporary and will be removed after logging.

may want a more permanent crossing that will last and be easy to maintain. If you want permanent crossings installed you should be willing to pay the logger to install them or have the logger install a crossing that you can beef up yourself. For example, a logger may use a hollow log, but you might want a culvert. If the logger uses a culvert you may want it bigger, or you may want to use something like double-walled plastic pipe instead of corrugated steel to make it self-cleaning. Modifications such as these take time and money not normally needed for a harvest. The woodland owner should be prepared to take monetary responsibility for improvements and should discuss their requirements, the time involved, and the cost prior to harvest.

Road and Trail Water Control Structures

When logging is finished the minimum criteria requires that skid trails and roads are resurfaced, water is allowed to drain, and water control structures are put in place to prevent erosion. No one disputes resurfacing (removing the ruts) and drainage, but some water control structures that loggers construct may not be useful to you. One of the most common and effective water control structures is a water bar (Figure 2). They are designed to be constructed on trails and roads that will be retired from use and are unpassable. If you want to continue to access the roads or trails, discuss this



Figure 2. Typical water bars constructed by loggers. They work efficiently to control water but are not passable.

with the logger prior to agreeing on the sale. You want water control structures; however the types that you need installed should be appropriate for your use (Figure 3).



Photos courtesy: Jeff Stringer

Figure 3. A water control structure specifically designed for landowner use.

Debris

All logging operations generate debris (unmerchantable parts of the tree). BMP minimum criteria requires that streams and channels must be devoid of logging debris when the harvest is finished. Other than that, anything goes. Large piles of “cut offs” can be left at the log deck. These can be good for some wildlife but can also be a nuisance. Tree tops resulting from felling are typically left in place. This practice is good from a nutrient standpoint, but they can be a wildfire hazard and if in an area of high visibility they can be unsightly. If leaving the tops in place is a concern the logger, can conduct a slash treatment that places the tops in contact with the ground. However, this treatment costs money. If the logger is skidding tree length back to the landing, the tops are usually wind-rowed along skid trails. This practice can facilitate tree planting; however if you want them scattered throughout the woods it will add time and cost to the logging operation.

Seeding

Logging roads, trails, and log decks that can erode and/or contribute to muddy water runoff entering streams must be reseeded. The BMP minimum criteria requires revegetation. However, the enforcement of the minimum requirement only ensures reseeding at the time the logger leaves the site. Revegetation requires that the woodland owner restrict traffic on retired areas and that Mother Nature cooperates. Also, certain species are recommended for revegetation, but the BMP minimum criteria does not specify their use. If you want specific ground covers, discuss it, and don't expect loggers to establish specialty covers like warm season grasses or food plots (Figure 4).



Figure 4. An exceptional job of revegetation using fertilizer and lime, not commonly used by loggers.

Issues Not Covered by BMPs

A number of issues that should be of concern to woodland owners that are not addressed in the BMPs, includes damage to standing residual trees, number of skid trails, aesthetics, taking more or less timber than was agreed upon, and other non-water quality issues. All of these issues, water quality related or not, are very important for long-term woodland health and your use of the woodlands. Understanding how the BMPs work and the difference between your objectives and the BMP minimum criteria and getting professional assistance from a consulting or industry forester can help reduce tension during a logging operation on your property.

It cannot be over emphasized that these issues need to be addressed in timber sale negotiations. Waiting to discuss these issues after the timber harvest has been started can be unfair to the logger and unsatisfying for the woodland owner.

Kentucky's Forestry BMP Laws and Publications

Kentucky's Agriculture Water Quality Act (AWQA) of 1994 requires landowners possessing 10 or more contiguous acres that are engaged in silviculture (forestry) or agriculture (farming) to have a written water quality plan. The plan specifies the minimum criteria for BMPs that need to be used on the property and landowners are required to ensure that they are used. In 1998 the Kentucky Forest Conservation Act was signed into law requiring commercial logging firms be inspected by the KDF for use of the AWQA BMP minimum criteria. These two laws produce a situation where the landowner is required to make sure that the BMP minimum requirements are completed on their property and that loggers use these BMPs when conducting operations. Go to www.ukforestry.org and click on Publications and BMPs for the following resources:

FOR 67 Kentucky Forest Practice Guidelines for Water Quality Management

FOR 96 - Forestry Water Quality Plan: Preparing an Agriculture Water Quality for Your Woodlands

FORFS 00-05 - Kentucky Forest Conservation Act: Landowner Questions and Answers

FORFS 00-06 - How Logging Inspections Work

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