New Forest Harvest Operations and BMP Manual

Lou Hyman, Univ. of Maryland Extension Service

After a long period of discussion, Maryland Department of Environment and Maryland DNR, Forest Service are close to finishing a new Forest Harvest Operations Manual that includes updated BMPs. The existing Manual dates back to 1983, with an updated edition published by DNR in 1993. A draft Manual was developed in 2005 which had several controversial proposals, resulting on the draft being put aside at that time.

In 2011, MDE published a new set of Standards and Specifications for Soil Erosion and Sediment Control which focused on construction and had several changes from the Forest Operations Manual. MDE announced in the spring of 2014 that all Green Cards must be redone using their 2011 Manual. In response, the Master Loggers Steering Committee and DNR asked for a revision and publication of a new Forest Harvest Operations Manual.

The 2015 FHO Manual is more detailed than the earlier versions. Its major revision is in its treatment of Streamside Management Zones (SMZ). The new manual added a detailed definition of the “Waters of the State,” which must be protected from sediment. It did reduce the required size of SMZs from 50 feet plus 4 times the slope to 50 feet plus 2 times the slope. Timber harvesting is allowed in SMZ’s, but logging decks and skid trails are restricted.

The major conflict in the 2005 draft was a requirement for a harvesting variance for Eastern Shore forests near Public Drainage Association and other man-made ditches. That has been dropped in the new draft. Instead, forest harvests along PDA ditches can either install a SMZ, or use existing or added erosion control measures. In addition, old agricultural drainage ditches within forests will be split into ‘functional’ ditches, which need a SMZ and ‘non-functional’ ditches, which do NOT require a SMZ. The definition of functional and non-functional is still being debated.

The new manual maintains the BMPs for roads and skid-trails that were in the 1983 and 1993 manuals, with minor updates, mainly to match the 2011 Construction Manual. There are some changes in the specifications for Stabilization/Revegetating exposed soils. The new rules do not require applying lime and fertilizer on forest soils, restrict re-seeding to slopes over 10%, and use updated Seeding Species and rates from the NRCS and Soil Conservation Districts. All soils within 50 feet of a water body or a property line or protected habitat must be stabilized within 3 days of disturbance. The rest of the exposed soil on the site should be stabilized within 7 days of completion of the activity on that site.

The new manual is undergoing review at this time, with a planned publication date of February, 2015. This will be followed by a series of BMP classes offered to all loggers this spring, with new Green Cards being issued to all who complete the course.
Welcome Lyle Almond As New MD-DE Master Logger Program Coordinator

Lyle Almond comes to University of Maryland Extension as the new Master Logger Program Coordinator after ten years as a forester on the Olympic Peninsula of western Washington. After receiving his MS in Forest Resources Management at University of Washington, he worked for WA DNR as a regeneration silviculturist and as both the forester and restoration ecologist for the Makah Tribe on Washington’s northwest coast. He recently completed a Fulbright Exchange in Slovenia, where he studied the European tradition of continuous cover forestry (single-tree and group selection and irregular shelterwood systems). You can reach Lyle at (410) 827-8056 ext. 125 or lalmond@umd.edu.

MD-DE Master Logger Program Bids Adieu to Lou Hyman

The Master Logger Program is sorry to see the departure of Lou Hyman, who has accepted a new position within University of Maryland Extension as a Research and Policy Extension Assistant Position with UMD. He is serving as the Editor and Facilitator for a revision of the Maryland Best Management Practices. This set of regulations, formally known as “Maryland’s Erosion and Sediment Control Standards and Specifications for Forest Harvest Operations,” is targeted to be published in the spring of 2015. Lou is working with the DNR-Forest Service and Maryland Department of Environment and several groups of stakeholders. Working with the Master Logger Program for the last year enabled Lou to get back into Forestry after his retirement and he was able to use his expertise to help revamp all the administrative aspects of the program.

Regional Recognition for MD-DE Master Logger Program

The Forest Resources Association’s Southeastern Region Outstanding Logger Selection Team has chosen MD-DE Master Logger Eddie Moore to receive the 2015 Regional Outstanding Logger Award. The formal award ceremony will take place at the FRA Southeastern Region Annual Spring Meeting on March 11-12, 2015 in Wilmington, North Carolina.

Master Logger Workshops on Invasive Weed Management

This Fall, two MD-DE Master Logger Workshops were held on opposite sides of Maryland to instruct harvest operators on the manual application methods most effective for controlling invasive weeds, such as tree-of-heaven and mile-a-minute weed, on logging sites.

