



FOREST RESOURCES ASSOCIATION INC.

1901 PENNSYLVANIA AVENUE, NW, SUITE 303
WASHINGTON, DC 20006

PHONE: 202/296-3937

FAX: 202/296-0562

SAFETY ALERT

16-S-3

DEAD TREES ARE MANUAL FELLING HAZARDS

May 2016

BACKGROUND: On a winter afternoon in the Appalachians, a timber cutter was felling hardwood timber with a chain saw. The terrain was fairly level, but there were several inches of snow on the ground and a dense understory of beech trees and brush.

PERSONAL CHARACTERISTICS: The timber cutter was a co-owner of his logging business. He was in his early to mid-thirties and was experienced and trained. He was wearing all required personal protective equipment.

UNSAFE ACTS AND CONDITIONS: The logger was manually felling timber in a partial-cut operation where there were scattered species of trees that had die-back conditions in the overstory. The landowner had instructed him to leave the trees that were not marked for harvest standing.

The logger used proper directional felling techniques to guide the fall of a standing medium-size cherry tree, but his aim in creating the hinge was probably slightly off. Approximately 35-40 feet away, close to the direction of the tree's fall, was a standing dead ash sawtimber tree.

As he completed the cut, the logger retreated in the opposite direction from the tree's fall. Due to the amount of snow and brush, and a downed, previously felled tree he had to step over, his retreat was somewhat slow.

ACCIDENT: The top of the falling tree brushed against the standing, dead ash tree, causing the ash to sway back and forth. As it whipped backward toward the timber cutter, the ash tree broke off five to six feet from the ground and struck his chain saw and his lower right leg.

INJURY: The tree broke the logger's lower right leg. His in-woods rescue was somewhat delayed because the logging business partner had to drive out to a main road (where the cell phone signal was stronger) to meet EMS and direct them over minor roads and to the site; the remote location and weak phone signal prevented the EMS crew from finding the job on their own.

It was two months before he began working in the woods again, and he had to hire another timber cutter to fill his manual felling job for six months.



RECOMMENDATIONS FOR CORRECTION: OSHA logging regulations specify that "Each danger tree, including lodged trees and snags, shall be felled or removed using mechanical or other techniques that minimize employee exposure before work is commenced in the area of the danger tree. If the danger tree is not felled or removed, it shall be marked and no work shall be conducted within two tree lengths of the danger tree unless the employer demonstrates that a shorter distance will not create a hazard for an employee."

Timber harvesters should discuss with landowners the safety hazard (and conflict with OSHA regulations) created when they require dead trees to be left standing. Leaving dead trees standing presents an especially high risk with manual felling. If there is any doubt about the safety of a tree falling and striking dead limbs or dead trees in the area, the manual feller should ask the skidder operator to knock the tree down the rest of the way rather than completing the felling with the chain saw.

Plan, clear, and use a retreat path leading diagonally back from the intended direction of fall of the tree, and take repeated glances at the crown of the falling tree during the retreat, continuing to walk briskly until well away from the stump of the falling tree.

Safety-conscious logging businesses note and record directions from the harvest site to the nearest hospital in the event of an emergency (see FRA Technical Releases 14-R-18, 14-R-13, and 12-R-27). Also, FRA Technical Release 16-R-1 highlights a logger's use of a cell phone signal booster to improve phone coverage in remote locations.

Reviewed by:
Southwide Safety Committee;
Rick Meyer
Appalachian/Southwide Region Manager

Please follow equipment manufacturers' recommendations for safe operation and maintenance procedures.