

3.2 LOGGING AESTHETICS

BACKGROUND

Timber harvesting creates a temporary change in the visual quality of the forest.

By creating a variety of tree sizes and types and different opening sizes, harvesting can have a long-term positive aesthetic effect. Some short-term aesthetic concerns include woody debris (slash) on the ground, broken or bent trees, ruts, clearcuts, or a general change in the appearance of the forest. Improving the appearance of a harvest may result in trade-offs with wildlife-related recommendations, resulting in fewer habitat elements, e.g., coarse woody material on the ground or standing snags (dead and dying trees). A forest that looks “neat” may not be ecologically healthy.

In many cases, doing a lot of little things can collectively make a big difference. For example, changing the timing of forest management activities can impact how a job looks and affect recreation on a woodlot. Roads built during dry seasons are cheaper to construct and look nicer. Operating on frozen ground that has good snow cover results in less damage to the soil, ground cover, seedlings, and the residual trees, which often translates into a better-looking job. Many outdoor recreational activities take place during specific seasons of the year. Harvesting activities scheduled to avoid peak use will help to minimize potential conflicts.

Planning and adherence to some basic recommendations will balance the aesthetic outcome with achieving the long and short-term objectives of the landowner.

OBJECTIVE

Minimize the visual impacts of timber harvesting.

CONSIDERATIONS

- Following recommended practices may result in additional cost or less income.
- Bark on trees is tender and easily damaged from late spring (bud break) through mid-July.
- Many aesthetic concerns are exacerbated during wet conditions.
- When operating in heavily stocked or high-value stands, planning and logger skill are more important to the aesthetic outcome than equipment size.
- All timber harvesting produces slash.
- Slash near roads, lakes, streams, and property boundaries is subject to regulation under the slash law, RSA 227-J:10. Briefly stated, this law requires that slash be removed from within 25 feet of a property line; from within 50 feet of any great pond or body of water greater than 10 acres, or from a public highway or active railroad bed; and 100 feet of any occupied structure.
- Slash helps maintain soil on-site and protect developing seedlings from temperature extremes and overbrowsing by deer. It can benefit wildlife by creating microhabitats for small mammals, birds, and other species.
- Manual treatment of slash can be dangerous to the logger.
- Maximum use of merchantable wood conflicts with recommended practices regarding dead and down woody material.

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- The branches, twigs, leaves, and needles of trees contain a higher percentage of nutrients than their trunks. On some sensitive sites, it may be more important to leave this biomass for nutrient recycling, instead of removing it.
- Slash can be a fire hazard.
- The basal area law (RSA 227-J:9) requires forested buffers along town and state roads, streams, and bodies of water following timber harvests.
- Clearcutting is a management tool used to create vistas or early successional wildlife habitat, or to regenerate specific tree species. Aesthetic considerations may conflict with these objectives.
- Clearcutting can open new or historic views.
- The visual impact of a clearcut area will vary with its size, shape, location, and time of year it is viewed.
- Clearcuts are most noticeable in the first few years following the harvest. The perceived negative aesthetics decrease as the area regenerates.

