

## Forest Landowner Update Winter 2006, Volume 20, No. 1

### Resource Review: Visual Guide to Timber Harvesting

National Web-Based Learning Center for Non-Federal Forest and Rangelands

By: James Johnson, Shawn Baker and John Peterson (*Virginia Tech Dept. of Forestry*)

Reviewed by: Jennifer Gagnon, *Virginia Tech Dept. of Forestry*

Many forest management objectives can best be achieved through some form of timber harvesting. Determining which harvest type is most appropriate to attain specific goals and understanding the short and long term impacts of that decision are critical. The Visual Guide to Timber Harvesting website is a self-directed learning module designed to introduce landowners to a variety of timber harvesting practices. The site describes the benefits and drawbacks of mid-rotation and regeneration harvest methods, to help landowners determine which methods are appropriate for their forests and management objectives. The main teaching objectives of this site are to: 1. describe the common types of harvesting practices available in Appalachian hardwood and loblolly pine plantations; 2. explain the types of trees removed in each harvest; and 3. show the visual impacts of each harvest practice.

Using innovative new digital technology, a series of photographs was stitched together to form 360° virtual panoramic tours of seven different stands. In five of these stands, panoramas were taken before and after harvesting practices were implemented, illustrating the impacts of the management. The panoramas are interactive, and allow the user to zoom in to explore the stands more closely. In addition, individual trees can be selected, and information on species, height, diameter, product class and stumpage price is presented. Species names are linked to Landowner Fact Sheets on the Virginia Tech Forestry Department's Dendrology website (also funded by the National Web-based Learning Center for Non-Federal Forest and Rangelands). These sheets provide range maps, wildlife and timber values, regeneration methods, potential problems, and fun facts for each species.



Example of the panorama feature showing a pine plantation before (above) and after (below) a commercial thinning.

The website begins with a general discussion of sustainable timber harvesting. Technical terms are underlined and can be defined by clicking on the term. A side by side comparison of panoramas of poorly and well-managed hardwood stands clearly illustrates differences in the harvesting practices. Included are stumpage values for the two stands (based on 2003 prices).

Two types of mid-rotation cuts, hardwood crop tree release, and pine plantation thinning, are discussed and accompanied by panoramas showing the stands before and after harvest. Four regeneration harvests are discussed, including shelterwood, reserve shelterwood, diameter limit, and clearcut (both commercial and silvicultural). Photos of the shelterwood cuts are provided. Panoramas of the diameter limit and silvicultural hardwood and pine clearcuts are presented both before and after the harvests. In all cases, a description of pre-harvest stand condition is given with the panorama. The tour concludes with a summary page of the different types of harvesting practices.

The website can be navigated easily using the interactive table of contents menu on each page. A help section can be accessed from the home page. After navigating through the website, landowners should have a better idea of which harvesting methods could be used to best meet their management objectives and be able to discuss their options with their natural resource professional.

The website can be accessed from: <http://www.cnr.vt.edu/dendro/360/introduction/>