On Saturday, October 18, Allegany College hosted a workshop featuring US Forest Service research scientist Jeffrey Kochenderfer to talk about this issue with a group of 15 Master Loggers. A second workshop was held Saturday, November 1, on the Eastern Shore at MD DNR’s Wicomico Demonstration State Forest. For this workshop, Ginny Rosenkranz, UME Extension Specialist, talked with a gathering of ten Master Loggers on invasive weed management. This was followed by a lecture on chainsaw safety and maintenance conducted by Husqvarna representative Doug Joensen and Jake Ricker, General Manager of Baker’s Power and Turf in Millsboro, Delaware.

Master Logger Program Featured In the News

University of Maryland's Campus News Service (CNS) recently distributed a wire service feature article and news video segment on the MD-DE Master Logger Program. Robert Beale, owner of Loveville Timberworks LLC was interviewed for the video. This gave him the opportunity to talk about the benefits of the Master Logger Program and the realities of the logging industry in general. The print story and video clip can be found on the Master Logger website at: http://extension.umd.edu/news/md-de-master-logger-program-featured-news
Manual Herbicide Application Methods for Hardwood Forest Management

The following is a thumbnail summary of the four manual application methods presented at the recent Master Logger workshops. Copies of Jeff Kochenderfer’s book, Manual Methods for Managing Vegetation in Appalachian Hardwood Forests can be found at: http://www.nrs.fs.fed.us/pubs/gtr/gtr_nrs96.pdf

Stem Injection
- Use 38% solution of Accord® Concentrate in a water carrier.
- Use 50% solution of Garlon® 3A, Roundup Pro®, Glyphosate®, or Razor® Pro in a water carrier.
- Use 6% solution of Arsenal® or 3% solution of Arsenal® AC in a water carrier.
- Arsenal® is very effective on maples.
- Make one incision per inch of diameter at breast height (dbh) spaced evenly around the stems.
- Apply 1.5 milliliters (ml) (0.05 oz.) of solution per incision.
- Treatment is applicable to stems ≥1.0 inch dbh
- The “cut stub” treatment is very effective on stems smaller than one inch dbh
- Treatment is best applied from June 1 to November 1.
- Do not apply during periods of heavy sap flow (February through May).
- Treatment costs $50-$75 per acre (chemical and labor).

Basal Spray
- Use 10% to 20% mixture of Garlon® 4 in an oil carrier (10% mixture on thin-bark species).
- See herbicide label for recommended oil carriers.
- Spray completely around stems 12-15 inches above groundline to point of runoff.
- Treatment is applicable to stems <6.0 inches dbh and treatments involving <1,000 stems per acre.
- Apply any time of the year stems are dry.
- Treatment costs $80-$125 per acre depending on the number of stems treated (chemical and labor).

Cut-Stump Treatment
- Use 50% to 100% glyphosate herbicide product in a water carrier.
- Use 3% Arsenal® AC or 6-percent Arsenal® in a water carrier.
- Treat stumps as soon as possible after cutting, although treatment can be effective on beech in the central Appalachians up to 4 days after cutting.
- Spray outer 2 inches of stump surface.
- Treatment is effective on all sizes of stumps.
- Root sprout mortality is greater around larger stumps.
- Do not use this treatment when stumps and nearby desirable trees are the same species.
- Treatment is best applied from June 1 to November 1.
- Do not apply during heavy sap flow (February through May).
- Treatment costs $40-$60 per acre (chemical and labor).

Foliar Spray
- Use 1% or 2% solution of a glyphosate product that contains a surfactant, or add a surfactant.
- Use 1% or 2% solution of Arsenal® AC and add a surfactant.
- Use 2% solution of Arsenal® and add a surfactant.
- See herbicide label for recommended surfactants.
- Use minimum sprayer pressure to control drift.
- Mix with clean water.
- Treatment is applicable to target stems less than 6 feet tall.
- Completely wet foliage
- Apply during rain-free periods.
- Best results are obtained in late summer while foliage is still green.
- Add Oust® (sulfometuron-methyl) for better control of herbaceous weeds and grass.
- Treatment costs $150-$200 per acre (chemical and labor).
Continuing Education Distance Learning Opportunities

Virginia Tech SHARP Logger Program’s newest on-line course is now available for MD-DE Master Loggers to take in order to gain required continuing education credits. The online course, "Forestry BMPs: Applied Research Results" generates a certificate at the end of the 35-minute course that you can submit to Lyle Almond, MD-DE Master Logger Coordinator to receive four CE credits. As new programs are produced by the SHARP Logger Program, they will all include a certificate of completion as proof of your participation. This course is particularly relevant to loggers on the Eastern Shore who will be servicing contracts in Virginia, as the course content includes a section on Virginia’s BMP guidelines.

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