RECOMMENDED PRACTICES

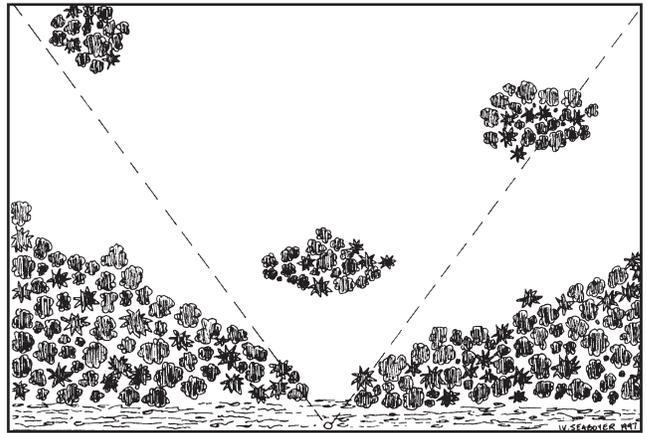
- ✓ Follow local and state regulations, allowing enough time to obtain necessary permits. Adhere to the basal area law (RSA 227-J:9) and slash law (RSA 227-J:10). Refer to *Guide to New Hampshire Timber Harvesting Laws*.
- ✓ Schedule phases of a harvest with the appropriate seasons to limit costs and disturbance. Minimize the impact on sensitive sites by harvesting on dry or frozen ground. Refer to *Best Management Practices for Erosion Control on Timber Harvesting Operations in New Hampshire* by the N.H. Dept. of Resources and Economic Development, Division of Forests and Lands. Consult the latest version before harvesting timber.
- ✓ Minimize visual and audible impacts of forest management activities by scheduling such activities during the appropriate seasons of the year and, where recreation is a priority, during periods of lower recreational use.
- ✓ Reduce the impact of noisy equipment when operating near residential areas by modifying working hours, shutting down idling equipment, or reducing truck noise (by using lower rpm's) to and from the landing. Consider using equipment with noise-reducing features.
- ✓ Notify abutters or others who may be affected by the logging operation. Posting signs will help recreational users and others understand the reasons and timing of the harvest.
- ✓ Supervise the job on a regular basis to identify and solve problems in a timely fashion.
- ✓ Sweep mud off paved roads whenever log trucks leave muddy landings.
- ✓ Cut stumps as low to the ground as possible. Re-cut multiple stems when trees are cut high on the trunk above a crotch.
- ✓ Cut whips, leaners, bent saplings, and broken trees, particularly in visible sections of the woodlot.
- ✓ Protect the residual stand, not only for aesthetics, but also for maintaining the biological and economic health of the forest, by:
 - Designating trees for removal only if they can be felled and removed without causing excessive damage to the residual stand.
 - Marking trees (to cut or leave) with paint on two sides to enable the logger to make better choices regarding directional felling and hitch selection.
 - Matching equipment to terrain, tree size and product and other site conditions.
 - Using directional felling techniques to avoid damage to unmarked trees during felling and to position the downed tree for the skidder to reduce damage to trees from skidding.

✓ Slash

- Minimize slash consistent with the slash law, RSA 227-J:10.
- Use tree tops down to 4 inches or less in diameter, or as markets permit.
- Lop tops to a height of 2 feet or less within 50 feet of a recreational trail. It may be desirable to pull the tops back 50 feet or more before lopping. Otherwise lop tops 4 feet or less above the ground.
- In areas where the presence of slash is a visual problem, consider using mechanized operations that remove slash and low-grade wood that otherwise would be left.
- Slash can be placed and crushed in skid trails to minimize soil disturbance, but plan for the location of recreational trails before harvest layout. Avoid placing slash in trails destined for recreational use.

✓ Clearcuts

- Design clearcuts to take into account slope, topography, existing vegetation patterns, and principle viewing points. Integrate clearcuts into trail systems in a manner that allows viewing of scenic vistas and for wildlife viewing.
- In visually sensitive areas, clearcut in multiple stages.
- Leave patches (or islands) of varying sizes and shapes of trees to break up the cut area and reduce its apparent size.
- Keep openings into harvest areas narrow to limit the view from public roads, lakes and rivers, or recreation areas.
- Use the natural terrain to minimize apparent size.
- Shape clearcuts to resemble natural openings, using topography and vegetative patterns. Integrate partial harvests along roadsides and highly visible slopes.
- Avoid long, straight edges for harvest bounds (boundaries of the logging job) that intersect with roads or trails at hard angles, or that are visible from roads or water bodies.
- Maintain an uncut or partially cut buffer of 150 feet along recreational trails and in residential areas. Maintain a partially cut buffer along roads, streams and certain ponds as required by the basal area law.



CROSS REFERENCES

2.2 Forest Structure; 3.1 Timber Harvesting Systems; 3.3 Aesthetics of Skid Trails, Truck Roads and Landings; 3.4 Harvesting in High-Use Recreation Areas; 3.5 Soil Productivity; 5.4 Logging Damage; 6.2 Cavity Trees, Dens and Snag; 6.3 Dead and Down Woody Material.

3.2: Logging Aesthetics

ADDITIONAL INFORMATION

Jones, G. T. 1993. *A Guide to Logging Aesthetics: Practical Tips for Loggers, Foresters, and Landowners*. Natural Resource, Agriculture, and Engineering Service. NRAES-60. NRAES Cooperative Extension, Ithaca, N.Y. 28 p.

N.H. Dept. of Resources and Economic Development, Division of Forests and Lands. 2004. *Best Management Practices for Erosion Control on Timber Harvesting Operations in New Hampshire*. State of New Hampshire. http://extension.unh.edu/resources/files/Resource000247_Rep266.pdf Accessed March 13, 2010.

RSA 227-J. *Timber Harvesting*. <http://www.gencourt.state.nh.us/rsa/html/xix-a/227-j/227-j-mrg.htm> Accessed May 27, 2010.

Smith, S. 2009. *Guide to New Hampshire Timber Harvesting Laws*. UNH Cooperative Extension, Durham, N.H. 37 p.